Feedback from TAG meeting
Pakistan
June 2020
INTRODUCTION

• Context:
  • **COVID19 Pandemic**
    • Global public health emergency
    • Pan Government, pan-sector response
    • Lessons can be applied for polio eradication
    • Pause in vaccination campaigns
  • Co-circulation of WPV1 and cVDPV2
  • Longstanding communication challenges
  • Transformation of Pakistan Polio program

• Process of TAG
  • Program sought guidance of TAG on different aspects with defined questions
  • Working groups formed within the TAG to address questions
  • Pre-TAG meetings with experts and stakeholders on different topics
  • Interaction with country teams on TAG VC to further understand local context
National Commitment

• Pakistan has demonstrated unprecedented levels of political commitment and capacity in response to the COVID-19 national crisis

• The devastating impact of the pandemic is unfolding. Successful resumption of polio vaccination activities at this time and ultimately achieving polio eradication will also require unprecedented levels of national resolve, commitment and effort

• The highly effective support and coordination mechanisms put in place for the SARS-COV2 pandemic response, at all levels and across sectors, and the important lessons learned, should be fully utilized and sustained to finally eradicate polio from Pakistan
National Commitment, COVID-19 & PEI: a significant opportunity

• International evidence and local experience indicate that COVID-19 will impact hardest on the poorest, marginalized communities, in social and economic terms as well as health

• These communities are the core areas in which PEI needs to achieve breakthrough to build trust and improve SIA acceptance

• There is an opportunity – now – to reframe the polio programme as a key component of the broader health and economic COVID recovery process, merging the benefits each aims to bring to communities

• The high-level political leadership and commitment characterizing Pakistan’s response to COVID is the only way to capitalize on this opportunity to achieve PEI’s core objectives
OVERVIEW of Questions to TAG

• SIA resumption and plan for 2\textsuperscript{nd} half of 2020

• Transformation

• Surveillance

• Integrated service delivery and essential immunization
1. **Eliminate cVDPV2 in 2020** through multiple large scale campaigns without exacerbating COVID-19

2. **Maintain control of WPV1** through targeted campaigns and outbreak response

3. **Complete the transformation of polio eradication program** to make it “fit for purpose” to successfully eliminate WPV1
SIA resumption and SIA plan for 2nd half of 2020
Findings: cVDPV2 epidemiology and risks

- Geographic expansion of cVDPV2 with 3 instances of breakthrough transmission in outbreak areas
- Large nationwide accumulation of populations susceptible to type 2 polio

- Modeling projections:
  - High risk for a very large nationwide outbreak (>1000 cases) if no type 2 SIAs in 2020
  - Outbreak response strategy probably not sufficient to eliminate cVDPV2 transmission at this point
  - Multiple (2-3) large scale SIAs that start no later than end of August and continue until the end of 2020 can significantly reduce the risk of a large outbreak
Forward projections based on proposed response

- Proposed response including R0, R1 and R2 (Jul-Aug 2020) plus 2 NIDs (Sep-Oct 2020) results in a substantial reduction in transmission.
- Declines in SIA coverage result in only modest increase in transmission compared to typical coverage (estimated based on non-polio AFP data).
- Only 1 response in July at reduced coverage, results in similar transmission compared to no response.

*including Afghanistan in NIDs

Simulated proportion (%) of districts with >100 cVDPV2 infections

Simulated cVDPV2 transmission (proposed response)*

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*including Afghanistan in NIDs

TAG proposed response:
R0 (plus select KP districts, incl those not covered March 2020): 13 July 2020
R1: 27 July 2020
R2: 17 August 2020
NIDs: 14 Sep and 26 Oct 2020
Findings: WPV epidemiology and risks

WPV1

• Ongoing widespread WPV1 transmission
  • South KP becoming new WPV1 reservoir
  • Multiple areas of uninterrupted transmission (Karachi, Quetta block)
  • Expansion of WPV1 to previously polio free areas (Sindh, Punjab)
  • Detection of WPV1 across the country

• Modeling projections:
  • Hundreds of cases (>500) by end 2020 if type-1 SIAs not conducted
  • Maintaining control (limited increases in cases and geographic spread) through end 2020 possible with multiple type-1 SIAs
Forward simulation considering SNIDs and NIDs

- Without any vaccination, transmission begins to spread geographically from Sept 2020 with most transmission focused in Northern, Central and Southern Corridors and Karachi.

- Alternating SNIDs and NIDs between July 2020 to Feb 2021 had a substantial impact on WPV1 transmission and case burden.

