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

Joint Appraisals require careful preparation. This includes:

- **By 31 March:** Submission of End of year stock reporting
- **By 15 May:** Submission of the vaccine renewal request on the country portal (including provision of updated targets, wastage rates, switch requests, if applicable, etc.)
- **4 weeks before the Joint Appraisal:**
  - Submission on the country portal of reporting documentation required for renewal purposes, in particular;
  - Update of the grant performance framework (GPF)
  - Financial reports, annual financial statements and audit reports (for all types of direct financial support received)
  - Reporting on any campaigns/SIA conducted (if applicable)
- Submission of HSS and CCEOP renewal request (if new tranche needed), on the country portal including HSS budget for requested tranche;
- Gavi partners (WHO, UNICEF and others) to report progress against their milestones on the partner portal.

Other reporting information to be posted on the country portal 4 weeks before the Joint Appraisal includes:

- Immunisation financing and expenditure information (required from all countries)
- Data and survey requirements (required from all countries)
- Annual progress update on the Effective Vaccine Management (EVM) improvement plan (required from all countries)
- Updated CCE inventory (only from countries receiving CCEOP support)
- HPV specific reporting (only if applicable)
- HSS end of grant evaluation (only if applicable)
- Post Introduction Evaluation (PIE) reports (only if applicable)
- Gavi transition and/or polio transition plans or asset mapping information (only if applicable)
- Expanded Programme on Immunisation (EPI) review / plan of action implementation report (if available)
- Post campaign coverage survey reports (only if applicable)
- Other information, such as information on additional 3rd party funded private sector engagements

*Note: Failure to submit the renewal requests as well as required reporting on the country portal four weeks ahead of the Joint Appraisal meeting (except for the vaccine renewal request, which is to be submitted by 15 May) may impact the decision by Gavi to renew its support, including a possible postponement, and/or decision not to renew or disburse support.*
Joint Appraisal (full JA)

Country
Pakistan

Full JA or JA update 1
☑ full JA
☐ JA update

Date and location of Joint Appraisal meeting
26th August – 5th September, 2019

Participants / affiliation
See Annex A for full list of participants

Reporting period
2018

Fiscal period 3
2018 for Partners, July 2018-June 2019 Government

Comprehensive Multi Year Plan (cMYP) duration
E.g. initial self-financing or preparatory transition...

1. RENEWAL AND EXTENSION REQUESTS

Renewal requests were submitted on the country portal

<table>
<thead>
<tr>
<th>Vaccine (NVS) renewal request (by 15 May)</th>
<th>Yes ☑</th>
<th>No □</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the vaccine renewal request include a switch request?</td>
<td>Yes □</td>
<td>No X</td>
</tr>
<tr>
<td>HSS renewal request</td>
<td>Yes □</td>
<td>No □</td>
</tr>
<tr>
<td>CCEOP renewal request</td>
<td>Yes □</td>
<td>No □</td>
</tr>
</tbody>
</table>

2. GAVI GRANT PORTFOLIO

Existing vaccine support (to be pre-filled by Gavi Secretariat)

<table>
<thead>
<tr>
<th>Introduced / Campaign</th>
<th>Date</th>
<th>2018 Coverage (WUENIC) by dose</th>
<th>2018 Target</th>
<th>Approx. Value $</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pentavalent</td>
<td>2008</td>
<td>75</td>
<td>6,455,317</td>
<td>451,603,585</td>
<td></td>
</tr>
<tr>
<td>PCV</td>
<td>2012</td>
<td>79</td>
<td>6,455,317</td>
<td>477,061,895</td>
<td></td>
</tr>
<tr>
<td>Rota</td>
<td>2017</td>
<td>58</td>
<td>6,455,317</td>
<td>40,653,466</td>
<td></td>
</tr>
<tr>
<td>IPV</td>
<td>2016</td>
<td>75</td>
<td>6,132,551</td>
<td>29,298,351</td>
<td></td>
</tr>
<tr>
<td>TCV</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>1,175,190</td>
<td>Planned for Dec 2019</td>
</tr>
<tr>
<td>TCV Campaign</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>18,936,280</td>
<td>Planned for Nov 2019</td>
</tr>
<tr>
<td>Measles SIA</td>
<td>2018</td>
<td>NA</td>
<td>30,838,552</td>
<td>10,593,909</td>
<td></td>
</tr>
</tbody>
</table>

Existing financial support (to be pre-filled by Gavi Secretariat)

<table>
<thead>
<tr>
<th>Grant</th>
<th>Channel</th>
<th>Perido</th>
<th>First disbursment</th>
<th>Cumulative financing status @ June 2019</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measles SIA</td>
<td>UNICEF</td>
<td>2013</td>
<td>20/09/2013</td>
<td>21,6m</td>
<td>964,8k</td>
</tr>
<tr>
<td></td>
<td>WHO</td>
<td>2013</td>
<td>08/10/2013</td>
<td>20,7m</td>
<td>20,7m</td>
</tr>
<tr>
<td>Measles SIA</td>
<td>UNICEF</td>
<td>2018</td>
<td>12/09/2018</td>
<td>21,3m</td>
<td>19,4m</td>
</tr>
</tbody>
</table>

1 Information on the differentiation between full JA and JA update can be found in the Guidelines on reporting and renewal of Gavi support, https://www.gavi.org/support/process/apply/renew/.

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

3 If the country reporting period deviates from the fiscal period, please provide a short explanation.
## Comments

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

<table>
<thead>
<tr>
<th>Indicative interest to introduce new vaccines or request HSS support from Gavi</th>
<th>Programme</th>
<th>Expected application year</th>
<th>Expected introduction year</th>
</tr>
</thead>
<tbody>
<tr>
<td>MR</td>
<td>2020</td>
<td>2021</td>
<td></td>
</tr>
<tr>
<td>HPV</td>
<td>2020-2021</td>
<td>2022</td>
<td></td>
</tr>
</tbody>
</table>

Grant Performance Framework – latest reporting, for period 2018

A number of indicators and targets are yet to be completed at provincial level. Analysis of Grant Performance Framework indicators will follow.

---

4 Providing this information does not constitute any obligation for either the country or Gavi, it merely serves for information purposes. Countries are encouraged to highlight in subsequent sections, and particular in the Action Plan in Section 7, key activities and potentially required technical assistance for the preparation of investment cases, applications and vaccine introductions, as applicable.
### PEF Targeted Country Assistance: Core and Expanded Partners at Sept 2019

<table>
<thead>
<tr>
<th></th>
<th>Year</th>
<th>Funding (US$m)</th>
<th>Staff inpost</th>
<th>Milestones met</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL CORE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td>2.29m</td>
<td>1.94m</td>
<td>44 out of 66</td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td>2.23m</td>
<td>1.95m</td>
<td>57 out of 77</td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td>3.10m</td>
<td>--</td>
<td>15 out of 21</td>
</tr>
<tr>
<td><strong>UNICEF</strong></td>
<td></td>
<td>895K</td>
<td>893K</td>
<td>23 out of 28</td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td>1.09m</td>
<td>1.02m</td>
<td>20 out of 21</td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td>1.34m</td>
<td>415k</td>
<td>3 out of 4</td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td>1.3m</td>
<td>965K</td>
<td>18 out of 31</td>
</tr>
<tr>
<td><strong>WHO</strong></td>
<td></td>
<td>1.05m</td>
<td>842K</td>
<td>21 out of 38</td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td>1.40m</td>
<td>979K</td>
<td>15 out of 16</td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td>1.4m</td>
<td>842K</td>
<td>21 out of 38</td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td>90K</td>
<td>90K</td>
<td>3 out of 7</td>
</tr>
<tr>
<td><strong>WB</strong></td>
<td></td>
<td></td>
<td>90K</td>
<td>16 out of 18</td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td>120K</td>
<td>0K</td>
<td>4 out of 4</td>
</tr>
<tr>
<td><strong>CDC</strong></td>
<td></td>
<td>246K</td>
<td>185K</td>
<td>1 out of 2</td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td></td>
<td>--</td>
<td>Disbursement not yet taken place</td>
</tr>
<tr>
<td><strong>TOTAL EXPANDED</strong></td>
<td></td>
<td>867K</td>
<td>586K</td>
<td>42 out of 50</td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td>2.40m</td>
<td>1.65m</td>
<td>47 out of 79</td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td>1.65m</td>
<td>469K</td>
<td>31 out of 49</td>
</tr>
<tr>
<td><strong>Acasus</strong></td>
<td></td>
<td>683K</td>
<td>683K</td>
<td>6 out of 7</td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td>829K</td>
<td>229K</td>
<td>3 out of 3</td>
</tr>
<tr>
<td><strong>CHIP</strong></td>
<td></td>
<td>196K</td>
<td>24K</td>
<td>4 out of 5</td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td>78K</td>
<td>90K</td>
<td>7 out of 8</td>
</tr>
<tr>
<td><strong>CRS</strong></td>
<td></td>
<td>226K</td>
<td>226K</td>
<td>14 out of 14</td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td>226K</td>
<td>226K</td>
<td>19 out of 20</td>
</tr>
<tr>
<td><strong>Dalberg</strong></td>
<td></td>
<td>18K</td>
<td>14K</td>
<td>--</td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td>70K</td>
<td>68K</td>
<td>6 out of 8</td>
</tr>
<tr>
<td><strong>Ernst &amp; Young</strong></td>
<td></td>
<td>22K</td>
<td>21K</td>
<td>1 out of 1</td>
</tr>
<tr>
<td><strong>Jhpiego</strong></td>
<td></td>
<td>90K</td>
<td>85K</td>
<td>0 out of 1</td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td>90K</td>
<td>89K</td>
<td>1 out of 24</td>
</tr>
</tbody>
</table>

*Financial and milestone reporting not available for 2019*
3. RECENT CHANGES IN COUNTRY CONTEXT AND POTENTIAL RISKS FOR NEXT YEAR

Comment on changes which occurred since the previous Joint Appraisal, if any, to key contextual factors that directly affect the performance of the immunisation programme and Gavi grants (such as natural disaster, political instability, conflict, displaced populations, inaccessible regions, etc., or macroeconomic trends, health worker industrial actions, disease outbreaks or severe and unexpected Adverse Events Following Immunisation, etc.).

For countries facing fragility, affected by emergencies or hosting refugees:\footnote{For further information refer to http://www.gavi.org/about/programme-policies/fragility-emergencies-and-refugees-policy/}: Please indicate if any flexibilities in grant management are being requested, and also mention in case the vaccine or HSS renewal requests were adjusted.

For countries transitioning from the Global Polio Eradication Initiative: Please briefly describe the impact on immunisation and primary health care services and specify whether the country has a polio transition plan in place. If such a transition plan exists, please briefly describe it with particular focus on health workforce and surveillance. If no transition plan exists, please describe actions being taken to prepare for polio transition. Please also comment on whether Gavi investments are being used/expected to be used in the polio transition.

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>JHU</td>
<td>70K</td>
<td>497K</td>
<td>344K</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>0K</td>
<td>249K</td>
<td>231K</td>
<td>591K</td>
</tr>
<tr>
<td></td>
<td>0K</td>
<td>249K</td>
<td>231K</td>
<td>98K</td>
</tr>
<tr>
<td>JSI</td>
<td>1 out of 17</td>
<td>28 out of 35</td>
<td>10 out of 14</td>
<td>0 out of 13</td>
</tr>
<tr>
<td>Data consult.</td>
<td>15 out of 16</td>
<td>Contract ongoing, no funding allocated in 2019; milestone reporting not available for 2019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IRD</td>
<td>2017</td>
<td>2018</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td></td>
<td>12K</td>
<td>17K</td>
<td>115K</td>
<td>652K</td>
</tr>
<tr>
<td></td>
<td>12K</td>
<td>17K</td>
<td>197K</td>
<td>150K</td>
</tr>
<tr>
<td></td>
<td>12K</td>
<td>17K</td>
<td>197K</td>
<td>--</td>
</tr>
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<td></td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
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<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>5 out of 5</td>
<td>milestone reporting not available for 2019</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Major positive highlights**
  - Report of PDHS re-confirming the positive trends in increasing coverage.
  - More attention to equity and reaching the missed children, e.g. during the measles campaign and as part of urban immunisation initiative.
  - Successful implementation of Y-1 CCEOP deployment and supply chain system design.
  - Successful application for introduction of TCV.
  - Functioning NICC. Meetings held regularly and chaired by the Special Advisor to the PM on Health, Dr. Zafar Mirza, with the vision of reaching the Universal Immunisation Coverage (UIC) in Pakistan by 2023.

- **An improving immunisation status**
  Findings of the recent DHS 2017-18 show that the percentage of fully immunised children has increased from 54% to 66% since 2013-14. Preliminary results of the National Nutrition Survey indicate further improvement across all provinces and a percentage of fully immunised children age 12-23 of 79% at national level.

  In terms of equity, across all metrics, the difference between highest and lowest categories are decreased while the capacities and performance of Provincial programmes remain highly variable.
Political transition
Federal and provincial elections were held in July 2018 and resulted in a change of leadership at the federal level and in two of the four provinces. In all four provinces and at the federal level, new Ministers of Health and Secretaries of Health have been appointed. In the months leading up to the election, a caretaker government was appointed, replacing both the federal and provincial Cabinets as well as senior civil servants, including all Commissioners and Deputy-Commissioners. As a result of these political developments, most provinces and the federal level had at least three Ministers and Secretaries throughout 2018.

