

# Accelerating Policy Change, Translation and Implementation for Pneumonia & Diarrhea Commodities in Pakistan

## Policy Brief

August, 2022

### OVERVIEW

Pneumonia and Diarrhea (P&D) are leading infectious causes of deaths in children under the age of five years. With an estimated 800,000 children's deaths, due to Pneumonia and 437,000 due to Diarrhea, both these diseases claim more lives of children than any other infectious disease. Pakistan is amongst one of the fifteen high-burden countries in the world where 70% of the U5 children lose their lives due to P&D (IVAC 2021). Ensuring healthy lives for all is at the core of Sustainable Development Goal (SDG) 3. Nonetheless, it seems challenging to reach the new SDG 3.2 target of U5 mortality in Pakistan to as low as 25 deaths per 1,000 live births by 2030 (Ministry of Planning Development & Special Initiatives, 2021). In 2013, WHO and UNICEF launched the Global Action Plan for the prevention and control of Pneumonia and Diarrhea (GAPPD), aiming to achieve 75% global reduction in severe P&D amongst U5 children by 2025. Although Pakistan's under-five mortality rate gradually fell from 107.4 in 2000 (111.3 for male children and 103.4 for female children) to 67.2 in 2019 (71.6 for male children and 62.6 for female children), the country is still lagging behind to achieve GAPPD target (UNICEF 2021). In order to attain GAPPD targets, focused, coordinated and integrated actions are required for reducing child mortality.

In this backdrop, Accelerating Policy Change, Translation and Implementation for Pneumonia & Diarrhea Commodities in Pakistan (P&D Project) was initiated by UNICEF in 2016 with a total investment of USD 12.5 million from the Bill & Melinda Gates Foundation (BMGF). These efforts aimed to ensure that relevant national policies were in place, understood, and adhered to assure availability of the essential commodities for improving management of childhood P&D and increasing child survival by the end of 2021.

Various stakeholders, including government health institutions at federal and provincial levels, donors, development partners, academia and global public health community, will benefit from this policy brief to inform existing and future health programming. The evidence will also support in scaling up effective interventions to geographical settings within Pakistan and in other developing countries to curtail childhood morbidity and mortality.

IVAC. 2021. *International Vaccine Access Center (IVAC) - JHSPH*. [Online] Available at: <https://www.jhsph.edu/ivac/>

Ministry of Planning, Development & Special Initiative. Government of Pakistan. 2021. *National Initiative on SDGs*. Available at: <https://www.sdgpakistan.pk/web/goals/goal3>

UNICEF. (2021). *Pneumonia*. [Online] Available at: <https://data.unicef.org/topic/child-health/pneumonia>

Following were the primary outcomes to be achieved through P&D Project in Pakistan:

**Outcome 1:** Policy Change - Existing national/provincial policies and guidelines are updated in line with global recommendations (WHO/GAPPD) for management of P&D among under five children by the end of 2021.

