

Joint Appraisal report 2017

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

Country	KENYA
Full Joint Appraisal or Joint Appraisal update	FULL JOINT APPRAISAL
Date and location of Joint Appraisal meeting	27 NOV – 1 DEC 2017, SILVER SPRINGS HOTEL; NAIROBI
Participants / affiliation¹	MOH, WHO, UNICEF, CHAI, CDC, WB, KANCO, CRS, HENNET, SABIN, JSI, USAID, DFID, LIONS, DPHK, GAVI, AMERICAN RED CROSS, APHRC
Reporting period	1 JULY 2016 – 30 JUNE 2017
Fiscal period²	1 JULY 2016 - 30 JUNE 2017
Comprehensive Multi Year Plan (cMYP) duration	JULY 2015 - JUNE 2019

1. SUMMARY OF RENEWAL AND EXTENSION REQUESTS

As part of the ongoing grant cycle, Gavi reviews and renews its support to the country annually (referred to as “renewal”). If a country’s new and underused vaccine support (NVS) is coming to an end and the country is still eligible for Gavi support, it may submit a request to extend the support (referred to as “extension”).

Below tables 1.1 to 1.4 will be pre-populated by the Gavi Secretariat based on the country information submitted through the Country Portal on 15 May and four weeks before the Joint Appraisal meeting. If there are any changes to be made, these changes should be discussed during the Joint Appraisal and flagged in the Joint Appraisal report.

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

Type of support (routine or campaign)	Vaccine	End year of support	Year of requested support	Target (population to be vaccinated)	Indicative amount to be paid by country	Indicative amount to be paid by Gavi
Routine	IPV, 10dose/vial, Liquid	2018	2018	1,214,392	US\$ 0	\$1,446,000

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

If 2017 is the last year of an approved multiyear support for a certain vaccine and the country wishes to extend Gavi support, please do so by requesting an extension of the vaccine support. The extension can be requested maximum for the duration of the Comprehensive Multi-Year Plan (cMYP), which must be submitted to Gavi.

Type of Support	Vaccine	Starting year	Ending year
Routine	DTP-Hep B-Hib, 10dose/vial, Liquid	2018	2019

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

² If the country reporting period deviates from the fiscal period, please provide a short explanation.

Routine	PCV10, 2dose/vial, Liquid	2018	2019
Routine	Rotavirus, 2-dose schedule	2018	2019
Routine	Yellow fever, 10dose/vial, Lyophilized	2018	2019

1.3. Health System Strengthening (HSS) renewal request

Gavi commits to Health System Strengthening grants up to a five-year period, with the first tranche approved with the approval of the proposal. In subsequent years, the country should submit a renewal request for the approval of the following HSS funding tranche.

*Below table summarises key information concerning the amount requested for the next year. Please note that funds previously requested and approved may be pending disbursement and do **not** require further approval.*

Total amount of HSS grant	US\$ 20,339,960
Duration of HSS grant (from...to...)	10 th May 2017- 9 th May 2020
Year / period for which the HSS renewal (next tranche) is requested	2018
Amount of HSS renewal request (next tranche)	US\$ 5,612,451

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

Similar to the Gavi HSS support, the Cold Chain Equipment Optimisation Platform provides phased support for a maximum duration of five years, which is subject to an annual renewal decision.

Below table summarises key information concerning the amount requested for the next year.

Total amount of CCEOP grant	
Duration of CCEOP grant (from...to...)	
Year / period for which the CCEOP renewal (next tranche) is requested	
Amount of Gavi CCEOP renewal request	
Country joint investment	Country resources
	Partner resources
	Gavi HSS resources³

1.5. Indicative interest to introduce new vaccines or request Health System Strengthening support from Gavi in the future⁴

Indicative interest to introduce new vaccines or request HSS support from Gavi	Programme	Expected application year	Expected introduction year
	<i>HPV, Single dose vial, Liquid</i>	2017	2018
	<i>Meningococcal A vaccination campaign</i>	2017	2018

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

⁴ Providing this information does not constitute any obligation for either the country or Gavi, it merely serves for information purposes.

	Yellow fever vaccination expansion	2018	2018
	PCV two dose to four dose switch	2018	2018
	MR follow up campaign	2018	2019

Background

Gavi's support to a country's immunisation programme(s) is subject to an **annual performance assessment**. The Joint Appraisal is a key element of this performance review. It is an annual, country-led, multi-stakeholder review of the implementation progress and performance of Gavi's support to the country, and its contribution to improved immunisation outcomes.

To inform the Joint Appraisal discussion, the country is expected to post all reporting documents on the Gavi Country portal not later than **four weeks ahead of the Joint Appraisal meeting**.

This includes reporting against **key requirements**:

- Update of the grant performance framework (GPF) for indicators which are due
- Periodic financial reports, annual financial statements and audit reports (for all types of direct financial support received, with specific submission deadlines depending on a country's fiscal year)
- End of year stock reporting (which is compulsory to be submitted by 15 May of each year to calculate future vaccine requirements)

Other critical information to be posted on the Country Portal four weeks prior to the Joint Appraisal include:

- Immunisation financing and expenditure information
- Data quality information (including annual desk review and progress report on the implementation of immunisation data quality improvement plans)
- Annual progress update on the Effective Vaccine Management (EVM) improvement plan
- Campaign reports (if applicable)
- HPV specific reporting (if applicable)
- HSS end of grant evaluation (if applicable)
- Post Introduction Evaluation (PIE) reports (if applicable)
- Expanded Programme on Immunization (EPI) reviews (if applicable)
- Gavi and/or polio transition plans or asset mapping information (if applicable)

Other information that will inform the Joint Appraisal discussion include:

- Report by WHO and UNICEF on their technical assistance milestones funded through the Partners' Engagement Framework that should be updated four weeks in advance of the Joint Appraisal
- Analysis on coverage and equity and other relevant programme aspects, as informed by the Joint Appraisal Analysis Guidance (if available)
- Full Country Evaluation report (if applicable)
- Other evaluation of Gavi programmes

Note: Failure to submit the relevant information described above on the country portal four weeks ahead of the Joint Appraisal meeting (except for the vaccine renewal request, which is to be submitted by 15 May) may impact the decision by Gavi to conduct the Joint Appraisal meeting and renew its support.

2. CHANGES IN COUNTRY CONTEXT SINCE LAST JOINT APPRAISAL

Comment on changes which occurred since the previous Joint Appraisal, if any, to key contextual factors that directly affect the performance of the immunisation system and Gavi grants (such as natural disaster, political instability, displaced populations, inaccessible regions, etc., or macroeconomic trends or disease outbreaks).

Please indicate if the country has been formally identified by Gavi as fragile and specify if flexibilities in grant management are being requested.⁵

Health is a devolved (decentralized) function to the 47 counties in line with the Kenya constitution. County governments receive a resource basket from the national treasury that is not itemized and the counties plan for and prioritize these funds to all their health including immunization needs. The devolution of health in 2013 had the following implications:

- Counties became semi-autonomous and determined their health budget allocation based on their perceived need
- Counties took up the responsibility for service delivery and hence health human resource management
- Counties became responsible for procurement of equipment, recording tools as well as vaccine related commodities
- Counties became responsible for financing of health including immunization service delivery, outreaches, support supervision etc.
- New leadership in place at counties with significant staff movements, new staff with inadequate EPI knowledge were deployed
- Vaccines continue to be procured centrally, but the procurement of injection devices, including syringes was devolved to the counties

At national level, health is headed by a cabinet secretary while the accounting officer is the principal secretary both appointed by the President. At the county level, their equivalents are the County Executive Committee Member (CEC) and Chief Officer (COH) respectively. County level structures are determined by each county based on their peculiarity. An Intergovernmental forum, established as a coordinating mechanism between the two levels of government exists. The department of intergovernmental relations within the ministry of health coordinates this forum. Elected Governors and 1,450 ward representatives lead the 47 county governments. In August 2017, national elections were held and in several counties, there was a change in leadership and this transition disrupted the immunization programme.. The country also faced a highly contested presidential election leading to a longer electioneering period than previously experienced, this after a repeat of the election.

The 47 Counties are responsible for delivery of immunization services including procurement of relevant tools, equipment and related vaccine devices for traditional vaccines (they procure those not funded by Gavi or co-financed by MoH) The role of the national government and the county governments was outlined during a national county consultative forum that was held in early 2017 with counties committing to improve immunization outcomes through various initiatives such as:

- Prioritization of immunization services as a high impact-low cost intervention
- Advocacy to increase visibility and support for immunization by Governors and county assembly
- Counties to forecast, plan, budget and track immunization expenditure with support from the national level
- County managers to strengthen demand generation activities, community engagement and linkage to health services. National government to support documentation of these activities.
- Annual joint planning for better allocation of resources
- National program to negotiate with Kenya Medical Supplies Agency to stock immunization devices and enable access by counties to sustain immunization services
- Sharing of immunization score card quarterly
- Performance review meetings to monitor progress

⁵ For further information refer to <http://www.gavi.org/about/governance/gavi-board/minutes/2016/7-dec/minutes/08a---fragile-settings,-emergencies-and-displaced-people/>

Previously, immunization services in Kenya were coordinated at 3 levels nationally: (i) The Health Sector Coordinating Committee, (ii) The Child Health ICC (CH-ICC) and (iii) Technical working group. The CH-ICC approved the application for Gavi CCEOP in September 2016 as well as plans for National Introduction of HPV and Meningococcal Vaccination campaign in high-risk areas.

The established coordination mechanisms for the health sector were found to be weak and the Ministry of Health set-out to revamp these functions. The Ministry of Health recently constituted Kenya National Immunization Inter-agency Coordinating Committee to provide oversight over National Immunization Program Implementation in line with the National Health Sector Strategic Plan and National Immunization Policy Guidelines 2014. The Kenya National Immunization Coordinating Committee (N-ICC) provides a forum for coordination of investments in immunization supports management of key action points and oversees the work of appointed technical working groups and taskforces. Membership to the N-ICC comprises of MOH, development partners, CSO representatives and Faith Based Organizations. It is chaired by the Director of Medical Services (DMS) or his designated representative and is required to meet quarterly with provision for special meetings if necessary. The N-ICC held its first meeting in October 2017.

In order to address issues of data quality, in early 2017, the immunization program held a target-setting meeting with counties for harmonization of denominators for immunization indicators. This exercise was guided by input from the Kenya National Bureau of Statistics and was aimed at improving data quality. The country also developed a 5-year Cold Chain Equipment Rehabilitation and Expansion Plan (CCERP) to guide country investment in cold chain. Based on the gaps identified, Kenya successfully applied for support under the Gavi Cold Chain Equipment Optimization Platform. The Ministry has since mobilized additional funds from World Bank to further support cold chain expansion. Deployment of equipment procured through these funding sources will significantly address the identified gaps in the CCERP.

In 2017 the country experienced prolonged national health workers strikes specifically from Doctors and Nurses. Specifically, the national doctors' strike lasted more than 3 months followed by a 5-month national nurse's strike that ended in early November 2017. These strikes greatly affected nationwide demand for service delivery and immunization (especially during the doctors' strike where the public felt all hospital services were grounded) and service provision (most of the level 2 and level 3 health facilities are managed by nurses). Following negotiations with GoK the health care workers have resumed duty since November 2017 and the health services are now being provided. In collaboration with other partners, the Ministry of Health is implementing efforts to accelerate access to immunization services through a rapid results initiative (RRI). These efforts aim to reach most of the children who missed vaccinations services during the strike.

3. PERFORMANCE OF THE IMMUNISATION SYSTEM IN THE REPORTING PERIOD

This section should provide a succinct analysis of the performance of the immunisation system, including a thorough analysis of immunisation coverage and equity, as well as a review of key drivers of poor coverage. It should focus on the evolution/trends observed over the past two to three years and particularly changes since the last Joint Appraisal took place.

Information in this section will substantially draw from the recommended analysis on coverage and equity and other relevant programme aspects which can be found in the Joint Appraisal Analysis Guidance (<http://www.gavi.org/library/gavi-documents/guidelines-and-forms/joint-appraisal-analysis-guidance/>).

3.1. Coverage and equity of immunisation

Please provide an analysis of the situation related to coverage and equity of immunisation in the country.

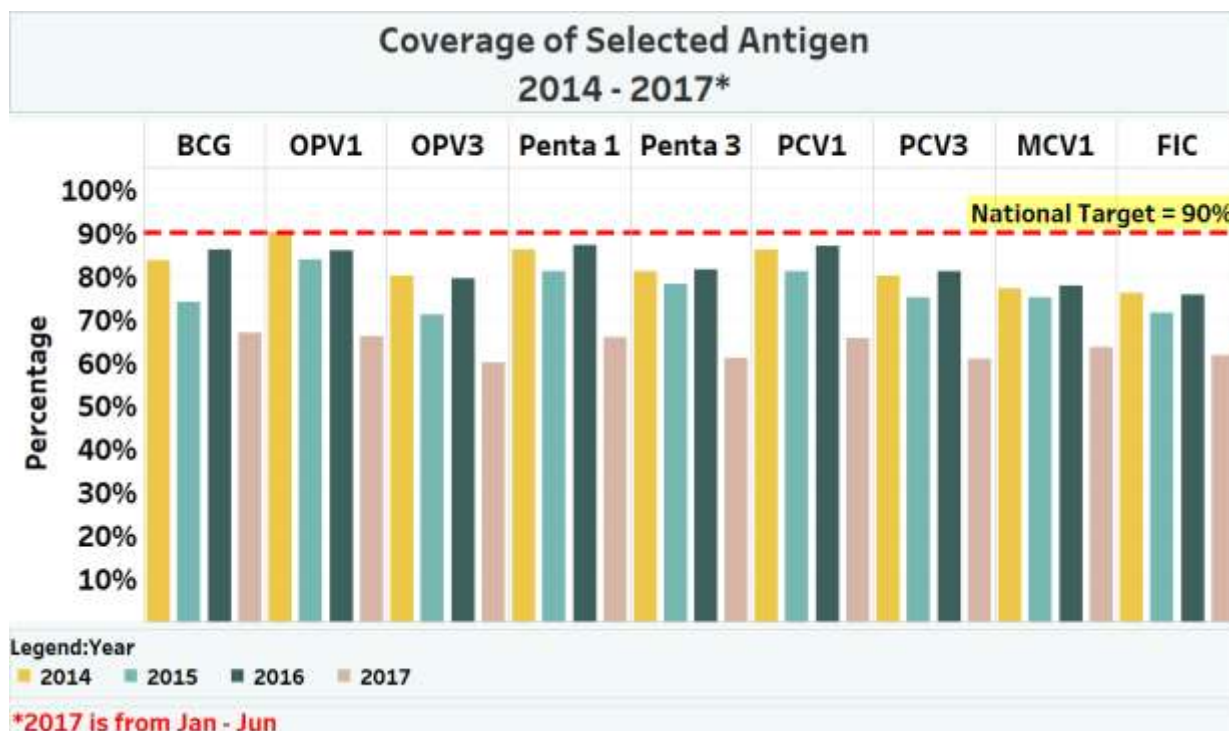
*Provide a summary of the difference in **coverage across various geographical areas, populations and communities** and the evolution over the past years. Relevant information includes: overview of districts/communities which have the lowest coverage rates and/ or the highest number of under-vaccinated children, number of vaccine preventable diseases (VPD) cases observed in various regions/districts etc.*

Countries are strongly encouraged to include heat maps or similar to show immunisation coverage trends

over time. Examples of such analysis are available in the *Joint Appraisal Analysis Guidance* (available via <http://www.gavi.org/library/gavi-documents/guidelines-and-forms/joint-appraisal-analysis-guidance/>)

National coverage

In 2016, the national target of 90% coverage for all antigens was not achieved. There appears to be a decline in coverage between 2014-2016 for most of the antigens as shown below from the DHIS2:



While coverage for most antigens has declined over the past 3 years due to the challenges attributed to instability caused by sudden changes in governance, among others, the immunization program has shown resilience, as exemplified by the stability of its systems.