Child health and nutrition are mentioned among the key priorities for the government of Prime Minister, Imran Khan, who has promoted the development of new health strategies for each province.

Fiscal constraints
Pakistan has a low domestic investment in health and social sector. In addition, the government is currently facing financial challenges in terms of large fiscal deficits and a growing balance of payments. Foreign reserves posed bigger challenges of stabilizing the financial economy as a result Pakistan approached the IMF and foreign loans for a bailout in late 2018. Following this development, the Government of Pakistan has announced an austerity drive, and many provinces are facing budgetary shortfalls. This has impacted health and immunisation programme as well, whereas it is critical to continue reliable disbursements to meet the NISP goals. Advocacy continues for a shift of immunisation expenditure from development to recurrent budget for sustainability, in addition to the importance of reliable and continuous release of development budget.

Polio, sustained challenge
During the reporting period, there was a further rise in the number of Polio cases and environmental samples in Pakistan, bringing the total number of wild poliovirus cases to 53 as of July 2019. The geographical distribution of cases illustrates how the southernmost region of Khyber Pakhtunkhwa province is currently facing unprecedented levels of poliovirus transmission.

<table>
<thead>
<tr>
<th>No. of wild polio cases</th>
<th>Proportion of positive environmental samples</th>
<th>No. of infected districts</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Pakistan</td>
<td>3</td>
<td>53</td>
</tr>
<tr>
<td>0 Islamabad</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0 Punjab</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0 Sindh</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0 KP</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3 Balochistan</td>
<td>4</td>
<td>41</td>
</tr>
<tr>
<td>0 GB</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Pakistan Polio Update July 2019

Potential future issues (risks)
Also provide a forward-looking perspective on what else may happen over the next year (given current conditions, vulnerabilities, dependencies, trends and planned changes) and needs to be anticipated. E.g. potential security challenges due to upcoming elections, risks of vaccine hesitancy, stock-outs or vaccine expiry, or risks to a sustainable transition out of Gavi support.

Drawing on existing country risk assessments, please list a maximum of five most important risks (i.e. with a high likelihood to happen and / or a high potential impact if it did happen). Consider the need for proactive actions to prevent them from happening or to timely detect and effectively respond once they will happen. Also clarify whether these risk mitigation actions are being prioritised in the action plan (section 7 below).
**Forward-looking review and risks to achieving programme objectives**

2020 is set to be another busy year for the programme, including a TCV introduction and catch-up campaign, a MR application development and potential introduction, the operationalization of the urban immunisation support, the implementation of the additional HSS funds, the programming and implementation of the Performance Based Funding and the development of the Gavi Programme Support Rationale for HSS-3.

The ongoing support to Pakistan, through the Multi-Donor Trust Fund continues to require significant engagement by all parties. The change of government requires a close collaboration and high intensity of engagement and advocacy with new officials to assure the smooth running of a complicated DLI and reimbursement mechanism.

**Risks**

*Sustainability:* The sustainability of the programme, including the funding by government of vaccines and the addition of new vaccines and the continued effort to regularise resources is occurring in a more constrained environment. As Pakistan enters a nationally constrained funding environment due to various economic factors, the continued growth in costs of the EPI programme (linked to increased co-financing) is a risk. The efforts to regularise the vaccine costs, critical HR costs and operational costs of the EPI programme is at various stages across Provinces.

*Equitable progress:* Punjab continues to improve and strengthen its EPI programme while the progress across Provinces remains unequal. The diversity of issues and the growing gap in coverage and performance will further challenge programmes to tailor support, appropriately and to continue to challenge better performing programmes to reach missed children with new strategies (i.e. equity gaps in urban and mobile populations in otherwise high coverage areas).

*Technical assistance dependency:* The continued support by national and sub-national partner staff and the key gaps filled by expanded partner contracts are appreciated by Federal EPI. Staff are a blend of gap-filling and skill transfer. However, the more technical staff – such as those assigned to cold chain, surveillance and data management are filling key gaps and few positions are available in the government system to receive skill-building. The discussion on transfer of skills is frequent, however, the need to develop a plan to improve staffing in EPI is needed.

*Polio transition:* Pakistan is in the end stages of Polio eradication and continues to hold multiple campaigns annual with thousands of staff available through the polio programme. Efforts at PEI – EPI synergy are aimed at EPI using PEI resources and skills to strengthen RI, however, these opportunities and the key role played by PEI in demand generation for RI and surveillance will transition over time as the polio objectives are achieved.

---

**Key activities for 2019 and 2020**

* Full portfolio planning informed by data and evidence, by development of 4 provincial EPI strategic plans and their annual action plan.

* Use the opportunity of the new government’s commitment to health and sustainability to move vaccine and other major costs from EPI PC-1s (development side) to the recurrent side of the budget.

* NISP performance, Mid Term Review and Gavi HSS evaluation

* Focus on equity, including collaboration with polio in super high-risk union councils.

* TCV introduction and catch up campaign

* Make the quality of EPI reviews better by more systematic use of data, and focusing them on rationalization of resources, accountability to reach missed children.

* MR application
Full Portfolio Planning:
The HSS-2 grant was exceptionally approved under the Country Tailored Approach in 2016 for a 2016-2019 implementation. In this case, Pakistan is eligible for a new HSS investment beginning in 2020. The full portfolio planning process has started in 2019 with an equity workshop led by UNICEF in April 2019 to inform planning, an alliance retreat focused on theory of change to achieve the expected results, and the development of provincial immunisation strategies (ongoing). The target application submission date May 2020.

4. PERFORMANCE OF THE IMMUNISATION PROGRAMME

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

4.1. Coverage and equity of immunisation

Please provide national and sub-national analysis of the situation related to coverage and equity of immunisation in the country, focusing on newly available data & analysis, trends and changes, including outbreaks and details on outbreak responses observed since the last Joint Appraisal was conducted.

- Provide a summary of the trends in coverage and equity, across geographical areas, socio-economic status including gender-related barriers, populations and communities, including urban slums, remote rural settings and conflict settings (consider population groups under-served by health systems, such as slum dwellers, nomads, ethnic or religious minorities, refugees, internally displaced populations or other mobile and migrant groups).
- Relevant information includes: overview of districts/communities which have the lowest coverage rates, the highest number of under-vaccinated children, highest dropout rate, disease burden: number and incidence of vaccine preventable diseases (VPD) cases as reported in surveillance systems in regions/districts, etc.
- Achievements against agreed targets, within the country monitoring and evaluation (M&E) framework (and captured in the grant performance framework (GPF). If applicable, reasons why targets have not been achieved, identifying areas of underperformance, bottlenecks and risks.

Key findings of the Pakistan Demographic Health Survey 2017-18 were released in August 2018. This section summarises some key results by core coverage and equity metrics. Overall, we observe progress mostly across all metrics and all areas.

For example, the overall Penta3 coverage has increased from 54% to 75% in the last five years. When examining coverage estimates by provinces and areas, an increase is noted apart from KP and Islamabad Capital Territory where coverage has decreased by approximately 5%. Given that DHS surveys have typically a precision of ±5%, this decrease should be interpreted as coverage not having improved rather than decreased.
When comparing Penta3 coverage by residence, the gap between urban and rural areas has decreased significantly from 20% in 2012-13 to 10% in 2017-18.

Similarly, in terms of wealth equity, the difference between the lowest and highest wealth quintiles has decreased from 58% to 42%. Maternal education has reduced from 36% to 26%. While we observe a reduction in both metrics, the overall difference still reflects significant inequities and warrants specific tailored strategies for reaching missed children. Section 4.2 details Pakistan’s efforts in designing and implementing pro-equity strategies relating urban settings and gender barriers. Of note, the difference in Penta3 coverage between males and females has remained similar (from 4% to 3%).

The Pakistan DHS 2017-18 also provides an analysis of the fully immunised child from two perspectives:

(1) looking at the basic vaccines which coverage was measured in the last survey round (i.e. BCG, measles, and 3 doses each of DPT and polio vaccine [excluding polio vaccine given at birth]; and

(2) age-appropriate vaccination which includes BCG, three doses of pentavalent, four doses of oral polio vaccine, one dose of inactivated polio vaccine, three doses of pneumococcal vaccine, and one dose of measles. When examining trends of age-appropriate vaccination, coverage estimates do not exceed 50% except in Punjab and Azad Jammu and Kashmir.

The results are consistent with progress achieved to date vis-à-vis strengthening of coordination and accountability at the operational level. Punjab, owing to strong political commitment – and facilitated by the introduction of the e-VACC system to track vaccinators – pockets of under-immunised children were identified resulting in children being vaccinated. In Azad Jammu and Kashmir, there is strong demand for immunisation services and parents make a concerted effort to follow the immunisation schedule.
Additionally, the preliminary National Nutrition Survey results conducted by UNICEF indicate further progress in immunisation coverage across all regions. Percentage of fully immunised children age 12-23 months:

Source: PDHS 2018; Preliminary NNS 2019 results

According to admin data from Jan-Jun 2019, significant disparities in coverages across districts can be identified:
Data from polio post campaign surveys measures key RI indicators 3 times a year since 2017. In the absence of a full immunisation coverage survey, that gives a good overview of the situation in the country and geographic inequities.

**Routine Immunisation Coverage** (Sep-Dec 2017)
Measured through post-polio-campaign surveys

4.2. **Key drivers of sustainable coverage and equity**

Briefly summarize the health system and programmatic drivers of the levels of coverage and equity based on the key areas listed below, focusing on the evolution and changes since the last Joint Appraisal. For those districts/communities identified as lower performing, explain the evolution of key barriers to improving coverage and improving programmatic sustainability.\(^6\) If there are no updates, please indicate and provide rationale.

- **Health Work Force:** availability, skill set and distribution of health work force
- **Supply chain:** integration, procurement planning and forecasting, key insights from latest EVMs and implementation of the EVM improvement plan, and progress on the five supply chain strategy

\(^6\) Relevant discussion questions on a number of the strategic areas here can be found in the programming guidance available on the Gavi website: http://www.gavi.org/support/process/apply/additional-guidance/
fundamentals. This subsection might be informed by available dashboards and tools, for example the Immunisation Supply Chain Management Dashboard that links EVM, Maturity Scorecard and DISC (Dashboards for immunisation Supply Chain) indicators.

- **Service delivery and demand generation**: key insights related to service quality improvement and community engagement strategies; access, availability and readiness of primary health care/immunisation services; integration and cost-effectiveness strategies; strategies on demand generation for immunisation services; immunisation schedules, etc.

- **Gender-related barriers faced by caregivers**: Please comment on what barriers caregivers currently face in bringing children to get vaccinated and interventions planned or implemented (through Gavi or other funds) to facilitate access to immunisation services by women for their children. (For example: flexibility of immunisation services to accommodate women’s working schedules, health education for women on the importance of vaccination and social mobilisation targeting fathers, increasing the number of female health workers etc.)

- **Data / Information system**: Strengths and challenges related to the immunisation data (routine data collection and reporting system, integration within the health information system, regular surveys, targeted surveys, quality of data, use of data. Links with the surveillance system). At national and at sub-national levels.

- **Leadership, management and coordination**: leveraging the outcomes of the Programme Capacity Assessment and/or other assessments, please describe the key bottlenecks associated with management of the immunisation programme. This includes the performance of the national/regional/district EPI teams/health teams managing immunisation (e.g. challenges related to structure, staffing and capabilities); use of data for analysis, management and supervision of immunisation services; coordination of planning, forecasting and budgeting, coordination related to regulatory aspects; and broader sectoral governance issues.

- **Other critical aspects**: any other aspect identified, for example based on the cMYP, EPI review, C&E assessment, PIE, EVM or other country plans, or key findings from available independent evaluations reports.

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**Leadership, management and coordination**

The challenges in the leadership, management and coordination of the EPI programme in Pakistan and particularly the issue availability of senior provincial EPI staff and coordination of technical assistance at the provincial level featured highly during the Joint Appraisal discussions. The issues in prioritisation, use of data and coordination across government units were key findings during discussions on the bottlenecks to improving the management and coordination of the EPI programme. Although Quarterly Reviews at the Provincial level occurred with more frequency, the further improvement of these reviews and the ability to follow-up on key actions is required.

The capacity of programme management varies significantly by Province. Gavi has engaged LMC support through Acasus in Balochistan and Sindh, two of the most challenging Provinces regarding management and accountability.

Additionally, Acasus provided support to the federal EPI on organizing the NICC reviews. The reviews are held regularly and chaired by the Special Advisor to the PM on Health, Dr. Zafar Mirza, with the vision of reaching the Universal Immunization Coverage (UIC) in Pakistan by 2023.

There is significant technical assistance available across Provinces, with partners and expanded partners having Provincial focused support and staff. The communication between agencies and also between agencies and expanded partners is weak. Although significant effort is deployed in aligning terms of

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7 More information can be found here: http://www.gavi.org/support/hss/immunisation-supply-chain/


9 For additional programmatic guidance refer to http://www.gavi.org/support/process/apply/additional-guidance/#gender. Gender-related barriers are obstacles (for access and use of health services) that are related to social and cultural norms about men’s and women’s roles. Women often have limited access to health services and are unable to take their children to get vaccinated. Barriers include lack of education, lack of decision-making power, low socio-economic status, women unable to move freely outside their homes, inaccessibility of health facilities, negative interaction with health workers, lack of father’s involvement in healthcare etc.