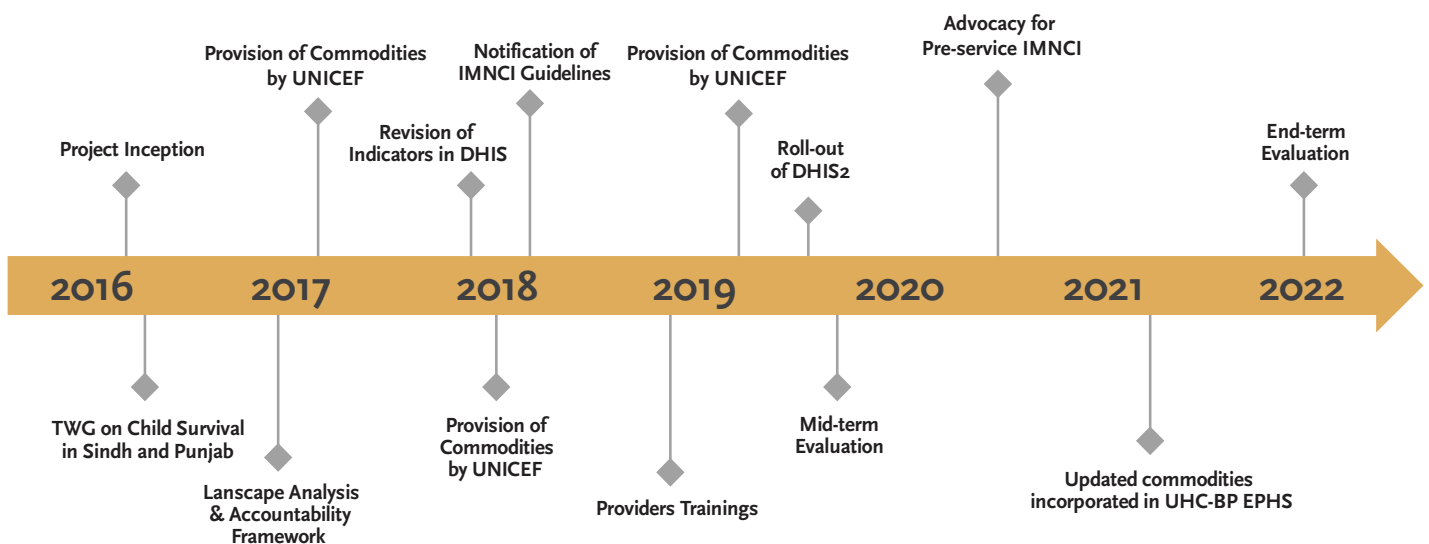
**Outcome 2:** Policy Translation - Translation of revised and updated P&D treatment guidelines into relevant action plans by all provincial/areas health departments by the end of 2021.

**Outcome 3:** Policy Implementation - Availability of essential commodities (Amox DT, Zn DT, co-packaged Lo-ORS Zn DT, oxygen, ARI timers & pulse oximeters) for treatment of childhood P&D by the end of 2021.

**Outcome 4:** Knowledge Management - Translation of lessons learned from this investment to other settings/broader geographical areas within Pakistan.

Overall, the project was designed to target more than 64 million population of both Sindh and southern part of Punjab, including 31 million females and 33 million males. The project emphasized on reaching 36.6 million rural and 0.16 million disabled and marginalized populations, with the focus on leaving no one behind in line with the UN Disability Inclusion Strategy. Among these, 8.9 million U5 children (4.4 million girls and 4.5 million boys) were the prime focus. Rights holders were mainly project beneficiaries who were mothers and caregivers of U5 children. Broadly, the timelines of project milestones are described in figure 1.

Figure 1: Timeline of Project Milestones



## End-Term Evaluation of P&D Project

End-term evaluation ascertained the achievement of the efforts to put in place enabling policies for childhood Pneumonia and Diarrhea, assessing the extent to which these efforts were successful in attaining their intended results of policy transformation. This policy brief was developed on the results of end-term evaluation, where a mixed methods approach (quantitative and qualitative techniques) was employed and both primary and secondary data was collected, wherever possible, disaggregated by gender. Availability of the revised and updated commodities at the public health facilities and their prescription to the children, suffering from Pneumonia and Diarrhea, was gathered through quantitative approach while effects of treatment outcomes and acceptability in the population was assessed through qualitative techniques. Qualitative component comprised of key informant interviews and focus group discussions whereas quantitative survey comprised of health facilities checklist and prescription reviews. Guides and tools, developed for this purpose, focused on the entire pathway of policy process (policy change, translation, implementation and knowledge management). Quantitative tools were pilot tested and then refined to improve logic, flow and language before use in the field.