The decline in coverage can be attributed to frequent stock out of injection devices and inconsistent outreach work targeting under deserved populations due to lack of financial resources (MoH is working to document this), weak data review and quality assurance mechanisms and inadequate engagement of communities religious leaders and non-health stakeholders on immunization services leading to low level ownership at county level. The immunization program is leveraging on opportunities brought about by devolution to adapt to this change of governance. As counties have leeway on resource allocation including that made to health, they could tailor their budgets to respond to their particular immunization needs. In addition, one of the goals of devolution was to bring services closer to the people. This has largely been successful with appointment of Health Management Teams and Hospital Management Boards, enabling participation of the communities in decision-making. The immunization program plans to leverage on these efforts mainly through advocacy and regular performance review with county stakeholders. The Gavi HSS, high-level advocacy activities are planned, mainly to strengthen support for immunization financing and in this context 2016 UNICEF TCA included (i) Advocacy with policy makers and parliamentarians for prioritization of immunization financing and bundling of vaccines with devices (ii) Support implementation of recommendations from ongoing support on domestic financing; Follow up on the action plan proposed by the country during the ESARO Commercial financing workshop and development of transition plan for immunization program. The Gavi HSS will also support outreaches in 17 focus counties while at the same time counties are being encouraged through advocacy to take up financing of immunization as a priority.

Health care strikes: in 2017, a five-month and a three-month strike respectively by government recruited nurses and doctors resulted in significant disruption of health care services, including immunization. This had a significant impact on coverage as some of the mothers and caregivers had to turn to profit and non-profit private providers for immunization. The nurses' returned to work in

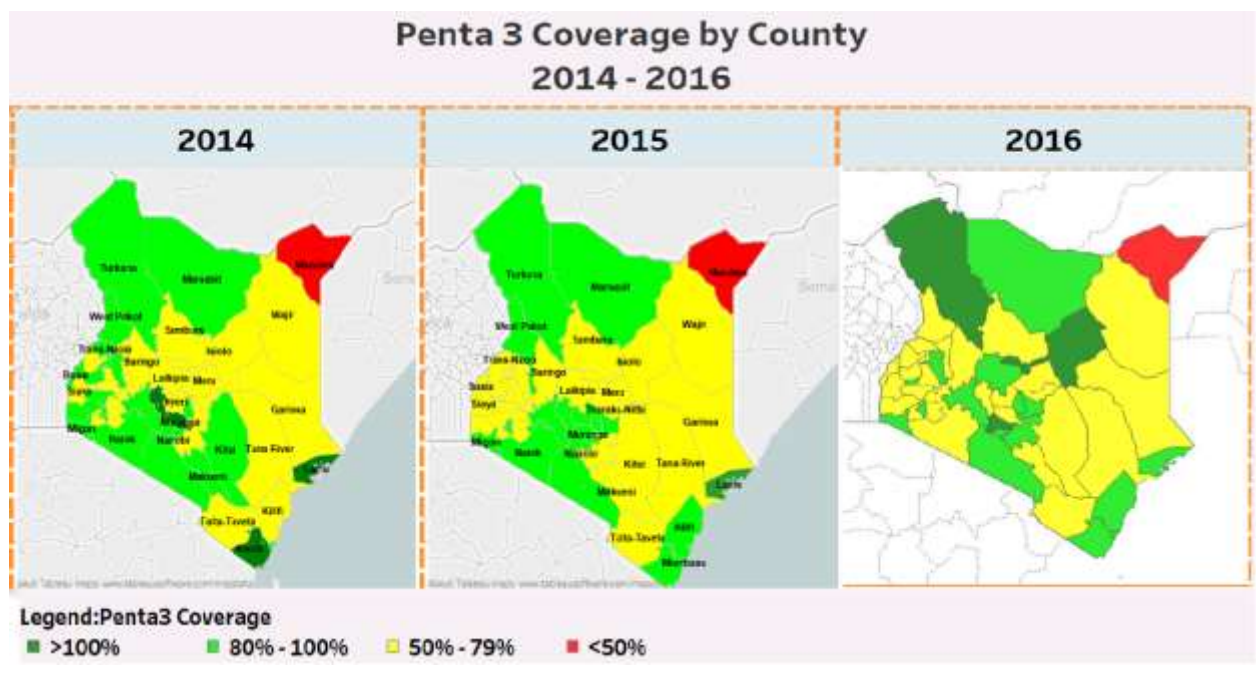
November 2017. Barriers related to equity including will require urgent attention. These include the lack of cold chain equipment and interrupted supply/ availability of vaccines at the operational level due to various reasons (Including strikes, poor forecasting and lack of support to collect vaccines from depots) which has prevented and or interrupted immunization in some health facilities. There is a need to improve the country’s cold chain capacity. The country is currently implementing the 2-year Gavi CCEOP project that will help strengthen this.

In the past, low data quality coupled with an inadequate performance review mechanisms has negatively impacted vaccine coverage. With the current HSS grant, the program plans to conduct annual immunization performance review at national and county level, support supervision and data quality improvement and assessments.

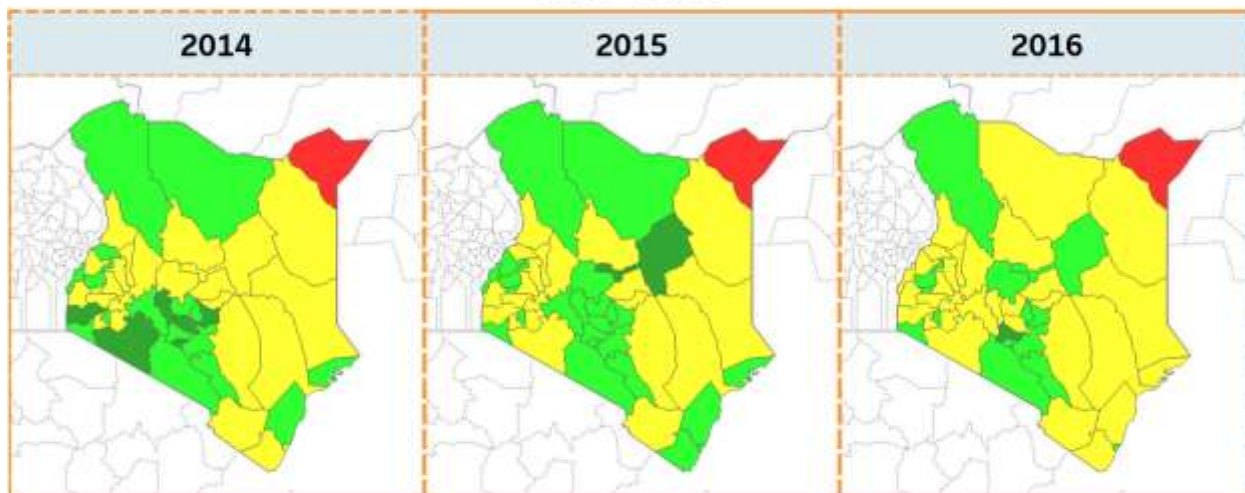
County coverage

In 2016 performance continued to vary across counties. The national Penta-3 coverage stood at 81.5% in 2016, slight below the national target of 90%. Only 40% of counties had a Penta-3 coverage of 80% and above. Penta-3 coverage in 3 counties (Kiambu, Isiolo, Turkana) was above 100% probably due to influx of population from other countries and/or an denominator challenges. Kiambu county borders the capital city of Nairobi. People migrate from other counties to live in Kiambu where there is affordable housing and the advantageous proximity to workplaces in Nairobi city. Surprisingly, just one third of sub-counties contribute to this ‘over-performance’ in the county. Penta-3 coverage for a majority (57%) of counties lies between the 50-79%. The counties with lowest penta 3 coverage are Mandera (37%), Wajir (55%), Nandi (61%) as shown below. All the three counties are focus counties in the Gavi HSS grant. Counties with the lowest MR1 coverage include Mandera (30%), Samburu (53.2%), West Pokot (54%), Wajir (54%), Nandi (59.7%). Currently the HSS also includes system strengthening activities for 17 of 47 counties such as immunization performance reviews and supportive supervision.

Between 2014 to 2016 two counties retained high Penta-3 coverage (Marsabit, Turkana) others experienced a decline from high coverage (West Pokot), while in Isiolo the coverage increased. Mandera consistently reports low Penta-3 coverage



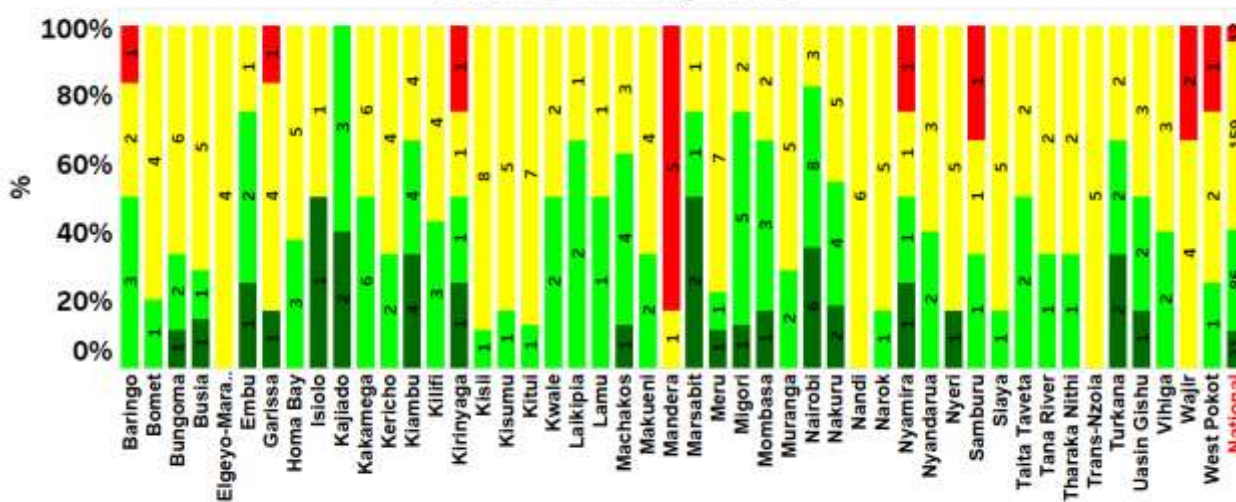
MCV1 Coverage by County 2014 - 2016



Legend: MCV1 Coverage
 ■ <50% ■ 50% - 79% ■ 80% - 100% ■ >100%

Counties are further sub-divided into sub-counties. Further analysis of sub county data also shows variation in performance within counties as shown below. Eight counties have sub-counties with penta-3 coverage below 50%. Most of these are semi-arid counties with nomadic populations that are difficult to reach. Interventions for these counties are also affected by a paucity of financial resources, although it is expected that support from HSS may help to address the challenges.

Number of Sub-Counties in County by Penta 3 Coverage 2016

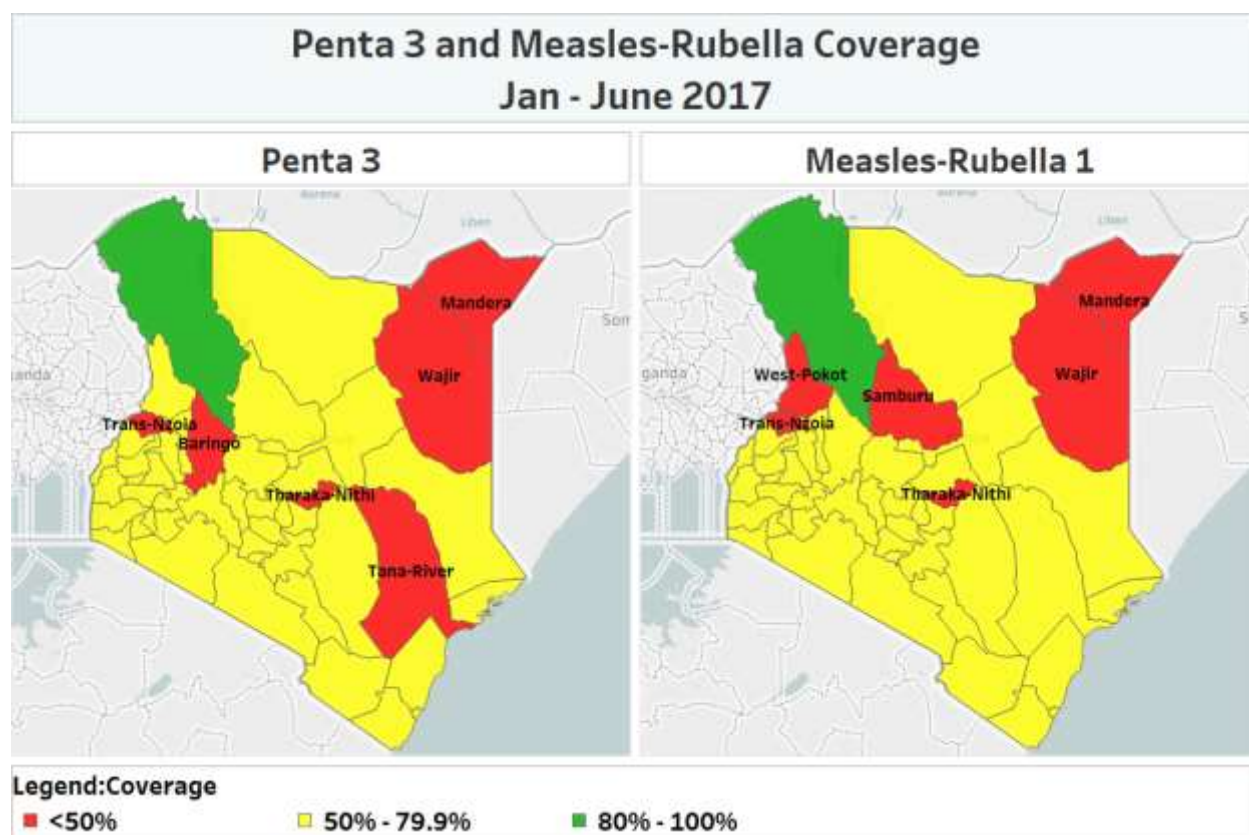


Legend: Penta 3 Category
 ■ <50% ■ 50% - 79% ■ 80% - 100% ■ >100%

Five of 6 (83%) sub-counties in Mandera county had a Penta 3 coverage below 50%. The county is semi-arid with a nomadic population, borders Ethiopia and war torn Somalia and is security challenged with significant refugee population movements and also hard to reach. The inadequacy of resources to conduct outreaches and other activities to reach this population has further caused low coverage. There is need to support outreaches for this population. This county is a Gavi HSS focus county and will be supported to address these barriers to coverage and equity. The county also may be having an over-estimated denominator which is affecting the data quality