10 If applicable, such as Full Country Evaluations (relevant for Bangladesh, Mozambique, Uganda and Zambia) and Technical Assistance evaluations (conducted for Gavi Partners’ Engagement Framework tier 1 and tier 2 priority countries).
reference and key annual activities, there is limited collaboration and extremely limited information sharing. It was highlighted during the mission that there were multiple data collection efforts on key immunisation delivery inputs (health facility, staff, cold chain) being collected by different agencies/staff which leads to duplication and inefficiencies.

Supply chain

The immunisation supply chain in Pakistan has significant investments from Gavi and partners in order to improve both the design and the efficiency of the system. These are outlined in more detail in Section 5, including progress on CCE OP implementation.

Some of the recent improvements include the implementation of a supervisory application to improve the quality and frequency of data reported by the district health coordinators from the fixed EPI sites in Balochistan with technical support from Acasus and Unicef.

The immunisation supply chain in Pakistan is complex and through Gavi-support, the system redesign process reviewed key areas of risk, efficiency and equity for overall improvement. The mission agreed to bring forward the recommendations of the report to develop a costed implementation plan. The costed implementation plan would be completed by first quarter of 2020. And outcome could be used for developing the new HSS grant as well as the Provincial PC-1s.

The installation and use of vLMIS in all districts in Pakistan was supported through remaining balances funding and is linked to a DLI. The mission highlighted key challenges as many Provinces launched new MIS systems, specific to Provinces in 2018. This led to a drop in use of vLMIS as data entry staff are now required to report in two systems. A key action is to develop a plan for integration or elimination of a platform for reporting in each Province and Area.

As part of the overall supply chain assessment, the EVM Assessment would be conducted in Pakistan, and the proposed dates for implementation initially planned for Q4 2019, would now take place in Q1 of 2020 when the proposed EVM2.0 tool for the assessment would be ready. The key action is to fast track the EVMA as it had been overdue for over a year, it was recommended that the global team working on the tool be contacted to fast track the customization of the tool for use in Pakistan by December 2019.

In 2017, Gavi completed a clean vaccine audit and a temperature monitoring study. Both of these reports have recommendations which are under implementation.

Health Work Force

In 2018, Pakistan developed a human resource vision document and have commenced a health human resources reform which includes the EPI. This is expected to be a lengthy process. It was identified by the mission members the long standing gaps in management positions within provincial EPI teams and raised as a major concern in the different meetings with Secretaries of Health, Finance, Planning and Ministers.

Pakistan’s EPI programme is vertical and there are a large number of vaccinators and Lady Health Workers around the country. However, the rationalisation, performance and quality of staff remains a significant challenge.

The attendance of vaccinators remains a challenge, despite the presence of e-Vaccs which highlights the need for accountability and a review of staff retention. A review in 2017 of Lady Health Workers showed there are some gaps in their training related to BCG and Measles vaccines and that only certain Provinces (Sindh) are permitting them to vaccinate.

The quality of human resources remains a significant challenge. Although steps have been made to improve performance in relation to attendance and capacity building, the size of staff and diversity of training and hiring protocols remains a bottleneck to improving quality of vaccination service. Technical positions, such as for cold chain maintenance remain a challenge to recruit and for existing posts to operate with high performance.
Service delivery

*Progress on service delivery inputs:* Service delivery varies in terms of coverage and capacity across the country. There are significant issues with the availability, quality and distribution of service delivery components: HR, fixed and outreach sites and cold chain. Efforts are being made by the government to open new sites, add more vaccinators and improve the performance of existing vaccinators.

*Engagement of private and CSO providers:* Gavi is supporting the development of private sector engagement and CSO engagement frameworks (separately) through HSS and via expanded partner support. A recommendation from the Joint Appraisal in 2017 highlighted the need to improve EPI-CSO collaboration. The Secretariat contracted a CSO (CHIP) to support the development of standard contracts and improved information flow between EPI and CSOs at Provincial level to promote the use of NGOs and CSOs in hard to reach areas of the country. As part of this support, there was CSO EPI engagement during the recent Measles campaign and CSOs are working with Unicef on the urban immunisation programme. However, there remain significant challenges facing CSOs operating in Pakistan mainly linked to government procedures and trust.

PCCHI, previously Gavi-supported platform in Pakistan received its last funding in early 2018. The Secretariat is still planning the modality of engagement with previously supported CSO platforms. During the mission, the CSO platform and their representatives highlighted the potential modalities of engagement through Gavi and government support including upcoming TCV campaign.

*Urban immunisation:*
UNICEF with other core and expanded partners (WHO, IRD, ACASUS, Zenysis, Jhiego, PCCHI/CHIP, Others) has provided technical support to EPI programs for planning, implementation and monitoring of the Integrated Urban Health Initiative. This initiative is led by Federal/provincial EPI program in 10 selected mega cities (Karachi, Hyderabad, Lahore, Multan, Rawalpindi, Faisalabad, Gujranwala, Peshawar, Quetta and Islamabad). A total of 42 million population out of which 1.5 million are under 1 year. 7 million are below the age of five years and 9 million women are of childbearing age.

The technical support is provided for development of overarching framework for urban health initiative. This framework was used to develop the city specific road maps for all 10 mega cities including Karachi, where the road map development was coordinated by JSI.

The profiling and mapping of urban slums and underserved areas, immunization coverage assessment, implementation of prototype in UC 110 of Lahore (in partnership with CSO), has been completed.

The profiling results revealed that estimated 13 million (31% of total urban population in targeted cities) is residing in 4,437 slums and underserved areas. Among profiled slums, 35% are unregistered, 87% have no health facility, either public or private, 45% public health facilities are not providing vaccination services and 29% respondent (coverage assessment survey) have no information about vaccination. 56% profiled slums & areas are covered by lady health workers which is a potential untapped resource to provide immunization services to these marginalized communities.
The preliminary results of coverage assessment also revealed the difference between immunization coverage among total urban population and urban poor. The FIC Coverage in slums population is as low as 27% in Quetta to 76% in Multan. The coverage survey has been completed in seven mega cities and is in progress in remaining three cities (Karachi, Peshawar and Hyderabad) as mentioned in below graph.

A prototype has been developed in 12 selected urban slums in union council 110 in Lahore. A micro census and population census was conducted and used to develop and update the micro plans. 12 slum health committees are established with participation from local community notables, religious leaders, teachers, and local government representatives for advocacy and social mobilization among slum communities. These committees are being facilitated by 10 locally recruited and trained female community resource persons (CRP). Based on these interventions, 90% zero dose children have been retrieved and dropout rate reduced from 41% to 29% and 35% to 22% for Penta 3 and Measles1 respectively. Based on the lessons learned from this prototype, EPI Program Punjab will roll out the same experience in slums of 03 other union councils in Lahore with technical support of UNICEF. All the tools developed for UC 110 will be used and updated where necessary.

The preliminary results of coverage assessment also revealed the difference between immunization coverage among total urban population and urban poor. The FIC Coverage in slums population is as low as 27% in Quetta to 76% in Multan. The coverage survey has been completed in seven mega cities and is in progress in remaining three cities (Karachi, Peshawar and Hyderabad) as mentioned in below graph.
Equity-focused Integrated Urban Immunization/Health roadmap for Karachi was presented by JSI and it is to be finalized in the coming months. A monitoring framework for the roadmap developed, with an additional DLI duly agreed with provinces for the USD 16 million allocated for urban health initiative.

Overall, Government of Pakistan is very keen on urban immunization agenda, however, due to weak second tier of management and severe delays in the availability of funds activities had a slow start. In the devolved health context with predominant vertical programming; revamping and operationalization of Primary Health Care approach is the need of the time. Coordination across different sectors, operationalizing public private partnerships, establishing proficient fund flow mechanism are envisaged as potential key challenges. In addition, exact quantification of unimmunized/ under immunized children especially in urban disadvantaged/ high risk and migratory population is another potential issue.

In 2019 and 2020, the city specific concept notes will be translated into costed action plans and will be implemented, and progress will be monitored.

**Demand Generation**

UNICEF supported the government in the rollout of one national and four provincial immunization strategies which included, utilization of social mobilization toolkit and community outreach through Polio CBVs, LHWs and CSOs during World Immunization Week (WIW), rotavirus introduction and measles SIA; IPC training of frontline workers (FLWs) on rotavirus and measles SIA; 7 Advocacy, Communication and Social Mobilization committees at provincial/area level and district communication committees in Balochistan, Sindh and KP; and national level mass media campaign for WIW (2018-19) and Measles SIA.

EPI and UNICEF’s social media platforms and mass media were used to create awareness and interact with parents. The exclusive hashtag for the WIW campaign in 2019 #TeekuVsDisease reached 589,209 people with 1.75 million impressions. 48,896 people were reached through Facebook ads out of which 4,091 new people started following the EPI Facebook page and 57% of these were women. Targeted messages were shared in 150 WhatsApp groups with a total of 17,318 members.

During the Measles SIA in October 2018, there was vaccine resistance from some communities in high risk areas in Killa Abdullah and Pishin, Balochistan. The Polio CBVs also faced challenges in accessing the children in these communities; however, providing additional nutrition and maternal/child health services in these locations allowed EPI to vaccinate children. Furthermore, influencing campaign timing in KP and Balochistan also contributed towards vaccine acceptance. Reports of resistance based on male decision makers being absent from the household in conservative districts were reported. Timing of the campaign was expanded to evening hours in some areas to ensure men were available to support vaccination.

The polio community health workforce (numbering 18,857 in 11 polio tier-1 districts) devoted a week every month to mobilizing communities for routine immunization, referring zero-dose children and generating zero-dose data used to retrieve 36 per cent of such children for routine immunization. During the five annual polio immunization campaigns, over 260,000 volunteer social mobilizers went house-to-house to identify and refer zero dose children for routine immunization.

Additionally, Punjab has set up an integrated Health Communication Cell that provides support to the EPI as well as other programs. Technical assistance was provided to Provincial EPI in KP in development of training material on Interpersonal Communication based on latest marketing techniques. 30 master trainers were trained, and around 1,000 vaccinators have been trained through cascade trainings.

**Gender-related barriers**

Traditionally, the analysis of gender inequity in childhood immunization is limited to the sex differentials in coverage between boys and girls and the impact of mother’s education on child immunization for both sexes.

Though, there is same likelihood of boys and girls to be vaccinated in most low- and middle-income countries (LMICs). Mothers are typically the primary caregivers for their children, but their lower status in the household and community limits their capacity to act on their own and their child’s behalf. Women are acutely affected by physical and time barriers to accessing immunization services (e.g. distance to services, inconvenient times of services, long queues). These barriers may be amplified or mitigated by other
elements of their social position, such as economic status, ethnicity, marital status, age, educational status, caste, and the socio-cultural context, including gender norms.

Lack of health literacy leads to limited understanding of immunization hence leading to low motivation of mothers to vaccinate their child. Furthermore, quality of services including the responsiveness of services; range of services available; provider attitudes, skills and behavior; availability of female providers – may deter them from attending health services.

In Pakistan, females are 3.4 percent less likely to be vaccinated compared to males for third dose of DPT. Similarly, vaccination coverage increases with the increase in mother’s education from 61 percent for uneducated mothers to 99 percent with highly educated mothers. Gender of the vaccinators is considered as a major barrier to vaccination in many districts. The implementation research carried out in 2017 in four urban slums at Karachi's coastal belt, identified mistrust of the caregivers on health systems due to the weak interpersonal communication and gender of the health care providers. Traditionally, community women do not speak to male vaccinators. In areas where LHWs are not appointed, there is a major problem of low coverage. Absence of male family members in facilitating vaccination becomes a reason for dropout.

Gender in immunization programme does not look at the key barriers that might impact parents’ decision or ability to vaccinate their children (whether male or female). Past surveys only provide sex disaggregated data at the national or first sub national level hence, they do not capture gender related disparities at the lowest operational level.

A recommendation is for the EPI to undertake implementation research to analyze gender related barriers to the uptake of health and immunization services; devise and operationalize evidence-based strategies to address these barriers to the uptake of health and immunization services in high risk urban, remote rural and conflict situation.

Additionally, the LHW programme continues to work with EPI. The role of Lady Health Workers is deemed important in the provision of maternal and child health services and their terms of reference are growing. They are used in a variety of ways (as a vaccinator or social mobiliser or health educator) depending on the Province. Their involvement is being considered as part of the HR for health reforms. It is extremely important to assess their capacity in relations to the terms of reference assigned to determine if this is a right approach to overload them.

During the Measles campaign, the hours in Karachi were extended into the evening as mothers reported they could not leave the house with their child for an immunisation session without the Father present. This is an interesting learning which may point to challenges in business-hour vaccination sessions in Pakistan's urban centres.

### Status of health information systems

The administrative data flow, for coverage, surveillance and vaccine safety data, is similar across province. Data is collected generally on a paper and/or electronic based system at the EPI Centre level which is then entered at the sub-district / district level. Differences are observed in the choice of the management information system tool ranging from interactive dashboards to Excel spreadsheets. The table below lists the tools used by province / area.

