Application Form for Gavi NVS support

Submitted by

The Government of

Guyana

Date of submission: **2 September 2016**

Deadline for submission:

i. **9 September 2016**
ii. 1st May 2015
iii. 9 September 2015

Select Start and End Year of your Comprehensive Multi-Year Plan (cMYP)

Start Year	2017	End Year	2018

Form revised in 2016

(To be used with Guidelines of November 2015)

Note: Please ensure that the application has been received by Gavi on or before the day of the deadline.

Gavi
GRANT TERMS AND CONDITIONS

FUNDING USED SOLELY FOR APPROVED PROGRAMMES

The applicant country ("Country") confirms that all funding provided by the Gavi will be used and applied for the sole purpose of fulfilling the programme(s) described in the Country's application. Any significant change from the approved programme(s) must be reviewed and approved in advance by the Gavi. All funding decisions for the application are made at the discretion of the Gavi Board and are subject to IRC processes and the availability of funds.

AMENDMENT TO THE APPLICATION

The Country will notify the Gavi in its Annual Progress Report if it wishes to propose any change to the programme(s) description in its application.The Gavi will document any change approved by the Gavi, and the Country's application will be amended.

RETURN OF FUNDS

The Country agrees to reimburse to the Gavi all funding amounts that are not used for the programme(s) described in its application. The country's reimbursement must be in US dollars and be provided, unless otherwise decided by the Gavi, within sixty (60) days after the Country receives the Gavi's request for a reimbursement and be paid to the account or accounts as directed by the Gavi.

SUSPENSION/ TERMINATION

The Gavi may suspend all or part of its funding to the Country if it has reason to suspect that funds have been used for purpose other than for the programmes described in the Country's application, or any Gavi-approved amendment to the application.The Gavi retains the right to terminate its support to the Country for the programmes described in its application if a misuse of Gavi funds is confirmed.

ANTICORRUPTION

The Country confirms that funds provided by the Gavi shall not be offered by the Country to any third person, nor will the Country seek in connection with its application any gift, payment or benefit directly or indirectly that could be construed as an illegal or corrupt practice.

AUDITS AND RECORDS

The Country will conduct annual financial audits, and share these with the Gavi, as requested. The Gavi reserves the right, on its own or through an agent, to perform audits or other financial management assessment to ensure the accountability of funds disbursed to the Country.

The Country will maintain accurate accounting records documenting how Gavi funds are used. The Country will maintain its accounting records in accordance with its government-approved accounting standards for at least three years after the date of last disbursement of Gavi funds. If there is any claims of misuse of funds, Country will maintain such records until the audit findings are final. The Country agrees not to assert any documentary privilege against the Gavi in connection with any audit.

CONFIRMATION OF LEGAL VALIDITY

The Country and the signatories for the Country confirm that its application, and Annual Progress Report, are accurate and correct and form legally binding obligations on the Country, under the Country's law, to perform the programmes described in its application, as amended, if applicable, in the APR.

CONFIRMATION OF COMPLIANCE WITH THE Gavi TRANSPARENCY AND ACCOUNTABILITY POLICY

The Country confirms that it is familiar with the Gavi Transparency and Accountability Policy (TAP) and complies with the requirements therein.

USE OF COMMERCIAL BANK ACCOUNTS

The Country is responsible for undertaking the necessary due diligence on all commercial banks used to manage Gavi cash-based support. The Country confirms that it will take all responsibility for replenishing Gavi cash support lost due to bank insolvency, fraud or any other unforeseen event.

ARBITRATION

Any dispute between the Country and the Gavi arising out of or relating to its application that is not settled amicably within a reasonable period of time, will be submitted to arbitration at the request of either the Gavi or the Country. The arbitration will be conducted in accordance with the then-current UNCITRAL Arbitration Rules. The parties agree to be bound by the arbitration award, as the final adjudication of any such dispute. The place of arbitration will be Geneva, Switzerland

. The languages of the arbitration will be English or French.

For any dispute for which the amount at issue is US$ 100,000 or less, there will be one arbitrator appointed by the Gavi. For any dispute for which the amount at issue is greater than US $100,000 there will be three arbitrators appointed as follows: The Gavi and the Country will each appoint one arbitrator, and the two arbitrators so appointed will jointly appoint a third arbitrator who shall be the chairperson.

The Gavi will not be liable to the country for any claim or loss relating to the programmes described in the application, including without limitation, any financial loss, reliance claims, any harm to property, or personal injury or death. Country is solely responsible for all aspects of managing and implementing the programmes described in its application.

1. Type of Support requested

Please specify for which type of Gavi support you would like to apply to.

Type of Support	Vaccine	Start Year	End Year	Preferred second presentation[1]
Routine New Vaccines Support	HPV quadrivalent, 1 dose(s) per vial, LIQUID	2017	2017	

[1] Gavi may not be in a position to accommodate all countries first product preferences, and in such cases, Gavi will contact the country and partners to explore alternative options. A country will not be obliged to accept its second or third preference, however Gavi will engage with the country to fully explore a variety of factors (such as implications on introduction timing, cold chain capacity, disease burden, etc.) which may have an implication for the most suitable selection of vaccine. If a country does not indicate a second or third preference, it will be assumed that the country prefers to postpone introduction until the first preference is available. It should be noted that this may delay the introduction in the country.

[2] Gavi would appreciate feedback from countries on feasibility and interest of selecting and being shipped multiple Pentavalent vaccine presentations (1 dose and 10 dose vials) so as to optimise wastage, coverage and cost. Please refer to section 6.2.

2. Table of Contents

3. Executive Summary

Please provide a summary of your country's proposal, including the following the information:

- For each specific request, NVS routine support or NVS campaign :
  - The duration of support
  - The total amount of funds requested
  - Details of the vaccine(s), if applicable, including the reason for the choice of presentation
  - Projected month and year of introduction of the vaccine (including for campaigns and routine)
- Relevant baseline data, including:
  - DTP3 and Measles coverage data (as reported on the WHO/UNICEF Joint Reporting Form)
  - Target population from Risk Assessments from Yellow Fever and Meningitis A
  - Birth cohort, targets and immunisation coverage by vaccines
- Country preparedness
  - Summary of planned activities to prepare for vaccine launch, including EVM assessments, progress on EVM improvement plans, communication plans, etc.
  - Summary of EVM assessment and progress on EVM improvement plan
- The nature of stakeholders' participation in developing this proposal
  - Inter-Agency Coordinating Committee
  - Partners, including CSO involvement

Summary of Country proposal

The EPI policy of the Government of Guyana is to provide vaccination for all target populations in order to eliminate the occurrence of all vaccine preventable diseases. This has been achieved over the years and the program is set to expand as new vaccines come on the market.

As the vaccine for the elimination of certain strains of HPV became available the country examined the burden of disease that cancer of the cervix has on elements of the population and following the recommendations of the PAHO/TAG, decided to introduce the vaccine that would have an effect on its occurrence. The possibility of also decreasing the number of cases and morbidity caused by ano-genital warts was also seen as an extra beneficial preventative factor to the introduction of this vaccine.

The overall objectives of the introduction would therefore be:

- To decrease the incidence of cervical cancer in women from HPV types 16 and 18
- To decrease the incidence of ano-genital warts in women and girls
- To obtain a coverage rate of >90% for the 2 doses of vaccine
- To stimulate the development of a comprehensive cervical screening program at the national level

Assistance with national country wide introduction

1. NVS routine support or NVS campaign:

The duration of support requested is for a one year period commencing September 2017 to September 2018 . The total amount of funds requested for vaccines, associated supplies and an introductory grant is US $ 153,720 for 2017

After careful consideration, Guyana prefers to use the WHO qualified quadrivalent HPV from Gardasil presented in the 1-dose vial. Because of the small birth cohort in Guyana as well as the presence of rural populations in hinterland areas the 1-dose vial will limit wastage. Currently, Guyana is using 1-dose presentations for the pentavalent, IPV and PCV13 vaccines which were successfully introduced. An EVM assessment done in 2014 revealed that the cold chain storage and transport capacity at the national level is adequate and sufficient to accommodate any new vaccines, such as HPV.

The planned date of HPV introduction nationwide will be September 2017, this follows a pilot project which commenced on 1st January 2012 in several regions and continued until end of June 2015.

b Baseline Data

The overall objective of EPI is to reach and maintain immunization coverage of 95% or greater in every region, sub-region, district, and village of Guyana. Significant strides have been made in the area of attaining the 95% coverage. Since 2005, for the routine vaccines BCG, OPV, pentavalent, the coverage has been maintained. Improvements in vaccination coverage have been made in each of Guyana's 13 administrative regions and sub-regions. Comparison between 2005 and 2015 national EPI coverage reveals that there were significant improvements in all antigens. From 2005 to 2015, the immunization coverage has been maintained at over 90% for the routine antigens. In 2015, the coverage for pentavalent vaccine was 95%, Oral Polio Vaccine was 92%, BCG was 99% and MMR was 100%. The new vaccines coverage was 96% for the Rotavirus and for PCV 13, 94 % in 2015. The programme has shown good performance in meeting targets as well as the introduction of new vaccines.

Despite these achievements, challenges still exist in the hinterland regions 1, 7, 8 and 9. The coverage for these regions have fluctuated from 85 % (2012) to 90% (2015). Even so, there are isolated areas within these regions which have poor access and outreach activities are done in order to ensure that the target population are reached.

There are also difficulties in accessing vaccination in remote hinterland communities due to climatic and transportation difficulties. There is a need for training of staff in remote areas since new staff is being added to the health programme

The target population for Yellow fever is an estimted 1 birth cohort of 16,000 1 year olds and 40,000 others, Meningococcal A is only given to travellers going to the Middle East or countries where the disease is prevalent.

c, Country Preparedness

In the expectation of having a nationwide HPV programme the country introduced the HPV vaccine in several regions as a pilot project in January 2012. From these 3 years many lessons were learnt and now the decision was made to introduce the HPV nationwide. Social communication strategies are planned to be initiated in the latter half of 2016 and early in 2017 with targeted audiences being parents, teachers, health staff, the general public and other relevant stakeholders.

The last Effective Vaccine Management (EVM) was completed in July 2014 and provided recommendations for the improvement of the vaccination programme at the national and regional level. The conclusion of the report noted that this was a baseline EVM assessment in Guyana which has helped the national EPI to identify key strengths and challenges in the vaccine management performance. Based on the root causes of the challenges and gaps as suggested by the category scores, an EVM Improvement Plan has been developed by the programme to sustain the high performance and address major challenges. The total cost of the Improvement Plan for three years was estimated at $384,688.

Many activities were completed on the EVM improvement plan (2013 to 2017) These include the building of a new cold storage room with all the necessary supporting pieces of equipment. The storage in the regions has improved significantly and it is expected that in the health centres, that with the new cold storage equipment that is on order that their storage will be adequate. Based on these change shortages of the cold storage is not one of the problems that is envisioned when the HPV vaccine is introduced into the routine programme and the catch up cohort of 2 years is done. The training of doctors and nurses in EPI is a continuing process. The stock cards have been modified to reflect the inclusion of diluents and supervisory visits to all regions have been increased. The adverse reaction forms have been revised with the assistance of PAHOWHO and the final disposal by incineration has improved. The EPI manual has been revised and the annual vaccination week activities continue. In all much progress has been accomplished following that assessment.

d. Stakeholders Involvement

Guyana has an Inter-Agency Coordinating Committee (ICC) on Immunization as the main decision making body in all matters related to immunizations. This is an independent group of personnel who meet to discuss issues pertaining to immunization. It has been in place since 1989, and is comprised of officials from the Ministries of Public Health, Education and Finance, along with representatives from UNICEF, PAHO/WHO, and the Red Cross. They meet approximately 2-4 times per year. In their July 2016 meeting the introduction of HPV vaccine nationwide was endorsed and the proposal for partial funding from GAVI was approved. The

expansion of the HPV pilot project had been discussed at previous ICC meetings and it was decided to make the necessary preparatory arrangements to roll out to a nationwide routine programme.

This proposal was formulated with the assistance of a short term technical adviser from PAHO, the EPI focal point at the PAHO/WHO Guyana office and the other members of the ICC who worked alongside the EPI Manager and staff from the Ministry of Public Health.

