Pakistan: Joint appraisal report

<table>
<thead>
<tr>
<th>Country</th>
<th>Pakistan</th>
</tr>
</thead>
</table>

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

| Comprehensive Multi Year Plan (cMYP) duration | 2014 – 2018 |
| National Health Strategic Plan (NHSP) duration | 2016 – 2020 |

1. SUMMARY OF RENEWAL REQUESTS

<table>
<thead>
<tr>
<th>Programme</th>
<th>Recommendation</th>
<th>Period</th>
<th>Target</th>
<th>Indicative amount paid by Country</th>
<th>Indicative amount paid by Gavi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pentavalent (1 dose/vial, liquid)</td>
<td>Renewal</td>
<td>2017</td>
<td>6,329,001</td>
<td>$5,334,867.00</td>
<td>$27,331,500.00</td>
</tr>
<tr>
<td>PCV10 (2 doses/vial, liquid)</td>
<td>Renewal</td>
<td>2017</td>
<td>6,329,001</td>
<td>$23,141,413.00</td>
<td>$47,502,000.00</td>
</tr>
<tr>
<td>IPV (10 doses/vial, liquid)</td>
<td>Renewal</td>
<td>2017</td>
<td>5,131,327</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HSS-1</td>
<td>No cost extension</td>
<td>2017</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>ISS</td>
<td>No cost extension</td>
<td>2017</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Operational costs for measles</td>
<td>No cost extension</td>
<td>2017</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Indicate interest to introduce new vaccines or HSS with Gavi support*

<table>
<thead>
<tr>
<th>Programme</th>
<th>Expected application year</th>
<th>Expected introduction year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotavirus</td>
<td>2016*</td>
<td>2017</td>
</tr>
<tr>
<td>Cold Chain Equipment Optimization Platform</td>
<td>2016</td>
<td>2017</td>
</tr>
</tbody>
</table>

*Recommended for approval by IRC in June 2016
2. COUNTRY CONTEXT

Introduction

Pakistan is the 6th most populous country in the world, with an estimated population of 184.35 million people and an annual birth cohort of 5.7 million children. The infant and under-five mortality rates – 69/1000 and 85.5/1000 respectively are caused in part to vaccine preventable diseases, however, only 54% of children in Pakistan receive a full course of vaccines.

Administratively, Pakistan is composed of four provinces - Punjab, Sindh, Khyber Pakhtunkhwa, Balochistan, the Federally Administrative Tribal Areas (FATA), CDA/ICT, AJK and the Gilgit Baltistan region (GB). There are substantial social and economic inequities between and within regions and provinces which affect the equitable coverage of immunisation. In Balochistan, the most resource-poor province, only 16% of children are fully immunised. Punjab, in contrast, estimates 82% coverage and comprises more than half of Pakistan’s population.

In 2011, the 18th amendment to the Pakistani constitution fully devolved the subjects of health and education. Immunisation programs at the Provincial level are paid for and managed by Provincial EPI departments. The Federal government directly manages the immunisation programs in the territories and areas and determines immunisation policy.

Pakistan is one of the few remaining countries with Polio cases. In 2016, 13 cases have been identified, down from 54 in 2015. Due to the United States’ cover of a vaccination campaign in their gathering of information that led to the death of Osama Bin Laden on Pakistani soil in 2013, Taliban and other extremist groups have targeted polio vaccinators and have spread anti-polio vaccine messaging throughout hard to reach areas of the country. Since 2012, more than 70 polio vaccinators have died, heightening risk to vaccinators who perform routine immunisation activities.

The large size of the population in Pakistan and high prevalence of vaccine preventable diseases is a clear case for strong support to immunization programs while the complexity of the country is a challenge to program implementation and equitable coverage.

Gavi’s involvement with Pakistan

Pakistan is the largest recipient of Gavi support with over US$908 million disbursed for immunisation. Since the introduction of the Hepatitis B vaccine in 2002, the Alliance has supported Pakistan’s immunisation programs. The pentavalent and PCV 10 vaccines were introduced in 2008 and 2012 and Pakistan most recently introduced the Inactivated Polio Vaccine (IPV) in July 2015, starting from Punjab province and nationally completing roll-out in January 2016 in FATA. Pakistan is planning to begin a phased roll-out of the Rotavirus vaccine in October 2016. Table 1 provides an overview of active and previous Gavi support to Pakistan.

---

1 Pakistan Economic Survey 2012-2013
2 http://www.gavi.org/country/pakistan/
3 Pakistan Health Demographic Survey 2012-2013
5 Pakistan Health Demographic Survey 2012-2013
### Table 1: Gavi vaccines and direct financial support to Pakistan

<table>
<thead>
<tr>
<th>Programme Category</th>
<th>Programme</th>
<th>Total disbursed pre-2015</th>
<th>2015 disbursement</th>
<th>2016 disbursement</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health System Strengthening 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health System Strengthening 1</td>
<td></td>
<td>$23,524,500</td>
<td></td>
<td>$23,524,500</td>
<td></td>
</tr>
<tr>
<td>Immunisation Support Services (ISS)</td>
<td></td>
<td>$43,581,500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Vaccines Support (NVS)</td>
<td>HepB mono</td>
<td>$24,953,324</td>
<td>$24,953,324</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Measles SIA</td>
<td>$10,029,548</td>
<td>$10,029,548</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Penta</td>
<td>$295,914,434</td>
<td>$21,472,161</td>
<td>$25,776,702</td>
<td>$343,163,297</td>
</tr>
<tr>
<td></td>
<td>Pneumo</td>
<td>$246,734,001</td>
<td>$72,060,183</td>
<td>$27,511,936</td>
<td>$346,306,120</td>
</tr>
<tr>
<td></td>
<td>Tetra DTP- HepB</td>
<td>$31,387,734</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IPV</td>
<td>$377,993</td>
<td>$4,379,720</td>
<td>$24,051</td>
<td>$4,781,764</td>
</tr>
<tr>
<td></td>
<td>Rota</td>
<td>-</td>
<td>-</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Operational Support</td>
<td>Measles SIA</td>
<td>$21,664,500</td>
<td></td>
<td></td>
<td>$21,664,500</td>
</tr>
<tr>
<td>Vaccine Introduction Grant (VIG)</td>
<td></td>
<td>$6,750,500</td>
<td>$3,420,894</td>
<td>$10,171,394</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>$720,079,190</td>
<td>$101,332,958</td>
<td>$87,312,689</td>
<td>$908,724,837</td>
</tr>
</tbody>
</table>

Since the devolution of health in 2011, Gavi financial support to the government has been channelled through partners, predominately, WHO and UNICEF. This year, a three year $84 million health systems strengthening (HSS) grant was approved as part of a World Bank administrated multi-donor trust fund for Pakistan’s National Immunisation Support Project (NISP). The fund permits fund flows directly to provinces through the use of disbursement linked-indicators.