<table>
<thead>
<tr>
<th>Province / Area</th>
<th>Data Flow and System Used</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coverage data</td>
</tr>
<tr>
<td></td>
<td>Monthly report is generated</td>
</tr>
<tr>
<td></td>
<td>Surveillance and vaccine safety</td>
</tr>
<tr>
<td></td>
<td>Weekly report is generated</td>
</tr>
<tr>
<td>Region</td>
<td>Data Entry Process</td>
</tr>
<tr>
<td>-------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>AJK, Balochistan,</td>
<td>Data is compiled manually in an Excel spreadsheet at the district level which is then sent to the provincial management team via email.</td>
</tr>
<tr>
<td>Islamabad (CDA / ICT),</td>
<td></td>
</tr>
<tr>
<td>GB and FATA</td>
<td></td>
</tr>
<tr>
<td>Punjab</td>
<td>The sub-health district level sends a paper-based report to the District Health Officer which is then entered into an offline EPI management information system. An extract (in Excel format) is generated on a monthly basis which is then sent to the provincial level. This data is then uploaded on a provincial dashboard / system. The e-VACC system is used also used in parallel to track vaccination coverage. The 3rd version of e-VACC was released in 2018 allowing for tracking children.</td>
</tr>
<tr>
<td>Sindh</td>
<td>Data is entered at the sub-district level into the Vaccine Logistics Management Information System (vLMIS). Data is directly accessible by the provincial level. Zindagi Mehfooz (ZM) is an android-based application used for tracking children. Up until now, almost all vaccinators have been provided with a smartphone which is essential for the use of this application.</td>
</tr>
<tr>
<td>KP</td>
<td>Data is entered at the district level into the EPI MIS. Data can be directly accessed by the provincial level.</td>
</tr>
</tbody>
</table>

The University of Oslo conducted a review of existing information systems in Punjab and Sindh in May 2018. Below are key findings:

Use of technology in Punjab is quite advanced albeit there is a definite need to standardise indicators and indicator definitions across systems. Indeed, there are over 30 systems utilised in the health sector. Integration has been highlighted as a significant challenge. The University of Oslo failed to identify an overarching structure and governance body taking care of how these systems fit together, how sharing of data is facilitated, and how these many data sources contribute to a bigger architecture that allows for integrated data analysis. Currently linkages between various health information systems is done manually.

To address this issue, Zenysis, a Gavi INFUSE 2017 pacesetter, has been contracted through Gavi support to explore technical solutions for integrating / utilising the range of immunisation data sources available for decision-making.
Additionally, an assessment of Pakistan Data Use has been contracted by the Gates Foundation with Vital Wave aiming at better understanding immunization programme data flows at national and subnational level. The project is aiming to map data flows and document barriers, causal issues and potential solutions to address them.

Compliance with Gavi’s data quality – Data use

Pakistan reports on its ten Grant Performance Frameworks (GPFs) on a semi-annual basis since NISP implementation is effective. The World Bank and the Gavi Secretariat has provided support to each reporting round to assure quality and consistency in the data reported. The provision of this ongoing support has helped to understand some of the challenges relating to basic programme monitoring. First, the reporting of routine programmatic data – whether they are related to disbursement-linked indicators or not – has not been prioritised by both provincial and federal levels.
This is seen by the data being reported shortly before the Joint Appraisal (JA), not leaving sufficient time for all stakeholders to do a quality check. Second, the agreed upon performance metrics, while used by the Multi-Donor Trust Funds, are not all integrated in the routine monitoring of Pakistan’s immunisation programme. This is exhibited by the fact that there is still variability in what is being used as a denominator across provinces and federating areas (e.g. using districts as the denominator while the indicator specifies union councils). As a result, while results are examined and discussed during the JA, progress against performance metrics are not used routinely to inform ongoing programmatic strategies.

The technical assistance provided by both core and expanded partners has allow the immunisation programme at all levels to systematise the review of routine data. Having said that, this process still requires heavy engagement from partners. Given the equity-related challenges that Pakistan is facing, it is undeniable that effective data use is part of the response. In preparation for the next round of Gavi health systems strengthening (HSS) funding, it would be helpful for Pakistan to reflect on lessons learned and identify how best practices related to data use can be systematised. Ideally, identified interventions should be planned as part of broader digital strategy development process that is ongoing in Pakistan.

4.3. Immunisation financing

Please provide a brief overview of the main issues affecting the planning, budgeting, allocation, disbursement and execution of funds for health and immunisation. Please take the following aspects into account:

- **Availability of timely and accurate information for planning/budgeting** (e.g. quantification of vaccine needs and pricing data), availability of medium-term and annual immunisation operational plans and budgets, whether they are integrated into the wider national health plan/budget, their relationship and consistency with microplanning processes and how they are reflected into national health financing frameworks.

- **Allocation of sufficient resources in national health budgets for the immunisation programme/services**, including for Gavi and non-Gavi vaccines, as well as operational and service delivery costs. Discuss the extent to which the national health plan/budget incorporates these costs, which partners might be providing funding for traditional vaccines, and any steps being taken to increase domestic resources for immunisation. If any co-financing defaults occurred in the last three years, describe any mitigation measures that have been implemented to avoid future defaults.

- **Timely disbursement and execution of resources**: the extent to which funds for immunisation-related activities (including vaccines and non-vaccine costs) are made available and executed in a timely fashion at all levels (e.g., national, province, district).

- **Adequate reporting** on health and immunisation financing and timely availability of reliable financing information to improve decision making.

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11 Additional information and guidance on immunisation financing is available on the Gavi website https://www.gavi.org/support/process/apply/additional-guidance/#financing
The draft Aide-Memoire, the report provided by the World Bank on the progress of the MDTF, was made available following the mission in September 2019 and is available for detailed consultation. The report outlines the reasons for the World Bank’s rating of the project status to “Moderately satisfactory” and outlines key actions by the Government of Pakistan and partners in overcoming challenges. The key performance issues outlined by the report include:

1. Delays in release of Provincial Development Budget to EPI programmes (particularly for Sindh, KP and Baluchistan)
2. Shifting of EPI expenditures from development to recurrent budget
3. Procurement under the project (issues in process for procurement which leads to unnecessary delays)
4. Financial Management (progress on the DDO codes have been made but still challenges with performance of the Financial Management Specialists under the project)
5. Social and environmental safeguards compliance has also been downgraded, with specific actions by the WB to support Federal EPI in implementing the policies

Additionally, during the appraisal mission the following issues were highlighted:
- Budgetary allocations are not in line with PC-1 allocations.
- Financial Management Specialist (FMS) weaknesses. FMSs not integrated with the team and confined with the limited role of Bank funding only.
- Releases are not made against the development budget for FY 19-20 in Federal and all the provinces except for Punjab.
- Transfer of operational budget and vaccination cost to the recurrent side of the Budget.
- No POL provisioning for FATA and other Federating areas in the PC-1
- Slow utilization of NISP TA for training activities
- PC-1 closing on FY 19-20. How the activities will be funded for FY 20-21

5. PERFORMANCE OF GAVI SUPPORT
5.1. Performance of Gavi HSS support (if country is receiving Gavi HSS support)
Provide a succinct analysis of the performance of Gavi’s HSS support for the reporting period.

- **Progress of the HSS grant implementation** against objectives, budget and workplan, and significant deviations from plans (e.g. implementation delays, low expenditure rates, etc.), using the below table.

**HSS Grant Performance**
The HSS grant is channelled through the World Bank’s National Immunisation Support Project which utilises a disbursement-linked indicator (DLI) system. As such, the analysis of NISP / HSS performance is reflected by progress achieved against expected DLI per project year.

The below graph shows progress achieve to data against DLIs. Cells in red indicate that targets are not achieved; those in yellow reflect that target is almost achieved (within 10%) and green cells indicate target achievement based on self-reported data. In terms of Federating Areas, progress by and large is slow. Almost all indicators show poor performance except for AJK where routine immunisation activities appear to be implemented. This is reflected in the draft Aide-mémoire shared by the World Bank following the Joint Supervision, Appraisal and Evaluation Mission and included as annex 1 of this report.
### Table: Progress on DLIs, by Province

<table>
<thead>
<tr>
<th>DLI#</th>
<th>Indicator</th>
<th>Year</th>
<th>Punjab</th>
<th>Sindh</th>
<th>KP</th>
<th>Balochistan</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Percent of detailed UC supervisory plans implemented by district supervisors and made available to supervisor officers in each project province **</td>
<td>1</td>
<td>🔺</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Percentage of UC in each project province for which revised computerised UC level micro plans are in functional use at district and provincial levels **</td>
<td>2</td>
<td></td>
<td>🔺</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Percentage of districts in each project province with at least 80% timely and complete reporting on Vimis* . **</td>
<td>2</td>
<td></td>
<td></td>
<td>🔺</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Percentage of districts in each project province with at least 95% functional cold chain equipment in place as per specifications in each tier of the health system [including at least 1 month buffer stock capacity at district level] ***</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>🔺</td>
</tr>
<tr>
<td>9</td>
<td>Budget allocations for immunisation are continuous, adequate and can be easily tracked within the provincial financial management information systems</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td>🔺</td>
</tr>
<tr>
<td>1</td>
<td>Percent of children aged between 12-23 month old in each project province who are fully immunised</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td>🔺</td>
</tr>
<tr>
<td>3</td>
<td>Percentage of districts in each project province reporting at least 80% coverage of Penta3 immunisation in children between 12-23 month old, as validated by third party</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td>🔺</td>
</tr>
<tr>
<td>5</td>
<td>Percentage of districts in each project province with their recognised surveillance sites having functional online surveillance systems for VPD and AEFI</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td>🔺</td>
</tr>
<tr>
<td>8</td>
<td>Percent of children under two years of age with vaccination cards available in each project province</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td>🔺</td>
</tr>
</tbody>
</table>

*TPV results based on sample  
** Verified and disbursed (source of data: PDHS 2017-18)  
*** Pending verification

Additionally, please see below a summary of the disbursement performance in 2019 following validation of results and the projections of DLI and Non DLI payments under NIPS is as follows:

### Disbursement under NISP
USD, Millions

<table>
<thead>
<tr>
<th>Year</th>
<th>Approved</th>
<th>Feb-19</th>
<th>Aug-19</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50</td>
<td>16.6</td>
<td>21.31</td>
</tr>
<tr>
<td></td>
<td>129.6</td>
<td>28.4</td>
<td>52.81</td>
</tr>
</tbody>
</table>

IDA credit: 50%  
MDTF: 50%
More detailed analysis on the achievements and challenges of the NISP project as presented to NISP Multi Donor Trust Fund Steering Committee is Available in annex 2.

Additional HSS funds $ 25m

As Pakistan continues to advance towards polio eradication goal, we also encounter a range of challenges including evidence of increasing trends of community resistance witnessed during recent polio campaigns that is posing threat to routine immunization too. In such a challenging environment where traditional methods of reaching the unreached are becoming more and more complex and out-dated, there is need of to tackle the issue in a more collaborative and innovative way to not only expand the service delivery for vaccines across those who need them but also to engage communities through a novel approach aiming to engaging in conversation with the community to reduce their concerns, myths and misconceptions. In order to respond to the challenging situation especially in Polio tier-1 districts and top low performing Gavi extended its support to the country with additional HSS support with equity focus aiming to reach the unreached.

In this context a team of Federal, Provincial EPI focal points, development partners, the representatives from National and Provincial Emergency Operations Centers (EOCs) including CSOs, actively contributed to the discussions to deep diving into the challenges on the ground faced in reaching those who are persistently being missed by the programme.

Equity based approach was considered while describing the geographies for directing the grant. While prioritizing the districts, the programme took into account number of indicators like Polio Tier-1 district, Penta-III coverage as recorded in previous Post campaign monitoring (PCM) Data, maximum number of zero dose children/unimmunized children recorded in NIDs in the district, , high drop-out rates, number of out-breaks reported in the district and mean poverty index. All tier-1 districts were selected instantly and then based on scoring further list of 46 district was generated, with the aim to improve RI coverage.

The proposed objective in the additional HSS proposal are:

**Governance and accountability**

EPI Programme envisages using HSS grant for improving governance across all levels with clearly defined roles and responsibilities along with development of performance measures around accountability indicators and monitoring the same. EPI will use this opportunity for holding high level advocacy with
political and programme leadership to ensure the implementation of accountability framework at all levels. Regular periodic stock take meetings will be conducted with the attendance of senior politicians and government officials to review the progress in implementation of accountability framework and resultant improvement in governance as reflected by the achievement of EPI program results.

Improvements in EPI Program management is expected to achieve the following results:
1. Accountability framework is developed, and managers are capacitated to utilize it
2. Timely release of recurrent and development budgets for immunization programs
3. At least 80% of managers and supervisory staff are retained for their minimum standard tenure (3 years).
4. District EPI program performance is regularly reviewed in all district polio eradication committee (DPEC) meetings under the chair of Deputy commissioner

Service Delivery
Through this additional support, it is envisioned to reduce the equity gaps in provision of quality RI services to marginalized populations like urban poor, remote rural and security compromised areas.

The following are the key results to be achieved for service delivery is in targeted districts:
1) At least 80% of UCs in targeted districts are delivering Quality EPI services through expansion of fixed EPI sites and outreach. (Public/ Private and rental)
   - Equity focused Plans are developed, and GIS supported micro-plans (PEI microplans) are available, implemented and monitored at all levels
   - Private sector hospitals are providing RI services and reporting on progress back to EPI program in mega cities and other target districts.
   - 10 specialized Mobile clinics are established to provide integrated RI services in slums of targeted mega cities (Karachi, Lahore, Peshawar and Quetta).
   - Policy change for large hospital to deliver BCG and measles vaccine on daily basis based on evidence.
2) 10% of selected fixed EPI centres in mega cities are refurbished as client/ child friendly in all targeted Districts.
3) 90% of reported zero dose children are vaccinated including dues and defaulters (% zero dose children vaccinated, % dues/defaulters vaccinated and polio birth dose through CBVs and LHWs)

Surveillance, Monitoring and Supportive Supervision
The following results will be achieved to improve monitoring, supportive supervision and surveillance in targeted districts:
- Feasibility report for the interface of the various data application currently being used in the programme.
- One uniform monitoring and supervision system for real time monitoring of EPI programme is available for use.
- Surveillance System including a newly established community-based surveillance is responsive for timely detection and response on VPD cases.