Data as of June 2017 indicate Penta3 coverage below 70% at the national level and all other antigens showed coverage well below the 90% target compared to 2016. All except one county have a penta-3

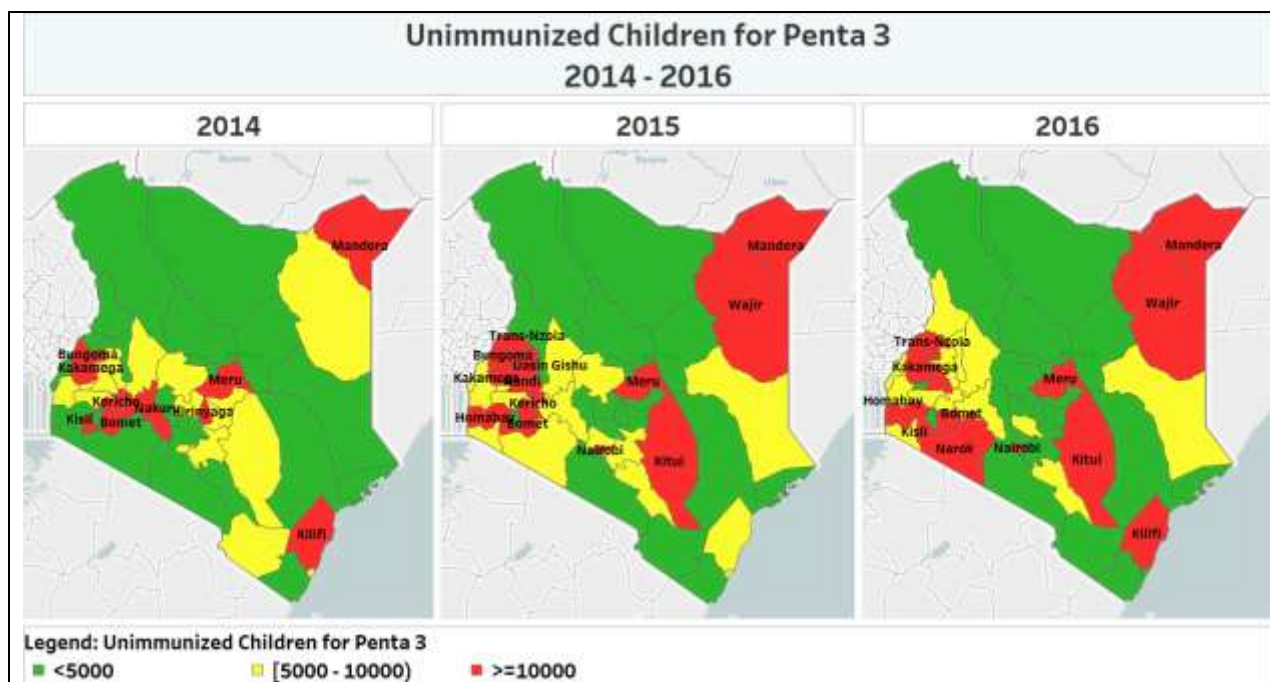
coverage of below 80% with 6 counties having a penta-3 coverage below 50%. There is therefore an urgent need for the country to institute a county-specific response to mitigate the effect of the health workers strike.



Unimmunized children

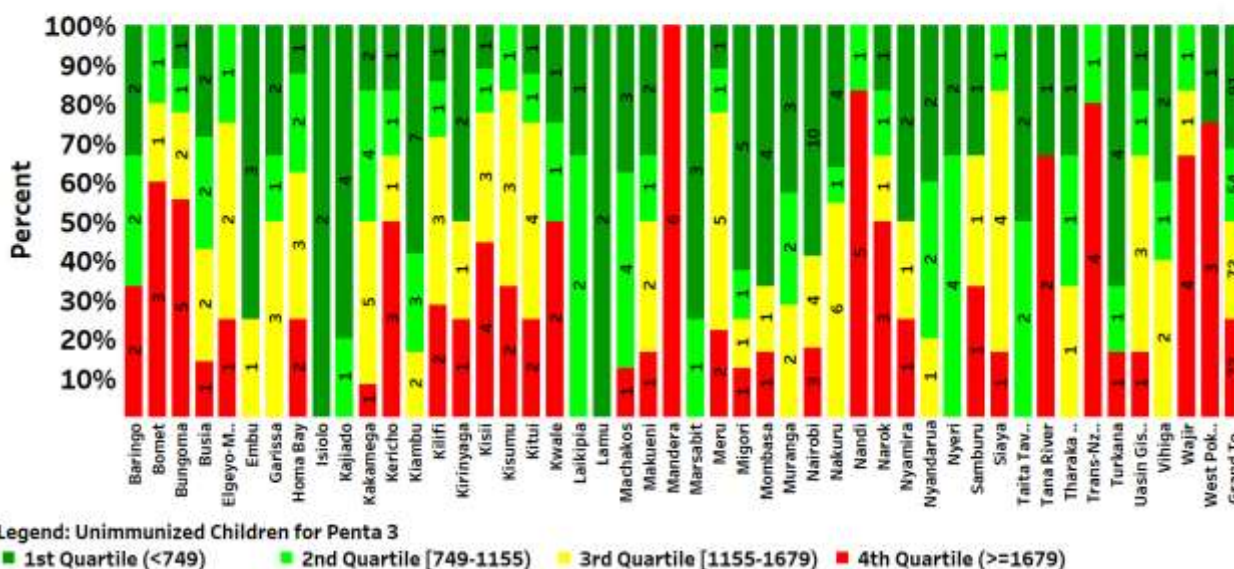
The total estimated number of unimmunized for Penta 3 has declined from about 400,000 in 2015 to 270,562 in 2016 and harmonization of the denominator across counties may also have contributed to this adjustment. In early 2016, the program conducted a target setting exercise in conjunction with counties and the Kenya National Bureau of Statistics. The projected total population remained the same but there was a slight reduction by approximately 3% in the projected number of live births between 2015 and 2016.

In 2016, 14 counties contributed to two thirds the total number of unimmunized children: (in order-from the least contributor to greatest): Nairobi, Kilifi, Meru, Bomet, Homabay, Kitui, Wajir, Nandi, Narok, Bungoma, Trans-Nzoia, Kisii, Kakamega and Mandera. These counties are majorly targeted through the HSS programme to receive support that will help improve their performance. The three (3) counties with the highest number of unimmunized children for Pentavalent 3 are Mandera, Kakamega and Kisii County with a total of 26910, 14814 and 14428 unimmunized children respectively. In contrast, Kiambu County records zero unimmunized children for Pentavalent 3. However, it hosts significant transit populations who may skew the performance data and hence it is still of special interest to the program, .



The numbers of unimmunized children for Penta-3 also show variation within the counties as shown by the sub county data below. Most counties have at least one sub-county with a high number of unimmunized children in the fourth quartile i.e. more than or equal to 1679 unimmunized children. Counties with the highest number of sub-counties reporting unimmunized children in the fourth quartile include: Manderla (6), Bungoma (5), Nandi (5), Kisii (4), Trans-Nzoia (4), Wajir (4).

Number of Sub-County in a County by Unimmunized Children for Penta 3 2016



A number of Urban and periurban counties (Mombasa, Kilifi, Kajiado and Kisumu) also have sizeable informal settlements, squatters and influx of populations around industrial plants and agricultural firms providing labour to the firms but significantly lacking in social amenities and health services including

immunization.

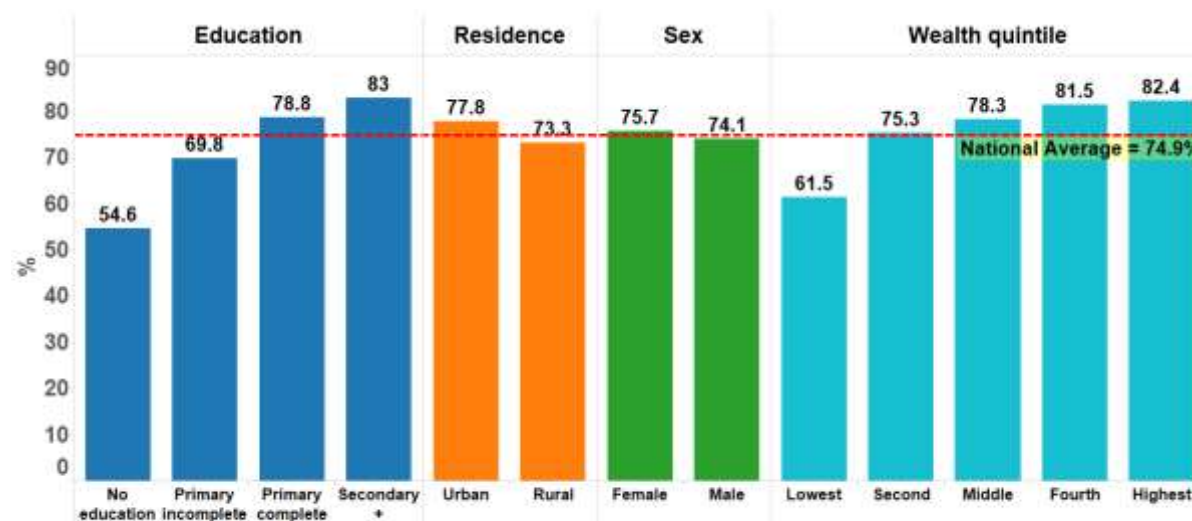
Drop-out rate

The national Penta 1 to Penta-3 Drop Out Rate in 2016 was below the threshold of 10% at 6.5%.

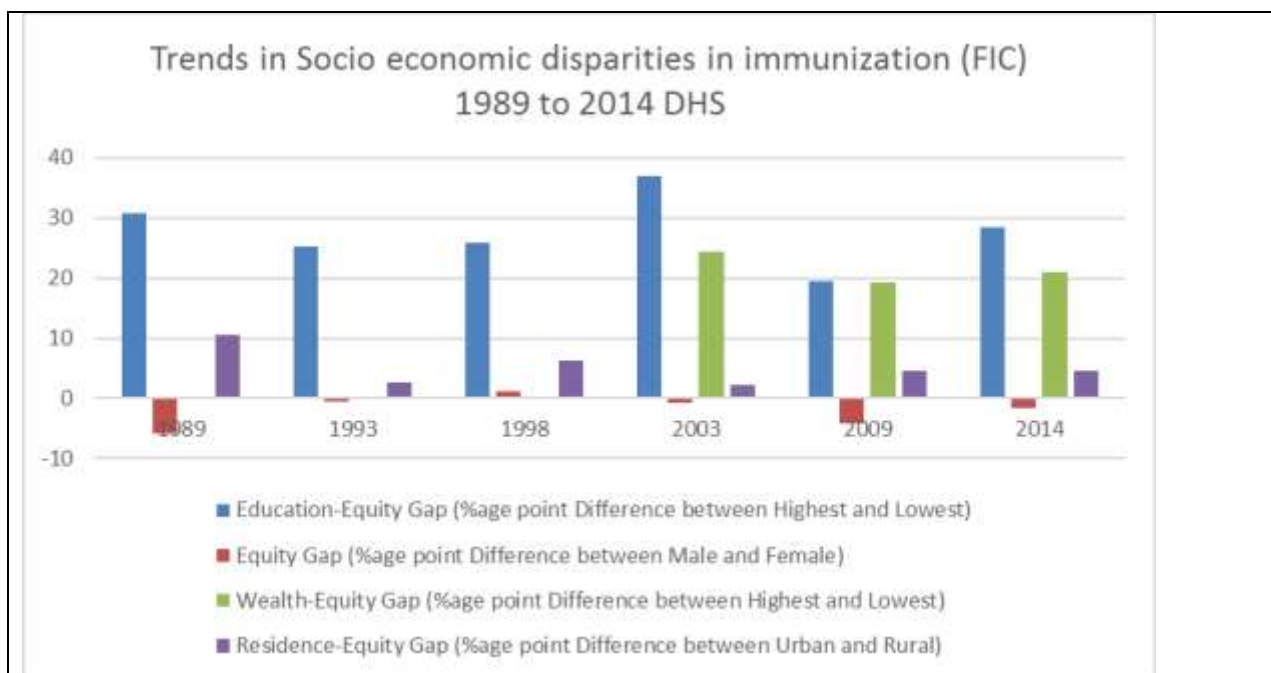
Analysis of 2016 data shows that dropout rates between Pentavalent 1 and Pentavalent 3 range between a low of 1.6% in Mombasa County and 19.5% in West Pokot County. There are eleven (11) counties with dropout rates greater than 10%. These are (in order of increasing drop-out rate): Trans-Nzoia, Narok, Garissa, Isiolo, Tana-river, Wajir, Turkana, Mandera, Marsabit, Samburu and West Pok ot

Demographic health survey

Analysis of the Demographic & Health Survey (DHS) 2014 report shows lowest vaccination coverage amongst households in the lowest wealth quintile, among children of mothers/caregivers with no education and among those that live in rural areas. At the national level, there is no difference in immunization coverage based on sex. Trend analysis from 1989 to 2014 confirms that access to education and wealth are the two major determinants for full immunization. Gaps between the rich-poor and educated-not educated appear to decline between 2003 and 2009, followed by an apparent widening in 2014.



Source: Kenya Demographic and Health Survey (KDHS) 2014



On-going initiatives to improve coverage and equity

Sixteen⁶ low-performing counties are targeted for support through the Gavi HSS grant while others are targeted through the ongoing Technical Country Assistance and other local partnerships such as scale up of the REC Strategy, Operational level training, capacity strengthening for supply chain etc.a

REC microplanning activities have been conducted in four counties with the highest burden of unimmunized children and that are not Gavi HSS focus counties. These are Narok, Kisii, Uasin Gishu and Nairobi. The have been trained at County and Sub county level in 2017, and the same was cascaded to operational level where select health facilities have been able to conduct a microplanning exercise and under the guidance of the County leadership identified context specific strategies to reach their target populations. Initial support has also been availed for outreaches to be able to demonstrate the model.

It is expected that the Gavi HSS/TCA will then support these strategies for a time, as counties prepare to absorb these costs into their health budgets. Health workers in the 16 focus counties will receive operational level training and mentorship to enhance their knowledge in EPI. This is to be followed by a microplanning exercise to be able to better focus their capacities in delivering on immunization outcomes. The counties will be supported to conduct quarterly support supervision to its facilities. Nairobi contributes a large number of unimmunized children and is home to some of the largest slums that host the urban-poor. Nairobi is one of the counties targeted by the Gavi HSS, through a RED/REC urban programming exercise.

Following the protracted Health workers strike, the Government, with the support of UNICEF, WHO, Redcross among other partners commissioned an integrated rapid results initiative (catch up campaign) targeting high impact RMNCH interventions including immunization in heavily affected counties. The Cabinet Secretary, Ministry of Health in November 2017, launched this formally. This largely involved community outreaches, distribution of commodities and partnership with local private, NGO and Faith based facilities to deliver the services. Further, the Ministry with the support of partners (CDC and MCSP) was able to implement START (Strengthening Technical Assistance for Routine Immunization Project) focussed on capacity building and development of competencies in immunization microplanning and data management using a mentorship and approach in sub counties and health facilities in 14 counties. This focussed on improving coverage and reaching the unvaccinated children.