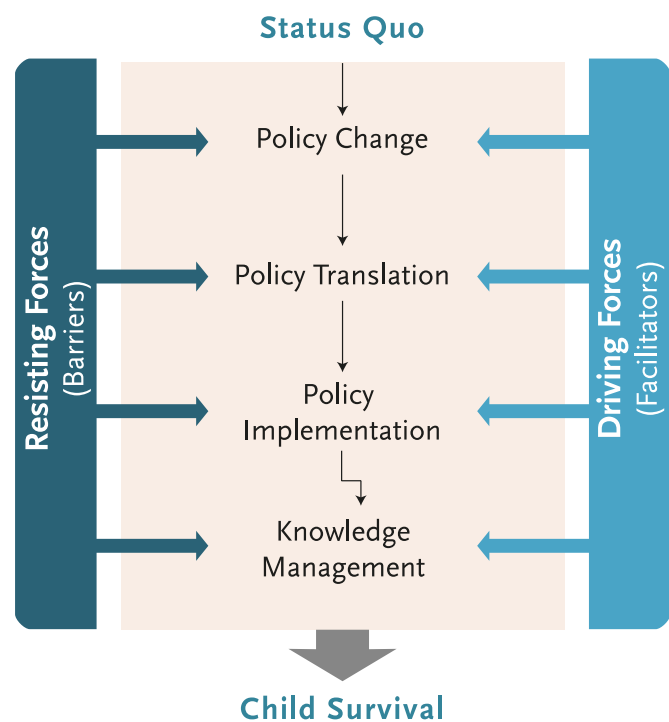
## STRENGTHENING POLICY PROCESSES

### *Achievements for Improving Child Survival in Pakistan*

Pneumonia and Diarrhea are leading causes of under-five mortality in Pakistan. UNICEF's Accelerating Policy Change, Translation and Implementation for Pneumonia and Diarrhea Commodities supported the federal and provincial governments in building a conducive policy environment to improve healthcare services for these illnesses in Pakistan. Improving child survival is also one of the key health sector priorities and the government has reiterated it in its National Health Vision and 12th Five-Year Plan. The project has played a pivotal role in bringing child survival on policy and reforms agenda. Through identifying plausible avenues of advocacy, the project achieved its envisaged targets and milestones to update child health policies focusing on childhood morbidity and mortality in the country.

Project successfully implemented the policy process to update relevant policies and guidelines with a focus on improving management of childhood Pneumonia and Diarrhea. Following the causal chain of policy change, its translation and implementation of actions, the project proved as a successful strategy to improve availability of updated commodities to manage childhood Pneumonia and Diarrhea. This was achieved through timely identification of facilitators and barriers of the entire policy making process and building strong working relationships with policy makers and planners at all levels (Figure 2). Formal advocacy platforms were established and strengthened at federal and provincial levels in the form of steering committee and technical working groups for building strong linkages and shifting from status quo to increased child survival. In order to achieve planned outcomes and its replication and scale up, the project engaged with relevant stakeholders including the federal ministry, provincial health departments, health directorates, district managers, implementing partners, professional medical associations, pharma industry, facility and community-based staff and regulatory institutions.