Demand generation
- Community members in selected districts will be actively engaged in microplanning, identification of accessible outreach sites, in tracking defaulters and promoting EPI services among other caretakers.
- The provincial governments will include community engagement as one of the components in the new PC-1 and invest in capacity building/motivation of its frontline workers in IPC/Health Education skills as a regular practice.
- Stronger linkages identified and available with CSOs and other community networks to engage communities as a regular practice.
Performance Based Funding - $13m

National Immunization Support Project (NISP) is a DLI based funding mechanism and upon achieving a high performance demonstrated through the PDHS, Pakistan became eligible to this additional grant worth $13.39 million.

The grant has been earned by Pakistan based on the performance however deliberations are underway within the programme to use it (considering equity perspective) to support poor performing districts across Pakistan. In this regards, the list of priority district developed at the time of HSS-II additional grant has been reviewed and excluding those 46 district a number of districts which still remain poor performing is being considered and as a next step consensus building workshop is being planned to take Provinces and stakeholders (including CSOs) on board to jointly formulate work plan and develop budget.

In this context, and in line with the timeline for work plan and budget submission (15 October 2019) request for technical assistance from WHO is being forwarded to complete the process.

In the text box below, briefly describe:

- **Achievements against agreed targets** as specified in the grant performance framework (GPF), and key outcomes. E.g. how does the number of additional children vaccinated and under-immunised children in districts supported by the HSS grant compare to other non-supported districts/national targets. Which indicators in the GPF were achieved / impacted by the activities conducted?
- **How Gavi support is contributing to address the key drivers of low immunisation outcomes?**
- **Whether the selection of activities is still relevant, realistic and well prioritised in light of the situation analysis conducted, as well as financial absorption and implementation rates.**
- **Planned budget reallocations** (please attach the revised budget, using the Gavi budget template).
- **If applicable, briefly describe the usage and results achieved with the performance based funding (PBF) the country received. What grant performance framework (GPF) metrics will be used to track progress?**
- **Complementarity and synergies with other donor support** (e.g. the Global Fund, Global Financing Facility)
- **Private Sector and INFUSE\(^{12}\) partnerships and key outcomes (e.g. increasing capacity building and demand, improving service delivery and data management). Please outline the sources (e.g. Private sector contributions, Gavi matching Fund and Gavi core funding – HSS/PEF) and amount of funding.**
- **Civil Society Organisation (CSO) participation** in service delivery and the funding modality (i.e. whether support provided through Gavi’s HSS or other donor funding).

**Civil Society Organisations (CSO) Engagement**

**Current Situation / Progress made at Federal Level**

CSOs of Pakistan have organised themselves into a National Level Platform known as ‘Pakistan CSOs Coalition for Health and Immunization’ (PCCHI) and have functional National and Provincial Executive Body. CHIP has been performing the functions of PCCHI Secretariat since July 2012. Since then, the advocacy for the engagement of CSOs services for strengthening routine immunization is continuing at federal and provincial level. The CSOs engagement could be categorized into two main components:

(a) Engagement at the policy and planning level under which the CSOs have become an integral member of National Inter Agency Coordination Committee meetings (NICCC), EPI review meetings and communications committees etc.

(b) Engagement of CSOs for service delivery and demand generation, under which a simplified version of Standard Operating Procedures for contracting out CSOs according to the public procurement regulations have been developed and endorsed by federal and provincial EPI and scope of work for CSOs engagement has been agreed. CSOs have been trained in demand generation and multiple

\(^{12}\) INFUSE was launched by the Gavi Alliance to help bridge the gap between the supply and demand side for new technologies and innovations and to create a market place for these innovations.
Joint Appraisal (full JA)

models of implementation. Performance indicators for tracking contribution of CSOs developed and endorsed by each province.

Provincial Update
The recognition level of CSOs varies in each province. The highest level of recognition to CSOs is awarded in Sindh Province followed by Khyber Pakhtunkhwa Province. The lowest level of recognition to CSOs is awarded in Punjab province. All four provincial EPI Cells hosted the following types of meetings for engaging CSOs:

- Pre-launch orientation of measles campaign 2018. CSOs were asked to come forward and support social mobilization during measles campaign. As a result of these meetings 20 CSOs were given contracts through 3rd party of Unicef.
- Orientation of key EPI concepts, policies, strategies and systems
- Provincial EPI review (Sindh and KP invited CSOs in their regular review meetings);
- All four provincial EPI Cells have issued notification of a procurement committee to launch a Request for Proposal for contracting out to CSOs.

Besides these common interventions where CSOs were invited, some province specific updates is as follow:

- Sindh Provincial EPI invited CSOs in preparing road map for Karachi.
- Sindh Provincial EPI has outsourced health facilities of one town to HANDS CSO and facilitation of outreach EPI in Tharparkar district to TRDP CSO;
- Khyber Pakhtunkhwa Provincial EPI has asked FPHC CSO to facilitate outreach EPI in Afghan refugee camps in district of Swabi.

Challenges

- Although all provinces and Federal EPI have expressed their commitment for engaging CSOs but their degree of sensitization regarding importance of CSOs engagement varies. Even if some provinces would engage CSOs due to pressure of the federal EPI and or GAVI, CSOs might face undue criticism and discouraging attitudes.
- Although procurement committees have been made and resources have been allocated in PC1 for the contracting of CSOs but the release of funds in each province is the responsibility of department of finance. The performance of CSOs is directly dependent on the regular cash flow hence delays in financial disbursement might affect the performance of CSOs.
- The SoP for contracting CSOs require due diligence for financial management capacity and maintaining minimum turnover which smaller CSOs would not be able to qualify.
- PCCHI as an independent body does not have history of financial transaction due to its voluntary nature hence it cannot apply for any funding independently.

Next Steps
The procurement committee of each province requires close follow up to:

- Issue the Request for Proposal and contract out CSOs according the endorsed SoP.
- Identify union councils where coverage rates are low and number of zero dose children is high for assigning these union councils to CSOs for required support. Scope of work for CSOs would be determined according to the needs as some locations might require support for service delivery and some locations might require support for demand generation.
- Utilizing endorsed monitoring and evaluation framework for tracking performance of CSOs contribution.

5.2. Performance of vaccine support

Provide a succinct analysis of the performance of Gavi vaccine grants, focusing on recently (i.e. in the last two years) introduced vaccines, or planned to be introduced vaccines, and campaigns, supplementary immunisation activities (SIAs), demonstration programmes, MACs etc., as well as switches in vaccine presentations. This section should capture the following:

- Vaccine-related issues which may have been highlighted for the vaccine renewals, such as challenges on stock management (overstock, stock-outs, significant consumption variations etc.), wastage
rates, target assumptions, annual consumption trend, quantification data triangulation, etc., and plans to address them.

- **NVS introductions and switches**: If country has recently introduced or switched the product or presentation of an existing vaccine, then the country is requested to highlight the performance (coverage) and lessons learned from the introduction/switch, key implementation challenges and the next steps to address them.

- **Campaigns/SIA**: Provide information on recent campaigns (since last JA) and key results of the post-campaign survey, including the coverage achieved. If achieved coverage was low, provide reasons. Provide other key lessons learned and the next steps to address them. If post-campaign survey has not been conducted, highlight reasons for the delay and the expected timelines. Are there any key observations concerning how the operational cost support was spent? Explain how the campaign contributed to strengthening routine immunisation e.g. by identifying zero-dose children and lessons learned.

- **Update of the situation analysis for measles and rubella** (using the latest immunisation coverage and surveillance data for measles, rubella and congenital rubella syndrome from national and sub-national levels) and update of the country’s measles and rubella 5 year plan (e.g. future dates of MR intro, MCV2 intro, follow-up campaigns, etc.).

- **Describe key actions related to Gavi vaccine support in the coming year** (e.g. decision-making on vaccine introduction, future application, planning and implementation of introduction/campaigns or decisions to switch vaccine product, presentation or schedule) and associated changes in technical assistance.

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**Measles Campaign**

A Measles campaign took place in 2018 with high administrative coverage and no major reported AEFI. The mobilisation was phenomenal, and the initial data received through the post-campaign coverage survey indicates over 92% coverage across all provinces and in Karachi.

**PCV Switch**

Pakistan switched PCV10 presentations in 2019, from 2-dose to a 4-dose presentation, with the main difference being that the new 4 dose presentation contains preservative and meets the criteria for the multi-dose vial policy (MDVP) application. When the country introduced PCV10 in 2012-13, significant efforts were made to raise awareness on the fact that the 2-dose vial was in fact a multi-dose vial liquid vaccine but did not meet the criteria from MDVP, so it had to be handled differently than other liquid vaccines in the programme.

**TCV catch-up campaign / routine introduction**

Pakistan submitted a request for TCV vaccine introduction and campaign support that was recommended for approval by the IRC in July 2018. The target age group for the campaign is 9 months to 15 years with an estimated population of 35.9 million. For the routine introduction, a single TCV will be administered at 9 months of age with an estimated total target population of over 6 million surviving infants. The campaign and routine introduction will be implemented in 3 phases as follows:

- Sindh (2019); Punjab and Islamabad (2020); rest of the country (2021).

For each area, an initial catch-up campaign in urban areas will be followed by routine introduction of TCV in EPI at the age of nine months (together with MCV). The country's phased introduction over a period of 3 years is in consideration of the global supply constraints as the sole WHO PQ TCV manufacturer increases production capacity. The roll out of TCV is planned to start in November 2019 with a campaign in urban areas of Sindh followed by routine introduction within 3 months.

The catch-up campaign is planned to be implemented over the course of 12 days, with additional days for mop-up as necessary in 14 districts of Sindh province. The exact dates of the campaign have yet to be finalized due to ongoing planning and coordination with EOC but is anticipated to be implemented in the month of September. To-date planning is on-track per the provincial TCV readiness tracker. A provincial steering committee has been convened to oversee preparations, microplanning and district cascade

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13 Please refer to the JA analysis guidance document for additional information on the expected analyses for measles and rubella.
workshops have been completed and the microplan desk and field review are planned to be completed by mid-September.

The routine introduction of TCV into EPI is currently planned for the month of December 2019 and training of all health care workers will be conducted prior to vaccine introduction in districts that did not receive training as part of catch-up campaign preparations. Four sentinel surveillance sites are also being established in advance of TCV introduction to improve prospective monitoring of typhoid fever in the province in public health facility settings.

Challenges
In advance of the catch-up campaign in November and routine introduction in December of 2019 below are a series of key challenges that require close monitoring to ensure appropriate mitigation:

- HR availability and capacity to meet current catch-up campaign daily target (120/team/day)
- Strategies to reach school-age population. This includes conducting an assessment of school enrollment to inform plans to reach school age children not enrolled in school (e.g. stray children), development of messages for children in affluent schools who may have been vaccinated with polysaccharide vaccine previously, identification underserved and hardest to reach areas where children likely at highest risk for typhoid (e.g. urban slums) and collaboration with city authorities.
- Ensuring timely vaccine importation due to ongoing political challenges between Pakistan and India and banned importation of Indian products, including TCV. Available TCV product is not locally registered and requires waiver or exemption in advance of shipments.
- Community distrust in immunization due to ongoing polio-related challenges.
- Complex stakeholder coordination to ensure all available resources from EOC, CSOs, Education department, private health sector are available to support implementation of TCV catch-up campaign.

Next steps
The immediate next steps to support preparations for the upcoming TCV introduction activities include:

- Federal EPI to determine appropriate pathway to enable importation and shipment arrival of TCV by October 2019. UNICEF and Gavi Secretariat to support as required.
- Campaign implementation dates to be finalized following alignment with EOC and GPEI.
- Campaign microplans to be submitted by mid-September for review and validation. Healthcare worker trainings to commence in September.
- Development of robust social mobilization and crisis communication strategies to be developed with support from UNICEF to mitigate potential risks of adverse community vaccine sentiment.
- A technical mission which includes WHO, UNICEF and other technical partners will take place in October to support and assess TCV introduction readiness.

Surveillance
In spite of many efforts and significant improvement in the last 3 years, VPD surveillance in Pakistan still requires strong investment and support to expand to all health facilities including private sector and traditional healers.

Polio update - Synergy EPI/PEI
Pakistan has experienced major setbacks in its goal to eradicate poliomyelitis. To date in 2019, there have already been 58 confirmed WPV1 cases with widespread transmission affecting 5 of 6 provinces (compared 12 confirmed cases for the same period of time in 2018). The national polio Technical Advisory Group (TAG) met 29-30 August to assess the challenges and provide guidance and recommendations to the programme.

It is clear that strengthened routine immunization services are required to interrupt poliovirus transmission as well as maintain zero-poliovirus in Pakistan once this is achieved. Based on the growing collaboration between PEI and EPI that was demonstrated during the national measles SIA in 2018, the TAG underlined the necessity of further strengthening polio and EPI synergies with emphasis on the highest-risk Union Councils (UCs) that serve as poliovirus reservoirs and propagators of the virus.
To support these focal areas, national and provincial EOC will need to come together to support districts and UCs to improve the quality and completeness of microplans to ensure that appropriate delivery strategies for specific populations are planned, systematically implemented and monitored. In addition, comprehensive communication and advocacy efforts will need to be employed to understand the needs and grievances of communities to build trust where resentment of the polio programme negatively affects acceptance of the vaccine.