⁶ Nakuru, Bomet, Nandi, Kitui, Kakamega, Bungoma, Trans-Nzoia, Tana-River, Baringo, Isiolo, Homabay, Laikipia, Garissa, Meru, Wajir, Mandera

3.2. Key drivers of low coverage/ equity

*Please highlight key drivers of the low levels of coverage and equity highlighted in the section above. For those districts/communities identified as lower performing, explain the **key barriers** to improving coverage.*

Health Work Force: *availability and distribution of health work force.*

As provided by the 2010 Kenya constitution, health services were devolved in 2013 during its implementation. Hence, management of the health workforce became one of the functions of the County government. New managers and health care providers were appointed/deployed/recruited to provide health services with significant transition of trained immunization staff to other responsibilities creating a significant immunization skills gap at the implementation and middle management level.

Despite the many health workers being employed at county level, especially in marginalized areas e.g. Turkana County, the country is yet to achieve the recommended health worker to population ratio for most counties as defined by WHO. WHO recommends at least 4.45 skilled health professionals per 1000 population. Inadequate staffing is a major barrier to service delivery, including immunization. The country has adopted an integrated approach to service delivery in an attempt to bridge the gap, for instance all of the reproductive, maternal, child health and nutrition interventions are delivered together in the level 2 and 3 facilities. However, this is not sufficient.

Financial constraints have limited in-service operational level training for healthcare workers and middle level managers. Currently less than 1% of frontline health workers receive EPI updates in any given year. The last EVMA (2013) reported that many staff had poor knowledge of MDVP, shake-test and wastage computation. This lack of knowledge resulted in incomplete filling in of the monthly logistics summary data. There is therefore the need to address financial constraints facing the NVIP in enhancing the capacity of County EPI teams through developing these core competencies.

The EPI program has shared resources online to facilitate access to current information on EPI, which could help improve health workers' skills. Through the Gavi TCA and support from partners, some progress has been made in capacity building. For instance, at least two Medical Engineering Technologists per county have been trained on cold chain equipment repair and maintenance. In addition, the current HSS grant will help address this challenge through the scheduled operational level training, mid-level managers training and the micro-planning exercises in the focus counties. Further investments in capacity building is needed to augment this. Further engagement is planned at the county level and among local partners to mobilize resources and scale up the trainings especially in counties not targeted by the HSS funds. These trainings are expected to enhance the knowledge of the health worker on EPI. The program through the HSS plans to hold an immunization supply chain-forecasting workshop for all 47 counties; this will enhance skills of county EPI logisticians.

Delays in payment of salaries by some counties, numerous labour disputes and the lack of a clear system for staff promotions and motivation has resulted in low staff morale, high attrition rates, and frequent strikes of health workers that negatively affects service delivery resulting in inequities. The government is in the process of establishing a Worker-Employer council in each county to address human resource issues. Further, the signing of and legal recognition of the Collective Bargaining Agreements (CBAs) between the County Governments and health workers is expected to lead to some stability in the health workforce.

While there are currently 35,000 community health volunteers in the country who are involved in immunization related activities such as defaulter tracing and social mobilization, skills and knowledge gaps exist among them on immunization and in guidelines on their engagement in immunization Service delivery. Through the Gavi HSS, community health volunteers in the focus counties will be sensitized on inter personal communication, basic immunization concepts and vaccine preventable diseases and they will be provided with job aids and guidelines to facilitate their work. They will be actively involved in the microplanning process alongside the health workers and community leaders to ensure community ownership of the program and to link demand for immunization to the services..

Supply chain: *key insights from latest EVMs and implementation of the EVM improvement plan.*

Cold chain capacity and functionality

The EVMA 2013 findings showed that 50% of sub-county vaccine stores had inadequate cold storage capacity to hold 3 months' stock of vaccine at a given time as per, the national policy. Out of about 10,000 existing health facilities about 40% did not offer immunization mainly due to lack of cold chain equipment. The limited cold chain space in immunizing health facilities has necessitated a number of facilities to adjust vaccine collection schedules, making it more frequent, inefficient and increasing the risk of stockouts. The Cold chain equipment landscape has changed significantly since the last EVMA. About 900 refrigerators were procured and deployed to health facilities, Sub county capacity was increased to over 90% and a significant proportion of non-functional CCE repaired. Today about 70% of facilities offer immunization. The country plans to conduct the next EVMA in 2018.

The program continues to be faced with new cold chain challenges resulting from population growth, new facilities being opened, old and obsolete cold chain equipment, new vaccines being introduced into the EPI schedules and newer vaccines characteristics such as freeze sensitivity.

In August 2016, the program developed a 5-year Cold Chain Expansion and Rehabilitation Plan (CCERP) to guide investment in cold chain during this period. In implementing the CCERP, the program successfully applied for Gavi support under the CCEOP platform in 2016. Through the CCEOP (KShs. 13 Billion) and subsequent funding by the National Government (KShs. 750 Million) through a Loan from the World Bank, the country plans to equip 960 facilities offering immunization but have no refrigerators, replace 1192 domestic and 3035 PIS refrigerators and expand immunization to about 590 facilities that currently do not offer immunization but have been identified by counties to start immunizing. In addition, all capacity gaps at sub county stores identified in the CCERP will be filled. The country with support from its partners. JSI/Nexleaf is planning to actively utilize temperature data to inform maintenance activities through use of Fridge tag data at HF level and remote temperature recorder at sub county level.

In addition, the National Government funding through a Loan from the World Bank and facilitated by UNICEF is being used to procure non-CCEOP eligible equipment such as cold rooms to be installed in the Arid and Semi Arid areas to expand their vaccine storage capacity and More than 3,300 vaccine carriers and coldboxes to supplement Gavi support and facilitate outreaches.

The program with support from UNICEF, WHO and CHAI has integrated a cold chain module into the country E-LMIS system, CHANJO®. The program is currently testing the cold chain module and it is expected that it will support cold chain deployment and tracking going forward.

The table below highlights changes in the status of cold chain equipment between 2011 and 2017.

Table: Status of cold chain in Kenya (2011, 2016 and 2017)

	Number of HF	Number of Equip	percentage of HF without EPI fridge	Non Functional (%)	PQS-PIS (%)	Non EPI	Solar
2011	5305	4946	13%	17%	85%	15%	236
2016	6911	6042	18%	8%	79%	21%	456
2017	7398	6263	19.5%	8%	80	20%	508

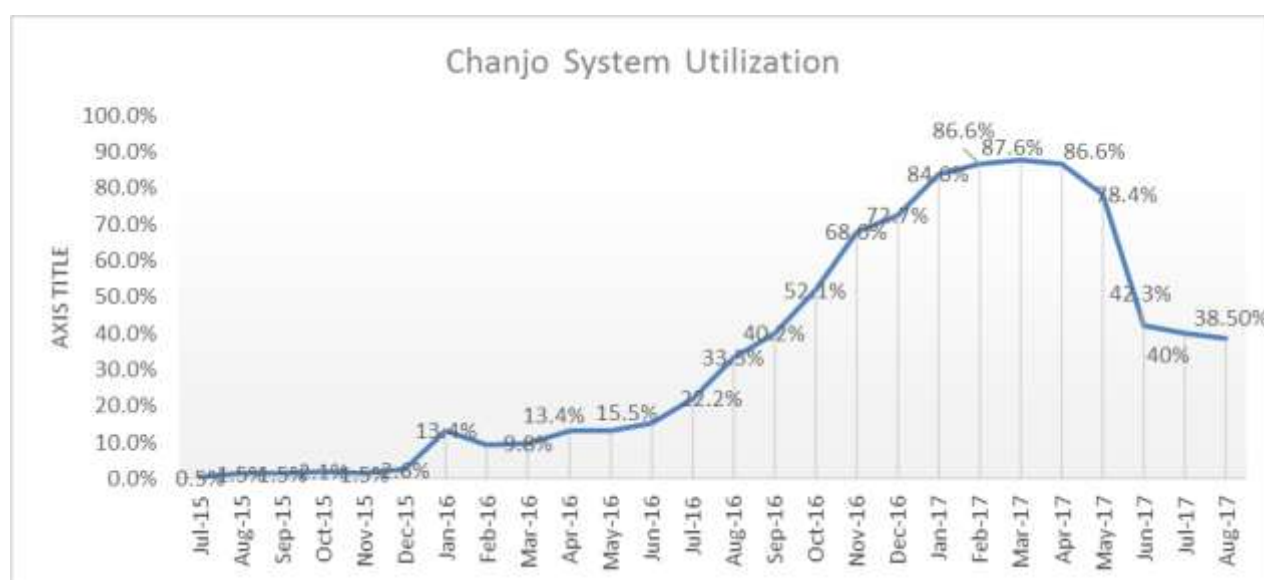
*Stock outs of vaccines and related supplies*The country has experienced Interrupted supply of syringes and other vaccine consumables. Vaccine stock outs have also occurred at health facility level mainly due to forecasting challenges related to capacity gaps, population target challenges and unstable service delivery arising from the strikes, poor stock management practices and weak and unreliable distribution mechanisms at that level. There is limited financial support to the vaccine supply chain system at operational level.

A program audit conducted by Gavi in 2015 pointed towards a weak supply chain system. This included poor inventory records, non-adherence to the FEFO principle, and lack of maintenance of buffer stocks across levels, inadequate transport and cold chain capacity leading to non-adherence to resupply policies, thereby contributing to periodic stock outs etc. A feasibility study for a Visibility & Analytics Network, conducted in October 2016, confirmed the drivers of stock outs mentioned above and the need to

reinforce the basic knowledge on stock and vaccine management across the levels of the supply chain and greatly enhance utilization of data for operational, management and strategic decisions and actions.

The program has implemented key interventions to improve vaccine stock management at all levels. The MOH has deployed **five** additional officers at the National Store to support vaccine supply chain management and improve vaccine management. These include a Pharmacist with postgraduate qualification and more than 10 years' experience in supply chain management, two graduate pharmaceutical technologists each with more than 15 years' experience, a general supply chain officer to manage the dry stores and an administrator. Further, with the support of UNICEF, the Depot manager has received vaccine specific supply chain management training and two more officers are scheduled to be trained in the same in 2018, under the TCA.

By March 2017, the Ministry in collaboration with UNICEF and CHAI had rolled out an electronic stock management tool (Chanjo®) to sub-county store level. The system utilization at county level had increased to 87.6% by June 2017. However, regular updating of stock transactions was significantly affected during the nurses' strike period. While this tool is designed as a transactional system and ultimately will significantly improve real-time visibility of stock levels and utilization when it is functioning at optimal capacity, there is a gap in using data to optimize performance and promote continuous improvement in the supply chain.



There are various efforts to improve vaccine stock management that will be implemented through HSS including joint forecasting between national and county and refresher training on temperature monitoring.

Procurement of vaccine related supplies is a function that was devolved to the counties. A significant number of counties have had challenges procuring injection devices, specifically BCG syringes due to various reasons such as unavailability in the market as well as prohibitive prices. NVIP with the support of UNICEF has been engaging KEMSA to consider stocking these essential commodities for counties to procure. In addition, the program is advocating for reverting procurement of injection devices mainly BCG syringes to National government and or bundling of the vaccines with syringes. This will enable collective sourcing through UNICEF, which could also reduce costs due to economies of scale.

The program is focused on putting in place processes that routinely promote use of real-time data from the eLMIS to rapidly respond to low stocks (by looking at nearby inventory levels) and ultimately to predict stock outs and prevent them. This includes development of Standard operating procedure for supply chain management at all levels (already finalized for National level and regional depots, the same is being adapted for lower levels), routine use of logistics data including reviewing it for timely reporting, timely ordering and order fill rates to improve vaccine availability at lowest service points. These efforts to improve vaccine stock management will be strengthened through the through the HSS grant including

joint forecasting between national and county, and refresher training on temperature monitoring and process transformation around data use at all levels of the system, and specifically for Inventory Management and Cold Chain Management as part of the proposed VAN activities. Data triangulation will be promoted to ensure that stock data is viewed side by side with utilization, cold chain and others data to facilitate enhanced problem solving and monitoring of data quality and system performance.

Inadequate operational funds for depots

The program continues to face the challenge of inadequate funding for operations of the depots. The last EVMA recommended proper arrangement for fund management at CVS, RVS and Sub-County Vaccine Stores level so that all EPI related activities could be correctly implemented. Support for general operations of the depots is minimal and ad hoc. The HSS will support procurement of generator for one depot and fire extinguishers for the other depots as one of the minimum EVM requirements

The last EVMA reported inadequate facilitation for distribution services and transportation from regional depots to sub county, and sub county to facility, a county function. In the HSS, various counties are targeted to be supported with vaccine delivery vehicles to support this function, even as the program continues to advocate for additional financing for operational costs at both county and national level. The CVS will also be supported with one refrigerated truck to supplement contracted transportation.

Demand generation / demand for vaccination: key insights related to demand for immunisation services, immunisation schedules, etc.

From KAP studies conducted in-country, while many care givers appreciate the benefits of immunization, which has contributed to vaccines being generally well accepted, the country has faced vaccine hesitancy among some groups including the religious sector. The country managed to deal with this through crisis communication during the MR campaign through some key activities such as implementing a crisis communication plan for campaigns, mobilization of immunization ambassadors, working across sectors with Ministry of Education and religious bodies and most importantly strengthening the community mobilization activities. There is need for continued Community mobilization and engagement in a systematic manner to ensure our coverage and equity objectives are met.

There is inadequate knowledge among care-givers about vaccine preventable diseases, the need to complete immunization schedule and while health workers have inadequate capacity in how to communicate to care givers on the same. Health workers do not always explain key messages: vaccine being given for, benefits, when to return and side effects if any that would create confidence in vaccines.

Even though there are strategies to engage community, religious leaders and non-health stakeholders in immunization, this has been ad hoc and inadequate leading to insufficient community ownership. There is a need to strengthen this engagement and include health professionals, civil society and other stakeholders including political leaders, people practicing alternative medicine, professional bodies etc. and inform families/care-givers about the vaccines and their benefits. At the same time, interpersonal skills of health workers should enhance to enable them to communicate well with care-givers and communities. In Kenya, Community Health Volunteers (CHVs) and village leaders are the frontline workers for social mobilization. Their capacities also need to be strengthened.

The country is in the process of updating the National Immunization Communication Plan, which will include Crisis/Risk communication. The program is leveraging on the HSS funding to update and implement communication plans at all levels. A number of communication activities have been included in HSS which will be implemented.

Mass media and social media digital platforms such as Facebook, Twitter, WhatsApp will be used to share information on routine immunization and issues of public concern. The use of SMS reminders in communication with clientele resulted in great penetration and demand generation during the 2016 measles rubella campaign. Consideration is being given to this approach in a scaled-up manner.

Supply side barriers such as stock-outs has a negative impact on uptake of vaccine. Therefore, the program will in addition focus on linking demand creation activities to service availability.