- Given most WPV1 transmission occurs in highest risk areas (i.e. Tiers 1-2 in Pakistan and Tier 1 in Afghanistan), smaller scope SNIDs when combined with NIDs provides optimal approach.

*Since 1 July 2020

*incorporating adjustment for IPV in RI
Risk of explosive CVDPV2 outbreak is very high, if no vaccination is conducted

Multiple SIAs with type 1 and type 2 polio vaccine in the 2\textsuperscript{nd} half of 2020 can significantly reduce the risk of a large polio outbreak (500+ cases)
Findings: COVID-19

- Models have shown that COVID-19 is projected to rapidly expand through at least July-August
  - Difficult to predict the timing of peak as it varies with the different models
- Significant impacts on the entire country and across every sector of society – national economy, household income, livelihoods, food security, education, and health
- Essential health services (provision and uptake) have dramatically declined – including immunization
- Polio eradication activities have also been affected – cancellation of SIAs, reduction in AFP case detection
Findings: Potential impact of SIAs on COVID-19 transmission

- Model shows that SIAs likely to result in temporary, small increases in COVID-19 (<2%)

- Risk mitigation:
  - Avoid SIA modalities that may introduce COVID-19 to communities not previously infected
  - Screen polio workers for symptoms to reduce risk to households
  - Health worker PPE (mask), sanitizer & limiting physical contact as much as possible, particularly with adults, reduces risk to households
  - Children are low risk for COVID-19 infection, disease, transmission
  - Risk to polio workers can be significantly reduced by:
    - Being from the same community
    - Avoiding contact with symptomatic individuals (esp. adults)
    - Reducing unnecessary contacts
    - Reducing risk of infection (PPE (mask) and hand sanitizer, physical distancing)

Impact of a door-to-door urban campaign*

Assumptions: 80% of a HCW’s contacts are with children <5yrs during SIA periods. Good PPE = 95% reduction in infectivity rates. Partial PPE = 50% reduction in infectivity rates.

*The role of children in COVID transmission is not fully known and could change results.

*Models assumed that vaccinators/volunteers are local. If vaccinators are not local to their community, they can be a vector for infecting previously uninfected communities. The effect of this latter case was not modeled here.
Conducting polio SIAs will not substantively increase COVID risk and the SIAs will significantly decrease polio transmission (and risk)

**Recommendation:** SIA should be resumed, provided the programme addresses the following:

- Highest level of Political commitment, endorsed by NCOC, NTF, PTF
- Adaptations to SIA operations to reduce COVID risk
- SIA design based on understanding and addressing community perceptions and needs
- SIAs approach designed within broader COVID-19 response and recovery efforts
- The rationale for SIA resumption is credibly communicated
Recommendations: SIA restart has highest level political commitment and support

NCOC, NTF, PTF should review the available evidence for polio outbreaks, incremental risks for conducting SIAs, TAG recommendation to proceed with SIAs, and detailed program SIA plan to ensure:

• Plan is contextualized within the broader national context
• Full support of national and provincial Government leaders
• Plan for communicating SIA rationale and safety to population is robust
• Full resources of Government are deployed to communicate and support implementation of SIAs
Recommendations: Adapting SIA operations

The TAG endorses the operational adjustments proposed by the program

Protecting the community
- Strictly local vaccinators
- Minimize other staff from outside (monitors, etc.), all with PPE and physical distance from everyone – vaccinators and community
- Modify ‘external’ monitoring – seek alternative methods
- Screening vaccinators – no COVID symptoms

Protecting households and polio workers
- Selective physical distancing, particularly with adults
- PPE (masks) and hand sanitizer
- Low-contact vaccine administration
- Robust training
- Revised microplanning for higher workload
Recommendations: SIA restart design is based on understanding of communities needs and perceptions

Support resumption of SIAs through rapid development and use of:
  • Methodology for monitoring COVID-19 impact on household and community attitudes, using robust independent quantitative analysis as well as qualitative insights
  • Development of mass media narrative and communications plan that:
    • Explains rationale for SIA resumption in context of COVID-19
    • Embeds PEI in the broader national public health and COVID recovery response

Ensure these short-term approaches contribute to measurably gaining trust among communities to facilitate optimal SIA quality
Recommendation: SIA designed within broader context of COVID-19

- Communities facing unprecedented stresses and needs
- There is a significant risk to a “polio only SIA” approach given COVID-19 disruptions and community need