Pakistan is one of Gavi’s Tier 1 priority countries, qualifying implementing partners for $2 million in technical assistance annually through the Alliance’s Partner Engagement Framework (PEF). Current technical assistance is in the form of technical posts (9 WHO and 8 UNICEF). To further coverage and equity objectives, 50% of the positions are located at the Provincial or Area level.

To accommodate the Pakistani fiscal year for co-financing obligations and offer additional grant flexibilities, Gavi developed a Country Tailored Approach (CTA) for Pakistan in 2016. The CTA offers four flexibilities (in summary):

1. The alignment of timing of Gavi’s co-financing requirements with the Pakistani fiscal year
2. Access to the five year program budget ceiling of $84 million for its HSS-2 application over 3 years. The funds will be channeled through a World Bank-administrated Multi-Donor Trust Fund (MDTF) for Immunization for 2016-2020
3. As the Multi-Donor Trust Fund pools resources from both the government and donors, Gavi’s funding will be directed towards a larger set of activities funded by the pool and managed under the Trust Fund
4. Gavi allows flexibility on the utilization of remaining unspent resources from Measles Supplementary Immunization Activities (M-SIAs) and Immunization System Strengthening (ISS) grant, per the findings of the 2015 Joint Appraisal and as agreed by the High-Level Review Panel in October 2015, to cover priority needs of the federal and provincial EPI programs aimed at achieving higher immunization coverage and equity.

In addition to providing $762,027,993 of vaccines and $148,103,048 in cash support to new vaccine launches and immunisation activities, Gavi is also funding advocacy efforts with the government at
various levels and has worked to build a platform of Community Service Organizations (CSOs) to support immunisation.

**Governance and Financing of Pakistan’s Expanded Program on Immunisation**

This year has seen significant high-level support for immunisation within Pakistan and the use of immunisation as an indicator for the success of preventative health programs. The Chief Minister of Punjab used immunisation coverage as an indicator of progress in health, holding higher-level management accountable for the success of the program. Gavi is funding advocacy work with Parliamentarians through an expanded partner, I-Vac, who organizes workshops explaining the importance of immunisation to lawmakers around the country. In August, Punjab Parliamentarians pledged to achieve 100% routine immunisation coverage in an event organised by the Parliamentary Sustainable Development Goals Secretariat on the “Role of Parliamentarians as Advocates for Routine Immunization (RI)”. The event was attended by 35 members of parliament from all political parties from Punjab.³

The devolved responsibility of health services from the Federal to the Provincial level, significantly changed the management of EPI in Pakistan. It permits a more tailored approach to meet Provincial needs, but causes confusion around the roles and responsibilities of EPI management and financing at all levels. In the first health strategy document since devolution, the *National Vision for Health*, was finalized in August 2016 and outlines more clearly the roles and responsibilities of Federal and Provincial governments related to health, although less specific to EPI.¹⁰

In practice, the Provincial governments fund and manage the EPI programs in their respective Provinces. However, not all models operate similarly. The Federal government is responsible for coordinating with foreign entities and is therefore responsible for coordinating with donors such as the Alliance and its partners. It is also charged with setting policy and in managing the immunisation programs in the Areas. To gain further clarity into the management of Federal EPI, a consulting firm, Acasus, has been contracted to review roles and responsibilities in a strategic functional review to be completed in Q4 of 2016, funded by Gavi.

The Interagency Coordination Committee (ICC) is the supervisory committee to the Immunisation program. A uniform entity in all Gavi-eligible countries, the ICC is charged with approving applications, reviewing progress in immunisation and providing guidance to EPI. In 2015, the ICC improved its level of participation and oversight of the EPI program, holding more than five meetings and approving the Rotavirus and CCE OP applications and the repurposing of remaining balances on grants to key coverage and equity priorities. Improving the strength of the committee to hold EPI programs accountable to results and for committee members to be truly informed of EPI work is being reviewed by the policy team at Gavi and is also considered in the review of roles by Acasus. Federal EPI is leading the development of an ICC secretariat within their offices to further support the committee and plan to finalize Terms of Reference before the end 2016.

The objective of Pakistan’s National Immunisation Support Project (2016-2020) (NISP), is to increase the equitable coverage of services for immunisation against vaccine preventable diseases (VPD), for children under 2 years of age. This includes improving immunisation services through strengthening of routine immunisation systems as part of country’s health system. The NISP is funded in part through a Multi-Donor Trust Fund which is the recipient of Gavi’s HSS-2 grant of $84 million. The fund was established in March 2016 and provides a pooled financing instrument. It includes funding from Gavi ($84 million) and USAID ($10 million) and is linked to $50 million of international

---

development assistance (IDA) which has a partial buy-down by the Gates Foundation of $25 million. It uses government systems and structures for implementation and contains an incentive mechanism based on disbursement-linked indicators (DLI) with province-specific targets. The Fund will reimburse the provincial governments based on the achievement of DLIs. This unique approach allows Gavi to both work through the federal government while ensuring resources are invested directly with Provinces, in line with each Province’s priorities and their complementary resources.

There are two types of budgets in Pakistan – (1) Development resources and (2) Regular budget. Regular budgets are stable, long-term funding streams which include many recurring costs of health delivery. The development budget is project-oriented, with start and end dates to funding, and includes any donor support. EPI costs are encouraged to be on the regular budget, however, Gavi funded activities through partners are obligated to be on a development budget due to the nature of the funding from an international sources, such as the NISP.

Both the Federal and Provincial governments are required to have a Planning Committee document (known as a PC-1) for development budget activities. These documents are workplan and budgets and are required to pass through Provincial Development Working Party (PDWP) or Central Development Working Party (CDWP) or to pass both committees in the case that foreign aid is to pass to the provinces. In order for the World Bank to sign the agreement with the Economic Affairs Division of Pakistan (EAD), all Provincial and Federal PC-1s (5 in total) had to pass PDWP and CDWP approval. This caused a delay in signing the agreement, however, the Joint Appraisal and parallel meetings moved forward a number of approvals and the World Bank signed the agreement with EAD on 31 August 2016, operationalizing the project. ¹¹ ¹²

Despite the delays caused by their development and approval, the Federal PC-1 document and Provincial PC-1s solidify vaccine programming into the national and provincial budgets and planning infrastructure and contribute to sustainability in following ways;

- Five years of secured vaccine co-financing 2016-2020
- Pooled procurement for vaccines and vaccine supplies by the federal government on behalf of provinces
- Province-specific operational plans and targets for immunisation
- Reflection of the true cost of immunisation by capturing the monetary value of Gavi’s in kind donation of vaccines in the PC-1s

The success of the NISP will be measured through a common reporting method to all donors – five performance frameworks (Federal, Punjab, Sindh, KP, Balochistan). The results will be presented to regular meetings of the ICC, as mandated by the agreement. The ICC will recommend the payment of funds based on the success or non-completion of the disbursement linked indicators at Provincial Level. The NISP steering committee, comprised of the MDTF donors and Civil Society Organization (CSO) representation is the recipient of their decision and will oversee key activities and approve disbursements from the fund.