Leadership, management and coordination: *leveraging the outcomes of the Programme Capacity Assessment and/or other assessment, please describe the key bottlenecks associated with management of the immunisation programme; this includes the performance of the national/ regional EPI teams (e.g. challenges related to structure, staffing and capabilities), management and supervision of immunisation services, or broader sectoral governance issues.*

The roles and responsibilities between national and county governments as regards immunization have been unclear since devolution took place. This hampered EPI service delivery as counties grappled with stock-outs of key commodities such as syringes, reporting tools and IEC materials. Clarity on the roles and responsibilities across the two levels of government has improved greatly following several advocacy engagements between the two levels of government and recognition of immunization as a shared function. The new leadership in the Counties following the August 2017 elections makes the need for continued engagement of the county leadership even greater. The program plans to continue to engage the counties through stakeholder meetings, immunization performance reviews, policy briefs and quarterly bulletins. Advocacy efforts will also be scaled up and some with support from the HSS grant as a portion of funds channeled through KANCO is to focus on advocacy. KANCO has not started implementation of its activities but the coordination unit will strengthen areas of coordination across the key HSS fund recipients

At the National level, the established coordination mechanisms for the health sector were found to be weak and the Ministry of Health set out to revamp these functions. The Ministry of Health formed the KENITAG, an independent body comprised of professionals from various fields related to immunization, to provide independent professional advisory opinions on technical issues. Further, the Ministry of Health recently constituted Kenya National Immunization Inter-agency Coordinating Committee to provide oversight over National Immunization Program Implementation in line with the National Health Sector Strategic Plan and National Immunization Policy Guidelines 2014. The Kenya National Immunization Coordinating Committee (N-ICC) provides a forum for coordination of investments in immunization supports management of key action points and oversees the work of appointed technical working groups and taskforces. Membership to the N-ICC comprises of MOH, development partners, CSO representatives and Faith Based Organizations. It is chaired by the DMS or his designated representative and is required to meet quarterly with provision for special meetings if necessary. The N-ICC held its first meeting in October 2017.

The Ministry of Health, in order to continue and sustain financing for immunization and to ring fence the same has positioned the NVIP as a National Strategic Public Health Program. Further, plans are underway to enact the necessary legislation through the support from the HSS, TCA and local partners to anchor this support in law.

The level of support provided to the health sector including immunization services varies across counties with performance largely dependent on the extent to which the county political leadership supports the technical arm to provide oversight to frontline health workers. In FY 2016/17, county governments increased allocations to health as a percent of total county budgets; however, evidence suggests that significant proportion of the county health budgets are used for personnel emoluments. The decision to allocate a certain proportion to health rests with the county. The top five counties that allocated the highest proportion to health include Elgeyo-Marakwet, Nakuru, Kiambu, Baringo, and Siaya. The lowest five are Mandera, Bomet, Turkana, Samburu, and Wajir- coincidentally 3 of these counties (Mandera, Bomet and Wajir) are highly contributing to the high number of unimmunized children while Samburu experiences high drop-out rates.

Financing for immunization at county level has been inadequate. The responsibility of procuring injection devices- syringes and safety boxes and documentation tools lies with the county. Of crucial concern to the immunization program is the inadequate funding and delays in financing for procurement of injection devices for BCG and Measles-containing vaccines by counties. This has negatively affected bundling of vaccines and injection devices and has contributed to missed opportunities for vaccination, and declined performance for other antigens. Addressing sustainable financing for injection devices and operational costs, hastening the establishment of sector coordination mechanisms in line with devolution and budget expenditure tracking at county and national level are crucial areas of intervention.

The need for continuous advocacy for immunization financing at county level cannot be overemphasized. While many counties mention immunization as a priority in their County Integrated Development Plans (CIDPs), few counties have a clear budget allocation for immunization, suggesting a weak link between planning and budgeting. Although key guidelines have been developed, the distribution of guidelines has

not penetrated to all levels especially newer facilities. There is need to print and disseminate key immunization guidelines and provide soft copies on the web to improve access by service providers. Recognizing the need to revamp vaccine management and provide health workers with relevant SOPs, the program is planning to develop simplified job aids and SOPs for the health workers.

Service delivery

The National Immunization services in Kenya is managed by the Ministry of Health through the National Vaccines and Immunization Program (NVIP). NVIP provides policy direction, oversight and technical support to implementation for the routine immunization that occurs at the county level through a network of over 7,000 sites, fixed, mobile fixed and outreach sites; Public, Private, FBO and NGO. The program is classified as strategic national program.

The National vaccine and immunization programme reaches the population through immunization service delivery points that are run by government, NGOs, CBOs, private actors and outreach services at Sub County, in which the vaccines are provided free of charge in order to eliminate economic barrier to immunization.

A total of 14 counties contribute to two thirds the burden of unimmunized children: (in order-from the least contributor to greatest): Nairobi, Kilifi, Meru, Bomet, Homabay, Kitui, Wajir, Nandi, Narok, Bungoma, Trans-Nzoia, Kisii, Kakamega and Mandera. These Counties face a myriad of challenges- Narok, Kitui, Wajir, and Mandera are largely arid and have nomadic populations posing logistical challenges. In addition, Wajir and Mandera are border counties fraught with ethnic conflict and insecurity challenges arising from neighboring Somalia.

Frequent and prolonged health workers strikes have also been disruptive to service delivery. Scarcity in resources at the disposal of counties and health facilities is the root cause of the decline in implementation of outreaches and mobile strategies designed to reach the hard to reach populations and address inequity in service delivery in most of these counties. Highly populous counties among the above like Bungoma, Trans-Nzoia and Kisii require extra efforts to identify and reach the unreached children.

Eleven of the populous counties have support earmarked through the Gavi HSS to facilitate activities focused on achieving coverage and equity and ensuring availability of high quality vaccines including facilitating vaccine delivery, operational level training, microplanning, outreaches and community mobilization drives. The program recently reviewed the Micro-planning RED/REC guidelines that will be applied across these counties in an effort to reach every child. Through the support of UNICEF, WHO and the Gavi/TCA, the country has begun implementation of this strategy in another 4 counties that are not supported under the HSS (Kisii, Uasin-Gishu, Narok, and Nairobi) through the TCA

Ongoing landscape analysis of immunisation service delivery in the country and data from the health workers strike period has yielded more information on equity gaps in vaccination coverage. Urban informal settlements in major cities (Nairobi, Mombasa and Kisumu) stand out as having equity gaps. Poor timing of services has adversely affected communities living in informal settlements contributing to the high number of unimmunized children. Some immunizing facilities do not offer vaccination daily, Missed Opportunities for Vaccination study revealed health workers miss to screen all children on vaccination status when they present to the health facility. This alongside the pressure to earn a living results in individuals prioritizing other economic activities over immunization.

Nairobi is the largest city in Kenya and accounts for the highest urban population at 3 million people, Mombasa and Kisumu the second and third respectively. It is estimated that more than half the urban population of Kenya now live in the country's informal settlements. The number of people living in slums has increased from approximately 1.5 million in 1990 to 6.4 million in 2014 and who survive on less than a dollar a day. The SARAM of 2013 reported that only 34% of primary health facilities in Nairobi provided immunization services. The Government has implemented a policy extending opening hours of these health facilities and procured mobile clinics however the gap is still great. This mirrors the situation in the two other cities. Further, in a number of periurban counties- Kisii, Uasin Gishu and Kajiado, have sizeable informal settlements around industrial plants and agricultural firms providing labour to the firms but significantly lacking in social amenities and health.

In addition to the Gavi HSS focus counties, the Program seeks to scale up the RED/ REC activities in

Narok, Kisii, Uasin Gishu and Nairobi and expand the same to four Urban and periurban counties (Mombasa, Kilifi, Kajiado and Kisumu) in order to bridge the equity gaps associated with the informal settlements in these cities. The program plans to achieve this through support from the Gavi TCA, and a scale up of targeted coverage and equity activities to these counties from a request for extra budgetary support in the Gavi HSS.

Public financial management: *the extent to which funds requested are made available in a timely fashion at all levels, highlighting particular bottlenecks in the disbursement process.*

The disbursement of funds from Treasury to MOH and Counties faces occasional delays, arriving late in the financial year and is done in four quarters while some interventions require lumpsum disbursements. This results in delayed procurement, lack of funds for operations as well as delayed staff salaries. There is need for the country to review financial procedures at the close of the financial year to ensure smooth transitioning into the next financial year. Unreliable cash flow has been identified as a constraint in ensuring uninterrupted flow of vaccine commodities and addressing the consequences of unreliable cash flow leads to inefficiencies, in the use of time and resources.

Many counties do not have specific line item in the budget allocation for immunization. Instead health funds are disbursed in a pool to be shared amongst the various health programs.

The VII agreement has facilitated timely vaccine procurement. In the past year, through rigorous engagements with UNICEF, the VII ceiling was increased from USD 1.7M to USD 4.5M due to the increase in the number of vaccines offered today as well as the need to purchase associated equipment. It has assisted Kenya to maintain a supply of vaccines and injection devices in periods of cash flow timing issues. This facility also provides a backup in situations where cash flow challenges have affected payment of co-financing portions. The government is fully committed to maintaining the VII facility.

Further, the Ministry led by the Cabinet Secretary and the Principal Secretary has committed to continue honouring Kenya's cofinancing obligations to Gavi in a timely manner. To this end, they requested the alignment of the financial cycles and are leading the ministry in institutionalizing mechanisms to ensure compliance with the set timelines through establishment of a financing cycle for vaccine procurement involving the National treasury.

3.3. Data

Provide a succinct review of key challenges related to the availability, quality and use of immunisation data. This section should at least cover insights on coverage data (target populations, number of children vaccinated) and could also cover topics such as vaccine supply chain data, VPD surveillance data, AEFI data.

Please take the following aspects into account:

- **Compliance** with Gavi's data quality and survey requirements (the requirements are detailed in the general application guidelines available on www.gavi.org/support/process/apply/). If you are not compliant, explain why.
- Highlight key **challenges** pertaining to data availability, quality and use, referring to results from most recent annual desk review, any recent assessments and implementation of immunisation data quality improvement plan. For example, are you aware of key limitations / weaknesses related to the quality of the data and data analyses you have used to inform this Joint Appraisal.
- Main **efforts / innovations / good practices** focused on improving data system strengthening and addressing key issues.

National vaccine and immunization programme reaches immunization clients through immunization service delivery points that are run by government, NGOs, CBOs, private actors and outreach services at sub county.

Kenya through the Ministry of Health has adopted DHIS 2 web based platform tool where immunization data is reported among other health sector indices. The Unit of Health Information Systems within the Ministry of Health manages it. The Routine immunization data collected at the community and health facilities is transmitted by 5th of the following month to the sub-county using standardized immunization tool (MOH 710). At the sub counties, the data manager collates data from all health facilities within the catchment areas and subsequently upload electronically to DHIS2, by the 15th of the following month. The reporting rate in 2016 was 92 percent. The DHIS2 consist of data elements on routine immunization including indicators and vaccine stock data.

The country also utilizes surveys and studies including Kenya Demographic Health Surveys (KDHS) to generate additional information to inform decision-making. The last DHS was conducted in 2014 and Key Indicators Report is available.

County governments are responsible for the generation of county relevant reports, printing of county documentation and reporting tools, receiving and analysing of routine immunization and surveillance data, access DHIS2 and liaise with the sub counties on irregularities of data in the system, and convening quarterly performance review meetings in the counties among other responsibilities. However, review meetings with utilization of data for decision making not regularly done both at the county and facility levels.

At the sub county level, the data managers receive reports from all the health facilities using a checklist every month. Their mandate is to verify reports for consistency, completeness before entry into the DHIS2 and liaise with the health facilities on data irregularities. However, at the sub counties, the capacity of using computer technology to analyze, interpret and use data is minimal; and there is inconsistent data entry due to lack of airtime/poor network in some counties affecting reporting and timeliness. There is lack of standard feedback to peripheral level on status of immunization coverage, completeness and timeliness of reporting.

The health workers at the community and facility levels are mandated to record daily vaccination events of eligible population in the relevant data capturing tools, maintain a daily record of the vaccines and diluents used, verification of completeness of data capture tools on a daily basis, fill and submit AEFI reports as they occur and submit summary reports to the sub county on 5th of every month.

Despite various efforts, poor data quality has been a key challenge to the immunization program. This has arisen from various factors

- (i) Data inaccuracies were observed in the DHIS2 system is partly due to differences in denominators applied at different levels as well as poor reporting resulting from poor data handling and processing. The country has instituted an annual National and County Target setting exercise to address the inconsistencies in denominator. Early 2017, the country undertook a National and County Target setting exercise in collaboration with the Kenya National Bureau of Statistics (KNBS). KNBS are the custodians of the country's population data as well as population projections. This exercise resulted in a harmonized denominator. However, a few counties still appear to be over performing due to a possibly underestimated denominator. Efforts are ongoing to resolve this. The country is set to conduct a second target setting in the first quarter of 2018 to ensure denominators are harmonized and locked within the DHIS 2
- (ii) Findings from a data quality audit report conducted in 2014 revealed there were errors at the health facility level in counting, aggregating and transferring data. There are staff shortages at the health facilities and the few who are deployed are not adequately trained on data capture, analysis and use and may prioritize service delivery over rigorous data capture from multiple programs. In addition, health care workers lack a common understanding of operational definitions for some immunization indicators. The country has leveraged on the various training opportunities including new vaccine introduction, operational level trainings, Micro-planning and data quality assessment to improve data management. However, more still needs to be done considering the existing gaps. The country plans to pilot an electronic vaccine registry in selected counties. This may simplify data capture and reporting. In addition, the CDC-START and STOP programs field officers provide mentorship at local level, helping to develop competencies and skills on the job for health workers and middle level managers.
- (iii) The DQA report 2014 also observed that most facilities had no data capturing tools while others improvised the tools by either doing photocopies or using note books. Some facilities were noted to use outdated tools. Continuous advocacy with counties and partners to support printing of data capture tools is ongoing
- (iv) Detailed information on immunization expenditure is difficult to retrieve and not routinely collected. At the national level, there are uncertainties in the data leading to unexplainable variations between different sources. At the county level, there is no firm procedure for collecting or comparing immunization budgeting or spending. There is need to establish a firm procedure for tracking immunization budgeting and spending until the IFMIS system is able to provide the data.
- (v) There is a lot of underreporting of AEFI. In 2016, 132 AEFI cases were reported most of which

were associated with MR SIAs. There is need to sensitize health workers on AEFI reporting. The country plans to leverage on various opportunities to strengthen AEFI reporting. These include: New Vaccine Introductions, Operational Level training