4. Signatures

4.1. Signatures of the Government and National Coordinating Bodies

4.1.1. Government and the Inter-Agency Coordinating Committee for Immunisation

The Government of Guyana would like to expand the existing partnership with the Gavi for the improvement of the infants routine immunisation programme of the country, and specifically hereby requests Gavi support for:

HPV quadrivalent, 1 dose(s) per vial, LIQUID routine introduction

The Government of Guyana commits itself to developing national immunisation services on a sustainable basis in accordance with the Comprehensive Multi-Year Plan presented with this document. The Government requests that the Gavi and its partners contribute financial and technical assistance to support immunisation of children as outlined in this application.

Table(s) 6.2.4 in the NVS Routine section of this application shows the amount of support in either supply or cash that is required from the Gavi. Table(s) 6.2.3 of this application shows the Government financial commitment for the procurement of this new vaccine (NVS support only).

Following the regulations of the internal budgeting and financing cycles the Government will annually release its portion of the co-financing funds in the month of **August**.

The payment for the first year of co-financed support will be around **November 2017** for HPV quadrivalent, 1 dose(s) per vial, LIQUID.

Please note that this application will not be reviewed or recommended for approval by the Independent Review Committee (IRC) without the signatures of both the Minister of Health and Minister of Finance or their delegated authority. These signatures are attached as DOCUMENT NUMBER : 2 and 3 in Section 10. Attachments.

Minister of Health (or delegated authority)		Minister of Finance (or delegated authority)	
Name	Dr George Norton, MD,MP	**Name**	Mr Winston Jordan,MP
Date		**Date**	
Signature		**Signature**	

Proof of involvement of the Ministry of Education will also be required for HPV Routine Support. The Ministry of Education will either have to be involved in the ICC process (preferred option) and/or the Minister of Education (or delegated authority) must provide its signature. The signature is attached as DOCUMENT NUMBER : {0} in Section 10. Attachments.

Minister of Education (or delegated authority)	
Name	Dr. Rupert Roopnarine, MP
Date	
Signature	

This report has been compiled by (these persons may be contacted in case the Gavi Secretariat has queries on this document):

Full name	Position	Telephone	Email
Dr Elizabeth Ferdinand	Short Term Consultant,PAHO/WHO	1-246-436-2497	eferdinand@hotmail.com

Dr Ertenisa Hamilton	EPI Manager, Ministry of Public Health	592-227-3509	ertenisa@yahoo.com
Dr Janice Woolford	Consultant, Immunization and Family Health ,PAHO/WHO	592-227-5150	woolforjan@paho.org

4.1.2. National Coordinating Body - Inter-Agency Coordinating Committee for Immunisation

Agencies and partners (including development partners and NGOs) supporting immunisation services are co-ordinated and organised through an inter-agency coordinating mechanism (ICC, Health Sector Coordinating Committee (HSCC), or equivalent committee). The ICC, HSCC, or equivalent committee is responsible for coordinating and guiding the use of the Gavi NVS routine support and/or campaign support. Please provide information about the ICC, HSCC, or equivalent committee in your country in the table below.

Profile of the ICC, HSCC, or equivalent committee

Name of the committee	Inter Agency Immunization Coordination Committee(ICC)
Year of constitution of the current committee	1989
Organisational structure (e.g., sub-committee, stand-alone)	Stand alone
Frequency of meetings	Quaterly

The Terms of Reference or Standard Operating Principles for the ICC, including details on the ICC membership, quorum, dispute resolution process and meeting schedules is attached as DOCUMENT NUMBER : 4.

Major functions and responsibilities of the ICC/HSCC:

- Discuss MOPH and donor needs with regard to the Expanded Programme on Immunization.
- Collaborate on the development of EPI initiatives.
- Improve the policy environment to ensure proper discussion of issues of mutual concern.
- Coordinate allocation of critical resources to avoid duplication.
- Evaluate progress and the need for additional assistance on implementation of EPI Plans of action.

Three major strategies to enhance the ICC role and functions in the next 12 months:

1. Incorporate input from selected members of the ICC during EPI budget development.
2. Include selected members of the ICC in the National EPI Review.
3. Arrange visits to low coverage areas for select members of the ICC to meet with stakeholders to discuss challenges and solutions.

Please describe how partners have provided support in preparation of the proposal:

Partners have taken part in the decision to introduce the HPV to the entire country, to review and give approval to the proposal and also committed to actively participate in the introduction process.

They have also supported the Ministry of Public Health in the implementation of its new cancer prevention policy.

Over the years there has been a few traditional CSO's who have partnered with the EPI in its quest to meet the goals of the programme and to have all children immunized. These include the Rotary, the Red Cross, CIDA, Religious Organizations and Lions clubs to name a few. They have helped in a variety of ways such as the provision of financial donations, human resource support (especially in hinterland communities) and actually forming part of the immunizing team in the outreach activities e.g. fairs and vaccination campaigns (Currently there is an organisation in Region #7 who assists the programme with transporting vaccines and personnel on a regular basis free of cost).

For the HPV introduction, these partners will form an integral part in assisting the EPI in convincing the parents to have their children immunized and to try to raise the level of awareness of cancer of the cervix and to demonstrate how the use of the HPV vaccine for young girls can prevent cervical cancer. It is our focus to have a very strong community base approach to the education as it relates to the HPV vaccine and the gate keepers both formal and informal will be key stakeholders included in the roll out of this activity. In this way, it is hoped that the many myths about the HPV vaccine will be addressed and more of the population will be able to make an informed decision.

4.1.3. Signature Table for the Coordinating Committee for Immunisation

We the members of the ICC, HSCC, or equivalent committee *[1]* met on the **28/07/2016** to review this proposal. At that meeting we endorsed this proposal on the basis of the supporting documentation which is attached. The minutes of the meeting endorsing this proposal are attached as Document number 5. The signatures endorsing the proposal are attached as Document number 6 (please use the list for signatures in the section below).

Please refer to Annex C of the 'Gavi HSS and NVS General Guidelines' for more information on ICCs.

Function	Title / Organisation	Name	Please sign below to indicate the attendance at the meeting where the proposal was endorsed	Please sign below to indicate the endorsement of the minutes where the proposal was discussed
Chair	Chief Medical Officer, Ministry of Public Health	Dr Shamdeo Persaud		
Secretary	EPI/MCH Officer	Dr Ertenisa Hamilton		
Members	PWR, PAHO/WHO	Dr William Adu-Krow		
	Consultant, Immunization an Family Health ,PAHO/WHO	Dr Janice Woolford		
	Child Survial Officer,UNICEF	Ms Cornelly Mc Almont		
	Head, Health Planning,Ministry of Public Health	Ms Karen Yaw		
	Planning Unit, MoPH	Ms Malika Idal		
	Ministry of Indigenous Affairs	Ms Pauline Welch		
	National Vaccine Cold Room Nurse	Ms Loreen Martin		
	EPI Surveillance Nurse	Ms Heather Edwards		
	Deputy Chief Nursing Officer	Ms Veronica Douglas		
	Ministry of Education	Ms Dionne Browne		

By submitting the proposal we confirm that the quorum has been met. **Yes**

The minutes from the three most recent ICC meetings are attached as DOCUMENT NUMBER : 7.

4.2. National Immunization Technical Advisory Group (NITAG)

Has a NITAG been established in the country ? **Not selected**

In the absence of a NITAG, countries should clarify the role and functioning of the advisory group and describe plans to establish a NITAG. This document is attached as **(Document Number: 8)**

5. Immunisation Programme Data

5.1 Background information

Please complete the table below, using data from available sources. Please identify the source of the data, and the date. Where possible use the most recent data and attach the source document.

- Please refer to the Comprehensive Multi-Year Plan for Immunisation (cMYP) (or equivalent plan) and attach a complete copy (with an Executive Summary) as DOCUMENT NUMBER 9. Please attach the cMYP costing tool as DOCUMENT NUMBER 10.
- Please attach relevant Vaccine Introduction Plan(s) as DOCUMENT NUMBER : 12
- Please refer to the two most recent annual WHO/UNICEF Joint Reporting Forms (JRF) on Vaccine Preventable Diseases
- Please refer to Health Sector Strategy documents, budgetary documents, and other reports, surveys etc, as appropriate.
- Please refer to the attached risk assessments in the case of yellow fever and meningitis A mass preventive campaigns.

Please use the most recent data available and specify the source and date.

	Figure	Year	Source
Total population	746,955	2012	Bureau of Statistics , Guyana
Birth cohort	15,413	2015	JFR,PAHO/WHO UNICEF
Infant mortality rate (per 1000)	13	2014	MOH, Budget Speech Indicators
Surviving infants*[1]*	15,413	2015	JFR,PAHO/WHO UNICEF
GNI per capita (US$)	3,383	2015	Ministry of Finance, Budget Speech Indicators
Total Health Expenditure (THE) as a percentage of GDP	4	2015	Ministry of Public Health, Planning Department
General government expenditure on health (GGHE) as % of General government expenditure	12	2015	Ministry of Public Health, Planning Department

[3] Surviving infants = Infants surviving the first 12 months of life

5.1.1 Lessons learned

Routine New Vaccines Support

If new or under-used vaccines have already been introduced in your country, please give details of the lessons learned from previous introduction(s) specifically for: storage capacity, protection from accidental freezing, staff training, cold chain, logistics, coverage and drop-out rates, wastage rate, etc., and suggest action points or actions taken to address them. Please refer to previous Post Introduction Evaluations (PIE), if applicable. If they are included in the Introduction Plan, please cite the section only. If this information is already included in NVIP/POA, please reference the document and in which section/page this information can be found.

Lessons Learned	Action Points
Over the years, Guyana has always had a strong EPI programme and has introduced new vaccines according to the Global Vaccine Plan of Action. In 2001, there was the introduction of the pentavalent which replaced DPT as a standalone vaccine for the under 1 age group. MMR was introduced in 1995 and Yellow Fever in 2001 in the one-year-old population. The above gives good evidence that the country has the capability to introduce new vaccines and maintain high coverage in its regular programmes. Lessons learnt is that there is a need for a good functioning cold chain system and user friendly educational materials.	A separate line item for EPI was created in the national health budget. -IEC strategy was developed based on a KAP study so more appropriate materials are being prepared for the community. -Cold chain inventory updated in 2015 and procurement of cold chain equipment is being processed

From the Introduction of rotavirus and the pneumococcal vaccine. -Health workers have to be retrained at various times since acquisition of the vaccines came two years later. - Regular updating of the cold chain capacity for the introduction of new vaccines needs to be done prior to implementation	This means that training needs to be done on receipt of the vaccines and just before implementation -Expanding the cold chain storage capacity. -Keeping the cold chain inventory up to date as per PAHO/WHO -requirements
From the Introduction of IPV as the first dose instead of OPV The lessons learnt were re- training had to be conducted multiple times since staff at the Primary Health Care are at various levels. In addition, health workers were oriented on the role this vaccine plays as it relates to the Polio End Game strategy. A link had to be established which helped in boosting their confidence since they were concerned about parents reaction to their children receiving three injectable vaccines at a tender age.	-Training of health staff was done as well as education and sensitization of the parents on Inactivated Polio Vaccines. -Training was conducted with different level of staff within the regions
Piloting of HPV as part of the immunization schedule During the piloting of this vaccine there were social groups, political leaders as well as parents that were against this activity one of the reasons being that adequate social mobilization was not conducted. The lessons learnt were; - Prior social mobilization needs to be done for the different target populations; parents/guardians, health care providers, teachers and the general public for good acceptance of the vaccines. - A response plan should be in place to dealt with mis-conceptions from the public	Intervention model with 2 different operating strategies was used for the pilot project. -Immunization activities were conducted at schools and health facilities. -Outreach HPV vaccination was done at health fairs and other national events. -Coordination with departmental and local education authorities were needed to successfully conduct the HPV pilot. -Technical guidelines on information, cold chain was prepared and circulated to all relevant staff -IEC strategy for teachers, students and parents were implemented. However, an aggressive campaign is needed for a nationwide introduction. -This is a need for the involvement of more partners for complete social marketing of the vaccines Innovative mobilization strategies could be improved -

5.1.2 Health planning and budgeting

Please provide information on the planning and budgeting cycle in your country

The planning and budgeting cycle observes a fiscal year from January to December. Budget submission is done in the month of August for the following year

Please indicate the name and date of the relevant planning document for health

Health Vision 20/20 Plan (HSP) 2013-2020

Is the cMYP (or updated Multi-Year Plan) aligned with the proposal document (timing, content, etc.)

EPI five- Multi -Year plans have been revised to include HPV planned nation wide prepared for 2017-2021. These plans also reflect technical and strategic elements from the TAG recommendations for immunisation, the ICC and other international guidelines.