In relation to the NISP, the Federal EPI program receives a direct funding stream which contributes to staffing, policy development and pooled procurement for vaccines throughout the country. Further, they are to lead the further development of the effective vaccine management secretariat and Adverse Events from Immunisation (AEFI) reporting.

¹¹ https://www.thenews.com.pk/print/147070-Pakistan-WB-sign-650m-accords
As of June 2016, Pakistan is in default for their co-financing obligations for 2015. A previous tender was announced non-valid due to procedural matters. Pakistan is procuring its pentavalent vaccine through a public national tender rather than through UNICEF supply division. A tender, initiated by Federal EPI, included 2015 and 2016-2017 co-financing obligation was closed on 1 September 2016. Without the completed purchase, Pakistan will be unable to have any new streams of funding from the Alliance.

An important administrative improvement occurred between the Finance Ministry and provincial level in 2016 to assure timely payments by provinces to the central purchasing mechanism for vaccines. With the development of the PC-1s, the provinces have three options, as approved by Executive Committee of the National Economic Council (ECNEC), to pay their co-financing share to the federal government with delegated authority for pooled procurement: 1) payment at the time of request, 2) payment within two weeks of procurement or 3) a deduction at source by the Finance Division from the provincial share in case of not meeting the two-week period for repayment. Areas will be supplied directly by the Federal government.

Tracking the overall progress of Pakistan’s immunisation programs is a challenge due to low-quality data. The absence of a population census since 1998 creates issues for denominator data at all levels of EPI reporting. Further, the classification of districts into urban and rural and the non-registration of urban slum areas creates additional challenges in gathering information to further coverage and equity. In addition to administrative data on immunisation activities, the Pakistan Bureau of Statistics executes the Pakistan Social and Living Standards Measurement (PSLM) and the National Institute of Population Studies executes the Demographic Health Survey (DHS), both referenced for immunisation data.\(^{13}\)

To overcome the lack of specificity for coverage and equity work and due to the questionable quality of administrative data, the NISP includes four independent coverage and equity surveys at district level. Gavi, through WHO, is funding a coverage and equity survey to be executed in Q4 2016. The model of this survey will be followed by the subsequent surveys under the NISP. In July, the ICC sub-committee tasked with the design of the coverage and equity survey approved the final design and WHO is tasked with the tendering process.

Often in parallel to the governance structure of routine immunisation, Polio activities continue to affect Routine Immunisation (RI) with hundreds of millions invested annually into the program and the global political pressure. To overcome issues of coordination, the Polio Synergy Plan, developed in 2015 outlines areas of collaboration between Polio eradication activities and routine immunisation. Progress in the implementation of the Synergy Plan has been limited with the exception of Punjab which has integrated management of RI and polio eradication activities. In other provinces, EPI and PEI activities are not happening in close collaboration or under the same management. The recommendation to improve collaboration was made clear in the 2015 High-Level Meeting and Joint Appraisal [Recommendations 9,11,40,48 and 51] and two new recommended actions developed during the current JA (below).

The growing political will to support EPI programs and initiatives is key to the progress and the upcoming Rotavirus roll-out across Pakistan. The issues in coverage need to be further addressed at a management and service delivery level. The use of the political will in holding management accountable for results is structured in the NISP through the results linked disbursements and can also be facilitated by improving the use of data in management at a high and mid-level.

\(^{13}\) [http://www.pbs.gov.pk/content/pakistan-social-and-living-standards-measurement](http://www.pbs.gov.pk/content/pakistan-social-and-living-standards-measurement)
**Recommended Actions:**

- **Strengthen the National Interagency Coordination Committee (ICC) to ensure effective, regular monitoring, and oversight of the EPI programme:**
  - Accelerate the appointment of dedicated secretariat with appropriate tools to ensure ongoing monitoring and coordination, including tracking of progress on action items and operational plans
  - Schedule quarterly meetings with structured agenda shared well in advance of meeting and minutes circulated within a week of meeting,
  - Establish accountability against decisions made at the ICC for all actors and at all levels (including government, partners and CSOs)
  - Facilitate the consistent participation of provinces in the meetings.

- **Strengthen Polio and EPI interaction and synergy:**
  - National and provincial EPI-PEI teams must continuously identify, develop and execute plans to exploit synergies in surveillance, communication, social mobilization and service delivery for routine immunisation in each province, district and Union Council by participating in and using information from:
    - Weekly national/provincial video conferences
    - National and Provincial quarterly PEI-RI review meetings
    - RI and surveillance task team meetings
  - By December 2016, provincial EPI-PEI teams should incorporate strategies, endorsed by the Prime Minister in the 2016-17 National Emergency Action Plan, to improve EPI coverage of all antigens in the eleven polio core reservoir districts supported by Community Based Volunteers.

- **Federal, Provincial, and District levels create or finalize their annual operational plans, leveraging polio assets, by end of September:**
  - Building upon a template developed by Federal level
  - Progress against which is monitored at least quarterly by the appropriate coordination body documented in meeting minutes (e.g. NICC; Provincial and District stock taking meetings, RI-PEI quarterly review meetings),
  - With timely interventions when implementation is delayed
  - And reporting on implementation progress tracked and reported by level of government.

**Program Management**

The management of EPI programs in Pakistan has seen significant progress through the last year, specifically in the development of planning documents and work plans related to the NISP. However, missing positions at the program management level create capacity gaps in finance. The province-specific discussions of the Joint Appraisal raised new issues related to the management structure of EPI through Provinces to Districts and Union Councils. Increased efforts in data collection showed
innovative uses of mobile technology and best practices for coverage and equity in some Provinces which can be used, with some adaption, in other areas of the country.

District Health Officers who oversee health activities in districts, do not have a direct reporting line to provincial EPI Teams in provinces which have vertical immunisation programs. It is suspected that the priority of RI relative to the broad portfolio of the DHO is not sufficient. Provincial EPI Managers experience difficulties in the management and oversight of vaccinators at a lower level as they report directly to the DHO.

The weakness of administrative data, stock reporting and cold chain monitoring systems are a challenge to managers for monitoring programs, however, all systems are in development. Discussions recommended the alignment of information from the supply chain tool (vLMIS - discussed further in the next session), staff attendance and vaccine-preventable disease (VPD) surveillance. Management’s access to data can improve accountability at all levels and address interrelated issues across immunisation (stock consistency, vaccinator performance and coverage of immunisation).