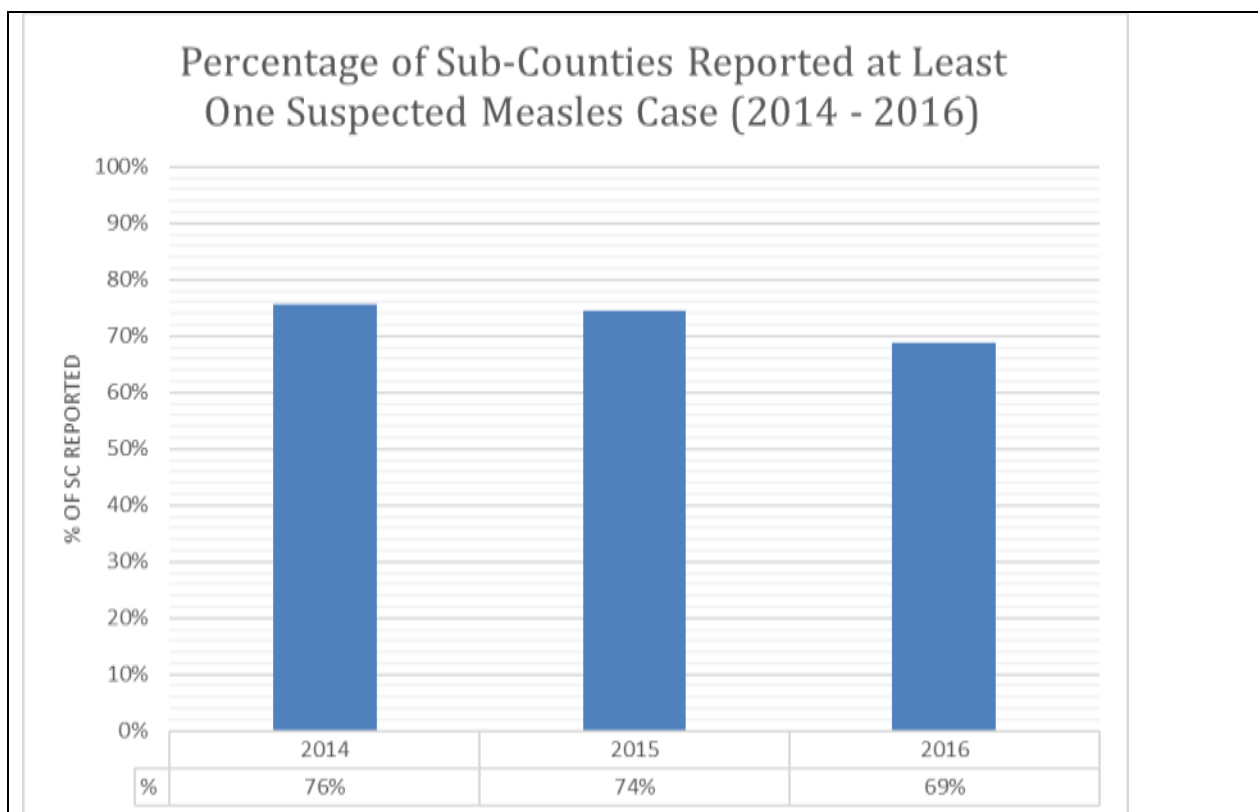
(vi) Vaccine consumption data has been reported through the DHIS and collected manually through vaccine stock ledgers and the MOH710. The logistics data obtained through the DHIS is not transactional and is usually incomplete. In the first quarter of the year 2017, the National Immunization Program scaled up the use of a web based transactional vaccine stock management tool (SMT) to all sub-counties to manage logistics. Although it still at its infancy stages, it is expected to improve visibility of vaccine logistics data at National level. Plans are underway to triangulate vaccine stock data with coverage data in DHIS2. The program, through the VAN project plans to institute a culture of regularly reviewing data and monitoring KPIs and using this information for decision-making. Although this approach will require significant changes in attitude at all levels, it is envisaged that it will help improve data quality and utilization.

(vii) Inadequate support supervision by the counties, irregular quarterly review meetings, non-implementation of data quality self-assessment. In the next 3 years, counties will be supported through the HSS to conduct supportive supervision as well as data quality self-assessment even as they establish their local mechanisms of addressing these issues.

In addition, data handling, analysis and consumption is not optimal, due to inadequate analytical skills of health managers. There is need to build capacity of health workers to utilize the data they generate. An annual data quality assessment is planned to be conducted through the HSS and this will include health worker training at sub county level. Through the VAN project, it is hoped that IMPACT teams will be formed or, similar teams will be adopted and trained in the selected counties to analyse data relevant to themselves and conduct meaningful data review meetings. Best practices will be scaled to other counties

The surveillance structure and network exists from the national level to the community level. In 2016, Kenya conducted an External Surveillance Review. It was noted that the current performance of the surveillance system in Kenya is not robust enough to allow timely detection of transmission of WPV or VDPV. The review noted the following crucial gaps in financing of surveillance activities. One third of the country's Sub-Counties had below standard AFP surveillance indicators. There was a knowledge gap in vaccine preventable disease surveillance; particularly at the tertiary HF levels. The review recommended strengthening of the sensitivity of the surveillance system by: capacity building of key staff, including private sector; conducting and documenting active surveillance; enhancing supportive supervision and providing feedback.

Reporting of measles surveillance data has declined over the years as shown below. This has been contributed by: Lack of clear definition of measles, high staff turnover, transport of samples to the laboratories is a challenge from the counties because there is no allocation for it and health care workers are not reimbursed. Feedback is a challenge from the laboratory to the facilities; the turn over time is long. The feedback loop is lacking compromising the quality of data collected. There is need to enhance capacity of health workers on measles surveillance through various up-coming opportunities such as operational level training, continuous sensitization to cover up on the high staff turnover, on job training and training on VPD surveillance.



In 2016 suspected cases of measles were classified as follows:

Final Classification	Number of Cases	Percent
Lab Confirmed	32	3.10%
Epidemiologically confirmed	66	6.40%
Compatible	29	2.80%
IgM Negative	908	87.70%
TOTAL	1035	100.00%

There were three lab confirmed measles outbreaks in 2016. Most of the cases were unvaccinated individuals as shown by the demographic data below. The demographic data is shown below:

Number of Reported Cases and deaths from Lab-Confirmed Measles Outbreaks

by Age Group and Vaccination Status

Vaccination Status	Age Group							Laboratory Results	
	<1 Year	1-4 Years	5-9 Years	10-14 Years	15+ Years	Un-known	Total	Number of Blood Specimens Tested	Number Measles Positive
Vaccinated	2	2	0	0	0	0	4	2	2
Not vaccinated	0	1	0	0	1	10	12	12	12
Unknown vaccination Status	0	1	0	0	0	0	1	1	1
Total	2	4	0	0	1	10	17	15	15
Deaths by Age Group	0	0	0	0	0	0	0	0	0

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

Please provide relevant information on the role and engagement of the various stakeholders:

- **National Coordination Forum** (ICC, HSCC or equivalent): the extent the forum meets the Gavi requirements (please refer to <http://www.gavi.org/support/coordination/> for the requirements).
- **Civil society**: the role and engagement of civil society in the immunisation system in the past year (service delivery, demand generation etc.).
- **Other donors**: the role and investments of other bilateral and multilateral donor in the immunisation system. Please include information on possible reductions in non-Gavi donor support that influence the overall system capacity (e.g. reductions in Global Polio Eradication Initiative funding).
- **Private sector**: public-private sector collaboration, indicating possible vaccine supply between Government and private sector and the percentage of children receiving immunisation through the private sector.
- **Cross-sectoral collaboration**: e.g. collaboration between health and education programmes.

The major key players in coordination and provision of immunization services include: The MOH, through NVIP, DSRU, County health management Teams, Development partners, NGOs, FBOs, CSOs and some sections of private sector. The National Immunization services in Kenya is managed by the Ministry of Health through the National Vaccines and Immunization Program (NVIP) and the Disease Surveillance and Response Unit (DSRU). NVIP provides policy direction, oversight and technical support to implementation for the routine immunization while DSRU manages vaccine preventable diseases surveillance and outbreak response. The two programs are classified as strategic national programs and report through their respective divisional heads to the Director of Medical services.

The County governments are responsible for oversight and implementation of immunization services in all of all the 6911 immunizing health facilities nationwide (Public, Faith Based and private). This includes providing immunization services, collection and distribution of vaccines from the Regional depots to the sub-county stores and health facilities; procurement and distribution of cold chain equipment, injection devices to health facilities; printing of data collection and reporting tools; communication and social mobilization; resource mobilization; support supervision and reporting of data at the county level. At county level, the County Health Department is headed by a County Executive Committee (CEC) member for health, responsible for policy and oversight, a Chief Officer who is the accounting office and a County Director for Health who is the technical lead and advisor to the county. The County Director for Health heads a County Health Management team (CHMT) - a team of technical officers of different cadres. The CHMT is responsible for coordination of health service delivery. The program will continue to improve accountability for immunization obligations at county level by advocating for inclusion of immunization in the County Integrated Development Plans (CIDPs) that will be developed in 2018 and should inform budgeting in the coming years.

Private health facilities also support immunization service delivery. The government provides the vaccines and related supplies to private immunizing health facilities as well as faith based organizations. Further, cold chain equipment is provided to targeted high volume health facilities to increase access to immunization services.

Immunization services in Kenya are currently coordinated at 3 levels: The Health Sector Coordinating Committee, The Kenya National Immunization Coordinating Committee (N-ICC) and Technical working group. The HSCC is the top policy decision making organ that provides the oversight to the health sector and is chaired by the Principal Secretary for Health (PS) with membership from heads of UN agencies, Development Partners for Health (DPHK) and CSO representatives through the secretariat (HENNET)

The Kenya National Immunization Coordinating Committee was constituted by the Ministry of Health to provide oversight over immunization service delivery in line with the National Health Sector Strategic Plan and National Immunization Policy Guidelines 2014. The N-ICC serves a programmatic oversight and coordination role to Ministry of Health's National Vaccines and Immunization Program on implementation of vaccines and immunization policy, within its overall terms of reference.

The National Vaccines and Immunization Program will review, prioritize and implement the National Vaccines and Immunization Policy Guidelines with recommendations and oversight provided by the N-ICC.

The Kenya National Immunization Coordinating Committee (N-ICC) reports to the HSCC and provides a forum for coordination of investments in immunization supports management of key action points and oversees the work of appointed technical working groups and taskforces. Membership to the N-ICC comprises of MOH, development partners, Health NGOs Network (HENNET) and Faith Based Organizations. It is chaired by the DMS or his designated representative and is required to meet quarterly with provision for special meetings if necessary. The ICC is a platform for interagency

coordination, resource mobilization, and policy guidance. The N-ICC also receives technical inputs from technical working groups that are set up with authority and approval by the ICC for particular topics and areas such as new vaccine introductions, proposals and applications, and campaigns. The National Immunization technical working group is led by the EPI manager and is accountable to the N-ICC. Membership to the TWG consists of program leads from the partner organizations and CSO supporting immunization program. The technical working group will have sub-committees in the following thematic areas: Vaccine Quality and Supply Chain, Monitoring and Evaluation, Advocacy Communication and Social Mobilization, and Training sub committee

The country receives support from partner agencies. With support from the German government through KFW and UNICEF the national level procured equipment including spare parts and supported training of 94 METS and repairs of non-functional cold chain equipment. With the support of CHAI, the country developed the electronic logistics management information system (eLMIS) and through the TCA this was expanded to all sub-counties. The country has also benefited from technical support through the CDC-START project at county level, STOP project, as well as from WHO through the field surveillance officers. JSI is supporting enhancing data visibility, accuracy and utilization for improved performance and efficiency of supply chains, through IMPACT teams, remote temperature monitoring and VAN.

The country has also been a beneficiary of GPEI. The country has conducted an inventory and mapping of polio eradication resources as part of transition planning.

CSOs like HENNET and KANCO play an important role in mobilizing communities for immunization services, sustaining community awareness on immunization, experimenting innovative approaches to service delivery and contributing to health systems strengthening at community level. CSOs play a key role in delivering services, enhancing the capacity of communities to demand services as well as carrying out advocacy work at the community level to increased immunization uptake. The CSOs work with all levels of Government and have a strong presence at the county level.

Other stakeholders are periodically engaged in the ICC and TWG including Ministry of Education (HPV working group)

Kenya National Immunization Technical Advisory Group (KENITAG) established to provide independent technical guidance on immunization to the Ministry of Health. There is advanced planning to establish National Vaccine Safety Advisory Committee to support decision making in effectively addressing AEFIs. The Ministry of health has begun to hold regular meetings with development partners in an effort to improve donor confidence. Progress is tracked and shared during the meetings.

4. PERFORMANCE OF GAVI GRANTS IN THE REPORTING PERIOD

4.1. Programmatic performance

*Provide a succinct analysis of the performance of Gavi grants for the reporting period. Describe **how Gavi support is contributing to advancing the performance of the overall immunisation programme and health sector strategies (with a particular focus on those districts/communities with lower coverage), and how the barriers identified in section 3 above are being addressed, stating -as relevant- good practices and innovations.***

This analysis should cover all Gavi support received, including NVS, HSS and CCEOP. This section must address the following:

- **Achievements against agreed targets**, as specified in the grant performance framework (GPF), and other grant-related activity plans. If applicable, reasons why targets as specified in the GPF have not been achieved, identifying areas of underperformance, bottlenecks and risks.
- **Overall implementation progress** of Gavi grants including NVS, HSS (incl. performance based funding PBF) and CCEOP.

- Past performance for measles and rubella (immunisation coverage analysis and rubella surveillance, performance⁷) and progress against the country's **measles-rubella 5 year plan**.

Please mention any other **relevant initiative not supported by Gavi** that addresses the key drivers of low coverage (described in section 3).

Through Gavi support, Kenya has maintained the following new and underutilized vaccines in routine immunization system: PCV10, Pentavalent, Rota Virus, IPV and Yellow Fever. The table below summarizes coverage against target by antigen

Vaccine	Target Coverage	2016 Coverage	June 2017 Coverage
Pneumococcal 1	90%	87%	65%
Pneumococcal 3	90%	81%	61%
Pentavalent 1	90%	87%	66%
Pentavalent 3	90%	82%	61%
Rota Virus 1	90%	84%	64%
Rota Virus 2	90%	77%	59%
Yellow Fever*	90%	10%	30%
IPV	90%	62%	57%
MR 1	90%	78%	64%
MR 2	90%	34%	31%

* Yellow fever coverage is as per the target population in the two counties

In 2016 Kenya has faced challenges in availability of YF vaccine due to global constraint. The DHIS only began capturing IPV coverage as from March 2016

The overall national coverage depicted in the above table indicates a decline in coverage rates from 2016 to the first half of 2017 and below are some of the reasons:

Challenges affecting achievement of immunization coverage targets:

Majority of communities in Kenya understand the benefits of immunization and are willing to present their children for vaccinations. There is minimal if any resistance to vaccination. Since 2013, the health sector in Kenya has faced several challenges linked to governance and devolution. The EPI program is slowly recovering from these challenges but a lot remains to be done to protect the program and reach more children with lifesaving vaccines.

The following are the major challenges faced by the program that affected achievement of planned immunization coverage target of 90% across all:

- (i) **Prolonged Health workers' strikes:** The public health sector experienced prolonged strikes of health workers. More specifically the doctors' strike lasted more 3 months from October 2016 to January 2017 followed by a 5-month nurse's strike that started in May 2017 and ended in November 2017. These strikes greatly impacted demand for immunization (especially during the doctors' strike where the public felt all hospital services were grounded) and service provision was minimal (most of the level 2 and level 3 health facilities are managed by nurses). The situation has since been resolved, however, the dent on demand for vaccines is still evident, and there is need to for rigorous demand generation and accelerated service delivery activities to enhance the recovery of immunization indicators.
- (ii) **Challenges related to the electioneering period:** Prolonged electioneering period lasting from early August to Early December with sporadic cases of violence and displacement of people, including health workers and changes in county leadership

⁷ Please include analysis of MCV1 and MCV2 routine immunization and MCV campaign coverage at national and sub-national levels (admin and survey data), information on case distribution by age, geography, vaccination history, etc. for measles and rubella (including CRS), including outbreaks, at national and sub-national level.