BEFORE mass scale SIAs restart, it is imperative that the national program and NCOC carefully consider the SIA design, informed by data on perception from communities and health workers. Options to consider include SIAs supporting:
  - COVID-19 public health response (e.g. soap, mask, COVID-19 information distribution etc.)
  - Promotion of COVID-19 ‘recovery’ initiatives (e.g. Ehsaas monitoring)
  - Reinforcing other essential health needs (e.g. nutrition and others)
  - Referral / linking to essential immunization catch up

- Caution: No promises that cannot be fulfilled – promise less deliver more
SIA strategy for remainder 2020

Operational considerations influencing SIA strategy

Scale of changes to restart SIAs requires

• Additional planning time for:
  • Training, PPE supply, micro-plan adjustments
  • Understand community perceptions
  • Develop mass media to communicate purpose and safety of SIA
  • Operationalize “reimagined” SIA

• Adaptive learning
  • “Small scale” campaigns should be done to allow program small operational learning environment
Recommendation: SIA strategy for remainder 2020

Principles:
• Prioritize cVDPV2 elimination over WPV1 control for remainder 2020
• Use type 2 vaccines early and at large scale
• tOPV is a critical tool Pakistan needs - make all efforts to use it in 2020
• Avoid schedules that result in repeated visits to households every few weeks
• Be nimble to evolving global vaccine supply and cVDPV2 epidemiology
• Pay specific attention to continuous WPV transmission areas in particularly South KP & central Pakistan
Continued Prolonged WPV1 Outbreak in Southern KP

Recommendations

• Undertake thorough operational, social, political and epidemiological analyses to clearly identify factors hindering control of the outbreak

• The NEOC and KP EOC should organize a multidisciplinary team of experts from International, national, provincial and district levels dedicated to stopping the persistent outbreak in Southern KP.
Recommendation: SIA strategy for remainder 2020

Example SIA schedule consistent with the principles

- **Jul 2020**
  - Small scale cVDPV2 outbreak Response
  - mOPV2

- **Aug 2020**
  - 1 medium-scale cVDPV2 outbreak response
  - (Current approved scope + South Punjab districts)
  - mOPV2**

- **Sep 2020**
  - 1 Large-scale cVDPV2 outbreak response
  - mOPV2**

- **Oct 2020**
  - NID
  - tOPV*

- **Nov 2020**
  - NID
  - tOPV

- **Dec 2020**

* tOPV available from the 4th Quarter; **Subject to review and approval by Advisory Group*
Proposed nOPV2 studies in Pakistan

Context
• The proposed nOPV2 study is to address operational issues related to use of nOPV2

• Initial use of nOPV2 is expected in late Q3 or Q4 of 2020, Pakistan is one of 9 countries selected for possible initial use of nOPV2

• If nOPV2 performs as expected, it may be the only OPV2 available in 2021

• Planned use of mOPV2 will preclude the conduct of the nOPV2 study in the immediate future.

• No clarity on direct benefit to the country program from this study.

• The use of nOPV2 has significant communication, perception and preparation needs in the Pakistan context that must be addressed before any nOPV2 use in a study or SIA.

Recommendations
• Pakistan should continue to engage with the Implementation Readiness subgroup of the GPEI nOPV2 Working Group to meet the readiness criteria for nOPV2 use

• The TAG does not support the conduct of the nOPV2 operational trial in Pakistan because of

  • Ongoing widespread cVDPV2 outbreak and urgency to respond with available vaccine
  
  • The significant concerns about impact on vaccine acceptance in the target population
Complete transformation of program

CBV review and communication strategy
Complete transformation of polio eradication program is essential to make it “fit for purpose” to successfully eliminate WPV1.
Transformation agenda

Findings

• Demonstrated ownership by the program: Boost in the transformation since January 2020 despite disruptions caused by COVID-19

• Comprehensive transformation of program across all components is underway, however, progress is behind expected timeline

Recommendations

• Program transformation should be accelerated and completed by end 2020

• Government and partners commitment at all levels, driven from the highest level – particularly full ownership and commitment of National and provincial EOCs to embrace and implement the change, including use of transformation dashboard by Federal Minister and PTFs

The program needs to embrace transformation as necessary for success. Without change of mindset at all levels of the program, it will not meet its goals
Community Based Vaccination (CBV) 

Findings

• Mostly focused on vaccine delivery, not original purpose
• Little time for community engagement
• Does not show superiority in campaign quality compared to less costly approaches such as SMT
• Failed to meet NEAP benchmark for 90% passing LQAS (especially Karachi)
• Grown beyond original purpose resulting in weakened management
• Has advanced female recruitment in some areas, but not others
Community Based Vaccination (CBV)