The collection of administrative coverage data from all levels and the capacity to report is unable to inform analysis of coverage and equity issues. A Data Quality Assessment (DQA) was led by WHO in 2016 and the detailed results by Province are available in Annex C. Based on the findings, improvement plans have also been developed for three provinces and for a final in September 2016.

Despite challenges, EPI managers are developing innovative approaches to solving key issues in coverage of immunisation. Since the 2015 JA, a tool previously used for tracking health workers engaged in dengue outbreaks was adapted to monitor vaccinator attendance (e-VACCS) and migrant children are targeted for routine immunisation at transit points. These activities has been developed and funded by the Punjab government. Further, the use of polio data in targeting under-immunised children grew the coverage of immunisation in Punjab in 2016.

E-VACCS 2.0, individually tracks vaccinator attendance and greatly increased vaccination coverage in Punjab through a mapping mechanism to assure a vaccinator minimum presence rate of 80%. The tool links the performance of vaccinators to incentives. The tool and management’s implementation raised the vaccinator attendance at posts to over 90% from 40% the year before implementation. The information is further used to target underperforming districts with additional human and financial resources. This is particularly important due to the higher rate of vaccine service delivery through outreach vs. fixed centres. 3,200 of 3,600 outreach vaccinators are currently covered with e-VACCS in Punjab and the remaining 400 will be supplied with devices before the end of 2016.

The expansion of the tool to other provinces is progressing, however, it is key that provinces also assure the availability of cold chain and stock to assure an effective monitoring of staff. The integration of the tools as recommended below can help underperforming areas identify key bottlenecks. Balochistan and KP provinces have secured android devices necessary for e-VACCS system and plan to roll out the system in targeted districts in their provinces in 2017. Sindh is piloting other mobile based technologies to improve monitoring of immunisation which makes a stronger link with parents and community.
In Punjab, polio data was used to address areas of low routine coverage. In 2016, polio teams identified more than 444,000 zero dose children during SIAs and EPI teams used the data to reach more than 333,000 of those children with routine vaccines within 14 days. The use of Polio data for microplanning and identification of high risk population is highly encouraged by EPI management at all levels.

In a third example of innovations to address coverage and equity issues, Punjab has developed a strategy to target migratory populations at transit points. Internal migration is a common phenomenon in Pakistan. According to the Pakistan Integrated Household Survey (PIHS), 21.5% of population migrated within and between districts (out of which one third of migrants moved between rural and urban settings); according to Labor Force Survey (LFS) 1998, 13.5% of population was involved in inter-district migration. Polio teams are already vaccinating at transit points around the country.

The government of Punjab took the initiative to address low coverage among migrants between districts through targeting vaccination outreach at transit points. The initiative focuses on children under 5 years of age. Transitory point locations include bus stations, airports and regular transit areas between districts. The Punjab government has just approved a new PC-1 to expand this strategy which avails US1.4 million to this work from government resources.

With the projected hires of key technical positions and the design of multiple monitoring tools to manage immunization, significant progress is expected in the next year in regards to program oversight and management. However, the plans for expansion and the tailoring of the existing tools to manager’s needs and provincial differences is at a key juncture. Partners need to fully support the further development and expansion of tools and also the ability of the information streams to “speak to one another.” The interest of politicians in using the data to hold programs accountable and to target resources is another key element in improving program performance.

The government has committed to the hiring of key management positions and the recent signing of the NISP agreement should expedite this process.

---

14 Latest data available
Recommendation actions:

- **Strengthen disease surveillance:**
  - Rotavirus and invasive bacterial disease surveillance in existing sentinel sites and expand to include CRS surveillance.
  - Ensure that all districts have designated surveillance officers, ensuring weekly VPD surveillance reporting, including AFP and measles (case-based).
  - EPI to participate regularly in the PEI task teams on surveillance.
  - Improve overall routine AEFI surveillance for all vaccine-preventable diseases including case management, potentially leveraging the rotavirus VIG and associated training activities.
  - Initiate intussusception monitoring ahead of rotavirus vaccine introduction.

- **Implement data quality improvement plans and ensure:**
  - WHO-led immunisation coverage survey is progressing on time and results are available in early 2017.
  - Programme data from districts are generated in a timely manner on service availability – including vaccine stocks, delivery and performance and used for management and accountability of programs.
  - Data from multiple EPI-related information systems (e-VACCS, vLMIS, immunisation registry, DHIS, etc.) are interconnected and integrated into EPI dashboard for management decisions.

- **Federal level to provide guidance and a reporting template by end of August** which Vaccine Management Committees at national, provincial, and district levels use to ensure timely implementation of EVM improvement plans and in particularly review vaccine stocks (and associated injected supply) including:
  - Stock levels
  - Utilisation
  - Closed and open vial wastage
  - Consistency with regular physical counts
  - Functionality and maintenance of cold chain equipment

Findings and follow-up actions should be consolidated and analysed by administrative level on a monthly basis.

**Service Delivery**

The coverage of service delivery depends on three main components (1) Existence of vaccines (supply chain) (2) Presence and skill of vaccinator (human resources) and (3) Functionality and existence of cold chain equipment. The information flow about these three components and the expansion of them was a highlight in the progress since 2015.

1. Supply Chain
The ability to forecast the number of vaccines needed annually is hampered by the lack of robust population and usage data. Further, there is little data available on the frequency of stock outs at the service delivery level although no stock outs have been reported at Provincial level and a three month buffer stock is present. Currently, vaccine shipments for donated vaccines are sent to the Federal level and are then transported to the Provincial level. Government-procured vaccines are sent directly to Provincial level with the exception of Balochistan. A new design of the supply chain system is in development by Unicef and expected later in 2017 after full in-country consultations and design workshops.

Currently, vaccine stock tracking through vLMIS is available at Federal and provincial levels and 83 districts, with committed but not planned expansion to all districts. The Bill and Melinda Gates Foundation (BMGF) performed a review of the underlying programming architecture. The reviewers strongly endorsed the programming and approach. Partners discussed adjustments to the vLMIS and the planned review of the usability and intended use of the system beyond the District level for Q4 2016. Funding from Gavi is available for training on the systems at all levels of management, however, the content and recipients of the training has not yet been defined.

