An integrated package on Childhood Pneumonia

Background:

India has the highest burden of childhood pneumonia in the world, both in terms of morbidity and mortality. Around 140,000 children die every year due to pneumonia. Among children under-five years, pneumonia contributes to nearly a sixth (15%) of all deaths in India. The reduction of under-five mortality from 39/1000 live births in 2016 to 23 by 2025 is one of the prime goals of India's National Health Policy 2017. In order to achieve this goal, mortality due to childhood pneumonia needs to be reduced to less than three per 1000 live births from the current level of 5.7 per 1000 live births, which is also in tune with the goal of India's Integrated Action Plan for pneumonia and Diarrhoea (IAPPD). To address the issue of childhood pneumonia, a series of digital & non digital tools were created by Save the children, ZMQ & Philips which are presented below:

mHealth & Web Case Management Tools on Childhood Pneumonia

The mHealth model was developed with a key objective of developing a bottom up strategy to strengthen ground building activities through increased awareness; enable active case finding; facilitate effective case management and real time integration with the health system. The tools were designed to address the following challenges:

- Lack of knowledge and awareness among mothers and communities on childhood pneumonia leading to low demand seeking behavior;
- Lack of knowledge & poor ability of the healthcare workers to enable correct diagnosis leading to weak referral & reporting;
- Lack of context specific appropriate tools at the disposal of Health workers for awareness generation, screening, referral & case management leading to low capacity;

i. SBCC Toolkit

SBCC toolkit is an audio-visual interactive toolkit with iconic graphics, audio & videos which provides customised information to the defined intended groups, for easier and quicker understanding of specific pneumonia related information. The toolkit is being used to activate the ground by building knowledge and for counselling purpose at different levels of the health system starting from community to ASHAs; ANMs; Community Members; Clinical providers; and Non-Clinical Providers. The toolkit has an internal **M&E mechanism** to assess the **usage and consumption of information** both at the level of individuals as well as in group sessions. Every session conducted by a registered user is captured along with information like no. & type of modules accessed, no. of participants engaged, time spent, feedback provided by the intended audience etc. All the information/data captured through the inbuilt analytics and is displayed on a dashboard for the ease of management & analysis. SBCC Toolkit can be used in building

knowledge and awareness on the ground and among key stake holders and; also help in achieving increased case finding

Features	Roles	Target Audience
 Talking Toolkit for semiliterate and illiterate rural community; Localized with audio & visual support; Cultural Centric Communication Strategy – local language support & localized Audio and Visuals 	 Build knowledge & awareness on the ground Build the ground for improved Pneumonia case finding Improved demand seeking behavior of the caregivers 	 Caregiver Extended Family/community members ASHA ANM Clinical Providers Non-clinical providers

ii. mHealth Pneumonia Case Management Toolkit

The Pneumonia Case Management Toolkit is a localized tool for end to end management of the pneumonia cases. The toolkit works at different levels both at the community (ASHAs) as well as the facility level (Sub-centre, CHWC, PHC, CHC etc). The toolkit is designed based on the government guidelines and its design is following a complete pneumonia case management algorithm starting from mapping of households, mothers/caregivers & children; identification, screening & categorization of pneumonia patients among children under 5 yrs; Referrals, pre-referral services & counselling; follow- up tracker & case closure. The toolkit has a robust M&E mechanism to capture each and every action starting from registrations to cases identified, services provided, referrals done, treatment provided, recovered cases etc. The case management toolkit is effective in building the capacity of the health workers and other stakeholders involved in the pneumonia case management.

Features	Roles	Target Audience
 Holistic trackers- Assessment, services, follow up, case record & treatment outcome Asynchronous monitoring 	 To enable case finding Symptomatic screening of the patient Treatment, Case management & follow-up of the cases 	 ASHA ANM CHWO Clinical providers at PHC & CHC

iii. Web based case management portal

It has been designed for management of pneumonia cases at different facility level starting from Health & wellness Centre (HWC); Primary Health Centre (PHC); Community Health Centre (CHC) & District level hospital. The case management system allows for referral of cases from community to facility level and new cases generated.

The portal has been designed based on the government protocols/guidelines and the design follows a complete case management algorithm starting from registration of new children under 5 years; management of cases referred; referrals to upwards facilities; identification, screening & categorization of pneumonia patients among children; & case closure. The web portal has the following features:

Features	Roles	Target Audience
 Search engine for searching and assessing the children Registration of new children Services like medication, counselling etc. Screening tracker Case Follow ups Case Closure Case Report Record of registered households, women & children Record of Closed cases 	 To enable Symptomatic screening of the patient at the higher facility Treatment, Case management & follow-ups of the new as well as referral cases 	 Community Health Officer- Health & wellness centre MO-Primary Health Centre MO- Community Health Centre