**Findings**

- TAG concurs with the review findings regarding CBV impact, and recommendation to downsize CBV and focus it on vaccination activities in selected high-risk UCs of tier 1 districts

- But TAG notes:
  - Significant risk of dissatisfaction among retrenched CBVs that may result in opposition or negative attitudes to PEI
  - Lack of compelling evidence that proposed SMT model will deliver higher quality campaigns
  - Risk of reverting to a previous ineffective SMT approach
    - Intermittent activities delivered through Area Mobilisers with inadequate community engagement impact
Community Based Vaccination (CBV) Recommendations

• TAG endorses the ongoing CBV transition, as in the NEAP, in Tier 2 districts of South KP, and 89 Karachi UCs.

• TAG endorses further CBV transition, as recommended by CBV review, in the 65 UCs of Karachi (bringing CBV scope to 34 UCs) and 3 tehsils of Killa Abdullah, and urges completion by October 2020.

• TAG recommends continuation of CBV in Khyber district.

• Conduct analysis of operational and contextual factors in Khyber and Peshawar resulting in apparent WPV1 suppression – including potential positive effect of CBV.

• TAG urges the programme to maximise SMT impact by ensuring key performance factors including:
  • Continuing pressure on recruitment of local, female vaccinators and supervisors
  • Strengthening SMT line management, monitoring and supervision, scrutinising SMT performance at UC and sub-UC level
  • Ensuring continuous communication and community engagement activity, between and during 10-day campaign cycles, creating an enabling environment for vaccination delivery and acceptance

• Review and report on SMT performance factors in Tier 1 UCs in post-CBV transition SIAs by next TAG.
Community Based Vaccination (CBV)

What lessons should be drawn from the apparent lack of WPV in Khyber and Peshawar over 12+ months?

Findings

• Unlike what was observed with WPV cases, cVDPV2 outbreak observed in Khyber and Peshawar at the same time as the rest of KP

• Detection of cVDPV2 cases – shows AFP surveillance system good and capable of detecting polio cases.

• Observed WPV epidemiology strongly suggests something is working in these two districts since the inception of CBV in late 2015, although other factors have to be considered

Recommendation

• Analyse in depth programme and community/context factors which may be associated with the very low level/absence of circulating WPV in Khyber/Peshawar to present back to TAG by August 2020
Communications strategy

Findings

Communications strategy has strengthened through internal processes and openness to external review. However...

• Developed before the COVID-19 pandemic - needs to adjust to support SIA resumption *(immediate priority)*

• Not achieved ‘breakthrough’ in community engagement.

• Overemphasis on projection of polio messages, working through paid intermediaries, rather than listening and responding to communities

• Urgent need for the program to radically reorient its model of community engagement *(long-term priority)*

• Requires new approaches, broader ownership, and wider participation in the programme from local and other international organizations with the required skillsets
Communications strategy

Findings

• Pashtun communities at heart of effort to improve community engagement, trust, and SIA access/quality

• Program has not achieved the required levels of engagement and trust with Pashtuns

• Design and delivery of community engagement and dialogue processes with specific sub-tribes is not sufficiently led by relevant Pashtuns – individuals and organisations
Communications strategy

Recommendations

Urgently operationalize a community engagement strategy, prioritizing Pashtun population areas through:

• Identification of relevant Pashtun actors with proven track record in community engagement and with linkages with groups in the highest risk areas

• Developing a ‘short-list’ of community engagement interventions informed by evidence-based review of community engagement methodologies (e.g. participatory action research, participatory development design, community-led monitoring and evaluation, human centred development)

• Designing and testing pilot interventions with these partners to test effectiveness – starting with Pashtun groups and sub-tribes
Communications strategy

**Recommendations**

Revise approach to communications measurement:

- Develop methodology to measure “community trust” and embed it as a core indicator of PEI progress reportable at the most senior levels of the national programme and reports to TAG along with proportion of missed children

- De-emphasize ‘refusal’ and processes (like meetings held) as communication measures
Communications Strategy

What opportunities exist for leveraging the COVID-19 situation and need for vaccine to advance vx acceptance and increase demand?