- (iii) Stock out of injection devices for traditional vaccines due to inadequate and delayed financing at county level.
- (iv) Limited access to vaccination by hard to reach and underserved populations (nomadic populations, refugees and migrant populations, urban informal settlements and informal labour) due to under funding for outreach and mobile services by counties
- (v) Insecurity in Northern Kenya due to ethnic conflict and from cross border incursions by militias especially Mandera and Wajir counties who consistently achieves low coverage
- (vi) Inappropriate service delivery schedules especially in major urban settlements eg. Scheduling of immunization.
- (vii) Financial access especially in urban informal settlements of Nairobi where majority of HF are private and charge a fee, or individuals have competing economic activities to attend to
- (viii) Inadequate planning and financing for immunization. There is need to ensure effective planning for immunization services at all levels. Health facilities need to develop micro plans and counties need to factor immunization services in the county integrated development plans.
- (ix) Minimal support supervision, regular data review meetings and microplanning at sub-national level due to financing constraints
- (x) Interrupted supply/ availability of vaccines at the operational level due to various reasons
 - (i)

New Vaccines Introduction and Campaigns

Measles Rubella vaccine introduction into routine immunization

Following a very successful MR campaign in May 2016 targeting 19 million children between 9 months and 14 years and which achieved an administrative coverage of 100% and a coverage survey estimate of 95%, the country introduced Measles Rubella vaccine into routine immunization schedule.

Successes:

- a) Smooth introduction and phase out of monovalent measles. Acceptance has been high, coverage levels for MR high.

Challenges:

- a) Lack of funding for Congenital Rubella Syndrome (CRS) tracking. The country is therefore not able to determine the effect of MR on CRS
- b) Measles Rubella second dose coverage has improved since introduction but is still low. The administrative coverage is at a low of 34% while measles rubella post campaign coverage survey reported a coverage of 55% (51%-58%)

Next steps in addressing the challenges:

- a) Leveraging on micro plans developed during MR to carry out REC approaches and strengthen routine immunization at the smallest administrative level. The REC strategy was implemented in four counties in 2017. Going forward, the 17 Gavi HSS focus counties will be supported to develop micro plans, identifying strategies to reach the target population including populations above the age of 1 year. In addition to the Gavi HSS focus counties, the Program seeks to expand the RED/ REC activities to four Urban and periurban counties (Mombasa, Kilifi, Kajiado and Kisumu) in order to bridge the equity gaps associated with the informal settlements in these cities. The program plans to achieve this through support from the Gavi TCA, and a request for the HSS increased ceiling aimed at coverage and equity activities.
- b) Implement CRS tracking
- c) Plan for MR campaign in 2019

Progress of Gavi Health Systems Strengthening implementation

Kenya was awarded the Gavi Health Systems Strengthening Grant in December 2016. This is a 3 year grant worth \$ 20,339,960 and includes implementation from KANCO, a civil society organization. Funds for MoH are currently channelled through UNICEF while the country is strengthening its financial and programme management systems. Although the HSS grant experienced delays, KANCO will resume implementing activities alongside MOH and these will be coordinated by the Coordination Unit. The majority of KANCO activities will be focusing on advocacy for immunization and demand generation. Whereas MoH will scale up implementation from 2017.

The Project Coordination Unit (PCU) has been set up and program staff have been sensitized. The PCU consists of MOH staff (A coordinator, an accountant and a monitoring & evaluation officer), with technical support from UNICEF and CHAI staff under Leadership Management and Coordination TCA. The PCU coordinates and guides the implementation of the HSS through the thematic working groups that have been revamped in NVIP (Vaccine quality and supply, Monitoring and Evaluation, Demand Generation, Capacity building & Training). The PCU also liaises with KANCO to monitor the implementation of the HSS. The PCU is finalizing the process of developing a coordinated workplan of activities between MoH and KANCO.

The N-ICC has been sensitized on their role in the HSS. Program level sub-committee thematic meetings have been revamped and the draft detailed implementation plan/road map has been developed. Capacity strengthening start-up activities have begun with the counties being sensitized on financial management procedures for the HSS. Procurement of office equipment and other items has also begun.

Below are challenges that affected the programme:

Challenges

Implementation of the HSS is behind schedule due to

- a) Transition of leadership following august elections
- b) Longer electioneering period (the country held two presidential elections in 2017 after the first was contested by the opposition)
- c) Protracted health workers strike
- d) Initial delays in setting up the PCU; signing tripartite agreement with KANCO, addressing the grant management requirements

In addition, the country has faced emerging issues, changes in county and country context since the development of the HSS proposal in 2015 to now:

- a) Health worker strikes leading to increased inequity and higher number of unvaccinated children
- b) Increased knowledge gaps among health workers
- c) Increase in the number of immunizing health facilities in the focus counties, with knowledge and skills gaps, creating gaps in funding for some activities
- d) Unforeseen coordination aspects and related costs at the PCU, related to installation of the necessary infrastructure at inception of the project

To address some of these issues the country is:

- 1) Requesting additional increased HSS Ceiling of \$3.2 million

Kenya plans to request an increase in the current HSS ceiling by \$3.2 million, as there is need to direct additional resources to key priorities to strengthen coverage and equity. Due to a number of factors with some mentioned above the country has reported low and stagnating coverage and this needs to be addressed as a priority. Not all counties reporting low coverage are included in the current HSS grant. The additional HSS increased ceiling will therefore be used for the following

- a) Support four additional Urban and peri urban counties previously not included in the HSS (Mombasa, Kilifi, Kajiado and Kisumu) and that have have sizeable number of informal settlements and squatters around industrial plants and agricultural firms providing labour to the firms but significantly lacking in social amenities and health in order to bridge the equity gaps associated with them.

- b) Although Nairobi is already part of the current HSS grant, the increased ceiling will close identified immunization gaps.
- c) Support underfunded items in the existing HSS such as.
 - i. Micro-planning and Operational level training activities
 - ii. Outreaches in view of emerging challenges at county level (counties to benefit will be prioritized)
 - iii. strengthen vaccine management capacity (including improved forecasting, stock management and temperature monitoring at National and County Management levels)
 - iv. Support accelerated coordinated efforts for enactment of legislation on immunization to anchor immunization into law.

2) To reprioritize or reallocate the current HSS grant:

Based on the changes in the counties and country context, the significant increase in inequity, high number of unvaccinated children and supply chain and vaccine management challenges witnessed, the program plans to reallocate and realign resources to strengthen these areas. Specifically:

- a. The country plans to increase efficiency by conducting Micro-planning and operational level training back to back
- b. Reallocate more resources to support the PCU operations- Liaison with focus counties and others stakeholders, Continued monitoring and follow up for reporting- Programmatic and Financial, Spot checks to ensure compliance with program objectives and engagement to review adapted county work plans

A budget supplement including or the HSS increased ceiling will be annexed to this JA report and submitted in two weeks

Progress of Cold Chain Equipment Optimisation Platform (CCEOP) grant implementation

Kenya received a CCEOP grant worth US\$ 8,231,741 for 2017 and 2018

So far the country has constituted a project management team for CCEOP implementation. The country finalized the deployment plan and preference form and UNICEF provided a costed operational plan

Challenges:

- a) The deployment plan had to be adjusted because the costing tool omitted cost of international freight as well as arising issues of currency conversion. The increased cost varied from the budgeted funds and this is caused delays in implementation of year 1 of deployment due.

Next Steps

- a) Preparation of finalized costed operational plan by UNICEF
- b) Funds disbursement and execute implementation

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

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

- *Financial **absorption** and utilisation rates⁸;*
- **Compliance** with financial reporting and audit requirements;
- *Major issues arising from cash programme **audits** or programme capacity assessments;*
- *Financial management **systems**⁹.*

- By December 2016, Kenya had cumulatively received a total of USD 30,746,643 cash support (HSS, INS, ISS, HPV, MR SIAS and VIGs).
- The VIGs for Rota, IPV and MR vaccines and financial support for HPV demo and year HSS support were channelled through UNICEF due to outstanding accountability concerns with previous grants channelled through the government. However, MoH is addressing these financial and programme management systems.
- In July 2015 Kenya received USD 12,332,500 from GAVI as operational support for measles rubella supplementary immunization activities. A further USD 2,520,500 was also received as MR and IPV vaccine introduction grants. The MR SIAs and introduction were undertaken in May 2016. Training for health workers on MR and other components of EPI and printing and dissemination of revised data reporting tools were undertaken to support introduction into RI. UNICEF is currently still holding an unspent USD 269,039 from MR VIG. The amount was further approved by Gavi to be utilized for national social mobilization through media and stakeholder meetings with all the 47 counties to accelerate action to reach children missed due to the prolonged strike by nurses and to raise coverage for MR 1 and 2 as well as coverage of other antigens. Gavi has accepted to extend the expiry of the MR grant to June 2018 to enable the ministry implement these accelerated activities that were delayed due to prolonged nurses' strike and national elections (. A total of USD 4,191.91 is the current balance from previous NVIG for Rotavirus vaccine and IPV. These grants have however expired and the reports shared with Gavi. UNICEF Finance Division will share the final statement with Gavi by the end of 2017 as outlined in the grant agreement with UNICEF
- Kenya had some outstanding audit issues relating to previous HSS and ISS support. To this effect Gavi Audit team carried out an extensive visited audit of both the HSS and ISS cash grant support between October 2015 and March 2016. The audit indicated that there was inadequately supported expenditure of USD 1,604,283 which has since been repaid back to Gavi by MOH. A further USD 254,748 in unused program cost in the Ministry and treasury accounts will be repaid to Gavi after finalization of discussions on outstanding issues.
- In April 2017, the government received USD 6,257,422 as contribution to Gavi HSS support. UNICEF is managing the funds on behalf of MOH.
- A portion of HSS funds is also being channeled through KANCO a CSO.

Overall programmatic capacity to manage NVS grants

- Following the PCA and Gavi audit, the MoH with support from WHO, UNICEF and CHAI is improving its capacity and those of counties to manage cash grants from Gavi such as NVS and HSS. Gavi is currently reviewing the GMR. The MOH has established a Coordinating Unit. The Unit is tasked with coordinating HSS implementation and ensuring prudent management of the grant. This unit is also tasked with coordinating activities between all the key partners including KANCO

4.3. Sustainability and (if applicable) transition planning

Provide a brief overview of key aspects and actions concerning the sustainability of Gavi support to your country. Please specify the following:

⁸ If in your country substantial amounts of Gavi funds are managed by partners (i.e. UNICEF and WHO), it is recommended to also review the fund utilisation by these agencies.

⁹ In case any modifications have been made or are planned to the financial management arrangements please indicate them in this section.

- **Financing of the immunisation programme:** key challenges related to the financing of the immunisation programme, including co-financing requirements.
- **Gavi transition planning:** if your country is transitioning out of Gavi support, specify whether the country has a transition plan in place. If no transition plan exists, please describe plans to develop one and other actions to prepare for transition.
- If a transition plan is in place, please provide information on the following:
 - Implementation progress of planned activities;
 - Implementation bottlenecks and corrective actions;
 - Adherence to deadlines: are activities on time or delayed and, if delayed, the revised expected timeline for completion;
 - Transition grant: specify and explain any significant changes proposed to activities funded by Gavi through the transition grant (e.g., dropping an activity, adding a new activity or changing the content/budget of an activity);
 - Submit a consolidated revised version of the transition plan.
- **Polio transition planning:** If your country is transitioning out of immunisation programme support from other major sources, such as the Global Polio Eradication Initiative, specify whether the country has a transition plan in place. If such a transition plan exists, please briefly describe it. If no transition plan exists, please describe plans to develop one and other actions to prepare for polio transition.

The proportion of the combined discretionary public budget allocated to health by national and county governments during FY 2016/17 decreased to 7.6 percent from 7.7 percent the preceding year, below the pre-devolution level of 7.8 percent and below the Abuja declaration target of 15 percent. Previously, there had been a gradual increase from 5.5 percent in FY 2013/14 to 7.7 percent in FY 2015/16. While national government allocations to health flattened to about 7.6 percent over the FYs 2013/14 to 2016/17, period, county governments maintained a gradual increase from 13.5 percent to 25.2 percent over the same period.

In FY 2016/17, the Ministry of Health was allocated KES 60 billion out of the national government's total budget of 1,505 billion. This is equivalent to 3.7 percent, a decrease from the 3.9 percent allocated in FY 2015/16 and 4.0 percent allocated in FY 2014/15. This shift indicates a downward trend in the proportion of government budget allocated to health.

In FY 2016/17, county governments increased allocations to health as a percent of total county budgets to 25.2 percent (or KES 92 billion) from funds received from the ex-chequer, up from the previous year's 23.4 percent (or KES 85 billion). While this indicates an increased commitment to health by county governments, the allocation is still below pre-devolution levels. A further breakdown of the data shows that there was a decrease in the proportion of the recurrent budget allocated to personnel expenses from 72.5 percent in FY 2015/16 to 70.6 percent in FY 2016/17. The allocation to drugs and other essential medical supplies decreased from 15.1 percent in FY 2015/16 to 14.6 in FY 2016/17. Construction and rehabilitation of buildings and medical equipment received the largest share of the development budget in FY 2016/17, indicating that counties give priority to expansion and consolidation of physical infrastructure. The exact expenditure on immunization by counties is difficult to determine as the budget for EPI activities is not standalone. In reality, many counties still do not have specific budget allocation for immunization. Instead, health funds are disbursed in a pool to be shared amongst the various health programs.

The Government of Kenya funds procurement of all the traditional vaccines (including storage and distribution) and co-finances with Gavi for the new vaccines (Penta, PCV, YF, Rota). Data from UNICEF supplies division indicates that a total of US\$ 40,015,963 was spent on vaccine procurement in 2016 with government contributing US\$ 6,668,137.

There has been significant increase in allocation to the EPI program from the national Health budget with US\$ 7.03 million allocated in 2016/17 budget compared to US\$ 3.88 million in 2013/14. The budget mobilization rate (budget as % of forecasted need) is around 50% and rarely flexible towards forecasted needs. This allocation is for procurement of vaccines and not for operational costs. There is low government funding for immunization operations. The cMYP recognizes the need to increase funds allocated for operations at national from KES 100 million by 2018 and to determine allocations at county level and increase county level allocations.

Immunization in Kenya benefits from significant DP support, but still requires sufficient domestic government funding to reach the immunization targets. In the short to medium term (2016 - 2021) the

domestic funding need at central government level is approximately 413.5 mill. per year against a budget of some \$7 mille leading to a domestic funding gap of some \$6.5 mill.. There is therefore a need for continuous advocacy for immunization financing including financing for operational costs. The table below summarizes a 4 year forecast of financial requirements for procurement of vaccines and injection devices.

	FY 2017 July '16 - June '17	FY 2018 July '17 - June '18	FY 2019 July '18 - June '19	FY 2020 July '19 - June '20
Traditional Vaccines:				
BCG	1,556,979	1,603,688	1,651,799	1,701,353
BOPV	1,880,164	1,936,569	2,105,480	2,168,645
Mea/MR (from 2017)	4,262,254	5,921,798	6,099,452	6,282,436
TT	662,632	682,511	702,986	724,075
Gavi Co-Financing:				
Pentavalent	805,400	692,900	648,180	761,319
PCV	1,801,450	1,526,008	1,427,517	1,676,691
RV	805,950	685,918	641,647	778,081
YF	18,900	7,491	7,017	8,251
HPV	0	0	459,875	583,477
Injection Devices+Safety Boxes:	1,020,467	1,051,082	1,082,614	1,115,092
Total Vaccine Supply	12,814,196	14,107,964	14,826,567	15,799,420
Proposed VII Ceiling	4,500,000	4,500,000	4,500,000	4,500,000
Required VII Turns	2.8x	3.1x	3.3x	3.5x

Below table summarizes Government and Gavi contribution for immunization programme in the last four years.