Figure 2: Policy Process for P&D Project

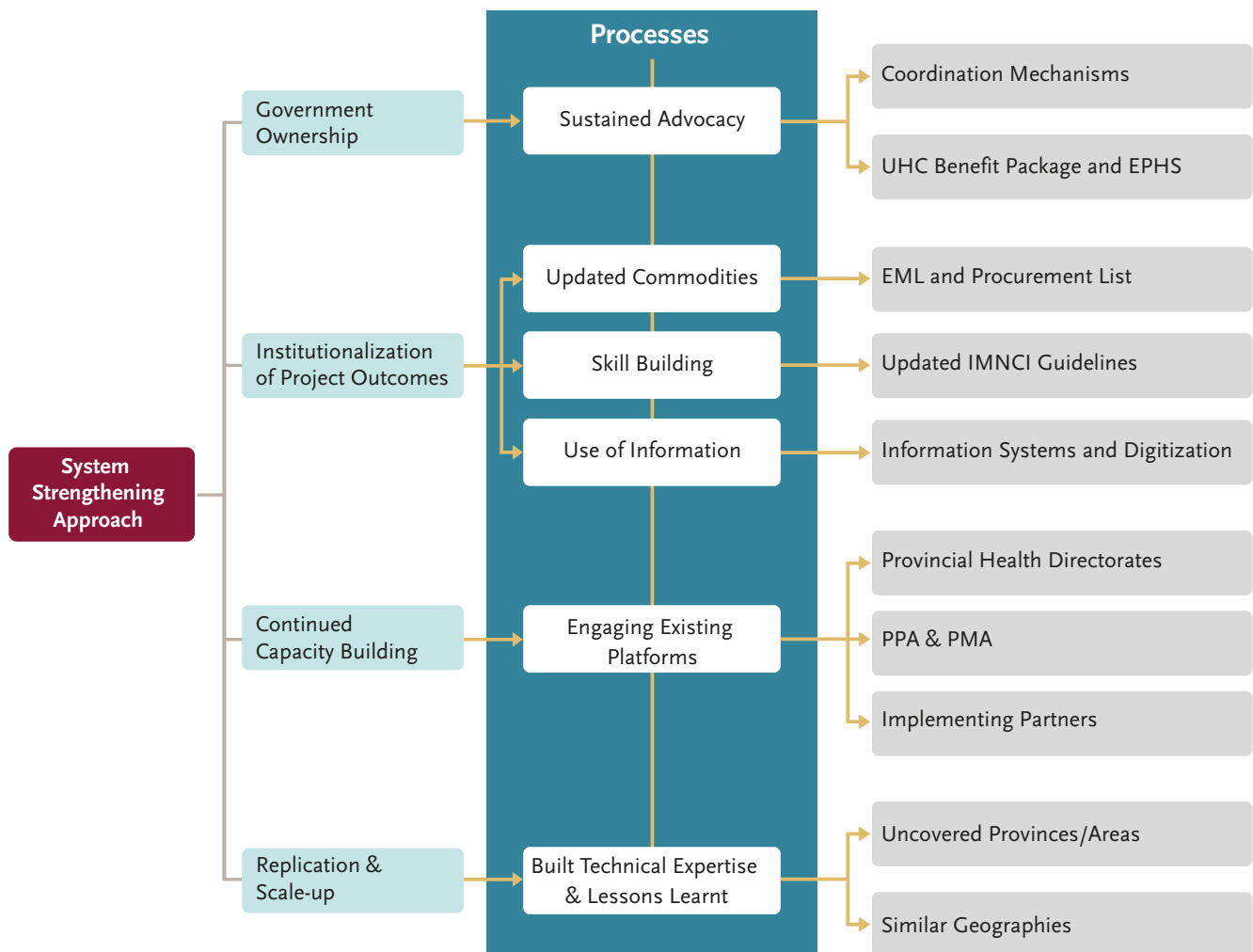


### Policy Change

Resolute political will and commitment is critical for initiating the policy process and steering the policy change, which is evident from inclusion of child survival in all strategic documents, including National Health Vision and National Action Plan. P&D Project supported and catalyzed systems and structure at federal and provincial levels to ensure the oversight and coordination for policy transformation. At the national level, a Project Steering Committee was established under the Ministry of National Health Services Regulation and Coordination (M/o NHR&C). This was later merged into the larger forum of National Technical Working Group (TWG) on Reproductive, Maternal, Newborn, Child and Adolescent Health and Nutrition (RMNCAH&N), having similar ambit and scope with broader representation from all provinces and federating units of the country and development partners. In target provinces, provincial governments notified TWGs on Child Survival for providing strategic vision and oversight to the relevant provincial stakeholders. TWGs had representation of government, donors, development partners, including UNICEF, professional associations, pediatricians and pharmaceutical manufacturers. Accountability Framework, entailing level-specific roles and responsibilities, was developed at the inception of the project to strengthen the stewardship and coordination. This was further supported through

project Theory of Change (TOC) that was developed during the first year of the project and guided the policy processes to update national health policies, translate these policies into operational strategies, implementation and reapplication of best practices. The P&D Project had taken a system strengthening approach for implementation of project activities to bring broader change in policies and government workings. Following figure (Figure 3) describes the various dimensions of systems strengthening activities that ensured government's ownership of the interventions and their institutionalization in regular systems. Advocacy activities were carried out to build the government's will and commitment to improve availability of updated commodities. For capacity building of healthcare providers from both public and private sectors, engagement of their professional association proved beneficial as they continued these trainings even after the funding of the project ceased. Another important aspect of policy process is knowledge management and as the project was carried out in provinces of Sindh and Punjab, it had shared its lessons learnt through national platforms with uncovered provinces and regions of the country.