- Do not assume COVID-19 will generate more positive environment for vaccination
- However, it can benefit from aligning itself with COVID recovery initiatives
- Be careful not to appear to be acting alone or out of step with national plans
- Avoid direct engagement with negative messaging (especially on social media)
- Aim to align with and amplify positive ones
- Take advantage of opportunity to use polio’s widespread presence to be seen as advocates for communities by monitoring the reach and efficacy of national initiatives and referring households to wider public health opportunities (e.g. ANC, EI etc)
Surveillance
Impact of COVID-19 on AFP surveillance

Findings

• AFP reporting declining in all Provinces

• Surveillance index declining, particularly South KP and Quetta.

• Other processes continue to be well managed - no major impact on case investigation, stool shipment and testing

• Polio surveillance team engaged in training & surveillance for COVID-19, especially in contact tracing
Surveillance Index
[1\textsuperscript{st} of Mar to 31\textsuperscript{st} of May]; 2018-2019-2020

A mixed pattern but decline in Quetta and Southern KP in particular
AFP Surveillance

Recommendations

• Identify approaches to facilitate resumption of AFP case identification in light of COVID-19 (digital reporting, community approach, case detection during SIAs etc.)

• Adjust program plans recognizing possible reduced ability to detect new outbreaks (e.g. wider scale campaigns)
Integrated surveillance

Findings

• COVID19 has highlighted that surveillance integration is a **win-win** for polio and other communicable/vaccine-preventable disease surveillance!

• Strategic discussions needed to take advantage of observed coordination and integration.

• Given the current challenges for endemic transmission & transformation besides lack of good documentation of efforts made so far and ability to **demonstrate** use of measles/NNT surveillance data, integration process may be started by 2021 and to be ready for implementation by 2022

Recommendations:

• Short-term: Identify specific functions within COVID-19 surveillance that can be supported without compromising AFP surveillance.
  • It is easier to integrate COVID-19, SARI, ILI and EWARS in one surveillance system.

• Medium-term: Together with other departments, outline a clear road map that will result in the development a strategic framework for full integration starting 2022
  • Share best practices from SEAR & AFR - POL EMR as part of preparation
Essential Immunization & Integration
Immunization coverage dropped significantly in 2020 due to the COVID-Pandemic

Immunization coverage
% target children covered, Mar-Apr 2019/2020

<table>
<thead>
<tr>
<th>Vaccination Schedule</th>
<th>2019 Cover</th>
<th>2020 Cover</th>
<th>Percentage Change</th>
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</thead>
<tbody>
<tr>
<td>Pentavalent 3</td>
<td>89</td>
<td>40</td>
<td>-49%</td>
</tr>
<tr>
<td>OPV3</td>
<td>88</td>
<td>62</td>
<td>-26%</td>
</tr>
<tr>
<td>Measles - 1</td>
<td>84</td>
<td>61</td>
<td>-23%</td>
</tr>
<tr>
<td>BCG</td>
<td>88</td>
<td>66</td>
<td>-22%</td>
</tr>
</tbody>
</table>

SOURCE: EPI MIS, provincial EPI programs
Essential Immunization

Findings

• Congratulates Pakistan on immunization budget shift from project mode to recurrent side
• Alarmed by negative impact of COVID-19 on RI performance:
  o Ranging from a 42% point drop in Balochistan to a 10% point drop in Punjab
  o Between March-April it is estimated that there were ~200,000 additional children not vaccinated with bOPV (0,1,2,3) and IPV – all other EI vaccine are affected particularly Measles
• Commends efforts to resume EI, including enhanced outreach services
• Encouraged by SHRUCs plan and notes that the needs extend beyond the 40 SHRUCs

Recommendations

• Identify operational approach to link resumption of SIAs to multi-antigen catch-up vaccination activities – further leverage H2H operations to accelerate catch up on essential immunizations disrupted by COVID-19
• Accelerate SHRUCs plan to refurbish EPI centres and implement Integrated Delivery of Services (IDS) – EPI, WaSH, nutrition and MCH
• Under the leadership of the NEOC, evaluate the impact of integrated services on polio and EPI coverage rates as well as community confidence, trust and demand for immunization services
• Incorporate lessons from SHRUCs to expand successful elements to other poor-performing UCs as soon as possible
Getting to Success – Pandemic also an Opportunity to Build Better

• The TAG encourages the programme to set the vision of the path to success which is possible and feasible

• The pandemic crisis also brings an opportunity to recast and reinvent the programme to overcome chronic obstacles

• The highly effective support and coordination mechanisms put in place for the SARS-COV2 pandemic response, at all levels and across sectors, and the important lessons learned, should be fully utilized and sustained to finally eradicate polio from Pakistan
Thanks