Table 5: Currently status of vLMIS by area (noting that not all districts equipped with vLMIS provide timely reporting through the system):

<table>
<thead>
<tr>
<th>Province</th>
<th>Districts with vLMIS</th>
<th>Districts without vLMIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sindh</td>
<td>41 Districts/Towns</td>
<td>-</td>
</tr>
<tr>
<td>Punjab</td>
<td>13</td>
<td>23 (DFID to scale up 2)</td>
</tr>
<tr>
<td>Balochistan</td>
<td>09</td>
<td>23</td>
</tr>
<tr>
<td>KP</td>
<td>05</td>
<td>20</td>
</tr>
<tr>
<td>FATA</td>
<td>14 Agencies</td>
<td>-</td>
</tr>
<tr>
<td>CDA/ICT</td>
<td>01</td>
<td>-</td>
</tr>
<tr>
<td>GB</td>
<td>-</td>
<td>07</td>
</tr>
<tr>
<td>AJK</td>
<td>-</td>
<td>10</td>
</tr>
</tbody>
</table>

*Source: Presentation by Dr. Gilani, NPM, July 2016*

(2) Human Resources

All provinces have increased service delivery capacity through the creation of new positions for vaccinators in PC-1’s and through training. Punjab and KP have taken necessary steps for the recruitment of vaccinators against newly created positions, however, similar actions were not yet taken by other provinces. Although some technical positions are proposed in the new PC-1s, in most cases the positions are not occupied and few plans to realize the positions are in place. Provinces focused on the recruitment of additional vaccinators or the regularisation of vaccinators on supplementary campaigns for Measles or Polio. Balochistan committed budget for the recruitment and training of 300 health workers and expansion of 300 EPI centres for 2016-2017. This is a key improvement due to the dispersed nature of the population in Balochistan where it costs an estimated 1.5 times more to reach each child.

The Areas (FATA, CDA/ICT, GB and AJK) experience severe human resource shortages. In some areas, there are only 1-2 dedicated EPI staff. The population of the areas combined is around 10 million
and contains territory with challenging terrain and high insecurity. The coverage and equity survey is planned to cover the areas but it is unknown if the data can be collected due to security restrictions in FATA.

The use of Lady Health Workers (LHWs) and Lady Health Supervisors (LHSs) as vaccinators is being explored by a number of provinces to strengthen routine immunisation through service delivery. Currently, LHWs are used in social mobilisation and health education. Pakistan has more than 110,000 Lady Health Workers at the community level and they play an integral role in bridging between health facility and community for providing essential health services to communities, especially in rural areas. Ongoing training activities, funded by Gavi for LHWs and an assessment of their contribution to RI is underway. In May 2016, WHO, with Gavi funding support, held a consultation on the use of LHWs in RI. Under the latest Memorandum of Understanding between the Ministry of National Health Services Regulations & Coordination and WHO training of another 22,000 LHWs will be complete by the end of 2016 with Gavi funding.

In addition to discussions around the number of vaccinators on staff, questions were raised about the certification of vaccinators (currently non-existent), the lack of use of other health providers such as CHWs and overall how to standardize vaccination outreach services to meet coverage and equity objectives. WHO has a planned human resource review which findings can be used to better rationalize workforce for routine immunization as part of the health systems service delivery.

Polio campaigns’ use of routine immunisation vaccinators continues to negatively impact RI results. Due to the per diem payment (~ $6/day) and the frequency of campaigns (15+ working days/month), little incentive or time remains for these vaccinators to meet RI targets when employed by both programs.

(3) EPI Centres with functioning Cold Chain Equipment

Service delivery for routine immunisation in Pakistan relies on three primary modalities; 1) Fixed 2) Outreach and 3) Mobile. Key information was gathered during this JA around the number of vaccine delivery points and vaccinators, however, information around mobile and outreach support is less available.

UNICEF, with Gavi support, is modeling and planning the design, efficiency, and sustainability, of supply chain. The work has been initiated to contribute to scaling up of support and decision on equipment, including through the CCEOP submission.

Additional support has been provided through the reprogrammed funds for a temporary staff at UNICEF country office to dedicate full time to vaccine management, cold-chain and supply chain issues across the country, including support to the platform application.

Most provinces require more service delivery locations as a number of Union Councils in some Provinces do not have any EPI fixed center. In addition, a number of functioning health facilities do not provide EPI services. Discussions recommended expanding service delivery capacity through opening new EPI centers in the public sector and including popular private sector health facilities especially in areas with high population density. Currently, there are no national or provincial standards for the number of vaccinators/population nor number of fixed EPI centers per UC. These discussions and analysis are further complicated by the absence of recent population data.
Table 3: Coverage of EPI Centers by Province (2016):

<table>
<thead>
<tr>
<th>Province</th>
<th>% UCs without a functioning EPI Center</th>
<th>Number of UCs w/o functioning EPI Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sindh</td>
<td>7%</td>
<td>82</td>
</tr>
<tr>
<td>Balochistan</td>
<td>40%</td>
<td>275</td>
</tr>
<tr>
<td>KPK</td>
<td>12%</td>
<td>120</td>
</tr>
<tr>
<td>Punjab</td>
<td>19%</td>
<td>676</td>
</tr>
</tbody>
</table>

Source: Presentations by provincial EPI managers, July 2016

According to discussions, the storage structure for vaccines and logistics is sufficient for Punjab, Balochistan and Sindh, and KP plans to construct a provincial warehouse, supported by UNHCR. With Gavi support, 17 warehouses were completed and 2 warehouses (one in each in Gilgit and Skardu) is to be completed by end of September 2016. AJK and Federal EPI need to expand the storage space to accommodate the introduction of new vaccines. A review of transportation is recommended.

The detailed rehabilitation and expansion plan for cold chain under development by the Unicef team provided the following insights to the Cold Chain infrastructure in Pakistan:

- A total of 12,408 cold chain equipment distributed to 7,010 locations
- Only 3% of locations do not have access to electricity and 25% have less than 8 hours;
- 17% of equipment are classified as broken and 12% as needing servicing
- 26% of the equipment is non-PQS and is classified as domestic fridges which are not recommended to be used to store vaccines
- 28% of the equipment is older than 10 years old
- Pakistan has a high no. of different models of fridges (59)

Temperature monitoring is progressing and the procurement of a central temperature monitoring system is ongoing. A temperature monitoring study is planned for Q4 2016. The recommendations from the EVM on temperature monitoring have not been implemented.

In the continued discussion of information for management - access to data from the three components of service delivery could have a huge level of impact both for program planning but also for accountability of staff at all levels. The high-level political commitment for immunisation can be further leveraged through the use of information and its concise presentation.