Figure 3: Project Processes for Government Ownership and Change in Policies



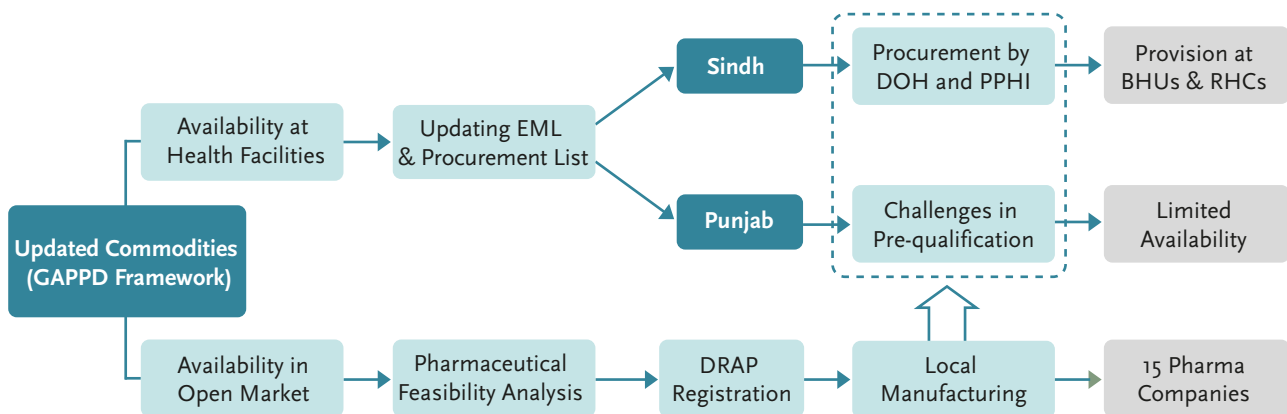
Specific conclusion under policy change are as follows:

1. Through sustained advocacy at federal and provincial platforms, the project had built government ownership around its interventions.
2. Development and implementation of joint accountability frameworks supported the implementation of project activities to update government policies and guidelines.
3. Updated commodities were included in the Essential Medicines List and Essential Package of Health Services, which will also support the sustainability of project interventions.
4. IMNCI was identified as a key RMNCAH&N intervention during development of UHC Benefit Package of Pakistan.

## Policy Translation

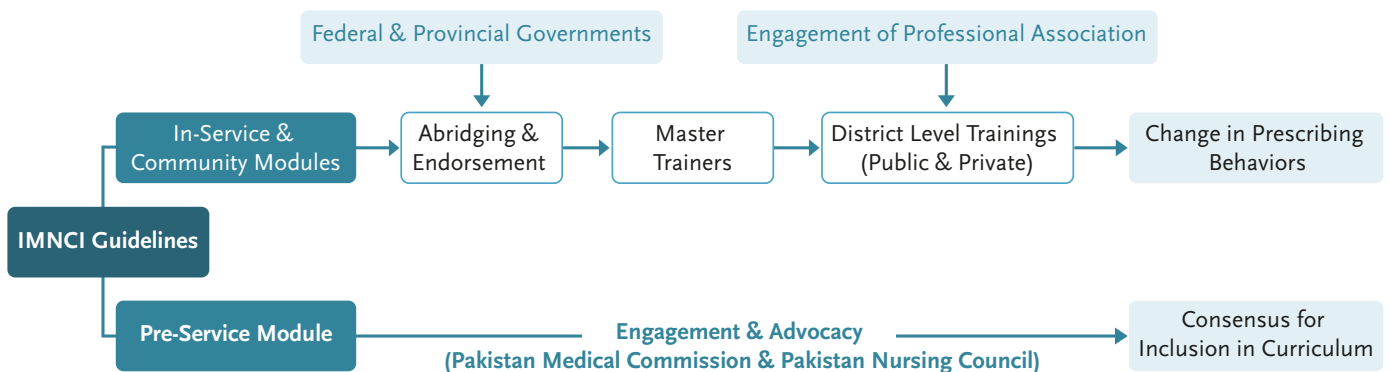
Policy translation heavily benefited from empirical and credible evidence on the use of updated commodities for improved management of U5 Pneumonia and Diarrhea. Building on the recommendations of GAPPD framework, these efforts realized the benefits and efficacy in use of updated commodities for improved management of childhood P&D. It further aimed at ensuring availability of essential commodities (Amox DT, Zn DT, co-packaged Lo-ORS and Zn DT, Oxygen, ARI timers, and Pulse oximeters) for treatment of childhood pneumonia and diarrhea. In order to achieve this outcome, the project supported initiatives for improving local production of updated Pneumonia and Diarrhea commodities to ensure availability in public sector healthcare facilities and open market within reach of private practitioners. Local manufacturing was encouraged through advocacy and continued engagement with stakeholders including DRAP and Pharma industry. Through dialogue and several rounds of seminars and round table conferences, awareness on the importance of updated commodities was raised. As a result, these commodities were included in the revised Essential Medicine Lists (EML) and Procurement Lists paving way to float tender by the respective provincial governments. Representatives of pharmaceutical manufacturers shared their concerns on production of co-packaged Zn DT and Lo-ORS due to variance in requirements of use, storage and formulation and difficulties in its registration with DRAP. Therefore, this remained an unachieved outcome.