Work through new technologies brought in by partners such as Zenysis technologies can help identifying the zero dose children and link them with routine. This work is to start in 2019 and to be assessed during the next JA.

5.3. Performance of Gavi CCEOP support (if country is receiving Gavi CCEOP support)

If your country is receiving CCEOP support from Gavi, provide a brief update on the following:

- **Performance** on five mandatory CCEOP indicators and other related intermediate results – achievement against agreed targets as specified in the grant performance framework (GPF) with discussion on successes, challenges and solutions for reaching targets;
- **Implementation status** (number of equipment installed / waiting installation, user feedback on preventive maintenance training, refrigerator performance, etc.), including any challenges / lessons learned;
- **Contribution** of CCEOP to immunisation performance (i.e. how CCEOP is contributing to improving coverage and equity);
- **Changes in technical assistance** in implementing CCEOP support. 

Note: an updated CCE inventory must be submitted together with the CCEOP renewal request.

### CCEOP Target Achievement

All targets for CCEOP were met for all provinces and federating areas, as targets were revised downwards for 2018 upon order and receipt of shipments. Targets for 2019 and 2020 have been defined based on the revised Operational Deployment Plan.

The target for 2018 CCEOP deployment was 6,828 CCE of which 99.7% have been achieved. The outstanding 14 pieces of equipment could not be installed in security compromised Areas of KPTD. As soon as situation improved in those locations, the outstanding CCE for 2018 would be installed.

### CCEOP Performance

Gavi support for CCEOP has been successfully deployed for the first year. The plan for year 2 CCEOP deployment is ongoing, incorporating the learnings from Year 1 and system redesign. Provinces are focusing on equipping for facilities to serve the underserved communities and improved equity as a follow-up of the system design findings. The performance of the operation of the CCEOP in Pakistan have been very satisfactory with minor challenges that are been addressed as the process continue.

An evaluation of the CCEOP platform was conducted by JSI and published in May 2019 which highlighted the efforts in place for the coordination and deployment of equipment, the value of this investment in improving operational costs, stock storage, a decrease in stock wastage and overall improved efficiency, along with the recommendations that have been considered for year 2 of operations. Executive summary is available as annex 3.

5.4. Financial management performance

Provide a succinct review of the performance in terms of financial management of Gavi’s cash grants (for all cash grants, such as HSS, PBF funding, vaccine introduction grants, campaign operational cost grants, switch grants, transition grants, etc.). This should take the following aspects into account:

- **Financial absorption** and utilisation rates on all Gavi cash support listed separately\(^{14}\);
- **Compliance** with financial reporting and audit requirements noting each grant (listing the compliance with each cash support grant separately, as above);

\(^{14}\) If in your country Gavi funds are managed by partners (i.e. UNICEF and WHO), fund utilisation by these agencies should also be reviewed.
• Status of high-priority “show stopper” actions from the Grant Management Requirements (GMRs) and other issues (such as misuse of funds and reimbursement status) arising from review engagements (e.g. Gavi cash programme audits, annual external audits, internal audits, etc.);

• Financial management systems\(^{15}\).

Currently, cash support is channelled through partners via the MDTF and direct agreements with Unicef and WHO. A summary of the support, utilisation and compliance of reporting is provided in the table below.

Financial management specialists positioned at EPI offices in Islamabad and provinces through NISP can play a stronger role to advise EPI and minimize financial flow hinderances. EPI is to revise the TORs and ensure they role beyond NISP and support overall financial capacity development.

NISP fund flow delays were not limited to payments against DLIs, also there was a delay in signing Unicef MoU for TA component. The issue is from legal teams and due to a condition put forward by Gates Foundation on use of investment income.

Table: Cash grants to Pakistan, by implementing entity

<table>
<thead>
<tr>
<th>Grant Type</th>
<th>Implementing Agency</th>
<th>Amount disbursed</th>
<th>Latest known balance</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISS</td>
<td>UNICEF</td>
<td>5,182,240</td>
<td>2,565</td>
<td>As of 31/12/2018 Funds to be reimbursed</td>
</tr>
<tr>
<td>ISS</td>
<td>WHO</td>
<td>9,480,000</td>
<td>0</td>
<td>As of 24/07/2018 To be closed</td>
</tr>
<tr>
<td>Measles SIA 2013</td>
<td>WHO</td>
<td>20,699,680</td>
<td>2,031,775</td>
<td>As of 31/12/2018 Reimbursement of Coverage survey pending (-$1m). Grant to be reprog. and extended</td>
</tr>
<tr>
<td>Measles SIA 2013</td>
<td>UNICEF</td>
<td>964,819</td>
<td>34,402</td>
<td>As of 28/08/2019 Funds to be reimbursed</td>
</tr>
<tr>
<td>Measles SIA 2018</td>
<td>WHO</td>
<td>1,941,062</td>
<td>1,243,563</td>
<td>As of 31/12/2018 Grant active until June 2020</td>
</tr>
<tr>
<td>Measles SIA 2018</td>
<td>UNICEF</td>
<td>19,408,452</td>
<td>2,655,205</td>
<td>As of 29/07/2019 Reprogramming and extension ongoing.</td>
</tr>
<tr>
<td>Rotavirus VIG</td>
<td>UNICEF</td>
<td>1,372,441</td>
<td>2,113</td>
<td>As of 28/08/2019 Funds to be reimbursed</td>
</tr>
<tr>
<td>Rotavirus VIG</td>
<td>WHO</td>
<td>2,537,695</td>
<td>5,730</td>
<td>As of 01/04/2019 Grant extended until Dec 2019</td>
</tr>
<tr>
<td>IPV VIG</td>
<td>UNICEF</td>
<td>935,079</td>
<td>14,498</td>
<td>As of 28/08/2019 Funds to be reimbursed</td>
</tr>
<tr>
<td>PCV VIG</td>
<td>UNICEF</td>
<td>3,056,500</td>
<td>37,347</td>
<td>As of 28/08/2019 Funds to be reimbursed</td>
</tr>
</tbody>
</table>

\(^{15}\) In case any modifications have been made or are planned to the financial management arrangements please indicate them in this section.
The Status of vaccine audit recommendations and Grant Management Requirements implementation, as reported by the government is as follows:

**Audit recommendations**

- Outstanding, 0
- Completed, 8

**Grant Management Requirements**

- Outstanding, 6
- Completed, 16

Key outstanding recommendations to be implemented include:

- a) Revision of EPI strategy, action plan and PC-1s
- b) Limited capacity of Federal and Provincial EPI programs and district EPI teams and pending recruitment of human resources
- c) Implementation of Financial Management Improvement Plan (FMIP)
- d) Insurance on programme assets and vaccines

These were continuously presented to the Government Officials (Secretaries and Ministers) who reiterated their commitment to address them.
5.5. Transition plan monitoring (applicable if country is in accelerated transition phase)

If your country is transitioning out of Gavi support, specify whether the country has a transition plan in place. If no transition plan exists, please describe plans to develop one and other actions to prepare for transition.

- If a transition plan is in place, please provide a brief overview on the following:
  - Implementation progress of planned activities;
  - Implementation bottlenecks and corrective actions;
  - Adherence to deadlines: are activities on time or delayed and, if delayed, the revised expected timeline for completion;
  - Transition grant: specify and explain any significant changes proposed to activities funded by Gavi through the transition grant (e.g., dropping an activity, adding a new activity or changing the content/budget of an activity);
  - If any changes are requested, please submit a consolidated revised version of the transition plan.

Pakistan transition from Gavi support is estimated to happen in 2026, which will have a major impact on the country’s requirement for vaccine financing ($36m current commitment vs $126m estimated for 2026).

Key mitigation activities:

° Two major steps have improved the co-financing arrangement in the last year: (1) The operationalization of NISP has secured funding for immunisation in budgets until 2020 for vaccines and services. (2) The government procured pentavalent successfully in 2018/2019 via an open tender.

° Ongoing discussions related the transfer of vaccine costs to recurrent side of the budget are taking place and should happen by the end of the financial year.
5.6. Technical Assistance (TA) (progress on ongoing TCA plan)

- **Describe the strategic approach to Technical Assistance (TA) delivery to improving coverage and equity in reaching the under-immunised and unimmunised children. (i.e. embedded support, subnational support, support from expanded partners etc.)**
- **On the basis of the reporting against milestones, summarise the progress of partners in delivering technical assistance.**
- **Highlight progress and challenges in implementing the TCA plan.**
- **Specify any amendments/changes to the TA currently planned for the remainder of the year.**

### Progress and challenges in technical assistance provision in Pakistan, 2018-2019

Based on Technical Assistance (TA) needs identified during previous Joint Appraisal, in 2018 Pakistan was receiving support via Core and Expanded Partners in the following focus areas:

- Coverage and Equity (Urban immunisation)
- Vaccine specific needs
- Data
- Demand Promotion
- Supply chain design

**Table: PEF TCA Support to Pakistan, 2018 by Programmatic Area**

<table>
<thead>
<tr>
<th>Programmatic Area</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coverage and Equity</td>
<td>2.51</td>
<td>3.16</td>
<td>4.64</td>
<td>4.78</td>
</tr>
<tr>
<td>Vaccine specific needs</td>
<td>0.45</td>
<td>0.87</td>
<td>0.87</td>
<td>0.23</td>
</tr>
<tr>
<td>Data</td>
<td>0.87</td>
<td>0.90</td>
<td>0.90</td>
<td>1.09</td>
</tr>
<tr>
<td>Demand Promotion</td>
<td>1.09</td>
<td>1.31</td>
<td>1.05</td>
<td>1.34</td>
</tr>
<tr>
<td>Supply chain design</td>
<td>1.09</td>
<td>1.31</td>
<td>1.05</td>
<td>1.34</td>
</tr>
</tbody>
</table>

Overall, there was a positive response on the provision of TA in priority areas, although the coordination and information sharing between partners and government remained a challenge.

**General reporting compliance overview.** June 2019

All the partners have reported on their activities during November 2018 and June 2019 rounds of reporting. In general, most of the planned activities were completed on time or on track of implementation. A summary is available in the following table.
The following section outlines key activities of expanded and core partners, including any key details on progress of activities.

**Acasus**

*Main scope of work:* Strengthening of EPI capacities in Baluchistan and Sindh

*Geographic focus area:* Balochistan, Sindh

In total, Acasus is engaged with four provinces of Pakistan: KP, Punjab, Baluchistan and Sindh. A part of the scope of engagement via BMGF with KP and Punjab is immunisation coverage, with the majority being in primary care and MNCH. As part of coverage and equity agenda, Acasus is engaged in strengthening EPI capacity of Baluchistan and Sindh provinces, under their contract with Gavi.

**Progress update / Achievements:**

**Baluchistan**

1) Improving access and reach
2) Increasing staff effectiveness
3) Increasing political accountability

The team mapped the fixed EPI sites and population pockets in Balochistan to identify areas with low accessibility. EPI programme is identifying existing health facilities in the identified areas to increase accessibility for EPI services. The immediate plan is to ensure that 41 non-functional EPI sites are operationalized by end of September with the support of PPHI and the remaining communities are covered through outreach activity.

The EPI programme has implemented two interventions to increase the staff effectiveness: EVACCs and supervisory application. EVACCs is currently implemented in 17 districts with a compliance of 41%. The low compliance is due to the blockage of phones from Pakistan Telecom Authority (PTA). EPI program is in the process of registering the phones for activation by mid-September 2019. The supervisory application was implemented in the first week of August and 90% of District Health Coordinators and M&E officers are using it to record data from the visits to fixed EPI and outreach sites.
Acasus has engaged the Chief Secretary’s office on EPI. Chief Secretary has nominated a focal person to follow-up on the performance of EPI programme. The focal person has started reviewing the EVACCs attendance on the monthly basis to track the performance of vaccinators.

Next steps:

Acasus will support EPI programme in the plan to increase accessibility of EPI services through identification of potential EPI sites and mobilizing resources from the government and partners to operationalize the new EPI sites. The team will also work closely with the programme to improve the compliance on EVACCs and utilization of data collected through the supervisory application for improving EPI sites and outreach activities.

Sindh

Acasus has engaged with EPI programme in Sindh on improving immunization in Karachi. The team has worked on three priority areas:

1) Increasing geographical coverage of EPI services
2) Improving supervision of EPI sites
3) Engaging political leadership on EPI

Acasus worked with IRD to map the provision of EPI services using the Zindagi Mehfooz data. Acasus developed town-wise polygons on population, which were populated using ZM data, to identify the communities not visited by the vaccinators. The team shared the polygons with DHOs to ensure that the missed communities are visited on priority in the next month’s outreach plan. As a result, 86% of communities were visited in August as compared to 76% in July.

Acasus has implemented the supervisory application to monitor and improve the supervision of fixed and outreach sites. The application is used by the DSVs and TSVs during their visits to the fixed and outreach sites. The data from the supervisory application is being used to identify and fill the gaps in functionality of fixed EPI sites.

Acasus has set up a monthly routine with the Health Minister to review the progress of the EPI program. The reviews are driven by the data collected through ZM and supervisory application.