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Please indicate the national planning budgeting cycle for health

The national planning budgeting cycle is conducted in the framework of the Guyana economic model oriented towards improving the quality of life and well-being of all Guyanese and the guidelines for budget formulation and planning for public sector entities. On the national scale, these include: the different Ministries and state owned corporations and bodies exercising functions of control and defence of society. These institutions are obliged to prepare strategic or five-year plans and annual operating plans (AOPs) with budgets linked to their medium and short-term development objectives and aims, as appropriate, to send to the Ministry of Finance for analysis and consolidation as General State Budget, which is afterwards approved by the Parliament.

An AOP basically contains the following points: a) situation analysis, b) definition of management objectives for every financial year, c) definition of management indicators, d) determination of work and investment operations, and e) determination of the resources required for the execution of the operations projected in the AOP. The planning process usually starts at the Ministry level in late July or early August of each year.

Please indicate the national planning cycle for immunisation

The planning budgeting cycle for the EPI is part of the planning budgeting cycle of the health sector and includes items for the payment of personnel, purchase of services and goods, vaccines, syringes, safety boxes, travel expenses, allowances, materials and supplies, personal and non-personal services

5.1.3 Gender and equity

Please describe any barriers to access, utilisation and delivery of immunisation services at district level (or equivalent) that are related to geographic, socio-economic and/or gender equity. Please describe actions taken to mitigate these barriers and highlight where these issues are addressed in the vaccine introduction plan(s).

The Ministry of Public Health, in its policy and planning documents, makes the strategic objective of universal access to health services explicit. In the case of the EPI, no distinction is made to any section of the population. This is evident when targets are set e.g. 100% of the birth cohort, which includes males and females. When the targets are not met special strategies are put in place to accomplish them. These include special campaign days open to all, and by mobile teams sent to the hinterland to remote and scattered communities without health services. Home visiting to defaulters is another strategy sometimes used to arrive at the target. This focus guarantees immunization without discrimination by gender, race or geographic location.

Discuss how equity issues (geographic, socio-economic and/or gender) are being taken into account in the design of social mobilisation and other strategies to increase immunisation coverage. Highlight where these issues are addressed in the vaccine introduction plan(s).

Equity issues with regards to geographic, socio-economical and gender are taken into account in the routine immunization programme. For the hinterland regions where there are geographic and socio-economic issues, the EPI programme conducted mop up and outreaches vaccination services so that every child is vaccinated. All persons are vaccinated regardless of their gender.

The various social communication and mobilisation strategies that will be developed to address the different target populations will take into consideration the utilization of different tools such as print media, social media, street theatre and house to house education and vaccination. This will form part of the HVP proposal introduction mobilization plan. This will ensure that all the parents and guardians from the different socioeconomic and demographic strata will be informed and vaccined if eligible.

Please indicate if sex disaggregated data is collected and used in immunisation routine reporting systems.

Reporting by gender was initiated by EPI in 2014. The ratio of male to female vaccination coverage is 1:1 and there are no major differences in hinterland versus the coastal areas. With regards to the area of residence, the coastal areas have better coverage compared to the hinterland or rural areas and this is presumed to be due to the remoteness and hard to reach health facilities. This finding enabled the EPI to develop specific action plans for those hinterland areas with lower coverage.

Is the country currently in a situation of fragility (e.g. insecurity, conflict, post-conflict, refugees/and or displaced persons and recent, current or potential environmental disaster, such as flooding, earthquake or drought or others)? If Yes, please describe how these issues may impact your immunisation programme, planning for introduction of routine vaccines or campaigns and financing of these activities.

There is no civil unrest or war torn areas in Guyana so this issue does not pose a problem for immunization services. However because of the vast expanse of the country and the fact that the areas of the hinterland are so remote and difficult to access, special attention has to be paid to reaching these cut off communities. Transportation to these areas is also expensive and sending teams to them can prove difficult at times especially near to the end of the budget year or if there is an insufficiency of funds.

The rainy season does pose challenges in reaching some communities who may become isolated for periods of time. However as soon as the weather settles health services are restored as quickly as possible. If necessary a mop up vaccination activities are conducted.

If available, please provide additional information and documents on subnational coverage data, e.g. comparing urban/rural districts or districts with highest/lowest coverage, etc.

For the year 2015, the national coverage shows that Guyana was able to achieve significant immunisation coverage rates in infants under one year of age: 99% with BCG, 95% with pentavalent, 92% with Polio and 96% with rotavirus, 94 % with pneumococcal; in one-year-old children, 100% with MMR at 12 months. However, with regards to children being fully immunized according to age the rural/hinterland area reflects vaccination coverage that is lower than the urban areas. This is an issue that is compounded due the geographical terrain and weather conditions which makes health care inaccessible at times and as such children have their vaccines behind the scheduled period. There are also pockets of low coverage areas in hinterland Regions 1,7,8, 9 and 10. and coastland Regions of 4 and 10.

5.1.4 Data quality

Please attach a data quality assessment (DQA), report that has been completed within the previous 48 months with the most recently conducted national survey containing immunisation coverage indicators (DOCUMENT NUMBER: 27) and an immunisation data quality improvement plan (DOCUMENT NUMBER 28). If available, a progress report on the implementation of the improvement plan should also be submitted (DOCUMENT NUMBER: 11, DOCUMENT NUMBER: 28).

Please indicate what routine mechanisms to independently assess the quality of administrative data are in place, and if so what these mechanisms are and how they enable the country to track changes in data quality over time.

The EPI has supervision and monitoring systems in place by level, with a methodology and tools that are pertinent to human resources supervision, rapid coverage monitoring in the population and data quality control. Nevertheless, staff rotation, frequent changes on the local management levels and insufficient staff and financial resources provoke interruptions in the supervision plans.

The templates used for data quality monitoring make it possible to measure data concordance. With respect to record booklets and infant health cards as against the consolidated monthly report from the facility itself, the network, and the national level, results are greater than 90%. Nevertheless there are some difficulties found in their manual processing. Once these have been identified in supervision, they will be subject to improvement plans per health facility, including in-situ training with data from the facility itself

Please detail what household surveys have been conducted in recent years to independently assess immunisation coverage and equity, and describe any survey plans for the coming five year period.

Guyana Demographic Health Survey was conducted in 2009 where it analysed immunisation coverage rates by age and vaccine type, zone of residence, mother's level of schooling and wealth quintile. Results indicate that the coverage rates were similar to the national coverage reported data. It is proposed to conduct vaccine coverage reveiw by health center and district.

5.1.5 HPV specific facts

Please demonstrate country's ability to deliver a complete multi-dose series of vaccines to at least 50% of a one-year cohort selected from the population of 9-13 year old girls the target vaccination cohort in at least one typical district using a similar strategy to the one proposed for HPV vaccine delivery. For each district, fill-in:

District Information	
Name of the district	Regions 3,4,5,6
Size of population of the district	6,600
Describe how the district is divided into rural and urban areas:	This was a pilot project for the introduction of HPV in selected regions -The regions identified were composed of a mixture of urban and rural communities . - The target population was 6,600 girls between the ages of 11 to 13 years. -HPV Vaccines were donated through International Planned Parenthood Federation(IPPF) Vaccine used was GARDASIL -Three shots of the vaccine, first shot was given, then the second dose one to two months after the first dose and the third dose 6 months after the first dose. It was a voluntary programme and informed consent from the parents and guardians was used. This pilot project illustrated that the country is capable of nationwide introduction of HPV vaccine. Several other vaccines have been introduced successfully into the country over the last five years with excellent coverage rates. GAVI assisted in these introductions. The vaccines used were the Rotavirus(Rotarix), PVC 13 and pneumococcal conjugate vaccine.

Please specify what was the multi-dose vaccine used (HPV/TT/others)? What was the vaccination schedule?

During the pilot project conducted in 2012-2014, the quadrivalent HPV vaccine was used per the three-dose schedule, with an interval of 0-2-6 months.

Describe the vaccination strategy used (school based, health centre based, mixed)? How was it carried out, who carried it out, who was the lead department/agency? What age/sex was the multi-dose vaccine delivered to? If it was school based, how many schools were targeted? Was it age based or grade based?

Vaccines were initially donated through International Planned Parenthood Federation(IPPF) Vaccine used was GARDASIL

Three doses of the vaccine was given. The first dose was given, then the second dose one to two months after the first dose and the third dose 6 months after the first dose. It was a voluntary programme and Informed consent from the parents and guardians was used.

The objectives of the HPV pilot were:

- To vaccinate young girls at ages of 11- 13 years with three doses of the HPV vaccines.
- To maintain the potency of the HPV vaccines in all the regions.
- To monitor the EPI surveillance of events attributable to HPV vaccines and adverse events. To monitor and evaluate the vaccination program in schools
- To sensitize the public and health workers on the use of the HPV vaccines through print and non-print methods.

The indicators were:

- Number and percentage of young girls vaccinated with 3rd doses of HPV Vaccines.
- Number of health facilities with zero loss of vaccines due to failure to maintain the cold chain.
- Number of schools reporting high acceptance of the HPV program

During the preparation for the pilot it was necessary to:

- Prepare a fact sheet on HPV for the health workers.
- Prepare IEC materials for the targeted audience.
- Obtain approval from the Ministry of Education on the proposed HPV vaccine programme.

- Ensure political stabilization of the country.

The vaccine strategy used the following steps:

- Approval was obtained from the Chief Education Officer, Ministry of Education.
- This approval was communicated to the Regional MCH supervisors
- Each Region was responsible for the schools within their catchment.
- The target population was given to the health departments by the Ministry of Education
- The staff at the health centers vaccinated the target population who attended schools in their catchment.
- Each health center head liaised with the regional education officer in their catchment before the commencement of the activity.
- The commencement of the vaccination in the schools began in the month of January 2012 during the cancer prevention program activities

The selection of the schools:

- All public schools were selected for the vaccination of girls within the target age group.

The selection of the target:

- The age group was selected based on consultation with the ICC
- Young females 11-13 years old was the final decision after reviewed of the age of initiation of sexual activity from past surveys in Guyana (Adolescent Health Survey which indicated that the average of 14 years)
- Reviewed the educational activities at school e.g. GRADE 6 children who are preparing to write National Grade Six Assessment.
- Recommended by PAHO/WHO for females 9-26 years old

This pilot was launched on January 12th ,2012 under the theme of "Cervical Cancer Awareness Month and Prevention Program"

In the pilot different strategies were used

School Based

- HPV vaccines was initially introduced into schools Regions 2, 3,4 ,5 and 6
- Health centre, parents could bring the child to the clinic

Outreach activities

- House to house

Health events e.g. fairs

- The monitoring and evaluation
- This was the responsibility of the MCH staff
- M&E of this vaccine was done on a continuous basis
- Tally sheets were prepared to capture the data on a weekly basis from the health facilities.

Management of adverse events

- Reporting on adverse events were done immediately
- All health workers were responsible for managing adverse events of clients according to the MCH/EPI protocols.
- All adverse events were recorded on the "EPI adverse event forms" and reported within 24 hours to the EPI Officer, Maternal and Child Health Department.

- Challenges encountered

  The programme encountered criticisms and bad media coverage from one political group and one of the NGOs. The argued the following;

- Money could be spent on the vaccine procurement can be utilized more effectively e.g. on a child-

feeding program
- It was a mandatory program not voluntary
- The population should receive more education before the introduction of the vaccine
- Myths
  - Vaccine causes sterility of the young girls
  - We are encouraging the young girls to initiate sex early.
  - Young girls are dying due to the side effects of GARDASIL in other countries (misinformation).
- Schools
- Teachers are some of the resistant persons who are making the process difficult for the nurses

What was the number of targeted population? What was the number in target population who started the multi-dose series? What was the number in the target population who received all doses?

The targeted population for HPV pilot programme was 6,600 in the 11-13 years age group. In 2012, 1st year of introduction , the HPV coverage was 94%(1st dose) , the 2 dose (65%) and 3rd dose HPV coverage was 33%.

In 2012, the 1st dose of HPV coverage was 94%, 2nd dose (65%) and 3rd dose (33%). In 2013, the 1st dose

HPV coverage was 83%, 2 dose (55.6%) and the third dose 46.4 %. In 2012, the donation received was 21,600 doses, by the end of 2013 a total of 23,141 doses were given to the age group 11-13 years. The extra doses supplied were through the revolving fund. Subsequently, in 2014 ,a total of 1,306 HPV doses were used to complete those girls who had not completed vaccination.