Figure 4: Process for Ensuring Availability of Updated Commodities



Policy advocacy supported the updating of national guidelines and its implementation for improving the prescribing behaviors of healthcare providers and community health workers. Technical assistance was provided to the government in revising pre-service and community IMNCI modules, through engagement of experts. This was carried out in close coordination with WHO and revised guidelines were endorsed and notified by the federal M/o NHR&C. Through high level advocacy and consultative meetings, IMNCI guidelines were also included in the RMNCAH&N Essential Package of Health Services (EPHS).

Figure 5: Updating IMNCI Guidelines and Capacity Building



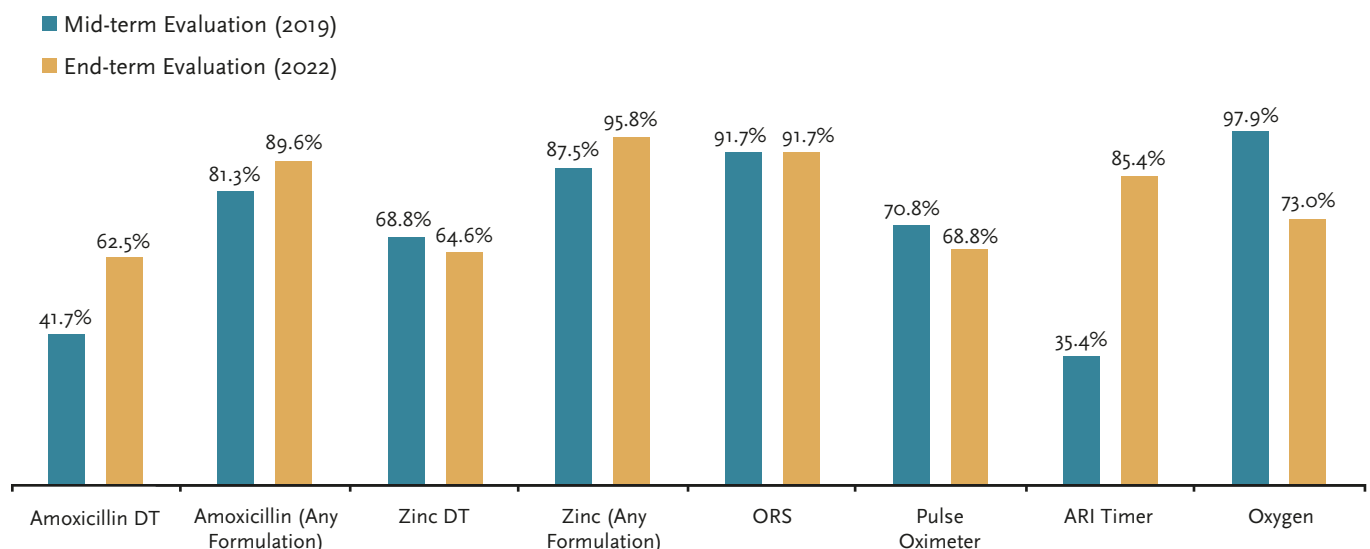
Specific conclusions under policy translation are as follows:

1. Procurement Lists of Provincial Health Departments were revised with updated commodities to manage childhood Pneumonia and Diarrhea.
2. Health information systems were updated to reflect the information on updated commodities.
3. Provincial government allocated budget for procurement beyond the support of the project.
4. Majority of the health facilities in the project areas had at least one of service provider trained on updated IMNCI guidelines.
5. Covid-19 pandemic affected the advocacy efforts due to social restrictions.

