

**Improving household decision-making  
for the management of Pediatric  
pneumonia in Uttar Pradesh and Bihar**



**Executive Summary of the Project**

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**Background:** In 2005, 2.3 million deaths were reported in children less than 5 years of age, and between ages of 1 month to 5 years, half of them were due to pneumonia or diarrhea, attributable to delayed recognition of illness by families, delayed and poor access to qualified health care in a setting which has untested home and traditional remedies for such illnesses and faith in incompetent and unqualified rural medical practitioners in a background of high prevalence of under nutrition, overcrowding, exposure to ambient air pollutants as a result of use of biomass fuel for cooking and second hand smoke and low rates of immunization etc.

**Hypothesis:** Community empowerment for prompt recognition of childhood pneumonia, understanding its severity and vulnerability of their child to adverse outcome due to delayed qualified care seeking is possible by development of appropriate messages by in-depth formative analysis of community constraints in real life and possibly diverse settings.

**Goal:** To create communications materials to improve household decision making when confronted by lower respiratory illness in children in northern India

**Settings:** Since there are multiple dialects in Uttar Pradesh and Bihar, with some overlap, this work was done in dialect specific rural village settings as well as in the corresponding Primary Health centers and Community Health Centers of 14 districts (roughly equal to 12.4% districts) of Uttar Pradesh and Bihar.

#### **Methods:**

**Conceptualization:** Vignettes of the entire spectrum of acute respiratory infections in children were prepared. These were used to initiate qualitative research like in-depth interviews (n=42), semi structured interviews (n=42) and focused group (n=42) discussions with various stakeholders in 7 districts to develop taxonomy of terms used for childhood pneumonia and pneumonia like presentations, perceptions of disease severity, factors influencing care seeking and choice of health care provider, elicit responses to various case scenarios and collect information/materials of medicines used for its treatment. Case studies were also done where there has been an adverse outcome due to childhood pneumonia. Data was translated into English, transcribed and coded by two independent coders. Themes were analyzed across districts and stakeholders which gave insights to concepts for message development.

**Message Development:** Messages were developed by our commercial partner with expertise in medical communications. Findings of formative research were used to messages in 4 domains, namely a) Symptom recognition (b) where and when to seek health care (c) how to approach a care provider and negotiate for quality of care (d) risk vulnerability perception. Messages were developed in each of the written, audio and video formats. Messages were pilot tested in rural and urban Lucknow before validation.

**Message Validation:** This was done in another set of 7 districts. Forty Nine focused group discussions were conducted with caregivers and community health workers.

**Customization of messages:** Based on the findings of the message validation exercise and advisory inputs obtained from Childhood Pneumonia Behavior Change Communication Committee messages were customized to the needs of the stakeholders/beneficiaries. Thereafter, customized versions of the final poster, audio and A/V messages are expected to be rolled out for community use.

**Implications:** A Childhood Pneumonia Behavior Change Communication Committee of various stakeholders who can be potential change agents from the government and non-government sector, civil society, potential implementation partners, content experts and other community gate keepers, like politicians to endorse the process of the development of behavior change communication messages for use in the state. Since there is a stakeholder consensus around the messages developed after stringent formative research, it is envisaged that the State governments of Uttar Pradesh and Bihar and large scale implementation partners like the BBC Media Action, Oligvy Action/CHAI and Rajiv Gandhi Mahila Vikas Pariyojana may agree to use the messages in their behavior change communication strategy. This will result in early care-seeking for suspect pediatric pneumonia and hence improved child survival.