In the latter half of 2014, there was a short fall of HPV vaccines so the programme was temporally halted since the GARDASIL vaccines became unavailable.

When vaccines became available in September 2015 the pilot was continued .The second doses are higher because those children who had been given the first dose before were then offered to continue the course. The pilot is still on-going in the regions identified (refer table 5.1.5 below).refer table 5.1.5 below). In addition, the high fall out during the different groups can also be associated with the fact that not all of the girls targeted accepted the HPV vaccines Lessons learnt are that the HPV programme should have only been initiated if a regular supply of vaccines was guaranteed. With the new expansion and based on the premise that the HPV vaccine would be available it is expected that there will be no reoccurrence of this.

Please refer to the attached document named Details on previous intro for further details.

Please provide the source of data for estimation of the target population:

This was based on the Ministry of Education enrollment register in schools

If applicable, please detail what additional people beside the target population also received the vaccine:

It was also given to anyone within the age group on request

Table 5.1.5: (Please refer to WHO/UNICEF JRF)

Girl age	HPV 1*st* dose	HPV 2*st* dose	HPV 3*st* dose
9 years old			
10 year old			
11 year old	572	728	276
12 year old			
13 year old			
14 year old			
15+ year old			
Unknown			

Was there an evaluation of the 'project'? If so, who performed it? Please provide a short summary of the evaluation methodology and/or provide the evaluation report if available (Document number No: 16). Please ensure this summary (and/or the attached report) includes a costing analysis of the proposed delivery strategy or strategies. Refer to section 10. Attachments.

No formal evaluation took place but a rapid assessment was done by the EPI Manager, PAHO/WHO local office and other relevant staff from the MoPH. From this assessment, lessons learnt in each region were recorded and were used in the formulation of the plan for the introduction country wide.

Lessons learnt

- All other vaccines introduced previously did not have any opposition other than HPV because this is a different age group from the routine program
- With the influence of modern communication technology (access to the internet). A more aggressive social mobilization /awareness campaign was needed to target the public other than the parents and guardians before the campaign by the health communication unit.
- Other strategies needed to be used for successful HPV introduction e.g. uses of community groups, churches and public meeting.
- Information should have been shared with all health staff not only those in Primary Health Care setting
- More awareness of parents and guardians and more acceptance of the HPV Vaccines more readily especially during outreach sessions
- Lack of buy in from health care staff and teachers can be detrimental to the process

5.2. Baseline and Annual Targets (NVS Routine Support)

Please refer to cMYP pages to assist in filling-in this section.

Number	Base Year	Baseline and Targets
	2015	2017
Total births	15,413	15,250
Total infants' deaths	208	208
Total surviving infants	15,205	15,042
Total pregnant women	16,015	16,015
Target population vaccinated with OPV3*[1]*	14,204	14,661
OPV3 coverage*[2]*	93 %	97 %
Target population vaccinated with DTP1*[1]*	14,822	15,246
Target population vaccinated with DTP3*[1]*	14,653	14,680
DTP3 coverage*[2]*	96 %	98 %
Wastage*[3]* rate in base-year and planned thereafter (%) for DTP	5	5
Wastage*[3]* factor in base-year and planned thereafter for DTP	1.05	1.05
Number of girls in the target cohort	0	8171
Target population vaccinated with 1st dose of HPV	0	8,171
Target population vaccinated with the last dose of HPV	0	8,171
HPV quadrivalent coverage 1st dose	0 %	100 %
HPV quadrivalent coverage last dose	0 %	100 %
First Presentation: HPV quadrivalent, 1 dose(s) per vial, LIQUID		
Wastage*[3]* rate in base-year and planned thereafter (%)	0	5
Wastage*[3]* factor in base-year and planned thereafter (%)	1.00	1.05
Maximum wastage rate value for HPV quadrivalent, 1 dose(s) per vial, LIQUID	5 %	5 %
Target population vaccinated with 1st dose of MCV	15,129	15,040
MCV coverage*[2]*	100 %	100 %
Annual DTP Drop out rate [(DTP1 – DTP3) / DTP1] x 100	1 %	4 %

[1] Indicate total number of children vaccinated with either DTP alone or combined

[2] Number of infants vaccinated out of total surviving infants

[3] The formula to calculate a vaccine wastage rate (in percentage): [(A - B) / A] x 100. Whereby: A = the number of doses distributed for use according to the supply records with correction for stock balance at the end of the supply period; B = the number of vaccinations with the same vaccine in the same period.

5.2.1 HPV specific targets

Single year cohort of girls to be vaccinated with HPV should be within the WHO-recommended target population of 9-13 years old girls

Please specify the source of data that was used to estimate the number of girls in target and reported in the above table under “Target population vaccinated with HPV“

This was based on the Ministry of Education rerollment register for all ten regions

5.3. Targets for Preventive Campaign(s)

No NVS Prevention Campaign Support this year

5.4. Targets for One time mini-catchup campaign(s)

No One time mini-catchup campaign this year

6. New and Under-Used Vaccines (NVS Routine)

6.1. Assessment of burden of relevant diseases (if available)

If already included in detail in the Introduction Plan or Plan of Action, please cite the section only.

Disease	Title of the assessment	Date	Results
Cervical cancer	Progress in Cervical Cancer Prevention, Cervical Cancer Action Report, Source: Gobolcan A profile of Cancer in Guyana 2003 to 2012, Guyana Cancer Registry:	Progress in Cervical Cancer Prevention, Cervical Cancer Action Report, Source: Gobolcan A profile of Cancer in Guyana 2003 to 2012, Guyana Cancer Registry:	The standardized incidence of cervical cancer by age in 2012 was 42.7 for every 100,000 women and the crude mortality rate was 18.8.

6.1.1 HPV burden specific information

Has the country undertaken an assessment of the burden of cervical cancer? If so, describe the burden, and when and how the assessment was done. If not, countries may report on Globocan data (available on the WHO HPV information Centre website at http://www.who.int/hpvcentre/en).

The statistics estimated from 2012; state that about 161 new cervical cancer cases are diagnosed annually in Guyana and 71 die from the disease each year.

The incidence of cervical cancer standardised by age in 2012 was 42.7 for every 100,000 women and the mortality rate was 18.8 for every 100,000 women – the second highest in the region of the Americas.

Cervical cancer ranks as the second cause of female cancers in Guyana and is the first most common female cancer in women aged 15 to 44 years in Guyana.

When the incidence rate of cervical cancer versus all other cancers in Guyana in women of all ages is compared it is seen that cancer of the cervix ranks second to cancer of the breast.

Cervical cancer ranks as the first cause of female cancer deaths in Guyana and is the first leading cause of cancer deaths in women aged 15 to 44 years in Guyana.

In Guyana, there is no published work about virus prevalence with normal cytological testing in the general population, nor are there any studies that report types in actual cancer specimens. This opens the window for future research once funding can be obtained.

Describe the existing cervical cancer prevention and control activities.

Activities for the detection of cervical cancer began years ago through NGO activity and the component of early screening began as a programme in government clinics in 2007. Since then, several ad hoc attempts have been made to get a standardised program available for all women in the population.

A National Policy and Strategy for the Prevention and Control of Cervical Cancer 2009 -2012 was introduced .In collaboration with JHPIEGO, an affiliate of the John Hopkins University in the USA. Visual Inspection using Acetic Acid (VIA) testing was initiated in the hospitals in 2007. There were 17 VIA sites in the country in 8 regions where there is cancer screening. Training is on-going to extend the sites to other areas through the Ministry of Public Health.

Some educational documents on procedure for staff and general information for women have been produced and disseminated.

The activities being implemented are:

1. Information, education, training and awareness-raising: health staff recruitment supported by printed matter.
2. Development of human resources: inclusion of the subject matter for staff, e.g. colposcopy training.
3. Equipment and strengthening of health facilities: with infrastructure, equipment and supplies for Pap tests and VIA, patient body fluids and cytology data, biopsies, etc.
4. Information and communications to users
5. Supervision and monitoring: individual and group surveillance activities..
6. Social participation and control to increase coverage in preventive primary care services.

However, although some progress has been made, there is need for improvment of an updated strategic plan.

Has the country developed a roadmap or strategy for establishing or strengthening a national comprehensive approach to cervical cancer prevention and control? **Yes**

If Yes, please attach and refer to section 10. Attachments. (Document N°**15**)

If No, are there plans for the country to develop such a roadmap or strategy in the future? Please describe- when, who will be leading the development of the plan, and which agencies will be involved.

There is no national cancer prevention plan but PAHO/WHO is leading the process for the development of a National Cancer prevention and Control Plan in collaboration with the Ministry of Public Health and other stakeholders. This process will commence in September 2016.

In preparation for the development of the National Cancer prevention and Control programme, an assessment was conducted in October 2015. Some of the findings of this assessment are as follows: the ageing population with high prevalence of known risk factors for cancer, high incidence of cervical cancer as preventable disease and a high percentage of advanced stage disease, there is a need for a more cost-effective defined basic health packages for adequate cancer management and improved infrastructure for rapid cancer diagnosis and treatment

The Guyana National Cancer Registry was established and has been expanding in its areas of responsibilities. It is run by an NGO who operates with subvention funding from the Government. In addition, the Ministry of Public Health has a Non- Communicable Disease Department with a Director to spearhead the cancer prevention and control strategy implementation. There is also the Regional Health Department of the Ministry of Public Health who work in collaboration with the NCD Department to implement activities at the Primary Health Care level.

The lines of action for the cervical cancer programme are oriented towards:life skills education and wellness programmes of girls considered to be pre adolescents and adolescents in self- eficacy and through providing an enabling environment to protect the sexual and reproductive health as well as mental health, human resource development, equipment – strengthening health facilities – information and communication, monitoring and supervision, research and social control and participation.

The school and adolescent health programmes implement activities in education for health and address health related items including HPV and cancer of the cervix.

In the adolescent health programme, the priority lines of action are: generation and analysis of strategic and timely information in the health situation of adolescents and youth, strengthening of health service systems in terms of care that can respond to the needs of adolescents and youth, advocacy and cross-sectoral work for the implementation of health policies for adolescents and youth, the promotion of activities on contraception in adolescents and the promotion and strengthening of activities addressing the community that can benefit the health and integrated development of adolescents and youth.

The Ministry of Public Health views the introduction of this vaccine as an opportunity to accelerate structuring of the cervical cancer program along integrated lines, with tracking indicators for primary and secondary preventive care, unique contents and messages, and a specialized information and surveillance system, taking advantage of the strengths of all the programmes and strengthening the results.

6.1.2 Delivery strategy for HPV vaccine

Please specify the chosen age cohort for HPV vaccination: **10 years old**

Please describe the HPV vaccination strategy and plan (when vaccinations will be scheduled, where vaccinations will be administered, who will do vaccinations, how will the vaccine logistics be assured, the plan to ensure all recommended doses are delivered, and plans for reaching girls who may be absent on the day of scheduled vaccinations, etc.)

To implement the HPV introduction plan, account is being taken of the principal lessons learned from the pilot project, extensive country experience in vaccine administration to girls of school-going age, as well as from specific demonstrations of HPV immunisation. Hence, the strategies of systematic routine immunisation by the EPI will be applied

I) School Based Programme

2) In the referral of girls not enrolled for such period to schools or health clinics(Private and Out of schools Units)

3) Outreach Activities e.g in other operative activities with immunisation teams in remote areas and vulnerable populations.

4)Mother and Daughter package of service (mother receives cervical cancer screening while daughter gets vaccinated)

School Based Strategies

After receiving the necessary approval from the Ministry of Education and Regional Officials. This programme will be offered through secondary schools in all ten regions.