## Policy Implementation

Availability of updated commodities improved at the health facilities and sustainability of policy efforts was evident from commodity security beyond the project life. These simple yet effective measures were critical for quality healthcare and when coupled with capacity building of the relevant staff, brought improvement in child survival. Comparing to the results of Mid-term Evaluation (Figure 6), the status of commodities at surveyed facilities showed a shift to dispersible tablets, particularly Amoxicillin. Despite initiation of procurement in Punjab, lack of minimum required number of bidders (pharma companies) led to procurement of syrup in the province. Current status of equipment and supplies to manage U5 Pneumonia and Diarrhea at public facilities showed mixed findings. Prescribing behaviors of the healthcare providers showed marked improvements with increased use of antibiotics in management of U5 Pneumonia and use of Zn and ORS in U5 Diarrhea. Comparing to the findings of Pakistan Demographic and Health Survey (PDHS) 2017-18, use of antibiotics, including Amoxicillin, for U5 Pneumonia increased from 46.4% to 71.6%. Similarly, in U5 Diarrhea cases, use of Zinc and ORS showed marked improvement as prescription of Zinc increased from 12.5% to 70.2% and prescription of ORS increased from 37.4% to 78.7%.

**Figure 6: Comparison of Current Status of Updated Commodities with MTE**



Specific conclusions under policy implementation are as follows:

1. Availability of updated commodities improved in the public facilities.
2. Prescribing behaviors of healthcare providers to manage childhood Pneumonia and Diarrhea improved significantly at public facilities.
3. IMNCI training enhanced capacities of LHWs to identify danger sign for quick referral of sick kids to the health facilities.
4. Dispersible tablets were not available in open market, hampering its use by the private sector providers.
5. Gender differentials and possible discriminatory practices against girl child were not identified during the evaluation.

## Knowledge Management

The project translated the child survival policies into actions and achieved outcomes that would require replication and scale up in other areas of the country for improving health outcomes. Through knowledge management, project learnings were also translated into all the federating units of the country. IMNCI guidelines updated through support of this project were available to all the federating units of Pakistan as it was endorsed and approved by the federal ministry.

Specific conclusions included under knowledge management include the following:

1. Development of UHC Benefit Packages of all provinces included updated commodities for management of childhood Pneumonia and Diarrhea.
2. Updated IMNCI guidelines were endorsed by all provinces and regions of Pakistan.
3. Professional associations involved in the roll-out of IMNCI trainings continued the activity in uncovered districts of Punjab.

## LESSONS LEARNT FROM P&D PROJECT IMPLEMENTATION

### Policy Change

- Policy change was dependent upon identifying and striking a balance between the driving (facilitators) and resisting forces (barriers) of policy process.
- Joint accountability framework with clear cut roles and responsibilities for government counterparts was critical to achieve the desired outcomes.
- Federal and provincial level coordination forums having participation of all federating units helped in building shared vision for child survival.
- During last two years of implementation, Covid-19 emerged as a big competing priority for health interventions diverting focus from childhood Pneumonia & Diarrhea.

### Policy Translation

- Credible evidence is essential for facilitating policy translation and building ownership of policy makers.
- Engagement of professional associations proved very successful in reaching healthcare providers.
- During Covid-19, online consultative process was adopted, however, face-to-face advocacy was imperative for policy advocacy, like updating IMNCI guidelines in the curriculum.

### Policy Implementation

- Prescribing behaviors of public sector providers were dependent on the availability of updated commodities in the health facilities.
- Community linkage through LHWs improved referral and case load of U5 Pneumonia and Diarrhea at the health facilities.
- Both pull and push factors must be crated to ensure local manufacturing of the updated commodities by the Pharma industry.

### Knowledge Management

- Use of federal coordination forums was very effective in knowledge management of the project activities.
- Sustained advocacy and technical support is a key enabler for replication in uncovered areas of Pakistan.
- Success of the interventions was found critical for it's scale up.

## RECOMMENDATIONS

UNICEF P&D Project proved as a strategy to curb Pneumonia and Diarrhea in Pakistan, which should be scaled up and institutionalized. Based on findings of end-term evaluations and inputs from all the stakeholders, actionable recommendations are developed to address the emerging challenges in improving child survival in Pakistan. These recommendations are framed in the rubric of systems strengthening approach with actions to make the interventions well entrenched in existing systems for sustainability. Final recommendations are distributed into strategic and operational levels, as described in the following paragraphs.