Recommended actions:

- Routine immunisation is a foundation for Universal Health Coverage, and as such staff vaccinating should be further developed to deliver an integrated package of locally appropriate, primary health care interventions, through, for example:
  - Identifying best practices being used in Pakistan for delivery of integrated primary health care services
  - Reviewing the scope of practice for individuals providing vaccinations (e.g. vaccinators, LHWs) as part of the upcoming HR Assessment and HR Review
  - Supporting necessary skill development to allow appropriate scope of practice
  - Aligning scope of practice with national salary scales/grades, and
  - Supporting Provinces to utilise NISP funds through PC1s to further the transition towards integrated service delivery.
Identify priority Union Councils for intervention and support using equity-based criteria leading to increasing immunisation coverage, by, for example:
- Mapping in a digital system the availability of essential immunisation service elements (e.g. immunisation staff, cold chain equipment, type of service delivery and/or means of transportation)
- Analysing equity data, supported by robust monitoring systems and information technology, to overlay the equity data with the digital map of service availability.

Demand Generation

The attention to demand generation, communications and advocacy saw improvement since the 2015 JA, notably,
- The development of a National Communication Strategy
- Staffing of a Communication for Development (C4D) specialist from technical assistance funding
- The use of LHWs and LSWs in the immunisation space
- Funds allocated in Federal PC-1 for Health Education and Communication Material development and telecasting/broadcasting
- I-VAC’s (Johns Hopkins University) advocacy and communications work with Parliamentarians and media
- The Pakistan CSOs Coalition for Health and Immunisation (PCCHI), previously supporting by Gavi through Catholic Relief Services (CRS) expanded into Balochistan to address issues of coverage and are working on their national registration.15

Despite key advances, it remains one of the neglected areas of EPI programs across the country. The engagement of Civil Society Organizations (CSOs) by government is still weak. Historically, there is no precedence of the government working directly with CSOs on demand generation neither at Federal nor at the provincial level and there is no demonstrated government policy on partnerships with CSOs. The NISP secures funding for CSO activities but the modality of the government contracts not clearly defined. CSOs have a potential to improve service delivery and engagement especially in reaching urban slums, rural areas and areas of insecurity – all priority locations in terms of coverage and equity. As with any potential partners, their engagement should be based on monitoring and performance data, in particular their contribution to increasing coverage and equity of immunisation where engaged. Annex C includes an analysis of the CSO landscape with respect to immunisation, by Province.

The use of Lady Health Workers (LHWs) in demand generation (discussed in detail in the above human resources section) is proven. This is not homogeneous though in every province.

The reduction of demand was also a topic of discussion at the JA. The predictability of service delivery and expectations for house-to-house vaccination as a result of polio campaigns were two reasons for reduced demand for vaccination. The delivery of the polio vaccine at the household level left communities with the expectation that all immunisation services will be delivered to their home. There is a need to change perception/behaviours to enable community to differentiate between polio eradication efforts and routine vaccine preventable diseases. While hesitancy and vaccine refusal may be less significant in some areas, behaviour change interventions needs to focus on shifting the mind-set of caregivers to seeking immunisation services from fixed centres. Leveraging the polio assets of social mobilisers, LHWs can help accelerate this change. There is potential to learn

15 http://www.csocoalitionforhealthinpakistan.com/
from innovations in polio immunisation, action including the use of community and religious leaders in messaging on the importance of vaccines.

Demand generation must go hand in hand with improved service delivery. Governments need to ensure that the health system (human resources, vaccine availability, and accessibility to services) can respond to the increased demand for immunisation services. If not, there is a risk of lost credibility and trust of government services.

**Recommended Action:**

Increase engagement with communities to increase demand for quality immunisation services while improving access and availability (including functioning EPI centres, with qualified human resources and available vaccines), as reflected in improved Penta-1 coverage and drop out below 5% in each district, using context specific innovations in communities, such as urban slums, hard to reach, low socio-economic status, and/or low female education, e.g.

- Use of polygons and other technology for mapping of high risk and underserved populations
- Community engagement to increase demand for quality services
- Evidence based approaches for behaviour change communication, focusing on mode of service delivery (outreach / fixed centre) and immunisation-related myths
- Integrate civil society organisations into strategies to increase community engagement and deliver immunisation services.

**Technical Assistance**

Gavi currently has three funding streams for technical assistance; (1) Partners Engagement Framework, which has an annual ceiling of $2 million for Tier 1 countries, (2) Funding through CRS for CSO activities and (3) Funding from remaining balances of previous grants. All work plans from the three streams are focused on improving coverage and equity through advocacy, the development of data and monitoring and through management support to Federal and Provincial-level EPI programs.

PEF technical assistance to government and provincial EPI capacity is provided through a network of partners. To assure a robust response to the JA 2015 recommended actions, 9 WHO and 8 UNICEF positions were funded through the use of PEF. Many of these positions are based outside of the capital, showing a clear focus on Coverage and Equity and providing key support to provincial governments. World Bank also has support from Gavi for consultants to work on financial management of EPI programs.

While UNICEF has concluded recruitment of all PEF positions, most of the technical positions at WHO remain un-filled at the time of this appraisal. This has led to a gap in technical assistance to country.

**Table 5: Detail of positions approved in 2016 for technical support through PEF**

<table>
<thead>
<tr>
<th>Agency</th>
<th>Programmatic area of work</th>
<th>Type of recruitment</th>
<th>New/existing position</th>
<th>Geographic focus</th>
<th>Duty station</th>
<th>Recruitment stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHO</td>
<td>EPI (coverage and equity)</td>
<td>International</td>
<td>New</td>
<td>Country</td>
<td>Islamabad</td>
<td>In progress, July 2016</td>
</tr>
<tr>
<td>WHO</td>
<td>EPI (coverage and equity)</td>
<td>National</td>
<td>New</td>
<td>Country</td>
<td>Islamabad</td>
<td>In progress, July 2016</td>
</tr>
<tr>
<td>WHO</td>
<td>HSIS (coverage and equity)</td>
<td>National</td>
<td>Existing</td>
<td>Country</td>
<td>Islamabad</td>
<td>In progress, July 2016</td>
</tr>
</tbody>
</table>
An umbrella contract is funded to engage CSOs in the immunisation space by strengthening their national platforms is organized through Catholic Relief Services (CRS). CSOs in Pakistan engaged in health and immunisation formed a coalition, PCCHI (discussed above) who is benefiting from the global support to national platforms.

In addition to established, annual partner funding, several priority activities are funded through the remaining balances and a workplan was developed following the JA in 2015 (Refer to Table 7 below). The funding includes the coverage and equity survey planned for Q4 2016, engagement with CSOs in urban slums and the procurement of key equipment needed in priority service areas.