Next steps:

Acasus will continue the support on improving immunization in Karachi through the implementation of Karachi Roadmap and conduct the bottleneck analysis for the remaining districts of Sindh.

Interactive Research and Development (IRD)

Main scope of work:

Zindagi Mehfooz Digital Immunization Registry (ZM DIR) is an integrated android platform which captures child immunization data and generates real-time reports to improve immunization coverage and empower its users to make data-driven decisions.

ZM DIR includes features such as individual-level data to track each child in the community, web-based dashboard, unique QR code-based identification mechanism, interactive (2-way) SMS reminders, a decision support system to guide vaccinators for routine and catch-up immunizations, real-time workforce evaluation, SMS based immunization history and completion certificates, predictive analytics to identify children at high risk of drop-out and customized report generation for monitoring, etc.

Moreover, ZM-DIR also incorporates features such as campaign mode (to record data specific to new vaccine campaigns), vaccine administration site (outreach vs fixed) and a child registry feature (for all Zero-dose and missed children). The targets under the current funding phase are to achieve immunization of 1.6m children and 0.5m women through ZM DIR. Presently, ZM DIR is being used by vaccinators throughout Sindh province, as well as vaccinators in a mobile immunization van serving hard to reach areas, and is expected to be expanded for use by CHWs (for child registry) and over 500 Kiran Sitaras (adolescent youth mobilizers). Moreover, a GSM tracking feature has also been developed and deployed which is thus far tracking 1,780
Joint Appraisal (full JA)

Vaccinators, and EPI staff in 21 districts has been trained on using the system to ensure vaccinator attendance and compliance.

Lastly, a text-based immunization chatbot, leveraging Artificial Intelligence (AI) and Natural Language Processing (NLP) technologies, is also in the process of being integrated with ZM DIR to cater to caregivers questions about immunization, thereby providing a quick and frictionless channel for over 10 million caregivers.

**Geographic focus area:**
ZM DIR has been successfully deployed in 27 out of the 29 Districts in Sindh province, with expansion underway in the two remaining districts, Khairpur and Dadu. ZM DIR also launched in Gilgit District, Gilgit Baltistan in July 2019.

**Progress update / achievements:**
The Registry has successfully enrolled >1.6 million children, >0.6 million women, and have provided >12m immunizations since October 2017. Moreover, 2,423 vaccinators and 1,383 EPI centers have been registered successfully on the platform enabling efficient collection of immunization data. The ZM-DIR has also been used to successfully generate bi-weekly reports on vaccinator attendance and compliance for EPI review meetings. ZM DIR has enrolled 542 and 130,456 zero dose children via mobile immunization van and accelerated outreach activities respectively. Moreover, the application has also been used to capture relevant GPS coordinates of points of vaccine administration, send mass messages for outreach campaigns and record and analyze vaccination data for provincial/national campaigns.

**Key challenges:**
- New vaccinators for interior Sindh province have not yet been provided with offer letters. This has resulted in delays in training these new vaccinators on ZM DIR. The training of around 2,000 vaccinators will take at least 3 months.
- The existing phones to vaccinators were provided in Oct 2017. After almost 2 years of extensive use in the field, they have started showing battery and functional issues and therefore require replacements.

**Expected results by end of current contract:**
By the end of the contract period, ZM DIR would have been rolled out all throughout the Sindh province and in all fixed centers in Gilgit. The mobile immunization van would have also covered 19 high-risk UCs in the province and would have also initiated activity in Balochistan. Moreover, initial series of gamified videos for vaccinator training would have been developed and deployed on the ZM application providing an important training platform to all users on vaccine scheduling and cases of missed vaccinations.

**Next steps**
- Discontinuation of paper-based registry: The coverage data reporting will be gradually routed through ZM, replacing paper-based entries and the current vLMIS system for coverage statistics
- Child registry: The registry feature will be deployed for registering births and zero dose children in communities by other frontline health worker cadres.
- Kiran Sitara: School girls will be engaged to support immunization camps and activities for registering and covering zero dose and defaulter children.
- GSM tracking: GSM based GIS module will be explored for integration into the ZM dashboard for real-time vaccinator tracking.
- Immunization Vans: The immunization van will cover additional high-risk UCs for zero dose and defaulter children.
- ZM expansion: ZM DIR will be expanded to the remaining 2 districts of Sindh and expansion to other provinces will be explored with Federal and Provincial EPI offices.

**Civil Society Human and Institutional Development Programme (CHIP)**

**Main scope of work:** Strengthen engagement between Federal/Provincial EPI Cells and CSOs for demand promotion for further improving coverage of missed children and promoting equity in immunization, as well as development of the Standard Operating Procedures (SOPs) and M&E framework for CSOs engagement.

**Geographic focus area:** Provincial and Federal
**Expected result:** Mapping of CSOs across the country and facilitation of their further engagement with the Federal and provincial governments.

In view of recent Measles SIA campaign, the objective was to engage CSOs to facilitate messaging around the campaign. CHIP has used it as a platform for better engagement with CSOs in four provinces of Pakistan. As of now 88 CSOs were identified. Work on identifying their areas of engagement is ongoing. Even though, SOPs are still under development and complexity of CSOs work and areas of engagement are posing issues for M&E framework development, CHIP has noted that some CSOs were directly contracted by the provincial EPIs as a result of recent campaign.

**Main scope of work:** (a) strengthening engagement between federal/provincial EPI & CSOs (b) facilitate strengthening of system for contracting CSOs (c) strengthen capacity of CSOs in key EPI concepts, polices, strategies and demand generation (d) develop consensus for scope of work and performance tracking systems for CSOs.

**Geographic focus area:** Provincial and Federal

**Progress update:**
- Facilitated participation of CSOs in Federal and Provincial EPI reviews, cMYP workshop and NICC meetings.
- Developed Standard Operating Procedures (SoPs), sample contract and Monitoring and Evaluation (M&E) framework.
- Compiled a handbook of key EPI concepts, policies and strategies and oriented 55 CSOs in it. Trained 56 CSOs on demand generation for childhood immunization. Developed an advocacy toolkit on demand generation and advocacy for routine immunization and oriented 56 CSOs on it.
- Undertook landscape analysis of CSOs working on health and immunization. Compiled best practices and challenges of contracting of CSOs by the Government. Developed scope of work and monitoring and evaluation system for CSOs engagement.

**Challenges:**
- Although federal and provincial EPI have taken steps towards procurement of CSOs, we expect delays due to government procedures.
- Although government has consented to engage CSOs there are still some ambiguities in comprehending real rationale and value of CSOs engagement in some government colleagues.
- Power dynamics and trust between CSOs and government still needs balancing.

**Next steps**
1. To facilitate contracting of CSOs for low immunization coverage union councils and zero dose communities;
2. To ensure PCCHI Secretariat remains functional as a national level platform for CSOs and offer services for quality assurance and performance tracking of CSOs contribution for childhood immunization
3. To facilitate federal and provincial EPI in developing national level strategy for demand generation of childhood immunization

**John Snow Research and Training Institute, Inc. (JSI)**

**Scope of work:** Development of roadmap to improve routine immunisation specifically in Karachi and the transitioning of key support from the USAID MCHIP programme in interior Sindh.

**Geographic focus area:** Sindh

JSI was contracted to provide key support to Sindh’s EPI programme, previously supported by Sindh and to develop a roadmap for immunisation in Karachi.
Jhpiego.

**Scope of work:** To support Human Papilloma Virus (HPV) vaccine needs assessment and feasibility study at the country level in Pakistan.

**Geographic focus area:** Federal

While most of the preparatory work was conducted (draft of engagement plan and preparation of assessment tool), implementation of other activities with external stakeholders were put on hold awaiting the No Objection Certificate from the Federal Ministry of Interior Affairs. Gavi has provided a non-cost extension until end of 2020 to ensure implementation of all activities.

**UNICEF**

**Total approved:** US$ 1,337,568

<table>
<thead>
<tr>
<th>Positions funded via PEF TCA: 11</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TCA - Funded Position Title</strong></td>
</tr>
<tr>
<td>P4 Immunization specialist at CO level</td>
</tr>
<tr>
<td>NOB at provincial / FO level - Punjab</td>
</tr>
<tr>
<td>NOB at provincial / FO level - Balochistan</td>
</tr>
<tr>
<td>NOB at provincial / FO level - Sindh</td>
</tr>
<tr>
<td>NOB at provincial / FO level - KPK</td>
</tr>
<tr>
<td>P3 Immunization supply chain management CO</td>
</tr>
<tr>
<td>NOC, C4D Specialist</td>
</tr>
<tr>
<td>NOC, Health Specialist HSS</td>
</tr>
<tr>
<td>NOC Monitoring and Reporting Officer</td>
</tr>
<tr>
<td>P4 - Health Specialist (integration)</td>
</tr>
<tr>
<td>P3 - Health Specialist (Immunisation)</td>
</tr>
</tbody>
</table>
Implementation of support under Technical Assistance for Pakistan is done via UNICEF staff, financed through PEF TCA. None of the activities receives direct funding.

Areas of work under PEF TCA include:

- Urban Immunisation
- Cold chain
- Demand promotion

Main constraints to implementation of activities. Sixteen HSS TCA milestones in 2018 were unfunded due to delayed budget from World Bank. UNICEF used own resources to fund several of these activities and this will require reversals of funding source once WB funds are received.

Focus areas:

Coverage and Equity

Urban Health

- UNICEF provided technical support for integrated urban health/immunization initiative in targeted nine mega cities of Pakistan through a local CSO CHIP. First round of data collection for profiling of 8 mega cities completed and identified 4,287 slums and 667 underserved and high-risk areas. A total of 469 health facilities have been assessed and a household survey to know childhood immunization coverage rates implemented in the profiled areas. The data validation is under process and numbers may change. GIS maps developed for Karachi and Hyderabad while these would be developed for 07 cities. Results of the profiling of slums in 09 mega cities would be disseminated in March 2019. City specific roadmaps for all 9 cities would be developed.

- A prototype on immunization in slums of one union council in Lahore is being developed and implemented through a local CSO CHIP. It has begun the social mobilization and demand promotion. As a result, 261 children have been immunised in which 114 were zero dose.

- TA urban immunization plan for the additional Gavi urban funding has been developed.

- Outreach sessions initiated in UCs where previously they were absent for 1-2 years. Previous irregular outreach implementation became more organized and periodic. 34 integrated outreach sessions implemented in Quetta: 629 (133 were zero dose) children and 109 pregnant women were vaccinated; 650 children screened and 35 and 68 were diagnosed as SAM and MAM respectively and managed. 13 pregnant women received ANC.

- Intensified third party field monitoring has been established in Karachi and interior Sindh (188 & 272 targeted union councils) to identify gaps in immunization service delivery and ensure evidence-based corrective measures.

- Microplan of 2,342 out of 2,551 union councils computerized, 1259 (49%) validated in 56 RED/REC districts. Approach will be evaluated in 2019. As of September 2018, 78% of UCs (September 2018) have RI micro plans compared to 38% in March of this year.

- Missing areas identified (included in polio but not RI plans)

- Ghost vaccinators were tracked (in coordination with DPCR) and made to report for duty (Qamber District)

- Initiation of defaulter lists

- Immunization quality improved

- 15,774 health workers of different cadres were trained on the RED/REC strategy in these districts

- EPI-PEI synergy SoPs were finalized and endorsed by FEPI and NEOC

- Data on zero dose children is collected through, NIDs, CBVs (polio tier 1 districts), AFP surveillance and shared with EPI. Collaboration between EPI and PEI helped retrieve 36% of the reported zero dose children (676,311 out of 1,882,197) – Highest in Punjab (95%), and lowest in Balochistan (6%).

Cold Chain

- Implementation of the recommendations from the temperature monitoring study.

- System design study concluded and report shared and waiting for final costing for implementation

- A total of 6,075 cold chain system were procured through CCEOP in 2018 and 5,832 cold chain equipment has been installed to fill the nationwide gaps identified through the System Design Study findings.
- In addition, 3,200 continuous temperature monitoring devices (TMDs) were procured for existing cold chain equipment giving a total of 75% of the equipment in Pakistan having TMDs.

**Demand Promotion - ACSM**
- Rollout of one national and four provincial immunization strategies
- 7 Advocacy, Communication and Social Mobilization committees and 35 district communication committees setup in Baluchistan;
- The social mobilization toolkit for immunization containing short animated videos and public messages (English and Urdu) disseminated across all provinces/areas during the WIW and Measles SIA.
- The official website and social media pages (Facebook, Twitter and YouTube) of Federal EPI were developed and the toolkit/key messages/additional material were disseminated through these channels.

**Operational Research:** 10 implementation research projects were completed, and the teams were supported to document the process through reports.