### *Strategic Level Recommendations*

#### **Recommendation 1: Promoting focus on child survival through advocacy and follow-up on national and international commitments**

- Advocacy with top political leadership and civil bureaucracy for evidence-based increase in earmarked budget and long-term monitoring mechanism for childhood illnesses.
- Focusing relevant ministers to emphasize child survival across the line departments and sectoral policies.
- Inclusion of child survival in all relevant sectoral policies beyond health sector.
- Reaching out politicians during upcoming electoral process to put the emphatic focus on pneumonia and diarrhea in their political manifestos.
- Strengthening federal, provincial linkages and coordination through RMNCAH&N and provincial TWGs to implement National Health Vision, policies and health sector strategies.
- Conducting policy dialogues and roundtables for advocating implementation of UHC Benefit Package as well as achievement of SDGs, particularly 3.2.

#### **Recommendation 2: Using evidence from P&D Project in future programming for child survival**

- Targeting interventions to improve gender equality and same time addressing the needs of marginalized, disadvantaged beneficiaries, particularly for those residing in rural areas and urban slums.
- Review and update child survival accountability framework for government ownership at all levels assigning responsibilities at federal, provincial and district levels.
- Exploring digital innovations for improving management of U5 Pneumonia and Diarrhea and progress tracking in line with National Digital Framework.
- Engaging media to sensitize politicians and government to focus on improving child survival in Pakistan.

#### **Recommendation 3: Ensuring sustainability, scale-up and replication of the project**

- Using federal coordination forum for evidence-based advocacy to enhance coverage to uncovered provinces and areas of Pakistan.
- Engaging intelligentsia for policy advocacy with relevant politicians and assembly members working on health and finance to keep pneumonia and diarrhea a high priority agenda.
- Donors to use their influence for sustaining focus on U5 Pneumonia and Diarrhea services and commodity security during their interactions with policy makers and planners.
- Follow-up with provincial governments for regular inclusion of updated commodities in their procurement lists and purchase orders.
- Sharing of project results, including challenges and lessons learnt, through national dissemination and peer-reviewed publication.



#### **Recommendation 4: Engaging pharma industry for local manufacturing of updated commodities**

- Continued engagement with pharma industry to promote local production and widespread access through effective marketing in rural and other communities using their network.
- Rationalization of pricing mechanisms for viability of production.
- Exploring public private partnerships with pharma industry and GP networks for demand generation and manufacturing of updated commodities.

### ***Operational Level***

#### **Recommendation 5: Strengthening information systems and district capacities for commodity security**

- Accelerating transition to DHIS2 for real-time data and its integration with prevailing digital information systems.
- Building analytical capacities of facility level staff and district managers on data systems and use of information.
- Implementation of standardized forecasting, procurement, distribution, maintenance and warehousing through institutionalizing HLMIS at district and facility levels.
- Including U5 Pneumonia and Diarrhea indicators in government's prioritized monitoring systems to improve decision making and ensure accountability.

#### **Recommendation 6: Building staff capacities at health facilities and in communities**

- Advocacy with PMDC and medical universities to make treatment guidelines part of education and training curriculum.
- Testing and scale up of digital platforms for training and improving clinical practices.
- Continued medical education to be arranged for providers to enhance their clinical capacities.

#### **Recommendation 7: Standardizing prescribing behaviors of healthcare providers**

- Active involvement with professional medical associations for improving prescribing behaviors of private sector providers as per IMNCI guidelines.
- Advocacy with local managers and service providers for raising the need of updated P&D commodities in open market to influence prescribing behaviors.
- Improving prescribing behaviors through involvement of specialists in tertiary hospitals as trend setters for junior practitioners in both public and private sectors.

#### **Recommendation 8: Enhancing community awareness on childhood illnesses**

- Use of print, electronic and social media to promote updated commodities for their ease of use, effectiveness and convenience.
- Targeting populations with high burden of U5 Pneumonia and Diarrhea to raise positive awareness while keeping in view socio-economic and gender inequalities.

This policy brief is developed on the basis of End-term Evaluation conducted by Contech International, which is a health consulting, research and management organization, established with the mission to improve health of all, especially women and children.

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