Table 7: Summary workplan and partner support for remaining balances of SIA, ISS and HSS-1 funds

<table>
<thead>
<tr>
<th>Service Area</th>
<th>Example Activities</th>
<th>Supported By</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Delivery</td>
<td>Capacity building of immunisation health workers, support in outreach service delivery, EPI-PEI static centres, outbreak investigations</td>
<td>WHO</td>
</tr>
<tr>
<td>Workforce and Human Resources</td>
<td>HR Support and review</td>
<td>WHO and UNICEF</td>
</tr>
<tr>
<td>Procurement &amp; Supply Chain Management</td>
<td>Procurement of motorcycle, vehicles and IT equipment. Procurement of Solar ILRs, development of electrical maintenance and maintenance of CR/FR. Conduct an operational research on supply chain system optimization.</td>
<td>WHO and UNICEF</td>
</tr>
<tr>
<td>Health Information Systems</td>
<td>Data Quality Audit, Development of DQ IP, Coverage Evaluation Survey, Support rotavirus surveillance system, support laboratory</td>
<td>WHO and UNICEF</td>
</tr>
</tbody>
</table>
All technical assistance is experiencing delays in implementation. The complexity of the administrative system in Pakistan and also the absorptive capacity of partners were highlighted as key challenges, however, the priority of the work plans to over the next two quarters is key to the progress of the NISP and larger funding streams to the country.

### Recommended Action:

- It is critical for the Secretariat and Alliance partners to accelerate the provision of assistance, and relevant reporting through existing mechanisms. There has been mixed delivery by Alliance partners providing assistance in support of the government, with significant delays in:
  - Signing agreements,
  - Implementation of financial resources already in country, and
  - Recruitment of approved positions which have directly impacted implementation of government activities intended to be supported with Gavi funds.

It is equally important for the Government to proactively flag to the Alliance potential bottlenecks in the implementation of the recommended actions of the Joint Appraisal.

### 3. GRANT PERFORMANCE AND CHALLENGES (maximum 3-4 pages)

#### 3.1. New and underused vaccine (NVS) support

##### 3.1.1. Grant performance, lessons and challenges

Punjab’s significant increase in Penta-3 coverage – credited to the new e-VACCS system and use of Polio data was a highlight of the success of this year. The completion of the IPV roll-out which was smoother than the PCV roll-out of the previous year was also a noted success for the 2015-2016 year.

Despite some minor, administrative delays, the development and approval of provincial PC-1s and the signature of the agreement between the World Bank and Pakistan is a positive beginning to the 3-year HSS-2 grant provided by Gavi. The lengthy design and innovative performance-based disbursements allow direct reach to the provinces and secure funding commitments from both federal and provincial governments. Further, it reduces risk by ensuring results-based
reimbursements to the government’s own investment.
Challenges remain in assuring the timely implementation of the HSS-2 grant, PEF-funded activities and underspend activities from HSS-1, Measles SIAs and ISS.

1.1.1. NVS future plans and priorities

New Vaccine Introduction – Rotavirus

The recent Rotavirus application has been received by the IRC and recommended for approval with some clarifications. It will roll-out, nationally, in phases, similar to IPV beginning in 2016.

The Government of the Punjab Province has committed to introduce Rotavirus in 6 priority districts (Lahore, Multan, Kasur, Khushab, Mandi Bahauddin and Muzaffargarh) in 2016 through its own resources and expand the entire Province in 2017 with Gavi support.

The roll out of Rotavirus and the associated staff training is an opportunity to provide capacity building on communications and AEFI reporting. Punjab has developed plans for roll-out including training, supply chain and capacity assessments. In contrast, plans are still in development for other Provinces and Areas. Plans are expected from other Provinces in advance of the national launch in 2017.

Figure 3: Map of 6 Districts for Rotavirus roll-out in 2016 in Punjab

Source: Responses to the IRC, Federal EPI, August 2016
1.2. Health systems strengthening (HSS) support

1.2.1. Strategic focus of HSS grant

See above narrative

1.2.2. Grant performance and challenges

Compliance summary

Current compliance levels are satisfactory with most of the more recent expenditures being through the partners. Historically there were compliance issues with HSS and ISS external audits of cash grants implemented by Ministry of Health – including late and non-compliant reports. An outstanding issue relates to the ISS external audit for the period, 1 July 2010 to 30 Jun 2013 which identified unsupported cash grant expenditures of up-to PKR 132 million (approx. $1.24m). The country is yet to provide its formal response on this issue. The issue requires further follow-up and conclusion on a possible reimbursable amount. To provide more clarity on the flow of funds, it is recommended that the ISS audit be expanded to cover through June 30th 2016.

The two main ongoing financial commitments relate to the recently signed HSS-2 agreement (US$84m) and the re-programmed funds available from the HSS1/ISS/Measles SIA grants (US$23m) – referred to as remaining balances.

Table 6 Summarizes the compliance of funding and audit requirements for the entire portfolio:

<table>
<thead>
<tr>
<th>Grant</th>
<th>Amount</th>
<th>Committed USD</th>
<th>Disbursed USD</th>
<th>Approved, undisbursed</th>
<th>Disbursement Name</th>
<th>USD</th>
<th>Financial Reporting</th>
<th>Audit</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSS 2</td>
<td>84,000,000</td>
<td>34,000,000</td>
<td>25,000,000</td>
<td>IBRD</td>
<td>34,000,000</td>
<td>Interim reporting due Jun '17</td>
<td>Due Jun '17</td>
<td></td>
</tr>
<tr>
<td>VIG IPV</td>
<td>3,678,500</td>
<td>3,420,894</td>
<td>257,606</td>
<td>UNICEF</td>
<td>1,659,494</td>
<td>Completed FYE '15, Due FYE '16</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>HSS 1</td>
<td>25,524,500</td>
<td>25,524,500</td>
<td>--</td>
<td>MoH</td>
<td>16,898,500</td>
<td>Completed FYE Jun '09, '10, '11, '12</td>
<td>Completed FYE Jun '09 &amp; '10</td>
<td></td>
</tr>
<tr>
<td>ISS</td>
<td>48,763,740</td>
<td>43,581,500</td>
<td>5,182,240**</td>
<td>MoH</td>
<td>34,101,500</td>
<td>Completed FYE Jun '11, '12</td>
<td>Completed FYE Jun '11, '12, '13</td>
<td></td>
</tr>
<tr>
<td>CSO A &amp; B</td>
<td>7,656,073</td>
<td>7,756,073</td>
<td>(100,000)</td>
<td>MoH</td>
<td>3,138,000</td>
<td>No Fin reports; FYE Jun '09, '10</td>
<td>No audit reports; FY Jun '09 &amp; '10</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>UNICEF</td>
<td>4,618,073</td>
<td>Completed; FYE '14 &amp;</td>
<td>--</td>
<td></td>
</tr>
</tbody>
</table>
### HSS 2 grant

Gavi’s HSS-2 funding is through a Multi Donor Trust Fund (MDTF) managed by the World Bank. US$34m was disbursed in January 2016 in to the MDTF and the World Bank has only just signed its project agreements with the GoP in order for the funds to flow, although funding for activities is expected before the close of the fiscal year. The second disbursement of US$25m is due in January 2017, and can only be withheld by giving notice on the agreement between Gavi and the Bank. In the joint review mission, the Bank raises a number of red flags which suggest possible financial management bottlenecks (further detail in the WB report in Annex G) which could impact progress despite the necessary agreements having been signed:

- Delayed provincial financial management staff recruitment
- Absence of immunization cost codes and designated accounts
- Technical support needed to operationalise the pooled procurement mechanism

### Remaining balances of HSS-1, Measles SIA, and ISS funds in Pakistan

Remaining balances of Gavi Cash Grants (HSS, ISS, Measles SIAs, VIG and operational costs) amounting to US$23m are managed and implemented by WHO and UNICEF. Gavi institutionally accepts the assurance systems and limited reporting of the partners and therefore there are no FM issues to raise. The main concern is more around the country’s absorptive capacity and the ability to utilize all these funds in a short period. The final workplan was approved by the ICC in June 2016 and the current end date is December 2016. An extension is recommended until December 2017. Financial statements will be provided in December 2016.