NVIP budget (historic and projected) by categories and FYs (in USD)

	FY2012/2013	FY2013/2014	FY2014/2015	FY2015/2016	FY 2016/2017
National Budget (GOK)					
Traditional infant vaccines	2,395,610	-	-	2,903,754	3,900,000
Other vaccines (Non EPI)	-	1,497,860	145,517	2,323,003	
GAVI Co-Financing	4,615,869	2,724,000	3,018,176*	3,714,079	2,600,000
Operations and maintenance	1,110,964	-	38,064	1,161,502	45,638.8
Total GOK	8,122,444	4,221,860	3,201,757	10,102,338	6,545,638.8
Gavi Grant	45.2M	39.7M	26.2M	69.2M	
*includes co financing for Rota					

Source: MoH 2013, using exchange rate of 1USD = 100 Kes

Expenditure trends on vaccine procurement (UNICEF SD)

	2013	2014	2015	2016
GAVI	13,914,785	31,363,796	50,930,452	33,347,826
Government (Traditional and Co- financing)	3,631,641	4,893,557	5,249,781	6,668,137
Total	17,546,426	36,257,353	56,180,233	40,015,963

Kenya entered the preparatory transition phase in January 2016. The co-financing has been aligned with Kenya's fiscal year to help timely payments. In 2016 Kenya's co-financing contribution/obligation currently stood at about 10% and is expected to increase to about 11% contributing about \$4.5 million by 2020. The government met its co-financing obligation of \$2,928,156.74 in 2016 (this was co-financing as per the cost estimate of the number of doses per vaccine).

With current projections, Kenya is expected to enter the accelerated transition phase in 2021. Ministry of Health continues to work with the Ministry of Finance in preparation for this transition. To prepare effectively for transition through these phases, Kenya needs to develop a transition plan. Kenya's transition plan will reflect activities to be conducted to sustain the gains of Gavi investments and provide sustainable financing for the immunization programme. These include:

- Conducting transition assessments focusing on key areas of immunization performance, financial sustainability, institutional apparatus and capacity, of the national immunization programme within the broader health system framework.
- Developing plans (including financial sustainability plan), strategies & actions to address/mitigate the gaps and/or weaknesses found in the assessments.
- Actively engaging Gavi and Alliance partners throughout the transition process to identify potential bottlenecks for successful transitioning and support for interventions that will mitigate them.
- Engaging stakeholders (Ministry of Finance, parliamentarians, CSOs, partners, donors, private sector etc.) to advocate for sustainable financing and resources for national immunization programme.
- Mobilizing financial resources from government, partners, donors, etc. to support the immunization programme
- Reviewing/updating the cMYP to reflect the additional obligations and provide for alternative sources of sustainable financing
- Leveraging Gavi support/facilitation to continue to gain access to vaccines at affordable prices as the country transits through the transition phases
- Aiming to utilize Gavi's "grace year" in the accelerated transition phase to apply for Gavi new and underused vaccines support (NVS).
- Monitoring transition plan through Joint Appraisal process.

Comprehensive guidance on how to develop this transition plan will be supported by Gavi.

The country is also receiving support from Gavi through the HSS grant, there is need to prepare an exit strategy to be implemented towards the last year of the grant so as to ensure sustainability of gains.

4.4. Technical Assistance (TA)

Briefly summarise key insights generated during the appraisal of Gavi supported Targeted Country Assistance (TCA) activities and milestones.¹⁰ Specify whether amendments to the currently planned and ongoing Technical Assistance activities and milestones are envisaged (short term). If changes are envisaged please provide a justification.

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

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5. UPDATE OF FINDINGS FROM PREVIOUS JOINT APPRAISAL

Provide the status of the prioritised strategic actions identified in the previous Joint Appraisal¹¹ and any additional significant IRC or HLRP recommendations (if applicable).

Prioritised actions from previous Joint Appraisal	Current status
<p>Vaccine supply, cold chain and logistics</p> <p>a) Improve cold chain performance and temperature monitoring through refresher training on temperature monitoring and response by facility first responders at facility level.</p> <p>b) Improve supply chain data visibility for informed decision making: Roll out and follow up on utilization of SMT, ViVa and provision of report tools to sub-counties</p> <p>c) Promote efficiency and best practices in vaccine management. This will be done through: a. Development and dissemination of Vaccine supply chain management SOPs b. HR capacity building on norms and standards of supply chain (reorder levels, min/max etc.) c. Development and implementation of the M&E Plan. d) Carry out a follow up EVM Assessment 2017</p>	<p>a) Pending</p> <p>b) Chanjo Training completed</p> <p>c) Vaccine management best practice</p> <p style="padding-left: 20px;">a. Draft SOPs done, finalization and dissemination pending</p> <p style="padding-left: 20px;">b. Done as part of SMT Training as well as Microplanning Training</p> <p style="padding-left: 20px;">c. integrated within the overall immunization program’s Monitoring and Evaluation plan, indicators were also identified during VAN workshops</p> <p>d) EVMA Scheduled for May 2018</p>
<p>Coverage and equity in prioritized Counties</p> <p>a) Promote and scale up of REC Strategy focusing on reasons for poor performance</p> <p>b) Operational level training of sub-county immunization managers and health workers in poor performing areas</p> <p>c) Update, print and disseminate operational guidelines and job aids for immunization</p> <p>d) Develop tools for and implement supportive supervision</p> <p>e) Identify strategies to improve MCV2 coverage (vaccination uptake in the second year of life)</p>	<p>a) Done: Microplanning exercise conducted in four counties</p> <p>b) Pending- To be done in Q1 of 2018</p> <p>c) Pending</p> <p>d) Done and implemented in 12 counties</p> <p>e) Pending</p>
<p>Demand creation for immunization</p> <p>a) Behavioral rapid assessment on immunization in focus low performing counties/sub Counties</p> <p>b) Assess immunization communication needs among special populations - mobile populations, slum</p>	<p>a) Completed</p> <p>b) Pending</p> <p>c) On-going- Plans done. Implementation started, slowed by the strike</p>

¹⁰ A summary of Technical Assistance approved under Gavi’s Partner Engagement Framework (PEF) for the year under review and reporting status can be accessed via the PEF portal by registered users, or by contacting the Gavi Secretariat.

¹¹ Refer to the section “Prioritised Country Needs” in last year’s Joint Appraisal report

<p>settlement and other marginalized groups c) Implement County specific communication plans with component of risk communication, based on the findings of the rapid assessment d) Development of County specific Advocacy tools e) Build capacity County EPI Focal point persons, HPOs, CSOs and immunization champions to map and engage vaccine hesitant group</p>	<p>d) On going e) On going</p>
<p>Data Management</p> <p>a) Establish mechanisms to capture relevant data on immunization financing b) Conduct training/mentorship of health workers and managers on data management c) Ensure immunization data tools are harmonized and appropriately distributed, along with relevant job aids d) Conduct annual reviews of data and set revised population targets e) Ensure linkages between vaccine stock data and necessary follow-up f) Comprehensive immunization program review Surveillance g) Surveillance for new vaccines to determine burden of Vaccine preventable disease and impact of vaccines-rotavirus, IBD, CRS, Men A, HepB birth dose, Measles h) Develop vaccine safety strategy</p>	<p>a) Pending- TA engaged to strengthen Immunization financing and tracking, including identifying relevant data b) pending c) Done d) Done e) Pending f) Pending- to be conducted in 2018 g) Pending h) Ongoing- draft to be finalized</p>
<p>Planning coordination and governance</p> <p>a) Strengthening of ICC, Stakeholder meetings- National and County b) Advocacy with policy makers and parliamentarians for prioritization of immunization financing and bundling of vaccines with devices c) Update National and develop county multiyear plans for immunization d) Document challenges and best practices/approaches used to reach unimmunized children in Kenya e) Application for HPV national roll out; define county specific strategies f) Financial and technical support KENITAG operations to prioritize new vaccines looking at vaccine landscape and horizon taking into account financial sustainability and graduation of Kenya from Gavi support g) Define data requirements and tools to track immunization expenditure at national and county levels</p>	<p>a) Partially Done- National Immunization ICC constituted and first met in October b) Ongoing- Several meetings have been held with ministry leadership on financing; syringes to be bought through VII c) Pending- scheduled for early 2018 d) Pending e) Done Proposal approved; implementation in 2019 f) Ongoing g) Ongoing- Supported by TA</p>

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

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

Briefly outline the **key activities to be implemented next year** with Gavi grant support.

In the context of these planned activities and based on the analysis provided in the above sections, describe the five **highest priority findings and actions to be undertaken to enhance the impact of Gavi support**, indicating timelines and Technical Assistance needs.

Please indicate if any modifications to Gavi support are being requested, such as:

- Changes to country targets as established earlier, either from the agreed Grant Performance Framework (GPF) or as part of the NVS renewal request submitted by 15 May;
- Plans to change any vaccine presentation or type;
- Plans to use available flexibilities to reallocate budgeted funds to focus on identified priority areas.

Note: When specifying Technical Assistance needs, do not include elements of resource requirements. These will be discussed in the context of the Targeted Country Assistance (TCA) planning, which will be informed by the needs indicated here.

Overview of key activities planned for the next year:

The program plans to address the bottlenecks and challenges identified as per the five thematic areas.

Key finding 1	Demand generation - Inadequate engagement of community, religious leaders, private sector and non-health stakeholders, vaccine hesitancy among some groups, lack of knowledge on schedule by caregivers, little funding for promotion of Routine Immunization
Agreed country actions	<ol style="list-style-type: none"> 1. Design and implement strategies to increase immunization program visibility 2. Develop documentary on vaccines and Routine Immunization 3. Advocacy with vaccine hesitant groups 4. Develop job aid for front line health workers to communicate with clients
Associated timeline	May 2018- December 2018
Technical assistance needs	Technical assistance needed to support advocacy, design and development of materials.
Key finding 2	Data and surveillance – Inadequate capacity to analyse and use routine data at county level, data entry level issues transferring data from paper forms to DHIS-2, data discrepancy issues, under reporting of AEFI, declining VPD surveillance indicators and denominator issues.
Agreed country actions	<ol style="list-style-type: none"> 1. Harmonization of denominator and setting targets for immunization 2. Design, develop and disseminate national immunization bulletin 3. Use GIS for equity programming 4. Support surveillance of IBD, rotavirus, Measles, rubella, meningitis 5. Pilot EVR
Associated timeline	January 2018 – December 2018
Technical assistance needs	Technical assistance required for GIS for equity programming

Key finding 3	Governance, Sustainable immunization financing and New Vaccine Introduction – Inadequate and unpredictable financing for immunization including for new vaccines introductions, funds flow and disbursement challenges, varied support for immunization by the counties and few engagement and coordination forums for immunization.
Agreed country actions	<ol style="list-style-type: none"> 1. Improve co-ordination through support of immunization governance structure 2. Develop and implement mechanism for increased immunization financing- Resource Mobilization framework and preparation for transition 3. Support management training of two immunization program staff 4. Support efforts to develop and update the legal framework for immunization 5. Planning and support for New Vaccine Introduction (Men A, MR, PCV Switch, Tt/Td Switch, Yellow Fever Expansion, HPV) <ol style="list-style-type: none"> a. Application Process b. Preparation and Implementation for NUVI
Associated timeline	February 2018 – December 2018
Technical assistance needs	Technical assistance to support new vaccine introduction planning
Key finding 4	Vaccine quality and supply – Poor visibility of stock data, Stock out of vaccine syringes and other supplies, Facility vaccine supply data is of poor quality, EVMA implementation delayed, poor visibility of cold chain functionality and temperature response system, poor record keeping and practices in vaccine stores at all levels and lack of funding for vaccine depots.
Agreed country actions	<ol style="list-style-type: none"> 1. Training of supply chain officers on vaccine management 2. Logistical and technical support for the cold chain Project Management Team (PMT) 3. Improve visibility of supply chain data to facilitate timely decision making 4. Conduct supply chain data review meetings (county and national) & Design and develop SOPs to improve vaccine management
Associated timeline	January 2018 – December 2018
Technical assistance needs	Technical assistance for PMT support
Key finding 5	Coverage and equity – Low coverage across most counties, high number of unimmunized children, missed opportunities to vaccinate, facilities lack micro plans, high staff turnover and lack of funds for immunization operations including outreaches.

Agreed country actions	<ol style="list-style-type: none"> 1. Scale up the ongoing REC implementation including outreach session planning to additional prioritized health facilities in the focus counties 2. Build capacity of counties to safely deliver immunization services through- <ol style="list-style-type: none"> a. Operational level training in the current four counties b. On job mentoring by field officers in priority counties 3. Document national immunization program achievements, challenges and lessons learnt in implementing the program in a devolved health system 4. Design and disseminate simple job aids to address and reduce missed opportunities in vaccination (MOVs)
Associated timeline	May 2018 – December 2018
Technical assistance needs	Technical assistance for documentation of lessons and development of MOVs job aids

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

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

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

On 4th and 5th October 2017 members of the immunization TWG met to prepare for the Joint Appraisal and the upcoming comprehensive EPI review. Teams were constituted as per thematic area to populate the Joint Appraisal template. Teams were constituted for the following areas- Governance, Immunization Financing, Coverage & Equity, Supply chain, Data Management, Advocacy Communication & Social Mobilization, New Vaccine Introductions. The teams were tasked to ensure they collate all the information required for the JA, read through the previous JA and highlight the progress of the key areas of improvements brought out as per the 2016 JA. The teams would also identify in brief, potential areas that needed intervention in the following year. The teams constituted of members from the MOH-NVIP, MOH health promotion, MOH accountants, WHO, UNICEF, CHAI, HENNET, KANCO, CDC. Sections of the JA template were assigned to teams. Once populated, these were collated into one document which was circulated for review

During this process the following key documents were utilized in developing the 2016 JA; JA analysis guidance, Guidelines on reporting and renewal, the JA template, CMYP 2015 document, KDHS 2014, The GAVI TCA, KHSSP 2014-2018, WHO-UNICEF JRF, EVM assessment of 2013, DHIS reports, NVIP work plans and reports, and NVIP field reports among others.

The country then held its Joint Appraisal workshop 27th-30th November 2017. Participants were drawn from the Ministry of Health and in-country partners as well as technical partners from outside the country. Participants included: MOH, WHO, UNICEF, CHAI, CDC, WB, KANCO, CRS, HENNET, SABIN, JSI, USAID, DFID, LIONS, DPHK, GAVI, AMERICAN RED CROSS, APHRC, SABIN.

During the workshop, members reviewed the draft report specifically the country context and performance as well as progress in implementing recommendations made during 2016 JA. Members then reviewed key drivers of low coverage and equity as per the thematic areas and provided an action plan for the JA 2017, taking into consideration pending activities planned in the last JA, activities in the HSS and on-going partner and MOH activities. The team provided feedback to the Principal Secretary for Health on the last day. The PS reiterated commitment of the Ministry of Health to reach all children.

On 1st December 2017 the National Immunization Coordinating Committee met and endorsed the Joint Appraisal 2017

8. ANNEX

Compliance with Gavi reporting requirements

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

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

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

In case any of the required reporting documents is not available at the time of the Joint Appraisal, provide information when the missing document/information will be provided.