- The team from the local health clinic will coordinate all the activities that need to be done to ensure a successful implementation process. During the planning stage, the relevant information from the education sector will be obtained and distributed to all health facilities in all the regions. Each health clinic will be responsible for contacting the schools in their district and obtaining the enrollment of the girls in the targetetd age group to be vaccinated. The health wokers will also discuss all the arrangements with the teachers prior to the vaccination exercise. Certain days will be designated vaccination days at the school and plans made to attend with relevant supplies and materials on those days. Depending on the number of children to be vaccinated the number of days to attend that school will be decided. At least one return visit to immunize will be done.
- The programme is expected to begin in September 2017 which coincides with the school terms. The second dose is expected to be administered in March 2018. The goal of the HVP programme is immunising >90% of the girls with the both doses. Using the school based programme will remove the difficulty of having the parent take time off to bring the child to be vaccinated which in many cases contributes to the low coverage.
- Training and social mobilization will be done prior to the commencement of the programme. Training materials will be standardized and there will be designed for each target population and disseminated to the regions for their use. This is in an effort to make sure that all relevant information is correct and uniform. Some instructors may have to visit the regions to assist in the planning and implementation.
- A listing for the females to be immunized will be obtained prior to the vaccination noting the grade, age and educational centre, reflecting the names of the girls, addresses, date of first dose administration and schedule of the second dose. Tally of this information will be done on the regular EPI reporting system

Out of School Girls

A number of activities will be planned to address the out of school girls, these activities will be integrated into other programmes/ activities that ware part of the routine primary health care services. These include;

- Utilizing the case tracking for PMTCT as a mode of meeting the girls and vaccinating them. With the case tracking system health workers participate in field visits which will be used as an opportunity also to meet and vaccinate girls within the target age group.
- Utilizing post natalpostnatal visits as an opportunity for vaccinating girls that are out of school. This also takes on the form of community (home) visits where the opportunity exist for vaccinating out of school girls.
- House to house visits done for environmental health, vector control and others carried out by health teams as an opportunity to meet girls and vaccinate them
- Mop up campaigns that are done for defaulters will be extended to include girls
- Utilizing village/ community meetings as opportunities for vaccination of the target population

Outreach activities

Other home visiting will be done for those in the not so remote areas. For those children who are absent from school on the day of immunization they will be targeted for the return visit day.

The EPI,MoPH will take charge of vaccine supply logistics as per national programme: It is expected that set dates will be allocated to the HPV immunization times so that it does not become a prolonged and drawn out process and that there is minimum down time at school or disruption to the school day.

The strategy of immunisation in school ensures high coverage as long as there is buy in from the parents and teachers. A risk analysis and communication strategy mentioned below would address these issues.

Mother and Daughter package of service

For the clinics that do VIA screening, mothers would be encouraged to bring their female girls at 11 years. The mother would have screening at the girls given HPV vaccination. During this session at the clinics, health education would also be given to the mother and daughter on caner prevention.

Irrespective of the strategy, provide a description of existing health services and/or health education currently being provided to young adolescents (both girls and/or boys) within the 9-13 year old age group and indicate and potential synergy by integrating with HPV vaccination:

a. For health services (this can include: what health services are provided, to which age/sex group, whether it's mandatory or voluntary, regularly or ad-hoc, in school or out of school, who provides these (government, NGOs), how often, what is the uptake in the community, how is it perceived by the community.)

Presently, there is the Health and Family Life education programme in secondary schools for young adolescents (both boys and girls). This is conducted by the Ministry of Education in colloboration with the adolescent department of the Ministry of Public Health. However, there is also a need to have a more integrated structured school based health programme so that the HPV nationwide introduction programme would be more successful. HPV could be included in the following:

- A dental health programme in selected schools- This is currently beign done by the MoPH
- A school feeding program which is well established in the schools in the hinterland where breakfast and lunch is given to children who attend school by Ministry of Education.
- Sexual education program which is conducted in some schools by the Guyana Responsible Parenthood Association
- There are also programmmes which is conducted by the Police authority drug education.
- Menstrual Hygiene programme.

It is being suggested that any one of these above programs can be intensified with the introduction of the HPV vaccine and by doing so may increase the uptake of the vaccine and at the same time improve the health and wellbeing of the children and young teens.

The other services mentioned are offered to children and adolescents are healthy development, health promotion and disease prevention, including immunisation and promotion of healthy nutrition and eating habits. This is conducted by the nurses of the Immunization Programme.

b. For health education (this can include: the topic, whether it is national, sub-national, in school or out of school, who provides the education, how often, is it in the school curriculum, are there NGOs providing these? How is it perceived by the community? Has there been an evaluation and if so, how was it evaluated and what were the findings?)

HPV introduction into the national schedule poses several challenges that need to be considered in the design and implementation of communication strategies for the different players involved. This vaccine has systematically been subjected to attack, smear and disinformation campaigns in all countries who have introduced it, basically from anti-vaccine groups and religious organisations manipulating contents and information media that are hard to control and that generally exert great influence and impact on the population. Since this entails immunisation in adolescents, special care will be taken in handling taboo subjects. In developing countries

Target populations that must be the focus of the strategies will include;

- the schools Boards and school PTA
- students,
- teachers,
- primary health care providers,
- media personalities and
- parents
- community gate keepers
- Faith based organisations

Topics that must be included in the communication tools must address;

- The link between HPV and cervical cancer
- The statistics on cervical cancer
- The strains of HPV that causes cervical cancer
- The strains of HPV that the vaccine contains
- Number of required doses and interval
- Safety of the vaccine
- Side Effects
- The relationship between the age and the prevention of Cervical cancer

Information/ messages must address the different strategies to vaccinate girls with clear outline that all girls of that age group are priority there must be clear information about boys and the vaccine also.

The programme will focus on utilizing the health care providers within the communities to reach their community members with activities that will be funded by the national, subnational or local level. The central ministry will focus on the established organizations that will need to be on board. Also they will focus on reaching the decision makers so that all public opportunities by any government organization will be a stage to discuss the HPV vaccine.

The MOPH will also focus on education of the media through many different mediums on of such being a colloquium where they will be given the educational materials on the topic. The Ministry has already embarked on the development of its risk communication strategy which will be the framework for the execution of this aspect of the HPV introduction.

Please describe the communications and social mobilisation plan for the HPV vaccination strategy (what activities will be done to educate and raise awareness of the vaccination plan to the target population, their parents/guardians, the wider community, community leaders, groups of influence, etc.; who will provide this education and what materials will be used; how often will these activities occur vis-a-vis the proposed vaccination schedule.)

Risk Analysis and Communication

Many lessons were learnt during the pilot project and it identified many factors that contributed to the overall low coverage. These can be outlined as:

- Bad publicity from the press and the negative outfall from the anti-vaccine groups, mainly those overseas
- Parents not agreeing to have their children vaccinated because of misinformation
- No buy in by health staff, teachers and the public
- No real strategy developed to seek out the out of school girls and lack of access to any private schools in the Regions in the pilot.

In the upcoming roll out to a nationwide programme a much more aggressive set of marketing would have to be done to address the issues identified from the pilot. These will include:

- Increased sensitization and training for teachers, health staff and the parents. This would take the form of sessions held at schools for the PTA and teachers and to the community at large. These sessions would take the form of a delivery of a standardized set of messages, produced by health education specialists, and delivered by knowledgeable health staff from the area. Several such sessions could be held at the schools or at any forum that would be conducive to training.
- Endorsement by prominent persons. The president or the first lady, well known sports personalities or singing sensations, Ministers and religious persons could be used in the media to relay the need for the vaccine and the positive actions of prevention having it would have on cancer of the cervix
- Endorsement by community gate keepers
- The story of survivors or the children or relatives of cancer victims could be asked to relay their story on media and encourage parent to allow their children to be vaccinated.
- The use of public events e.g. fairs, cricket or other mass gatherings could be used to promote the vaccine
- Talks in churches or religious places of worship can be used to enlighten the public on the HPV and the benefits of the vaccine
- Family planning clinics, private health facilities and the government clinics can be sensitized and informed about the vaccine and how it plays a part in a cancer cervical programme. Leaflets and other material can be distributed in the clinics
- Inviting the religious organizations can be asked to identify any private schools that they are affiliated with to encourage the teachers and parents to take part in the sensitization package available by the MoPH
- Community volunteers can be brought on board to identify private schools or out of school girls in an attempt to capture them in the programme
- Community volunteers could also assist with informing the public at the many functions that they have. The use of their members to help in the manpower or financial aspect of outreach

activities into the hinterland could also be a role for the CSO's

- The child must also be sensitized and this can be done through the use of social media for those who have access to it. This is a powerful tool and can be very useful in identifying out of school girls and to encourage girls to have the vaccine
- Establishing the link between HPV and Cervical Cancer in the initial stage of the roll out.

Irrespective of the strategy, provide a description of existing health services and/or health education currently being provided to young adolescents (both girls and/or boys) within the 9-13 year old age group; and indicate and potential synergy by integrating with HPV vaccination:

a. For health services (this can include: what health services are provided, to which age/sex group, whether it's mandatory or voluntary, regularly or ad-hoc, in school or out of school, who provides these (government, NGOs), how often, what is the uptake in the community, how is it perceived by the community.)

Presently, there is need to have a more integrated structured school based health programme so that the HPV nationwide introduction programme would be more successful and to ensure sustainable high coverage. HPV could be included in the following:

- Health and family life education in secondary schools
- A dental health programme in selected schools
- A school feeding program which is well established in the schools in the hinterland where breakfast and lunch is given to children who attend school.
- Sexual education program which is conducted in some schools by the Guyana Responsible Parenthood Association
- Programs with the police on drug education

It is being suggested that any one of these above programs can be intensified with the introduction of the HPV vaccine and by doing so may increase the uptake of the vaccine and at the same time improve the health and wellbeing of the children and young teens.

The other services mentioned are offered to children and adolescents are healthy development, health promotion and disease prevention, including immunisation, promotion of healthy nutrition and eating habits, dental care is also included when possible.

Please select strategy that the country will choose to deliver the HPV vaccine: **Mixed strategy including both schools and health facility**

School-based strategy

Guyana strategy to deliver HPV vaccine does not include a "School-based strategy"

INTRUCTIONS

Description should include:

- Primary/secondary/tertiary, grades in each category, majority age in each grade
- Number of schools in the country (public/government schools, private school, or other categorization if possible and relevant for the country)
- What is the school year (which month to which month)
- When are the school holidays? (Approximated months, days if possible)
- When are the major examinations? (Approximated month)

The Government of Guyana provides free public education to all Guyanese from the age of 3 years and six months to early adulthood. This provision represents the government's conviction that education is a priority in raising the standard of living of the people of Guyana. Tuition fees have to be paid for University education.

Education, through the school system, is administered and supervised by the Ministry of Education. The Ministry has a political head - the Minister of Education, who is held responsible for education policy and administration in the country and is a member of the Parliament. There 440 primary schools and 114 secondary schools. There are 345 nursery schools and 123 nursery classes in primary schools. Twenty one prevocational institutions and 7 special education schools. It is anticipated that the names and location of these schools can be obtained using informal means such as questions to the various religious organizations, public appeal to the community and general questions by health staff in the various districts.

The established school system comprises of:

I. Nursery Education. Nursery schools offer a two year early childhood programme to all children acquiring the age of three years and three months. There are more than 350 schools with over 26,000 children. There is a ratio of one teacher to every eighteen children. The hours of school are from 8.30 a.m. to 12.00 noon. Parents play a pivotal role in the success of these schools.

2. Primary Education (Elementary). Primary schools accept children who attain the age of five years and six months and provide a six year programme leading to entrance into a secondary school programme. This level of education is, by law, compulsory hence parents can be deemed negligent if a child older than five years and nine months is not enrolled and does not attend school. Upon completion of the programme of study, the children take the national Grade six assessments so that they might gain entrance to Secondary Schools.

Students receive five hours of school per day from Monday to Friday. Classes normally commence at 8:30 a.m. and conclude at 3:00 p.m. The dates of important exams are in May for the primary school and May and June for the secondary schools.

The School year begins in September and ends in July and has 39 weeks in the academic year

3 . Secondary Education (High School). Currently secondary education in Guyana is offered in two types of institutions, the Secondary Departments of primary schools (SD) and the more highly regarded General Secondary Schools (GSS). Allocation to a particular type of school depends on the performance of students at national attainment tests; the students with the highest marks are allocated to List A secondary schools, students with lower marks to Lists B, C and D.

The Ministry of Education hopes to achieve Universal School Education by 2016. In the 2008-2013 Education Strategic Plan the Ministry adopted the policy that most primary school leavers should have access to a five-year secondary programme with a curriculum that emphasizes mathematics, science and technology. In addition, subjects and enrichment activities such as arts, sports and physical education would be offered in 80% of secondary schools. The Secondary Certificate Competency Programme (SCCP), which provided a parallel pathway for students had a greater interest in technical and vocational subject areas, was expanded in the last five years.

In academic year 2000/2001 there were 65,171 students in the three types of secondary institutions, 43,526 were in General Secondary Schools. In 2012/2013 there were 73,805 students with 65,919 in GSS. In addition there are also 6,818 students in private secondary schools. This is the only level in which the number of students has increased significantly.