Finally, Gavi has not been provided with a clear statement of the funds transferred between Ministry of Health and partners at the point when this switch of implementer occurred. Gavi needs to be certain that all funds disbursed under these grants are covered by either MoH audits (under Pakistan Supreme Auditor) or partner certified statements of expenditure.

### 1.2.3. Describe any changes to HSS funding and plans for future HSS applications
Pakistan has expressed interest to apply for CCEOP in September 2016. There is a unique opportunity for the country to optimize its HSS-2 investment ($32 million) in cold-chain and supply chain and benefit from the additional support of CCEOP. The allocation in the NISP MTDF for cold chain are US$ 24 million from Gavi and US$ 10 million from IDA loan from the World Bank. Pakistan is eligible for a 50-50 match on certain equipment if / when they apply to Gavi for CCEOP. In parallel with the JA mission, UNICEF has engaged with the country to support preparations for the CCEOP proposal, and they suggest the country might request for additional $34 million from the CCEOP.

Use of Performance Based Funding reward: The HSS-2 grant falls under the Gavi HSS performance based financing approach and if immunisation coverage improves the country can be rewarded with $30 per additional child immunized with each of DTP3 and MCV1. The maximum performance reward would be 150% of the ceiling, hence the performance payment that could potentially be awarded to Pakistan over the life of their HSS-2 grant would be up to $66 million. Initial discussions were held at Provincial and Federal Level to inform wider discussion on potential uses of PBF funding.

Compliance with data quality and survey requirements:

In a recently conducted Data Quality Assessment (DQA), it was observed that data accuracy was an issue mostly at the UC and the district levels. One of the key reasons for such data issues was the attempt to adjust the number of children vaccinated with the given target to the UCs. In the absence of a census for almost 28 years, different practices are adopted to estimate immunisation targets. The use of different sources e.g. Polio SIA data (<1 year children from SIA tally sheet), micro census data in certain UCs and LHW records to determine a more accurate estimate of the denominator is recommended. Provinces may consider triangulating different available sources of micro data in consultation with local experts e.g. Provincial bureau of statistics, P&D etc. and technical partners. Until this data is made available, EPI could be encouraged to use Polio data for target setting.

The DQA exercise also assessed the data management system against seven domains. Aggregate score at all three levels (province, district and UC) in all provinces was below 80% except Punjab at provincial level 82%. Data analysis and use and supervision and feedback were consistently the weakest area at all levels. A summary of the DQA findings in four provinces is in Annex C. It is encouraging to note that Punjab and Khyber-Pakhtunkhwa have already developed their Data Quality Improvement Plan addressing the issues identified during DQA. Timely implementing this plan and periodic monitoring of the implementation by partners is key.

1.3. Transition planning (if relevant)

NA

1.4. Financial management of all cash grants (e.g. HSS, VIG, campaign operational cost grant, transition grant)

Remaining balances of Gavi Cash Grants (HSS, ISS, Measles SIAs, VIG and operational costs is managed and implemented by WHO and UNICEF. HSS2 is going into NISP Multi Donor Trust Fund
which is managed by the World Bank.

2. UPDATE OF FINDINGS FROM PREVIOUS JOINT APPRAISAL

The Joint Appraisal 2016 included a review session and status update of recommendations from the HA 2015 and High Level Mission held in 2016. The status of these recommendations are summarized below and described in detail in Annex E. The update exercise was done with the presence of partners and government representatives.

Graph 3: Progress on addressing recommendations from the Joint Appraisal 2015 and High Level Mission

3. PRIORITISED COUNTRY NEEDS

<table>
<thead>
<tr>
<th>Prioritised needs and strategic actions</th>
<th>Associated timeline for completing the actions</th>
<th>Does this require technical assistance?* (yes/no) If yes, indicate type of assistance needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please refer to the recommended actions.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. ENDORSEMENT BY ICC, HSCC OR EQUIVALENT AND ADDITIONAL COMMENTS

---

16 Subsequent planning and discussions on Targeted Country Assistance will take place - detailed guidance on the process will be shared in May 2016.
Brief description of how the joint appraisal was endorsed by the relevant national coordination mechanism

| Issues raised during debrief of joint appraisal findings to national coordination mechanism
| Any additional comments from:
| Ministry of Health
| Gavi Alliance partners
| Gavi Senior Country Manager

5. ANNEXES

Annex A. Description of joint appraisal process

The overall objective of this joint appraisal exercise is to review progress made against the program national benchmarks and targets over the last year and identify key gaps and challenges to inform for future program implementation.

The Joint Appraisal for Pakistan 2016 was held from July 18th – 29th, with the first week in consultation with all Provinces which included travel to Karachi, Peshawar, Lahore and Islamabad. This was the first Joint Appraisal process for Pakistan which included missions in the Provinces. In addition to presentations by Province EPI Managers, meetings were held with the Secretaries of Finance and Planning of Sindh, KP and Punjab. This approach for the appraisal process allowed for a more detailed discussion of administrative challenges and issues affecting coverage and equity, while addressing Province-specific issues and the dynamic between Federal and Provincial administration.

NB: Annex D includes a full list of participants in the joint appraisal process.

Annex B: Changes to transition plan (if relevant)

<table>
<thead>
<tr>
<th>Changes proposed</th>
<th>Rationale for changes</th>
<th>Related cost (US$)</th>
<th>Source of funding for amended activities</th>
<th>Implementation agency</th>
<th>Expected result</th>
</tr>
</thead>
</table>

Annex C: Province and Area-level Analysis and Recommendations

Annex D: List of Joint Appraisal Mission Members

Annex E: List of previous recommendations and progress

Annex F: Additional Immunisation Supply Chain Capacity Figures

Annex G: Aide-memoir of World Bank’s mission during Joint Appraisal