**WHO**

<table>
<thead>
<tr>
<th>TCA - Funded Position Title</th>
<th>%</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Professional Officer (EPI)</td>
<td>100%</td>
<td>National</td>
</tr>
<tr>
<td>P4 EPI Officer HSS</td>
<td>100%</td>
<td>National</td>
</tr>
<tr>
<td>Technical Officer EPI (Monitoring &amp; Evaluation)</td>
<td>100%</td>
<td>Sub-National Baluchistan</td>
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<tr>
<td>Technical Officer (EPI - Data &amp; Surveillance)</td>
<td>100%</td>
<td>Sub-National Baluchistan</td>
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<tr>
<td>Technical Officer (EPI - Data &amp; Surv)</td>
<td>100%</td>
<td>Sub-National KP</td>
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<tr>
<td>Technical Officer (EPI - Data &amp; Surv)</td>
<td>100%</td>
<td>Sub-National Sindh</td>
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<tr>
<td>Technical Officer EPI</td>
<td>100%</td>
<td>Islamabad</td>
</tr>
<tr>
<td>Technical Officer (EPI)</td>
<td>100%</td>
<td>Sub-National GB</td>
</tr>
<tr>
<td>Technical Officer (EPI)</td>
<td>100%</td>
<td>Sub-National KP</td>
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<tr>
<td>Virologist</td>
<td>100%</td>
<td>National</td>
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<tr>
<td>Laboratory Scientist</td>
<td>100%</td>
<td>National</td>
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<tr>
<td>Laboratory Technician</td>
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<td>National</td>
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<tr>
<td>Technical Officer (EPI)</td>
<td>100%</td>
<td>AJK</td>
</tr>
<tr>
<td>NOC - M&amp;E Officer</td>
<td>100%</td>
<td>National</td>
</tr>
<tr>
<td>P4 surveillance Technical officer</td>
<td>100%</td>
<td>National</td>
</tr>
</tbody>
</table>

Implementation of support under Technical Assistance for Pakistan is done via WHO staff, financed through PEF TCA. None of the activities receives direct funding.

**Areas of work under PEF TCA include:**
- Vaccine-specific support
- Data
- Supply chain
- LMC
- Coverage & Equity

**Vaccine specific support**
- Technical, financial and logistics support for continuation of IBD and Rotavirus disease surveillance provided and additional personnel trained as part of capacity building for VPD and AEFI surveillance following introduction of rotavirus vaccine
Joint Appraisal (full JA)

- CRS surveillance on four sentinel sites established

Coverage and Equity
- Family practice approach has been launched in 12 selected districts. Technical support is being provided for expansion to all health facilities provided as part of integrated (immunization, MNCH, ATM, NCD and nutrition, and emergency preparedness) service delivery in Family Practice model districts establishment

Data
- DQ IP development on progress in the areas where DQA done.
- Major delays in development of slide deck containing summary findings of the coverage evaluation survey for each province and area due to delays in realization of the survey

LMC
- Comprehensive EPI review was done in Sindh, KP and AJK.
- Development of an annual operational plan of actions at the provincial level based on cMYP and PC-1 as well as EVM IP and DQ IP done in all areas.
- Review and possible revision of EPI policy and related SOPs is ongoing.
- Capacity building in micro-plan development was completed in all areas, except FATA
- Development of a policy for engagement of private sector in immunization service delivery and setting strategies for implementation is delayed due to non-availability of funds.

Note: Remaining funds from other cash support were reprogrammed for implementation of some of the activities.

PEF TCA Request for 2020: Summary for Pakistan
Requested PEF support for 2020 consists of:

<table>
<thead>
<tr>
<th>WHO: 16 positions 2020-2021</th>
<th>UNICEF: 10 positions 2020-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>P4 surveillance Technical officer Islamabad</td>
<td>P4 Immunization specialist Islamabad</td>
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<tr>
<td>P4 EPI Officer - HSS Islamabad</td>
<td>P3 Health Specialist (Immunization) Sub-National Balochistan</td>
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<tr>
<td>Laboratory Technician* Islamabad</td>
<td>Laboratory Technician* Islamabad</td>
</tr>
</tbody>
</table>

* Funding for 6 months until transfer to Government is finalized

Expanded partners | Key area/location
Ácasus | Leadership, Management (All Provinces, Federal)
CHIP | CSO engagement (All Provinces, Federal)
Jhpiego | HPV Landscape (Federal)
JSI | Sindh urban (Sindh)
IRD | Sindh Electronic Immunisation registry (Sindh)
Zenysis | Data integration and analytics (Federal)
6. UPDATE OF FINDINGS FROM PREVIOUS JOINT APPRAISAL

Provide the status of the prioritised strategic actions identified in the previous Joint Appraisal\textsuperscript{16} and any additional significant Independent Review Committee (IRC) or High Level Review Panel (HLRP) recommendations (if applicable).

2017 & 2018 JA recommendations

Key outstanding recommendations to be implemented include:

- Continued challenges in the operationalization of PC-1 include fund flow for program delivery and technical assistance
- Limited capacity of Federal and Provincial EPI programs and district EPI teams and pending recruitment of human resources
- Continued delays in the reporting of the results framework

Additional Recommendations for 2019 / 2020 (in addition to actions taken from the above).

<table>
<thead>
<tr>
<th>Opportunities to build on</th>
<th>Recommendation</th>
</tr>
</thead>
</table>
| Improve accountability of managers and frontline staff to resolve bottlenecks with service delivery | 1. Improve data analytics capabilities to fully leverage existing data systems  
2. Initiate data driven routines to hold managers and frontline staff accountable |
| Promote synergies with existing programmes | 1. Use all existing health infrastructure for RI  
2. Integrate service delivery with support from different vertical programmes |

<table>
<thead>
<tr>
<th>Fixing the basics</th>
<th>Recommendation</th>
</tr>
</thead>
</table>
| Improve management, flow and utilisation of funds | 1. Resource EPI and/or provincial health departments with quality FMS human resources. (voice over: financial management capacities are negatively impacting overall programme implementation and delaying NISP)  
2. Implement Programme Capacity Assessment recommendations for the government to be able to become direct recipient of Gavi funds |

\textsuperscript{16} Refer to the section “Prioritised Country Needs” in last year’s Joint Appraisal report
**Fill gaps in human resources at federal and provincial level**

1. Fill existing managerial and technical posts, that are budgeted within PC-1s (voice over: missing posts in Sindh)
2. Reduce reliance on partners’ TA (health education, M&E, vaccine management)
3. Improve programme management and coordination among all partners led by the government

**Improve reach and quality of immunization services**

1. Expand coverage of fixed sites, improve microplanning and enhance quality of outreach services
2. Focus on non and under-immunized communities (voice over: role of CSOs and map of Panjgoor)
3. Improve quality of services (AEFI, drop-out)
4. Use existing tools (and data) for programme management and accountability (ADD maps of Laki Marwat)
5. Ensure any interventions supported by partners are sustainable, and can be transitioned to government
6. Learnings from enhanced outreach [ADD ZM coverage on zero dose]

**Enhance community ownership and increase demand for EPI services**

1. Establish an innovative idea lab on demand, with health communication and education unit, and fully engage with the communities in SHRU Cs to generate insight on their needs and constraints

**Prepare for increased commitment for towards vaccine co-financing**

1. Ensure adequate allocations in the current PC-1s for vaccine procurement
2. Transfer vaccine costs to recurrent side of the budget by the end of the financial year (voice over: Note the increase in total vaccine costs as Pakistan transitions from Gavi. And considering the impact of currency devaluation and population increase)
3. Ensure procurement of vaccines takes place earlier in the year to avoid stockouts

**Introduce Measles (MCV-II) and Rubella Vaccine**

1. Update FIC definition to include MCV-2 (for children 15 months and above) and decrease the drop-out between MCV-1 and MCV-2 (voice over: For an introduction in Q4 2020, an application should be sent to Gavi now)

**Key Risks to Manage**

<table>
<thead>
<tr>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Untimely and inadequate financing for EPI from development budget</td>
</tr>
<tr>
<td>Move the vaccine and operational cost to recurrent side in all provinces (voice over: Ensure coordination and planning at all levels)</td>
</tr>
<tr>
<td>Inadequate allocations for vaccines with growing co-financing share</td>
</tr>
<tr>
<td>Plan and allocate adequate funds for future vaccine requirement</td>
</tr>
<tr>
<td>Not achieving Polio and EI goals without effective coordination</td>
</tr>
<tr>
<td>Implement the framework of coordination for EPI and PEI monitored through stocktakes and focused on super high-risk UCs</td>
</tr>
<tr>
<td>Expanding XDR typhoid outbreak</td>
</tr>
<tr>
<td>1. Finalize the campaign dates and planning for Sindh</td>
</tr>
<tr>
<td>2. Begin preparation for campaign in Punjab</td>
</tr>
<tr>
<td>Politicization of immunization programme (India vaccine messaging in polio)</td>
</tr>
<tr>
<td>Coordinate with PEI programme on the messaging related to Indian vaccines</td>
</tr>
</tbody>
</table>
7. ACTION PLAN: SUMMARY OF FINDINGS, ACTIONS AND RESOURCE/SUPPORT NEEDS IDENTIFIED AND AGREED DURING THE JOINT APPRAISAL

Briefly summarise the key activities to be implemented next year with Gavi grant support, including if relevant any introductions for vaccine applications already approved; preparation of new applications, preparation of investment cases for additional vaccines, and/or plans related to HSS / CCEOP grants, etc.

In the context of these planned activities and based on the analyses provided in the above sections, describe the five highest priority findings and actions to be undertaken to enhance the impact of Gavi support or to mitigate potential future risks to programme and grant performance.

Please indicate if any modifications to Gavi support are being requested (indicating the rationale and main changes), such as:

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

Overview of key activities planned for the next year and requested modifications to Gavi support:

<table>
<thead>
<tr>
<th>Overview of key activities planned for the next year:</th>
</tr>
</thead>
<tbody>
<tr>
<td>* launch of TCV support and introduction of TCV into Routine Immunisation</td>
</tr>
<tr>
<td>* Implementation of Urban Health Strategies across nine cities in Pakistan, with a more integrated PHC approach, with a special attention to Karachi</td>
</tr>
<tr>
<td>* Strengthen RI in polio high-risk districts which are generally deprived from health and immunisation services</td>
</tr>
<tr>
<td>* Implementation of additional HSS funds ($25m)</td>
</tr>
<tr>
<td>* Finalization of workplan and budget for Performance Based Award ($13m) and implementation</td>
</tr>
<tr>
<td>* Development of the Full Portfolio Planning leading to additional HSS grant ($100m)</td>
</tr>
<tr>
<td>* Development of MR introduction to routine and catch up campaign application and submission to Gavi</td>
</tr>
</tbody>
</table>

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

- Does the national Coordination Forum (ICC, HSCC or equivalent) meet the Gavi requirements (please refer to http://www.gavi.org/support/coordination/ for the requirements)?
- Briefly describe how the Joint Appraisal was reviewed, discussed and endorsed by the relevant national Coordination Forum (ICC, HSCC or equivalent), including key discussion points, attendees, key recommendations and decisions, and whether the quorum was met. Alternatively, share the meeting minutes outlining these points.
- If applicable, provide any additional comments from the Ministry of Health, Gavi Alliance partners, or other stakeholders.
9. **ANNEX: Compliance with Gavi reporting requirements**

*Please confirm the status of reporting to Gavi, indicating whether the following reports have been uploaded onto the Country Portal. It is important to note that in the case that key reporting requirements (marked with *) are not complied with, Gavi support will not be reviewed for renewal.*

<table>
<thead>
<tr>
<th>Report</th>
<th>Yes</th>
<th>No</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>End of year stock level report (due 31 March) *</td>
<td></td>
<td>X</td>
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<tr>
<td>Grant Performance Framework (GPF) * reporting against all due indicators</td>
<td></td>
<td>X</td>
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<tr>
<td>Financial Reports *</td>
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<tr>
<td>Periodic financial reports</td>
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<td>X</td>
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<tr>
<td>Annual financial statement</td>
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<td>X</td>
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<tr>
<td>Annual financial audit report</td>
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<td>X</td>
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<tr>
<td>Campaign reports *</td>
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<tr>
<td>Supplementary Immunisation Activity technical report</td>
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<td>X</td>
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<tr>
<td>Campaign coverage survey report</td>
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<td>X</td>
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<tr>
<td>Immunisation financing and expenditure information</td>
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<tr>
<td>Data quality and survey reporting</td>
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<tr>
<td>Annual data quality desk review</td>
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<td>X</td>
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<tr>
<td>Data improvement plan (DIP)</td>
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<td>X</td>
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<tr>
<td>Progress report on data improvement plan implementation</td>
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<tr>
<td>In-depth data assessment (conducted in the last five years)</td>
<td></td>
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<tr>
<td>Nationally representative coverage survey (conducted in the last five years)</td>
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<tr>
<td>Annual progress update on the Effective Vaccine Management (EVM) improvement plan</td>
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<td>X</td>
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<tr>
<td>CCEOP: updated CCE inventory</td>
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<td>X</td>
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<tr>
<td>Post Introduction Evaluation (PIE) (specify vaccines):</td>
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<td>X</td>
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<tr>
<td>Measles &amp; rubella situation analysis and 5 year plan</td>
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<td>X</td>
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<tr>
<td>Operational plan for the immunisation programme</td>
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<tr>
<td>HSS end of grant evaluation report</td>
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<tr>
<td>HPV demonstration programme evaluations</td>
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<tr>
<td>Coverage Survey</td>
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<td>Costing analysis</td>
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<td>Adolescent Health Assessment report</td>
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<tr>
<td>Reporting by partners on TCA</td>
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<td>X</td>
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</tbody>
</table>

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

Annex 1: Aide Mémoire NISP - Joint Supervision, Appraisal and Evaluation Mission (August 26 to September 04, 2019)

Annex 2: NISP Steering Committee Presentation – Progress and challenges

Annex 3: Pakistan CCEOP evaluation – Executive summary

Annex 4: Pakistan data analysis for Joint Appraisal

Annex 5: Detailed provincial updates (Balochistan, KP, Sindh and Punjab)