4. Special Education. The policy of the Ministry of Education is generally to integrate students with special education needs (SEN) into mainstream schools. In addition however, Special Education is offered in special institutions for students whose needs cannot be met in the regular classroom. These students may have physical, mental, or sensory disabilities. Students enrolled in Special Education Institutions follow curricula that provide for primary through secondary programmes. Their ages range from six to approximately eighteen years.

Please specify whether girls will be vaccinated by selection of a **Specific age**

Table 6.1.2 a

Number of	**Base year**	**Target year**
	2016	2017
Target population of girls in chosen age		8,171
Girls of chosen age enrolled in schools		

If girls are to be vaccinated by a specific **grade**, please specify grade

and provide the below data relative to the target grade:

Table 6.1.2 b

Age of girls in grade	Number of girls in grade / age	% of girls in targeted population
8 years old	0	0
9 years old	0	0
10 years old	0	0
11 years old	0	0
12 years old	0	0
13 years old	0	0
14 years old	0	0
TOTAL girls 9-13 years old	0	
TOTAL girls 14 years old and above	0	
TOTAL	0	

Note:

(1) To add new *Age of girls in grade*, click on the ***New item*** icon in the ***Action*** line. Use the **Delete item** icon to delete a specific *Age of girls in Grade*.

Please provide a source for the enrolment data (e.g., national statistics office, MOE, recent census, school registers, etc.)

The school registers for each grade will be used and obtained from the individual schools. The list of schools and their location will be obtained from the MOE

How will the school-based strategy capture those girls not in school? (Will out-of-school girls be invited to join school-attending girls on the days of vaccination? Will separate outreach sessions be scheduled for them? Will existing outreach posts be used? Will out-of-school girls be asked to come to the local health center? Will vaccination nurses do home visits?)

Out of school girls will be captured by utilizing combined strategies between the health services and the community social structure. Immunisation services in Guyana are offered throughout the year by regular immunisation in health centres or through mobile teams sent to remote communities, routinely. It is hoped that any out of school girl will be asked by social media to come to the school nearest their place of residence on the days that vaccination is being done. They will also be offered the vaccine at the clinics and at out reach activities e.g. health fairs. The mobile teams will mostly be concentrated on going to the remote areas but some mop up will be done in the coastal areas by the use of fairs or home visiting

If any, please describe special considerations to be made for marginalised or migrating populations?

Almost all girls in this target age are enrolled in schools as education is seen by parents as essential and because it is a legal requirement. For the few of them that do not attend school, following strategies will be used:

1) Referral of those girls scheduled at the same time to the schools in their area or the health services.

2) Mobile teams that will go to the scattered remote communities to address the marginalized and migrating populations.

3) Upon demand at the health services.

Every health facility will undertake micro-planning based on an inventory of educational centres in its working area. In addition to the census of girls from the target group, the girls not attending school will be put on census for scheduling based on the strategy agreed on with community authorities and women's organisations.

All girls attending private schools will be included in the target group and if possible will be vaccinated in their school once permission to do so is obtained from the school.

Health center-based strategy

Please describe the health system and services for the target population at the health centers:(This can include:
Number and type of health centers in the country by level (national, sub-national, district), (by public/government, private, or other categorization relevant for the country and if available).
What services for 9-13 year old girls are routinely available in these health centers?
What are the general operating day/times for service delivery in the health centers?
How vaccinations are delivered in the existing health centers? By whom, to what populations, etc.)

It is not proposed to use the health centres for the routine delivery of HPV vaccine but only for any out of school girl or the odd child that turns up for other services and are found to be unimmunized, then the vaccine would be offered. No opportunity will be missed.

There are some private practitioners who may offer the vaccine to their clients and these will be encouraged to inform the EPI team of their numbers. In the regular EPI service the private sector accounts for about 2% of all immunizations.

The health system is composed of the following subsectors: public and private. In the public system where the majority of immunization is given the MOPH directs the program. A brief layout of the structure is below.

In Guyana, EPI is integrated into the Maternal and Child Health (MCH) Program of the Ministry of Health (MOH). As such, EPI does not maintain an independent staff and is not separately financed. At the national level, the MCH/EPI Program is directed by an MCH/EPI Officer and other staff includes: an EPI Disease Surveillance Coordinator; a Deputy Chief Nursing Officer; a MCH Nurse; and an Administrative Assistant. National level staff is mainly responsible for policy direction, planning, monitoring and evaluation. At the regional level, EPI is managed by a Regional Health Officer (RHO). Within specific health facilities, Senior Health Visitors or a Medex coordinate implementation of the Program. Presently, there are 327 health facilities throughout Guyana's 10 administrative regions and 4 sub-districts within Region 4. Staff members from these health facilities provide comprehensive primary health care services, including EPI. At the Annual National EPI Meeting, a designated regional representative provides feedback regarding regional coverage rates, plans of action, training needs and updates to the MOH. These reports are compiled by the MCH/EPI Officer into a national report that includes comparative analysis of regional trends in vaccination coverage and the program as a whole.

Immunisation is usually offered from Monday to Friday, eight hours daily – this timetable applies in the urban and coastal areas. In the very remote areas a more flexible system has to operate in case the health worker maybe visiting or away from the post. HPV vaccines will be given to females once they visited the health facility and has not received their vaccines

Immunisation is given basically by the community health workers in the remote areas and other nurses.

Some of the key achievements of the program include the eradication of polio from the region of the Americas, the elimination of indigenous rubella and CRS and the elimination of measles from Guyana

How will the health centre-based strategy capture all the girls who are eligible?

This strategy will utilize most current Census 2012 to calculate population of girls.The Health Belief Model will be applied to predict uptake of HPV Vaccines and the 6 strategies of the Caribbean Charter of Health Promotion (1992).The main focus of the Health Promotion is to promote preventive health through administration of HPV vaccines (2 doses) aimed at a reduction of cervical cancer as noted through surveillance. The concept of Healthy Schools (girls in schools); and Healthy Villages and Communities (girls in and out of schools) will be used to promote HPV Vaccines with emphasis on the media and social media to ensure the small number of the girls not going to school or abandoning it before the end of the school year will be captured. It will form part of routine immunisation, which is the same all year round: on demand, generated by the social communication campaign, or through mobile teams programmed by each centre based on actual circumstances and needs

If applicable, please describe special considerations to be made for marginalised or migrating populations?

Special considerations will be done at the operative level to ensure that the EPI programme reaches100% of the population in its care. This is the norm and this includes scattered remote communities inclduing those that are marginalised or migrating populations. HPV will be included in this routine immunisation in addition to immunisation in existing schools.

6.2. Requested vaccine (HPV quadrivalent, 1 dose(s) per vial, LIQUID)

As reported in the cMYP, the country plans to introduce HPV quadrivalent, using HPV quadrivalent, 1 dose(s) per vial, LIQUID.

When is the country planning to introduce this vaccine? **September 2017**

Please note that, due to a variety of factors, the launch date may vary compared to the date stipulated in the application. Gavi will work closely with countries and their partners to address these issues.

Please summarise the cold chain capacity (at central and other levels) and readiness to accommodate new vaccines, taking into consideration training, cold chain equipment and other logistical requirements. If cold chain expansion is required, state how it will be financed, and when it will be in place. The Independent Review Committee requires assurance that the cold chain is ready or will be ready for the routine introduction of the new vaccine, and evidence/plans need to be provided. All proposals that include Gavi- financing for cold chain equipment intended for vaccine storage shall need to procure equipment pre-qualified by WHO under their Performance Quality and Safety (PQS) program. The purchase of non-PQS equipment will only be considered on an exceptional basis, with justification and advance agreement from Gavi.

A new cold storage facility was installed with the assistance of GAVI and PAHO. This was done in 2012 to accommodate the expansion of the EPI program with the addition of 3 new vaccines to its regular schedule i.e. Rota, PCV 13 and pneumococcal vaccines. In the annual plans of all divisions and areas the replacement of cold chain equipment is an ongoing requirement and no foreseeable problems are anticipated with the addition of the HPV vaccine. From the recent EVM conducted. It is noted that teh two walk in chambers with 7 additional back up refgierators at the national level has adequate cold chain capacity to store vaccines for all the health centers for a maximun of three months. In addition, currently, cold chain equipment is being procured based on the Cold Chain assessment and EVM recommendations and this is expected to distributed to all ten regions before the end of 2016.

6.2.1. Co-financing information

The co-financing policy does not apply for this exceptional opportunity.

6.2.2. Specifications of vaccinations with new vaccine

	Data from		2017
Number of children to be vaccinated with the first dose	Table 5.2	#	8,171
Number of children to be vaccinated with the second dose	Table 5.2	#	8,171
Immunisation coverage with the second dose	Table 5.2	%	100%
Country share of total needs	Parameter	%	50.00%

6.2.3. Portion of supply to be procured by the country (and cost estimate, US$)

		2017
Number of vaccine doses	#	10,750
Number of AD syringes	#	11,451
Number of re-constitution syringes	#	0
Number of safety boxes	#	0
Total value to be funded by the Country	$	49,857

6.2.4. Portion of supply to be procured by Gavi (and cost estimate, US$)

		2017
Number of vaccine doses	#	10,750
Number of AD syringes	#	11,451
Number of re-constitution syringes	#	0
Number of safety boxes	#	0
Total value of Gavi support	$	49,856

6.2.5. New and Under-Used Vaccine Introduction Grant

Calculation of Vaccine Introduction Grant for the HPV quadrivalent, 1 dose(s) per vial, LIQUID

Year of New Vaccine Introduction	Girls in cohort (From Table 5.2)	Share per Girls in cohort in US $	Total in US$
2017	8,171	2.40	100,000

The Grant will be based on a maximum award of $2.40 per girl in the birth cohort with a minimum starting grant award of $100,000

Please describe how the Gavi Vaccine Introduction Grant will be used to facilitate the timely and effective implementation of critical activities in advance of and during the introduction of the new vaccine (refer to the cMYP and the Vaccine Introduction Plan).

A detailed budget template for HPV introduction has been completed, indicating the amount of funds needed for the introduction and where possible GAVI funds can be used. Flow of the Gavi grant to promote key activities, such as:

Social Mobilization for the dissemination of vital information to parents and the public at large. Social media applications especially geared for the girls themselves on their cell phones and tablets. Whats p messages and instagram messages.

Training for members of the health staff, not only the EPI staff but all members. Special training for the teachers and staff at schools, the parents of the PTA and those who do not attend.

Cold Chain This system is currently updated with new cold chain equipment and GAVI funds will continue to be used to ensure that the EVM recommendations are completed.

Supervision This section has a major part to play in making sure that all standards are adhered to and that the SOP's of the EPI are followed at all times. Some funds will be allocated to this item and for travel by the supervisors to areas especially the remote ones.

Research There are a few areas of research that the introduction of this vaccine lends itself to being done. Some money from the grant will be considered to conduct at least one area of research

Monitoring and Evaluation Because this is a country wide introduction the monitoring and evaluation has to **be** emphasised so that coverage and allocation of resources can be monitored. Some of the grant funds will be allocated to ensuring that accurate statistics are obtained.

Procurement of the necessary vaccines for the introduction. It has been budgeted that 50% of the needed vaccine will be paid for by GAVI with the Government paying for the other 50%.

The vaccine for the 2 year catch up cohort will be paid for by the Government of Guyana

Please complete the 'Detailed budget for VIG / Operational costs' template provided by Gavi and attach as a mandatory document in the Attachment section.

Detailed budget attached as Document No. 22.

Where Gavi support is not enough to cover the full needs, please describe other sources of funding and the expected amounts to be contributed, if available, to cover your full needs.

The Government of Guyana is committed to the introduction of this programme and will be funding the entire costs except those proportioned to GAVI for the first year. It is expected to be responsible for the sustainability of the program in the years to come.

AOP 2017 of the EPI with national resources will include the budget to supplement gaps in the relevant lines and to fund the 2 year catch up campaign. This budget is prepared annually in August so the budget gaps will be included.

6.2.6.Technical assistance

Please describe any particular area(s) the Ministry would require technical assistance to support the introduction of HPV quadrivalent.

7. NVS Preventive Campaigns

No NVS Prevention Campaign Support this year

8. Procurement and Management

8.1 Procurement and Management of New and Under-Used Vaccines Routine

Note: The PCV vaccine must be procured through UNICEF to be able to access the price awarded by the Advance Market Commitment (AMC).

a) Please show how the support will operate and be managed including procurement of vaccines (Gavi expects that most countries will procure vaccine and injection supplies through UNICEF or PAHO's Revolving Fund):

All vaccines, syringes and other supplies are purchased through the PAHO/WHO Revolving Fund.

b) If an alternative mechanism for procurement and delivery of vaccine supply (financed by the country or the Gavi) is requested, please document

- A description of the mechanism and the vaccines or commodities to be procured by the country
- Assurance that vaccines will be procured from the WHO list of pre-qualified vaccines, indicating the specific vaccine from the list of pre-qualification. For the procurement of locally-produced vaccines directly from a manufacturer which may not have been prequalified by WHO, assurance should also be provided that the vaccines purchased comply with WHO's definition of quality vaccines, for which there are no unresolved quality problems reported to WHO, and for which compliance is assured by a fully functional National Regulatory Authority (NRA), as assessed by WHO in the countries where they are manufactured and where they are purchased.

No other mechanism is required.

c) If receiving direct financial support from Gavi (such as operational support for campaigns or VIG activities), please indicate how the funds should be transferred by Gavi.

ALL GAVI funds shoould be transferred to PAHO/WHO

d) Please indicate how the co-financing amounts will be paid (and who is responsible for this)

GAVI funds for co-financing will be managed though PAHO/WHO.

e) Please describe the financial management procedures that will be applied for the management of the NVS direct financial support, including procurement.

GAVI funds for co-financing will be managed though PAHO/WHO. The funds will be implemented according to the plan approved upon request by the EPI qnw per detailed budget.

f) Please outline how coverage of the introduced vaccine will be monitored, reported and evaluated (refer to cMYP and Introduction Plan)

It is anticipated that as this vaccine will be part of the regular schedule that everything that is done for and in the regular prgogram be done for this Nation wide introduction.. The only difference is the location of the delivery. This will be gradually become part of the routine school health programme, Monthy reporting will be instituted and form part of the regular reporting mechanism. Evalation will be done based on the collect data on HPV vaccines given at schools..

It is being suggested that coverage in the other vaccines may even be improved with the introduction of HPV. So improving the health and well being of the children and young teens.

The indicators will be:

Result indicators:

- Number and % coverage of girls with second doses.
- Drop-out rate.
- % of schools reporting high acceptance of the HPV program with coverage > 95%

Process indicators

- % of Regions with implemented plans
- % of schools with information
- No of schools with role of girls aged 10 to 12 years.
- Number of out-of-school girls with second doses

Progress reports will be prepared in accordance with Gavi and EPI Guyana standards

g) If applying for measles second dose, does the country wish to have the support in cash or in-kind? **N/A**

8.2 Procurement and Management for NVS Preventive Campaign(s)

No NVS Prevention Campaign Support this year

8.3 Product Licensure

For each of the vaccine(s) requested, please state whether manufacturer registration and/or national vaccine licensure will be needed in addition to WHO prequalification and, if so, describe the procedure and its duration. In addition, state whether the country accepts the Expedited Procedure for national registration of WHO-prequalified vaccines.

Note that the necessary time for licensure should be factored into the introduction timeline and reflected in the Vaccine Introduction Plan or Plan of Action.

Ministry of Public Health is in the process of HPV being licensed.

For each of the vaccine(s) requested, please provide the actual licensure status of the preferred presentation and of any alternative presentations, if required.

Ministry of Public Health is in the process of HPV being licensed.

Please describe local customs regulations, requirements for pre-delivery inspection, special documentation requirements that may potentially cause delays in receiving the vaccine. If such delays are anticipated, explain what steps are planned to handle these.

There is a Standard Opearting Procedure for clearing of vaccines and other supplies through the customs. It is expected that the SOP will be opeartional and their would be no change from the usual receiving procedure.

Please provide information on NRA in the country, including status (e.g. whether it is WHO-certified). Please include points of contact with phone numbers and e-mail addresses. UNICEF will support the process by communicating licensing requirements to the vaccine manufacturers where relevant.

The Food and Drug Authourity is the body that regulates the licensing of all pharmaceuticals in the country including vaccines. This is not WHO certified as reported by the Director . The Director of Guyana , Food and Drug Department is Mr Marlon Cole, email address- marcolie37@hotmail.com, telephone contact 222-8856.

8.4 Vaccine Management (EVSM/EVM/VMA)

It is mandatory for countries to conduct an Effective Vaccine Management (EVM) assessment prior to an application for the introduction of a new vaccine. This EVM should have been conducted within the preceding **5 years**.

When was the EVM conducted? **July 2014**

Please attach the EVM improvement plan progress report (DOCUMENT NUMBER:21); and if not previously provided, please attach the most recent EVM assessment report (DOCUMENT NUMBER : 20,19,21) and the corresponding EVM improvement plan (DOCUMENT NUMBER : 19). The improvement plan should include a timeline, budget of committed resources for these activities and funding gaps, if any, as well as M&E indicators to monitor progress of implementation.

When is the next Effective Vaccine Management (EVM) Assessment planned? **September 2017**

8.5 Waste management

Countries must have a detailed waste management and monitoring plan as appropriate for their immunisation activities. This should include details on sufficient availability of waste management supplies (including safety boxes), the safe handling, storage, transportation and disposal of immunisation waste, as part of a healthcare waste management strategy. Please describe the country's waste management plan for immunisation activities (including campaigns).

Waste management is included in EPI standards and guidelines. Nevertheless, advantage will be taken of the introduction of this new vaccine to update and strengthen existing technical guidelines.

All health facilities have the supplies necessary at their disposal (recipients, bags, identification) to implement differentiated separation of the waste generated in vaccine administration – including HPV vaccination – which must be in line with the SOP's implemented in the health facility.

Relevant supplies available

Safety boxes for uncapped sharps, to be destroyed afterwards as per standard.

Used and expired vaccine vials will be collected for final disposal.

Safe procedures along secure lines for workers to prevent needle stick injuries; no recapping, filling up to 75% of capacity of sharps box, sealing and transporting waste to final disposal.

9. Additional Comments and Recommendations from the National Coordinating Body (ICC/HSCC)

Comments and Recommendations from the National Coordinating Body (ICC/HSCC)

The ICC hereby endorses the HPV Proposal by the government and its partners

10. List of documents attached to this proposal

10.1. List of documents attached to this proposal

Table 1: Checklist of mandatory attachments

Document Number	Document	Section	File
Endorsements			
1	MoH Signature (or delegated authority) of Proposal	4.1.1	Ministerial endorsement (1).pdf **File desc:** **Date/time :** 30/08/2016 03:33:27 **Size:** 806 KB
2	MoF Signature (or delegated authority) of Proposal	4.1.1	Ministerial endorsement (1).pdf **File desc:** **Date/time :** 30/08/2016 03:34:47 **Size:** 806 KB
3	MoE signature (or delegated authority) of HPV Proposal	4.1.1	Ministerial endorsement (1).pdf **File desc:** **Date/time :** 30/08/2016 03:35:29 **Size:** 806 KB
4	Terms of Reference for the ICC	4.1.2	Terms of reference for the ICC MOH.doc **File desc:** **Date/time :** 01/09/2016 06:56:53 **Size:** 32 KB
5	Minutes of ICC/HSCC meeting endorsing Proposal	4.1.3	July 28 Minutes.pdf **File desc:** **Date/time :** 02/09/2016 12:11:42 **Size:** 1 MB
6	Signatures of ICC or HSCC or equivalent in Proposal	4.1.3	ICC Members endorsement v2.pdf **File desc:** **Date/time :** 30/08/2016 03:39:21 **Size:** 401 KB
7	Minutes of last three ICC/HSCC meetings	4.1.3	ICC Minutes May 12th, 2016.pdf **File desc:** **Date/time :** 30/08/2016 03:40:30 **Size:** 1 MB
8	Role and functioning of the advisory group, description of plans to establish a NITAG	4.2.1	NITAG.docx **File desc:** **Date/time :** 01/09/2016 07:05:53 **Size:** 11 KB
Planning, financing and vaccine management			
9	comprehensive Multi Year Plan - cMYP	5.1	CMYP 2017-2021 Final (Aug 2016) (1).docx **File desc:** **Date/time :** 30/08/2016 05:02:28 **Size:** 199 KB

10	cMYP Costing tool for financial analysis	5.1	HPV_proposal costing plan Final (Aug 2016)_ed.xlsx **File desc:** **Date/time :** 31/08/2016 10:09:14 **Size:** 46 KB
11	M&E and surveillance plan within the country's existing monitoring plan	5.1.4	HPV ME surveillance eds.docx **File desc:** **Date/time :** 01/09/2016 06:55:24 **Size:** 34 KB
12	Vaccine introduction plan	5.1	HPV Introduction Strategy Final.docx **File desc:** **Date/time :** 01/09/2016 06:51:35 **Size:** 490 KB
15	HPV roadmap or strategy	6.1.1	HPV Introduction Strategy Final.docx **File desc:** **Date/time :** 01/09/2016 06:52:47 **Size:** 490 KB
16	HPV summary of the evaluation methodology	5.1.6	HPV summary of the evaluation methodology.docx **File desc:** **Date/time :** 01/09/2016 06:53:43 **Size:** 18 KB
19	EVM report	8.3	EVM_report_GUY_Final_ July 2014 (1).docx **File desc:** **Date/time :** 30/08/2016 05:14:31 **Size:** 4 MB
20	Improvement plan based on EVM	8.3	Improvement Plan progress report updated August 2016 docx.docx **File desc:** **Date/time :** 30/08/2016 05:16:06 **Size:** 29 KB
21	EVM improvement plan progress report	8.3	EVM Improvement plan April 2014 docx.docx **File desc:** **Date/time :** 30/08/2016 05:15:12 **Size:** 30 KB
27	Data quality assessment (DQA) report	5.1.4	Guyana has not conducted a Data Quality Analysis.docx **File desc:** **Date/time :** 01/09/2016 07:03:55 **Size:** 11 KB

Table 2: Checklist of optional attachments

Document Number	Document	Section	File
13	Introduction Plan for the introduction of RCV / JE / Men A / YF into the national programme	7.x.4	No file loaded

14	Annual EPI Plan with 4 year forward view for measles and rubella		No file loaded
17	Evidence of commitment to fund purchase of RCV for use in the routine system in place of the first dose of MCV	7.x.3	No file loaded
18	Campaign target population documentation	7.x.1, 6.x.1	No file loaded
22	Detailed budget template for VIG / Operational Costs	6.x,7.x.2, 6.x.2	No file loaded
23	Risk assessment and consensus meeting report for MenA. If the DPT was used instead, please include this.	7.1	No file loaded
24	National Measles (& Rubella) elimination plan if available		No file loaded
25	A description of partner participation in preparing the application	4.1.3	No file loaded
26	Minutes of NITAG meeting with specific recommendations on the NVS introduction or campaign	4.2	No file loaded
28	DQA improvement plan	5.1.4	No file loaded
29	Plan of Action for campaigns	7.1, 7.x.4	No file loaded
30	Other		GAVI App_Guyana MYP 2017-2021_Costing_ Final (Aug 2016) (2).xls **File desc:** **Date/time :** 02/09/2016 09:37:46 **Size:** 1 MB
31	Evidence of self-financing MCV1	5.1.5	No file loaded

11. Annexes

Annex 1 - NVS Routine Support

Annex 1.1 - NVS Routine Support (HPV quadrivalent, 1 dose(s) per vial, LIQUID)

Table Annex 1.1 A: Rounded up portion of supply that is procured by the country and estimate of relative costs in US$

		2017
Number of vaccine doses	#	10,800
Number of AD syringes	#	11,500
Number of re-constitution syringes	#	0
Number of safety boxes	#	0
Total value to be funded by the Country	$	50,000

Table Annex 1.1 B: Rounded up portion of supply that is procured by Gavi and estimate of relative costs in US$

		2017
Number of vaccine doses	#	10,800
Number of AD syringes	#	11,500
Number of re-constitution syringes	#	0
Number of safety boxes	#	0
Total value of Gavi support	$	50,000

Table Annex 1.1 C: Summary table for vaccine HPV quadrivalent, 1 dose(s) per vial, LIQUID

ID		Data from		2017
	Number of surviving infants	Table 5.2	#	15,042
	Number of children to be vaccinated with the first dose	Table 5.2	#	8,171
	Number of children to be vaccinated with the second dose	Table 5.2	#	8,171
	Immunisation coverage with the second dose	Table 5.2	%	100%
	Number of doses per child	Parameter	#	2
	Estimated vaccine wastage factor	Table 5.2	#	1.05
	Number of doses per vial	Parameter	#	1
	AD syringes required	Parameter	#	Yes
	Reconstitution syringes required	Parameter	#	No
	Safety boxes required	Parameter	#	No
	Country share of total needs	Parameter	%	50.00%
gs	**Gavi support**	Parameter	%	50%
ca	**AD syringe price per unit**	Table Annexes 4A	$	0.041
cr	**Reconstitution syringe price per unit**	Table Annexes 4A	$	0
cs	**Safety box price per unit**	Table Annexes 4A	$	0.005
fv	**Freight cost as % of vaccines value**	Table Annexes 4B	%	2.10%

Table Annex 1.1 D: Estimated numbers for HPV quadrivalent, 1 dose(s) per vial, LIQUID, associated injection safety material and related country budget (page 1)

		Formula	2017		
			Total	Government	Gavi
A	Gavi support	*Gavi support (gs)*	50.00 %		
B	Number of children to be vaccinated with the first dose	*Table 5.2*	8,171	4,086	4,085
C	Number of doses per child	*Vaccine parameter (schedule)*	2		
D	Number of doses needed	*B x C*	16,342	8,171	8,171
E	Estimated vaccine wastage factor	*Table 5.2*	1.05		
F	Number of doses needed including wastage	*D x E*	17,160	8,580	8,580
G	Vaccines buffer stock	*Buffer on doses needed = (D - D of previous year) x 25% Buffer on wastages = ((F - D) - (F of previous year - D of previous year)) x 25%, = 0 if negative result G = [buffer on doses needed] + [buffer on wastages]*	4,290	2,145	2,145
I	Total vaccine doses needed	*Round up((F + G) / Vaccine package size) * Vaccine package size*	21,500	10,750	10,750
J	Number of doses per vial	*Vaccine parameter*	1		
K	Number of AD syringes (+ 10% wastage) needed	*(D + G) x 1.11*	22,902	11,451	11,451
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.11*	0	0	0
M	Total of safety boxes (+ 10% of extra need) needed	*(K + L) / 100 x 1.11*	0	0	0
N	Cost of vaccines needed	*I x vaccine price per dose (g)*	96,750	48,375	48,375
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*	934	467	467
P	Cost of reconstitution syringes needed	*L x reconstitution price per unit (cr)*	0	0	0
Q	Cost of safety boxes needed	*M x safety box price per unit (cs)*	0	0	0
R	Freight cost for vaccines needed	*N x freight cost as of % of vaccines value (fv)*	2,029	1,015	1,014
S	Freight cost for devices needed	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0	0
T	Total fund needed	*(N+O+P+Q+R+S)*	99,713	49,857	49,856

Note: Gavi vaccine support is limited to 50% of the required number of doses for the campaign, and a Vaccine Introduction Grant for the routine introduction.

Annex 2 - NVS Routine – Preferred Second Presentation

No NVS Routine – Preferred Second Presentation requested this year

Annex 3 - NVS Preventive campaign(s)

No NVS Prevention Campaign Support this year

Annex 4

Table Annex 4A: Commodities Cost

Estimated prices of supply are not disclosed

Table Annex 4B: Freight cost as percentage of value

Vaccine Antigen	Vaccine Type	2017
HPV quadrivalent, 1 dose(s) per vial, LIQUID	HPV	2.10 %

Table Annex 4D: Wastage rates and factors

The following table shows the wastage rates for routine and campaign vaccines, set for 2017.

Vaccine	dose(s) per vial	Maximum Vaccine wastage rate*		Benchmark Wastage Rate**
HPV bivalent, 2 dose(s) per vial, LIQUID	2	10 %	0 %	
HPV quadrivalent, 1 dose(s) per vial, LIQUID	1	5 %	0 %	
JE, 5 dose(s) per vial, LYOPHILISED	5	10 %	10 %	
Measles, 10 dose(s) per vial, LYOPHILISED in second dose	10	40 %	0 %	
Meningococcal A, 10 dose(s) per vial, LYOPHILISED	10	50 %	10 %	
MR, 10 dose(s) per vial, LYOPHILISED in second dose	10	40 %	15 %	
Pneumococcal (PCV10), 2 dose(s) per vial, LIQUID	2	10 %	0 %	
Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID	1	5 %	0 %	
Rotavirus, 2-dose schedule	1	5 %	0 %	
Rotavirus, 3-dose schedule	1	5 %	0 %	
Yellow Fever, 10 dose(s) per vial, LYOPHILISED	10	40 %	0 %	
Yellow Fever, 5 dose(s) per vial, LYOPHILISED	5	10 %	0 %	

Comments:

* Source - WHO indicative wastage rates

** Source - Country APRs and studies, approved by WHO, UNICEF, and the Gavi Secretariat

Note: HPV demonstration project wastage rates are the same as for the national introduction of the vaccine

Table Annex 4E: Vaccine maximum packed volumes

Kindly note that this table is for reference purposes only and includes Gavi- and non Gavi-supported vaccines.

Vaccine product	Designation	Vaccine formulation	Admin route	No. Of doses in the schedule	Presentation (doses/vial, prefilled)	Packed volume vaccine (cm3/dose)	Packed volume diluents (cm3/dose)
BCG	BCG	lyophilized	ID	1	20	1.2	0.7
Diphtheria-Tetanus	DT	liquid	IM	3	10	3	
Diphtheria-Tetanus-Pertussis	DTP	liquid	IM	3	20	2.5	
Diphtheria-Tetanus-Pertussis	DTP	liquid	IM	3	10	3	
DTP liquid + Hib freeze-dried	DTP+Hib	liquid+lyop.	IM	3	1	45	
DTP-HepB combined	DTP-HepB	liquid	IM	3	1	9.7	
DTP-HepB combined	DTP-HepB	liquid	IM	3	2	6	
DTP-HepB combined	DTP-HepB	liquid	IM	3	10	3	
DTP-HepB liquid + Hib freeze-dried	DTP-Hib	liquid	IM	3	10	2.5	
DTP-HepB liquid + Hib freeze-dried	DTP-HepB +Hib	liquid+lyop.	IM	3	1	22	
DTP-HepB-Hib liquid	DTP-HepB +Hib	liquid+lyop.	IM	3	2	11	

Vaccine product	Designation	Vaccine formulation	Admin route	No. Of doses in the schedule	Presentation (doses/vial, prefilled)	Packed volume vaccine (cm3/dose)	Packed volume diluents (cm3/dose)
DTP-HepB-Hib liquid	DTP-HepB-Hib	liquid	IM	3	10	4.4	
DTP-HepB-Hib liquid	DTP-HepB-Hib	liquid	IM	3	2	13.1	
DTP-HepB-Hib liquid	DTP-HepB-Hib	liquid	IM	3	1	19.2	
DTP-Hib combined liquid	DTP+Hib	liquid+lyop.	IM	3	10	12	
DTP-Hib combined liquid	DTP-Hib	liquid	IM	3	1	32.3	
Hepatitis B	HepB	liquid	IM	3	1	18	
Hepatitis B	HepB	liquid	IM	3	2	13	
Hepatitis B	HepB	liquid	IM	3	6	4.5	
Hepatitis B	HepB	liquid	IM	3	10	4	
Hepatitis B UniJect	HepB	liquid	IM	3	Uniject	12	
Hib freeze-dried	Hib_lyo	lyophilized	IM	3	1	13	35
Hib freeze-dried	Hib_lyo	lyophilized	IM	3	2	6	
Hib freeze-dried	Hib_lyo	lyophilized	IM	3	10	2.5	3
Hib liquid	Hib_liq	liquid	IM	3	1	15	
Hib liquid	Hib_liq	liquid	IM	3	10	2.5	
Human Papilomavirus vaccine	HPV	liquid	IM	3	1	15	
Human Papilomavirus vaccine	HPV	liquid	IM	3	2	5.7	
Japanese Encephalitis	JE_lyo	lyophilized	SC	1	5	2.5	2.9
Measles	Measles	lyophilized	SC	1	1	26.1	20
Measles	Measles	lyophilized	SC	1	2	13.1	13.1
Measles	Measles	lyophilized	SC	1	5	5.2	7
Measles	Measles	lyophilized	SC	1	10	3.5	4
Measles-Mumps-Rubella freeze dried	MMR	lyophilized	SC	1	1	26.1	26.1
Measles-Mumps-Rubella freeze dried	MMR	lyophilized	SC	1	2	13.1	13.1
Measles-Mumps-Rubella freeze dried	MMR	lyophilized	SC	1	5	5.2	7
Measles-Mumps-Rubella freeze dried	MMR	lyophilized	SC	1	10	3	4
Measles-Rubella freeze dried	MR	lyophilized	SC	1	1	26.1	26.1
Measles-Rubella freeze dried	MR	lyophilized	SC	1	2	13.1	13.1
Measles-Rubella freeze dried	MR	lyophilized	SC	1	5	5.2	7
Measles-Rubella freeze dried	MR	lyophilized	SC	1	10	2.5	4
Meningitis A conjugate	Men_A	lyophilized	IM	1	10	2.6	4
Meningitis A/C	MV_A/C	lyophilized	SC	1	10	2.5	4
Meningitis A/C	MV_A/C	lyophilized	SC	1	50	1.5	3
Meningitis W135	MV_W135	lyophilized	SC	1	10	2.5	4
Meningococcal A/C/W/	MV_A/C/W	lyophilized	SC	1	50	1.5	3

Vaccine product	Designation	Vaccine formulation	Admin route	No. Of doses in the schedule	Presentation (doses/vial, prefilled)	Packed volume vaccine (cm3/dose)	Packed volume diluents (cm3/dose)
Meningococcal A/C/W/Y	MV_A/C/W/Y	lyophilized	SC	1	10	2.5	4
Monovalent OPV-1	mOPV1	liquid	Oral		20	1.5	
Monovalent OPV-3	mOPV3	liquid	Oral		20	1.5	
Pneumo. conjugate vaccine 10-valent	PCV-10	liquid	IM	3	1	11.5	
Pneumo. conjugate vaccine 10-valent	PCV-10	liquid	IM	3	2	4.8	
Pneumo. conjugate vaccine 13-valent	PCV-13	liquid	IM	3	1	12	
Polio	OPV	liquid	Oral	4	10	2	
Polio	OPV	liquid	Oral	4	20	1	
Polio inactivated	IPV	liquid	IM	3	PFS	107.4	
Polio inactivated	IPV	liquid	IM	3	10	2.5	
Polio inactivated	IPV	liquid	IM	3	1	15.7	
Rota vaccine	Rota_liq	liquid	Oral	2	1	17.1	
Rota vaccine	Rota_liq	liquid	Oral	3	1	45.9	
Tetanus Toxoid	TT	liquid	IM	2	10	3	
Tetanus Toxoid	TT	liquid	IM	2	20	2.5	
Tetanus Toxoid UniJect	TT	liquid	IM	2	Uniject	12	
Tetanus-Diphtheria	Td	liquid	IM	2	10	3	
Yellow fever	YF	lyophilized	SC	1	5	6.5	7
Yellow fever	YF	lyophilized	SC	1	10	2.5	3
Yellow fever	YF	lyophilized	SC	1	20	1.5	2
Yellow fever	YF	lyophilized	SC	1	50	0.7	1

12. Banking Form

In accordance with the decision on financial support made by the Gavi, the Government of Guyana hereby requests that a payment be made via electronic bank transfer as detailed below:

Name of Institution (Account Holder):			
Address:			
City Country:			
Telephone no.:		**Fax no.:**	
		Currency of the bank account:	
For credit to:			
Bank account's title:			
Bank account no.:			
Bank's name:			

Is the bank account exclusively to be used by this program?

By who is the account audited?

Signature of Government's authorizing official

Name:		**Seal**
Title:		
Signature:		
Date:		

FINANCIAL INSTITUTION		**CORRESPONDENT BANK (In the United States)**
Bank Name:		
Branch Name:		
Address:		
City Country:		
Swift Code:		
Sort Code:		
ABA No.:		
Telephone No.:		
FAX No.:		

I certify that the account No is held by at this banking institution

The account is to be signed jointly by at least (number of signatories) of the following authorized signatories:

1		
	Name:	
	Title:	
2		
	Name:	
	Title:	
3		
	Name:	
	Title:	

Name of bank's authorizing official
Signature:
Date:
Seal: