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Technology for Development

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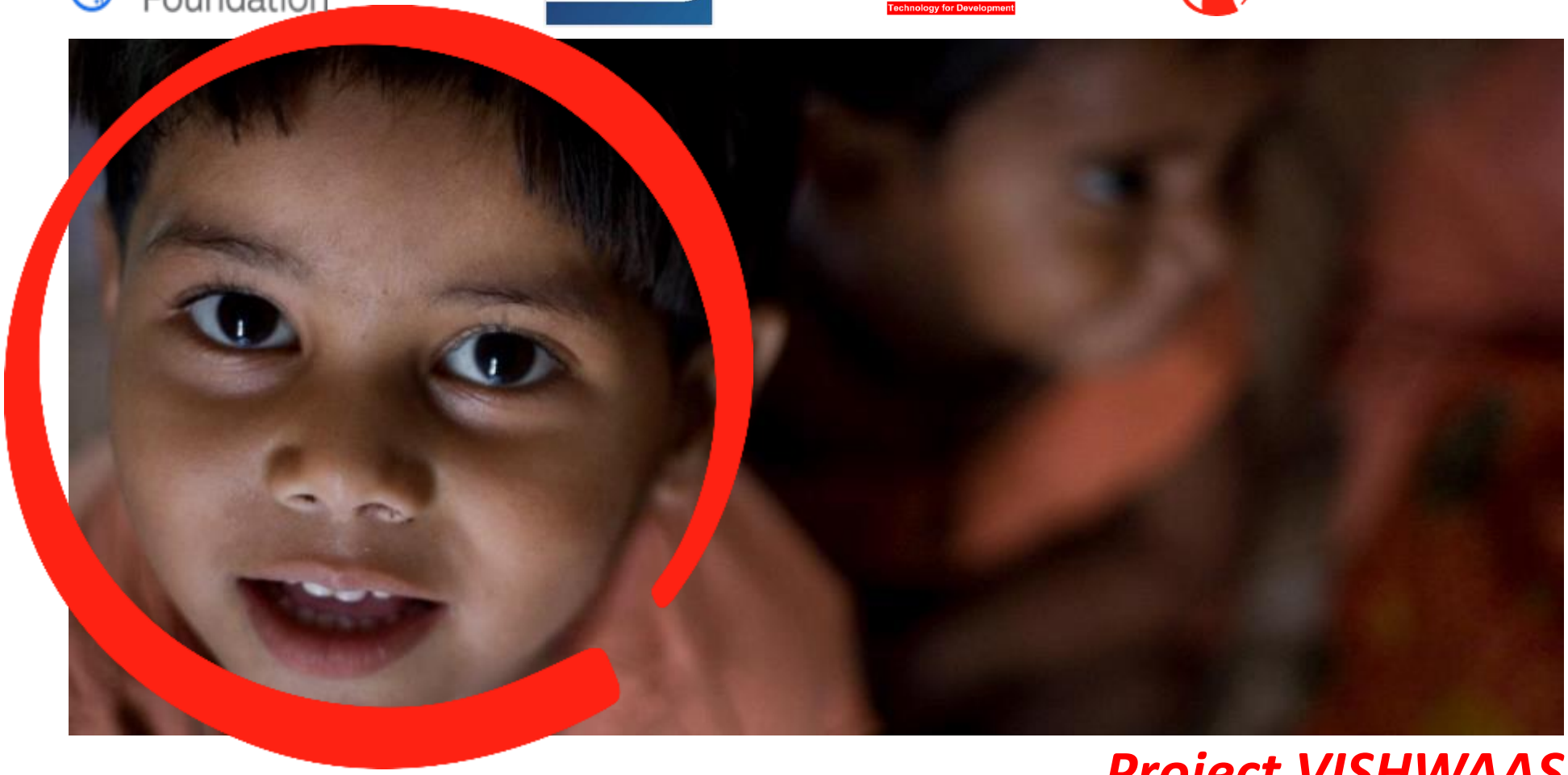


Project VISHWAAS

Learning and Sharing e-Dissemination

28 January 2022

Childhood Pneumonia a Silent Killer

Globally India contributes 17% of total Pneumonia Deaths

15 % under 5 Mortality in India due to pneumonia (estimated 1.4 lakhs deaths)

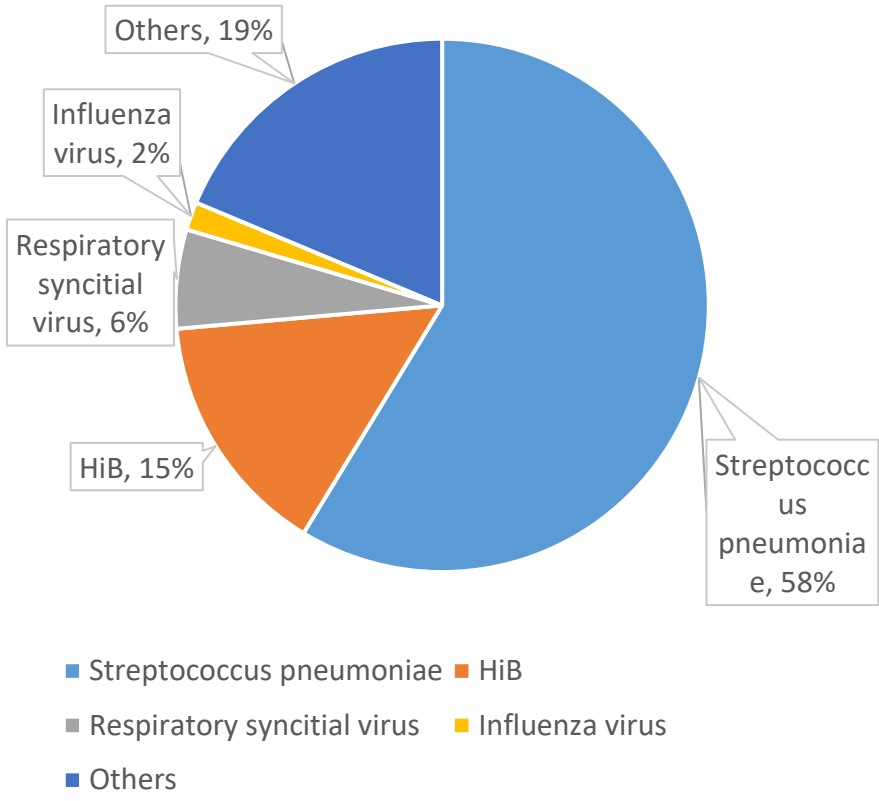
ARI Prevalence 2.8%

0.22 episodes per child / per year

29.8 million episodes per year

3.6 million severe pneumonia episodes

More than half of U5 deaths due to pneumonia due to particulate matter inhaled from Household Air Pollution due to bio-mass fuels



Over 70 percent childhood pneumonia deaths due to bacteria

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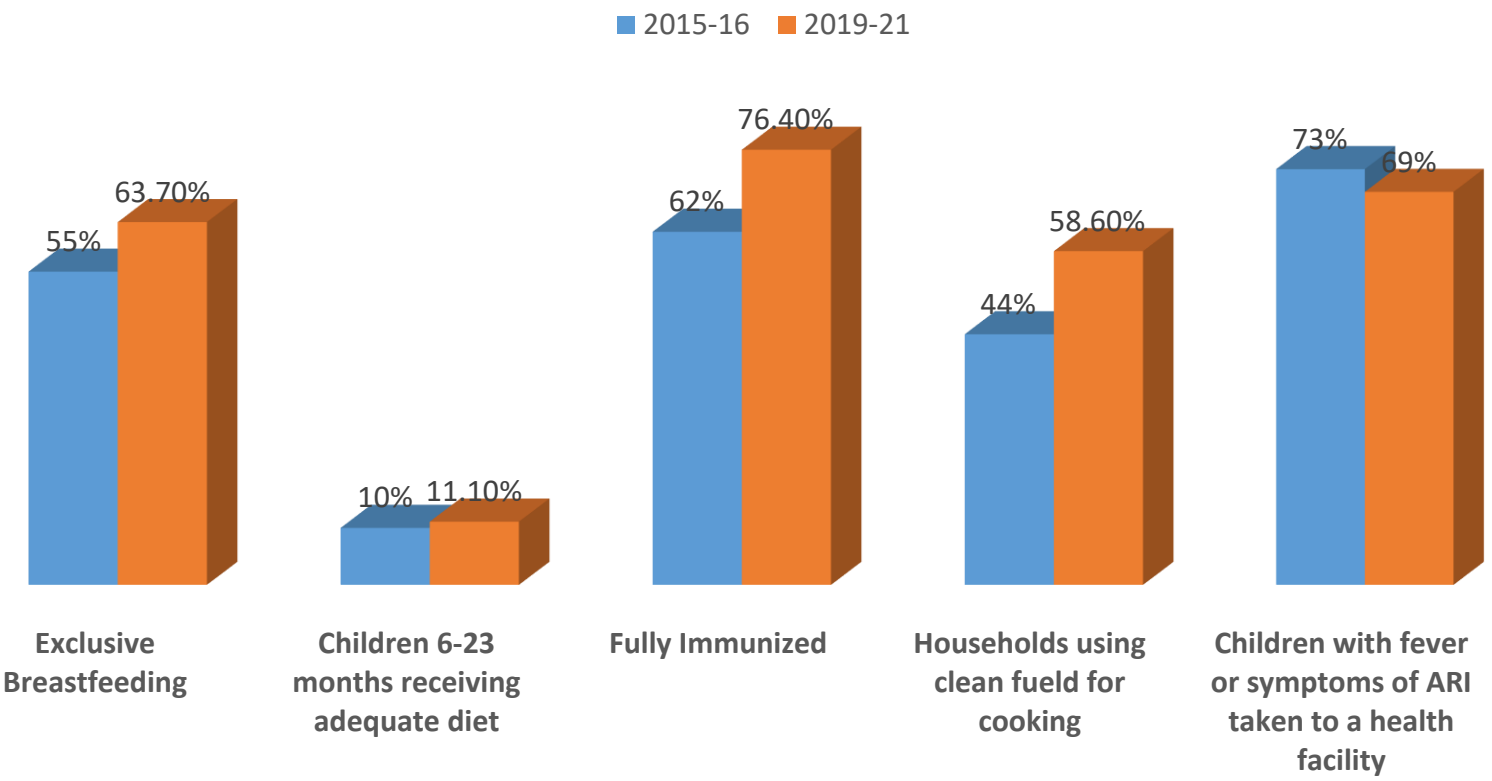
Pneumonia Intervention Coverage and Key Challenges in India



Demand side challenges

Lack of **awareness** among caregivers around identifying signs and symptoms of childhood pneumonia

Delayed care seeking leading to increased severity and mortality

Supply side barriers

Inadequate treatment at primary care health facilities due to poor knowledge and skills of health workers

Non-adherence to treatment protocol leading to delayed referral

Poor reporting of Childhood Pneumonia cases- only 90,821 cases reported in HMIS till July 2019

Lack of supportive supervision and mentoring to manage cases

Source: NFHS 2015-16 & 2019 -21

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PROJECT VISHWAAS INTERVENTION MODEL

Setting Global benchmarks for Pneumonia Management in India

BAHRAICH, RURAL UP
Two Blocks (Payagpur and Huzoorpur) | 393,000 population

Health System Touchpoints
- 47 Sub centres
- 7 Primary Healthcare Centres
- 2 Community Healthcare Centres

GOAL: Reduction in Pneumonia-specific under-five mortality

EXPECTED REACH
DIRECT – 87,894 children | 1000 health system workers
INDIRECT - 4, 70,196 population (excluding direct reach)

October 2019 – January 2022

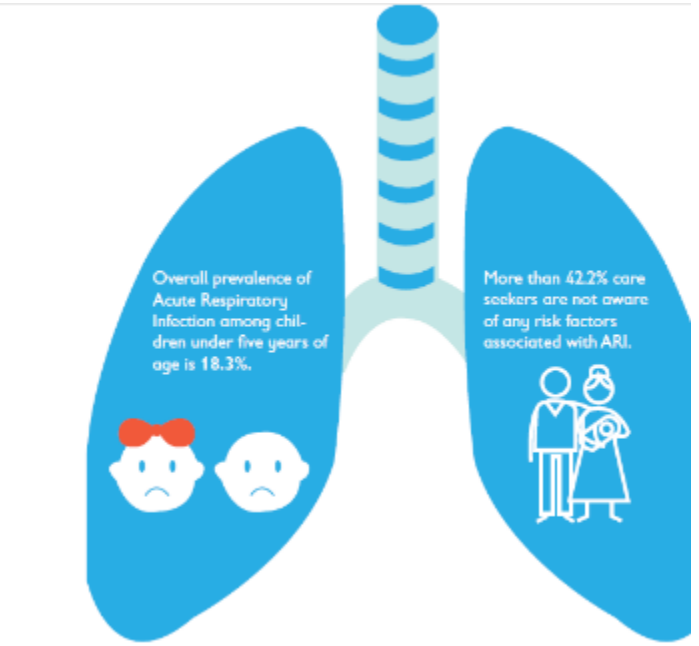
TONK, URBAN RAJASTHAN
45 urban wards | 165,000 population

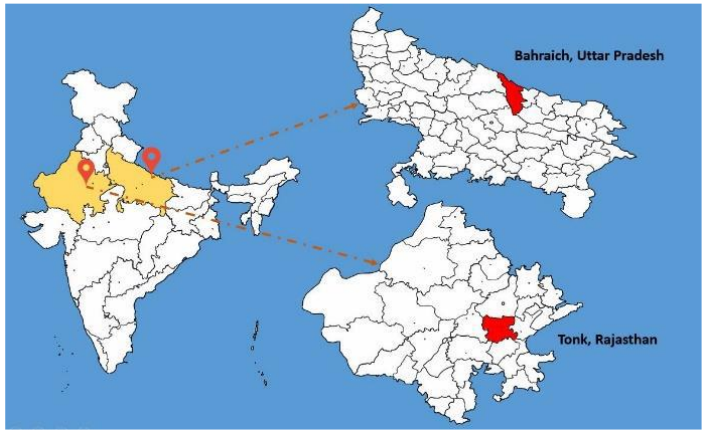
Health System Touchpoints
- 3 Urban Health Centres
- 1 Maternity Home
- 1 District Hospital
- 1 ANM Training Centre

OUTCOME 1
Increased community awareness of pneumonia and improved care seeking

OUTCOME 3
Enhanced commitments and resources through evidence informed advocacy for tackling Pneumonia

OUTCOME 2
Improved case detection and its management at both community level and facility level





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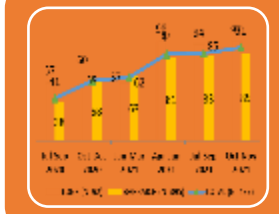
KEY PROJECT INTERVENTIONS

Increase Case Management of Pneumonia by FLHWs

- Training on Pneumonia Community Case Management
- Pre-referral dose of Amoxicillin
- Counseling and education



Strengthening Pneumonia Data and Information Systems

- Pneumonia MIS (records & reports) ASHA & ANM, M health case management tool
- Data Tracking, Follow

Increase awareness on pneumonia and improve care-seeking behavior of Caregivers of under 5 years' children

- Social Behavior Change Communication Interventions
  - Community accountability and ownership of pneumonia services
  - Pneumonia-volunteers

Strengthening Pneumonia Equipment, Supplies and Logistics

- Strengthening Heath Facilities on Pneumonia Supplies
- Equipping FHWs on Pneumonia Supplies and equipment's
- Training on Supply Chain of Amoxicillin and Supplies

Competency based pneumonia management training

- Capacitating health service providers
- Pneumonia management skill labs

MHealth Pneumonia Management Tool

- MHealth SBCC Management Tool
- MHealth Pneumonia Case Management Tool

Supportive Supervision

- Enhancing skills of FLHWs through handholding and mentoring

Implementation Research on Point of Care Diagnostics

- Acceptability Study on Children's Automated Respiratory Monitor (ChARM)

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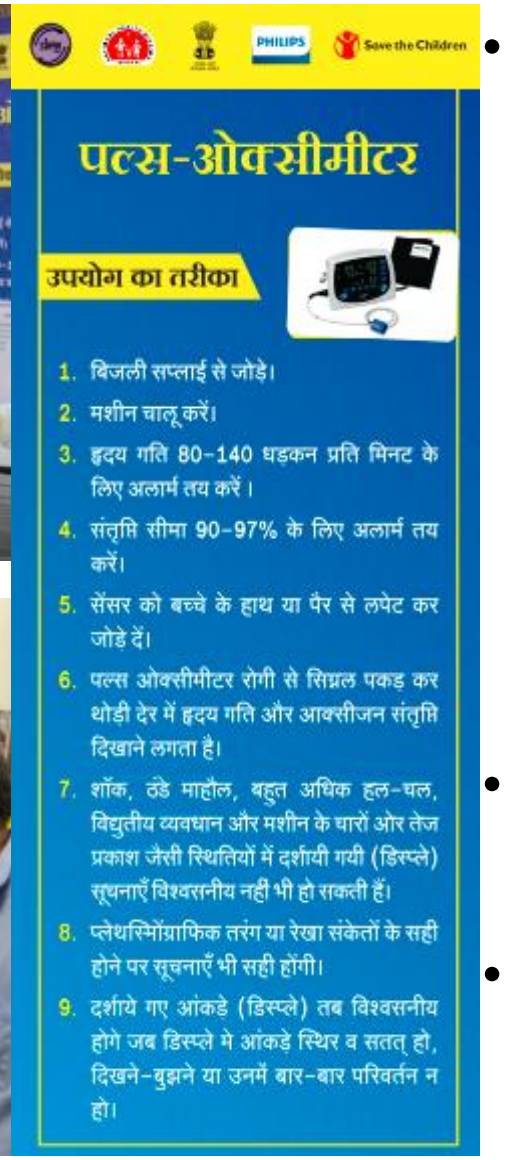
Competency-based training of the health care providers on pneumonia management

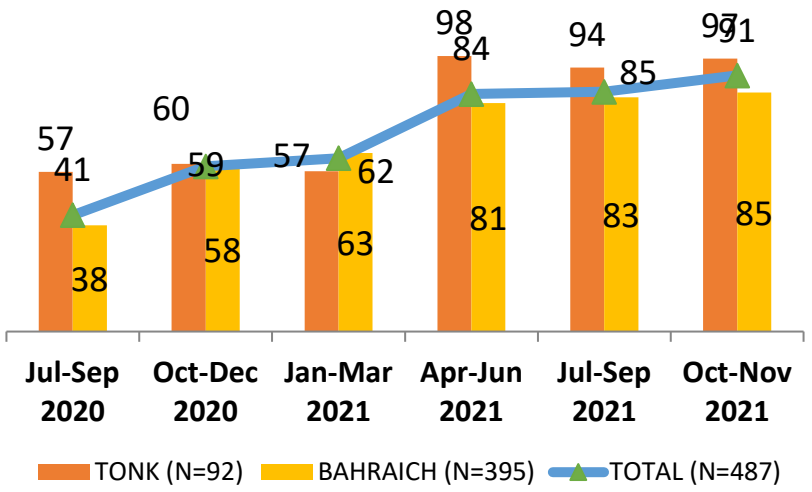


- Cadre of **66 Master Trainers** on competency based training of childhood pneumonia management developed. 31 Master Trainers in Tonk and 35 Master Trainers in Bahraich district trained on childhood pneumonia management.
  - In Tonk, capacitated 75 Medical Officers and 75 Staff Nurses, 75 ANMs, 92 ASHAs and 150 ANMTC students on childhood pneumonia management.
  - In Bahraich, capacitated 13 Medical Officers, 6 Staff Nurses, 16 CHOs, 64 ANMs and 380 ASHAs on childhood pneumonia management.
- Established **Three Pneumonia Management Skill** Labs in intervention districts (one on Tonk & two in Bahraich)
- Developed **job aid** on establishment of Pneumonia Management Skill Lab for scale up

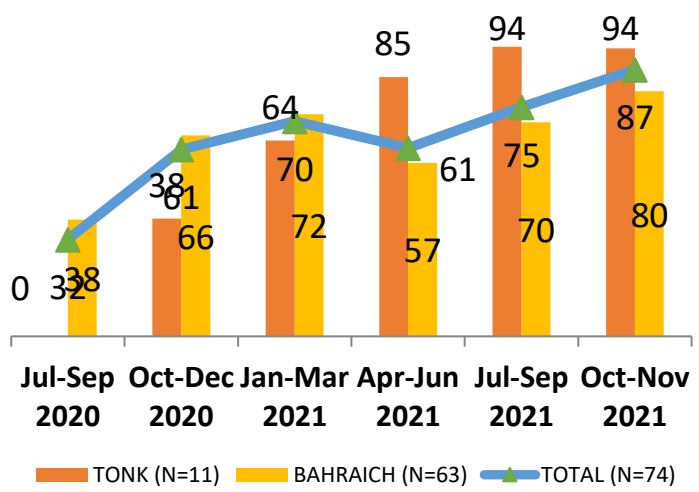
Strengthening Pneumonia MIS

- M Health Pneumonia Case Management Tool to register, track, treat, refer and follow up pneumonia cases
- Pneumonia Case Management Record Sheet & Registers for non-android users
- Training and handholding support

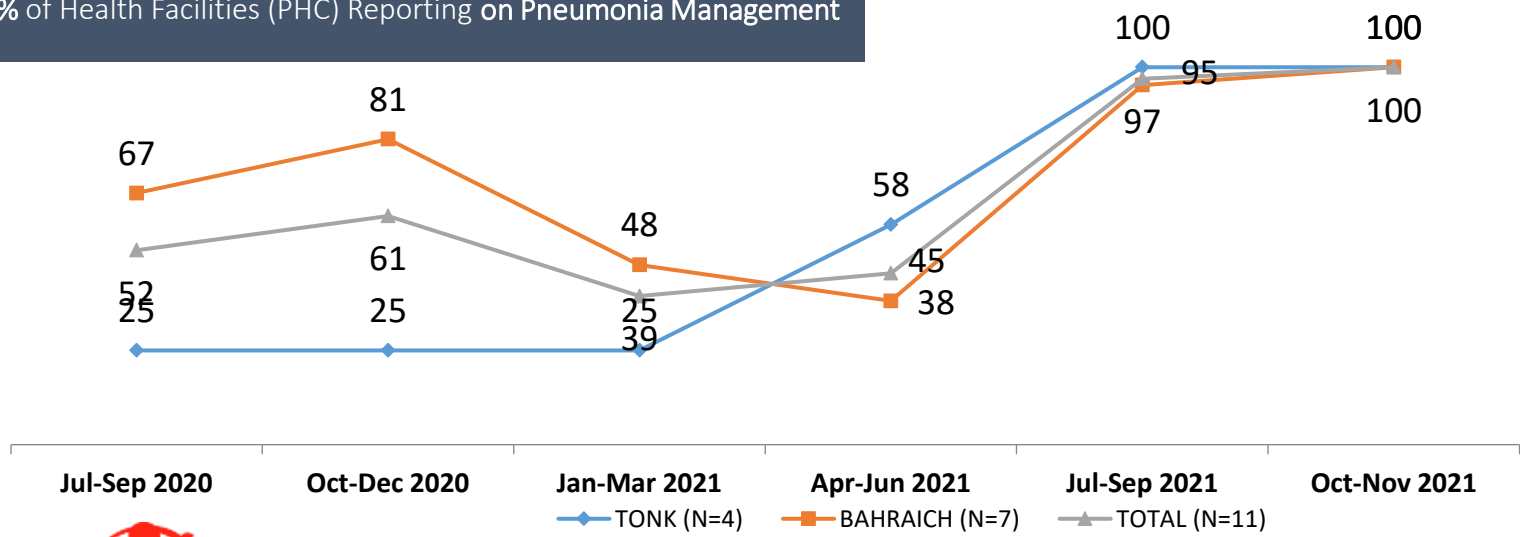
% of ASHA Reporting on Pneumonia Management



% ANMs Reporting on Pneumonia Management



% of Health Facilities (PHC) Reporting on Pneumonia Management



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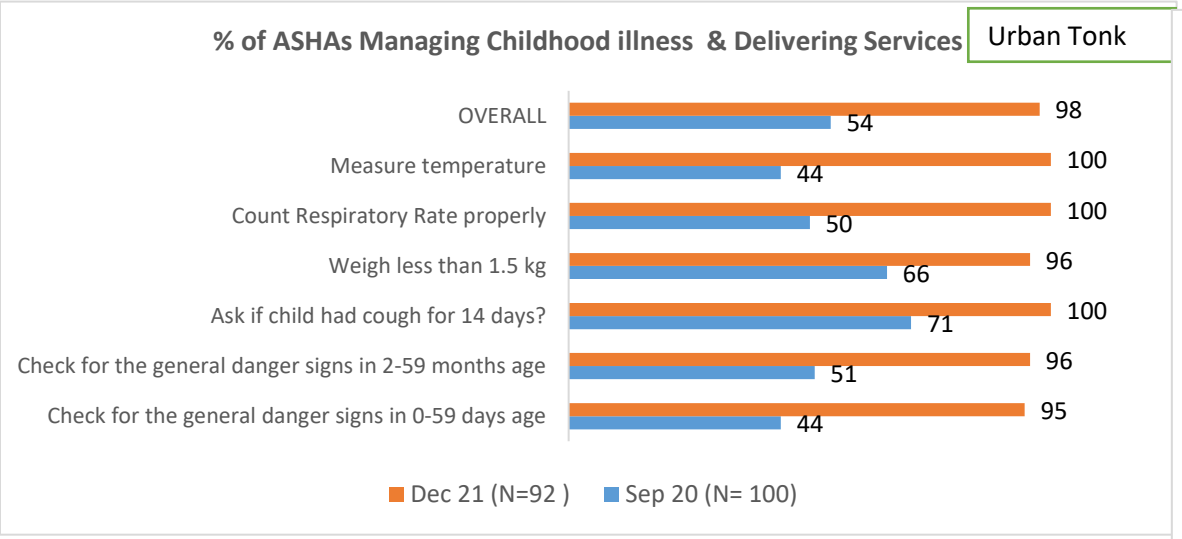
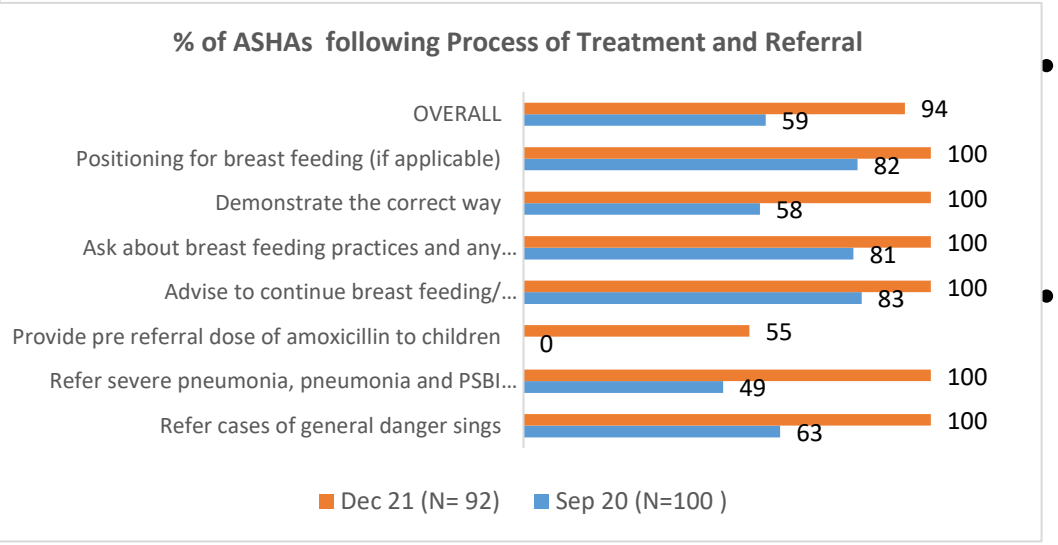
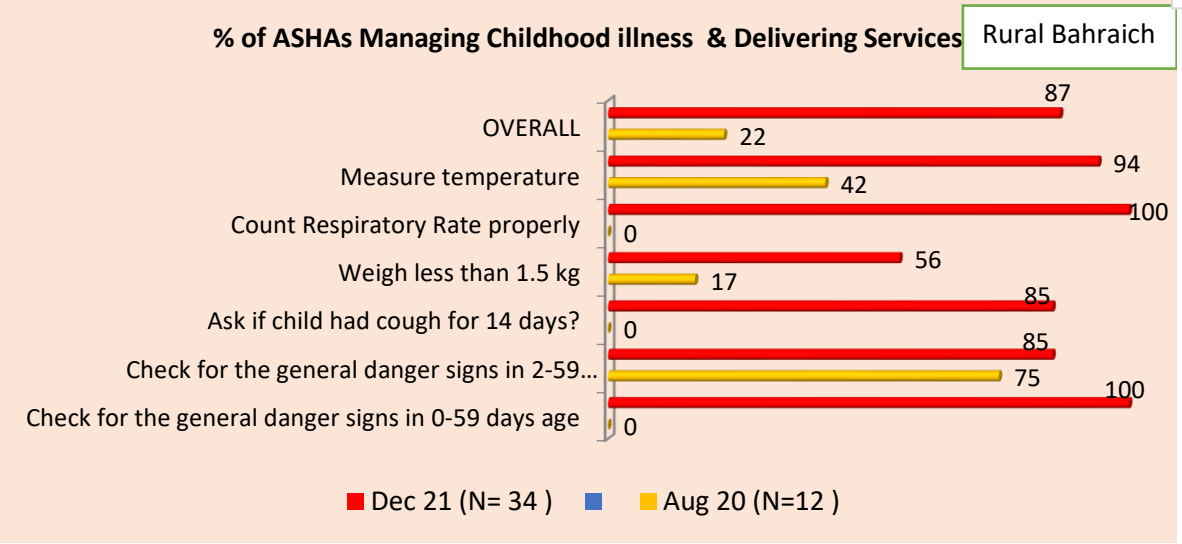
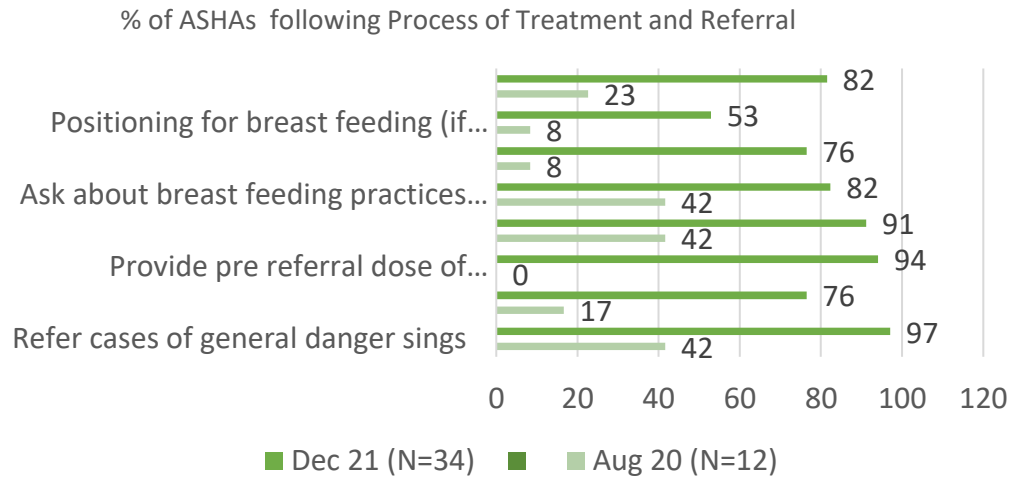
Supportive Supervision to enhance skill of frontline health workers on Childhood Pneumonia Management in Community Settings









- Trained 21 Supervisors as Supportive Supervisors
- 537 Supportive visits to 92 ASHAs in Tonk
- 356 Supportive visits to 234 ASHAs in Bahraich

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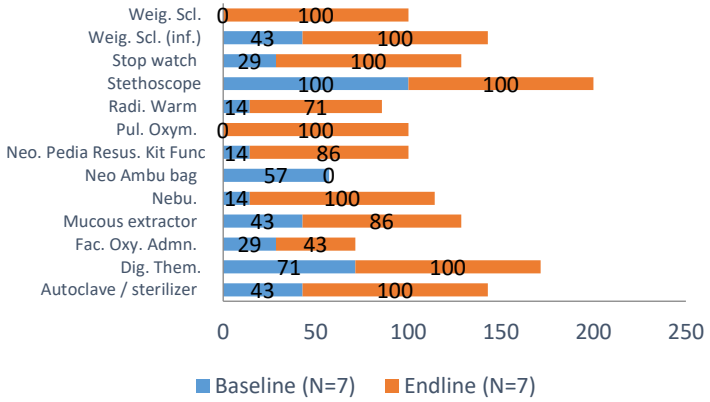
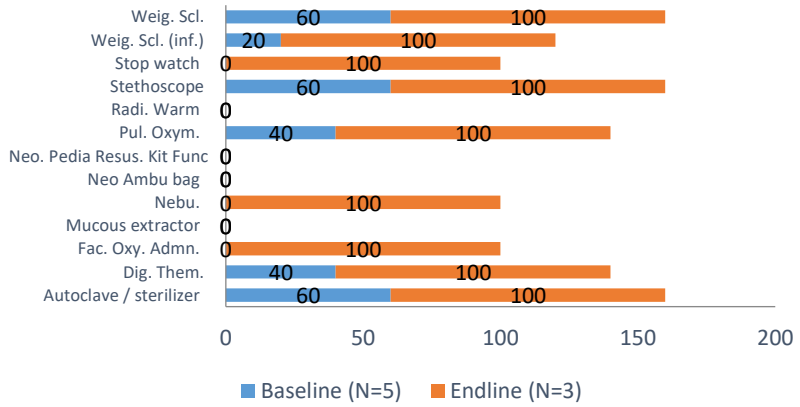
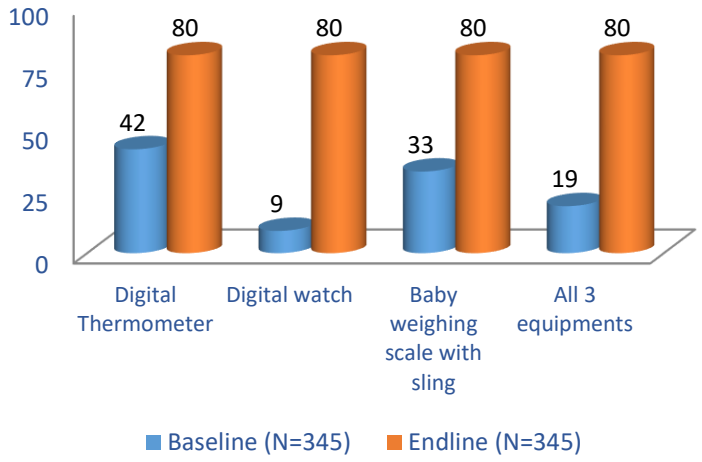
Pneumonia Supply and Logistic Management

Availability of functional equipment at Health Facilities

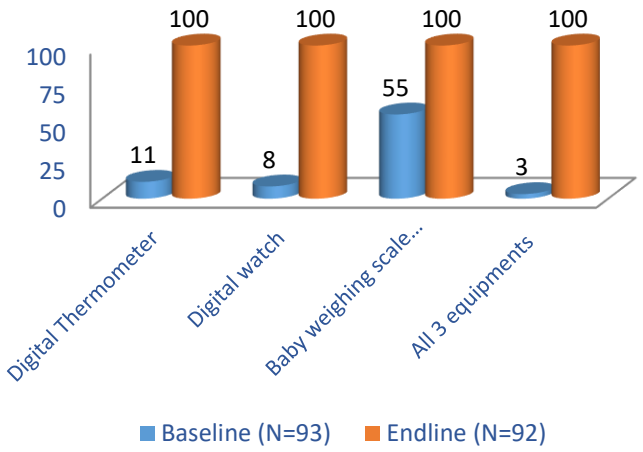




Availability of functional equipment with ASHAs



Bahraich



Tonk

- Project Vishwaas based on assessment strengthened Equipment and Supplies for pneumonia management
- **Regular tracking** of functional equipment's, supplies and drugs for pneumonia management at Facility level and with Frontline Health Workers is recommended
- Training on intending, stocking and use

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M-Health Pneumonia Management Tools

Innovation in digital Communication for development:

SBCC TOOLKIT- Awareness Generation

Features

- **Talking Toolkit for semi-literate and illiterate rural community;**
- **Localized with audio & visual support;**
- **Cultural Centric Communication Strategy – local language support & localized Audio and Visuals**

Target Audience

- **Caregiver**
- **Extended Family/community members**
- **ASHA**
- **ANM**
- **Clinical Providers**
- **Non-clinical providers**

Increased community awareness of pneumonia and improved care seeking

- m-health tool on pneumonia associated risk factors and counselling on pneumonia identification, management and treatment for care seekers developed and piloted
- 144 ASHAs and 26 ANMS trained on use and application of m-Health tool
- m-Health tool used as job aid by FHWs at various platforms and meetings (home visits, group meetings, VHNDs days)
- Community facilitators trained on m-Health tool on pneumonia associated risk factors and counselling
- m- Health based live application on counselling and identification of suspected severe pneumonia cases

https://play.google.com/store/apps/details?id=com.zmq.sbcc

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M-Health Pneumonia Management Tools

Innovation in Heath Tracking:

Case Management- Screening, Referral & Treatment

https://play.google.com/store/apps/details?id=com.zmq.stc.pneumonia.toolkit

https://play.google.com/store/apps/details?id=com.zmq.anm4stc

Features

- Holistic trackers- Assessment, services, follow up, case record & treatment outcome
- Asynchronous monitoring

Target Audience

- ASHA
- ANM
- CHO
- Clinical providers at PHC & CHC

Improved case detection and its management at both community level and facility level	ICT based case management tool for informed decision making at community level developed for FHWs
	Training package on ICT based case management tool rolled out in intervention area with 144 ASHAs and 26 ANMs
	Master trainers and FHWs trained on ICT based case management tool
	ICT based case management tool for informed decision making at facility level developed for medical officers and staff nurses
	Training of medical officers and staff nurses conducted on use and application of ICT based case management tool at facility level

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M Health ***is designed to drive behavior change and sustain frontline health workers with standardized protocols to identify, classify, manage, refer and treat Pneumonia in children under 5.***

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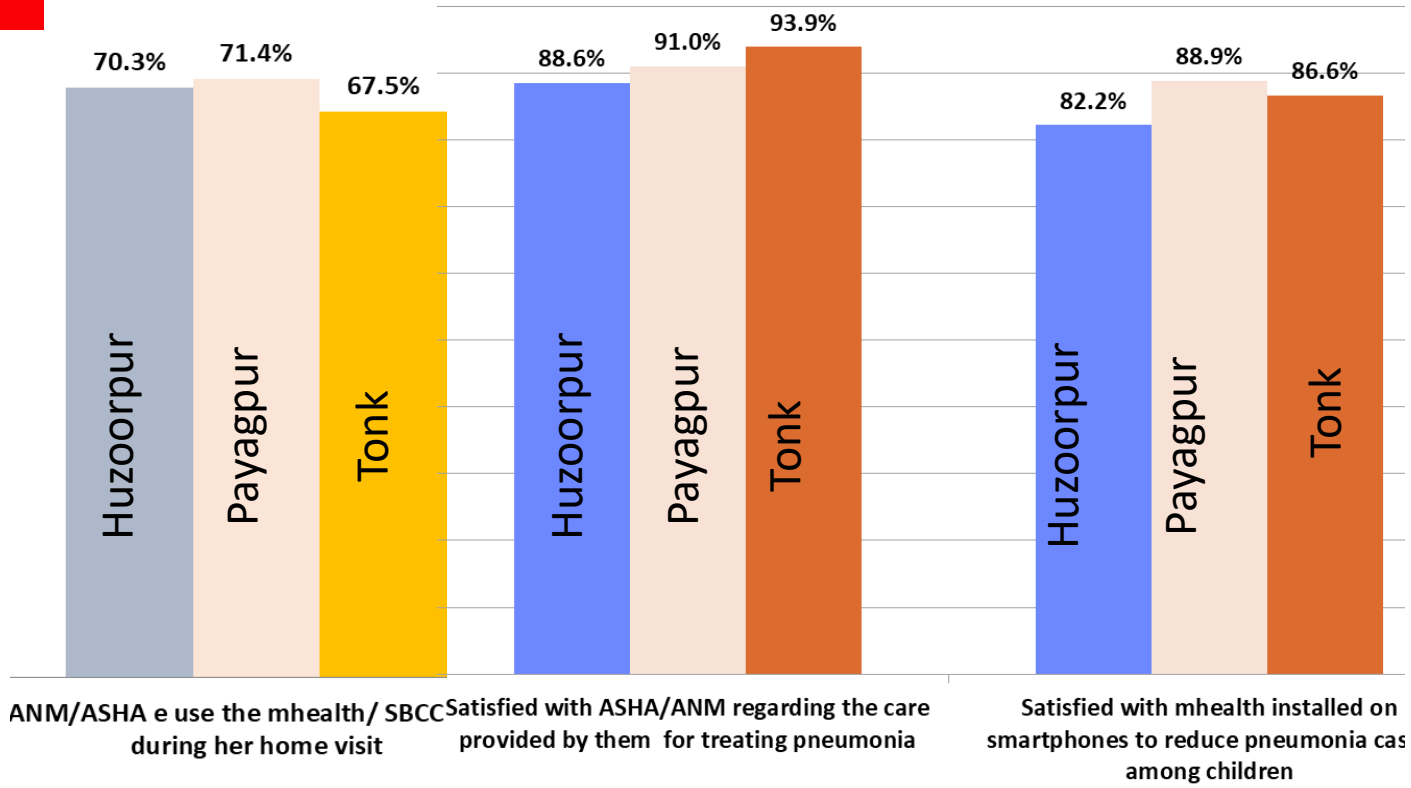

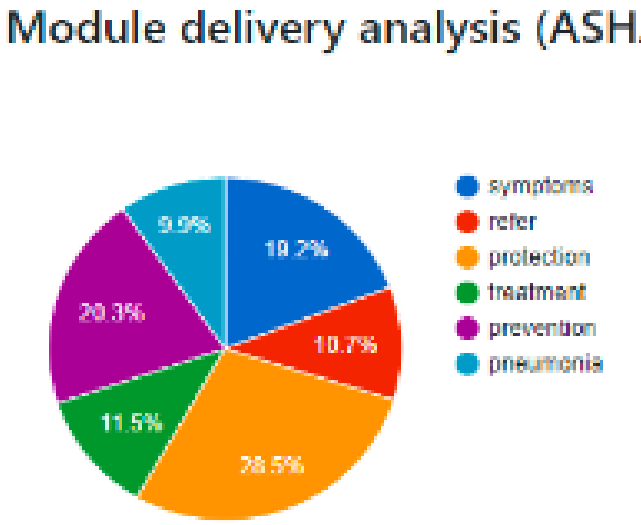

Bridging the knowledge gap - localized m Health tools available for improved and consistent communication delivery

Better Health Tracking - Built in Case tracking system for end to end management and case monitoring

Improved service Delivery & Referrals - Bottom-up health connect model for immediate referrals and timely service delivery

Supportive supervision for overall Health System strengthening - Improved digital screening follow ups, referrals & treatment management

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Project Strengthening SAANS Campaign

E Riskshaw Campaign

Youth Champion Engagement

Ratri Chaupal

Mohalla Meetings

- Training of Medical Officers and Frontline Health Workers on SAANS Campaign
- Pneumonia Corners at Health Facilities
- House to House Screening of ARI cases
- MHealth SBCC Counseling
- Interactive Voice Response System
- Radio Campaign
- Youth engagement
- Digital Wall Paintings

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Job Aid Collaterals

POSTERS ON PN MANAGEMENT BY ANM (AGE SPECIFIC)

POSTERS ON PN MANAGEMENT AT FACILITY (AGE SPECIFIC)

POSTERS ON PN MANAGEMENT BY MO (AGE SPECIFIC)

POSTERS ON PN MANAGEMENT BY CHO (AGE SPECIFIC)

4 PAGE LEAFLET FOR ASHA

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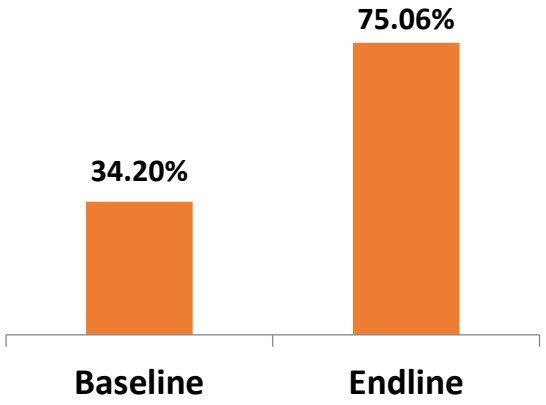
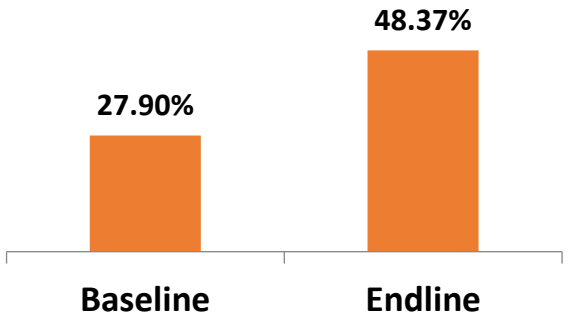
Outcome 1: Increased community awareness of pneumonia and improved care seeking

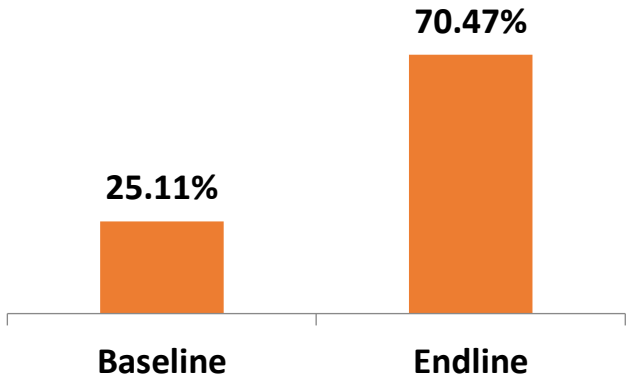
IR 1.1 Increased knowledge and awareness among HHs on pneumonia and its risk factors



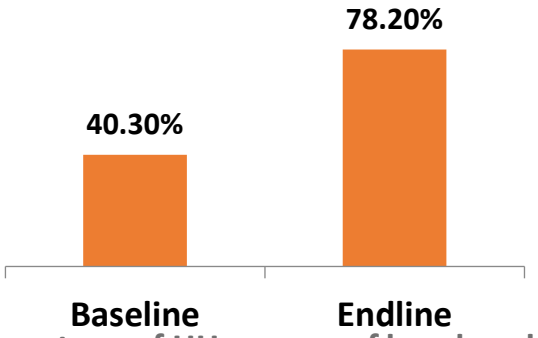
Percentage of HHs with knowledge of signs of pneumonia in children under 5 years of age



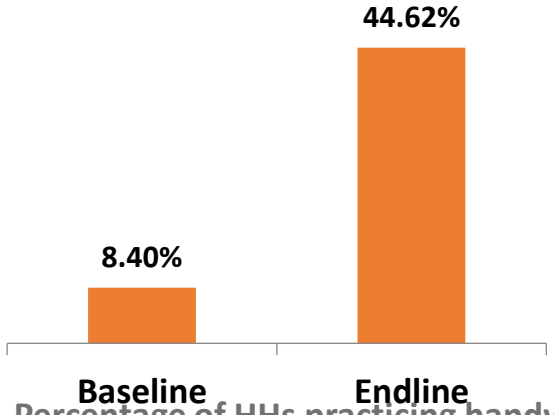
Percentage of HHs with knowledge on indoor air pollution and its effect on pneumonia



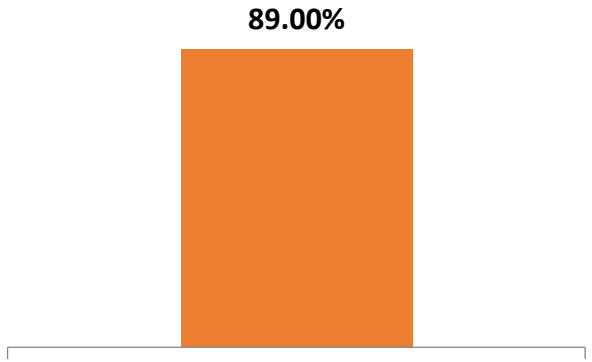
Percentage of MCHN days with focused counselling and education session on pneumonia



Percentage of HHs aware of handwashing with soap and water at critical times



Percentage of HHs practicing handwashing with soap and water at critical times



Percentage of HH who were counselled on pneumonia using m-health tool

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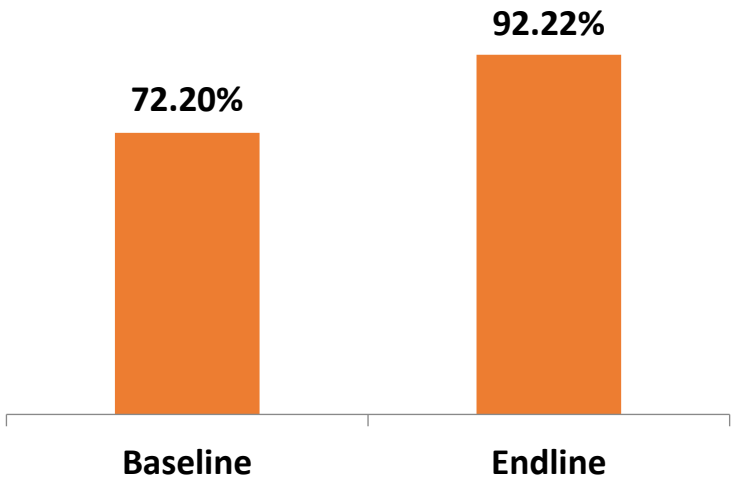
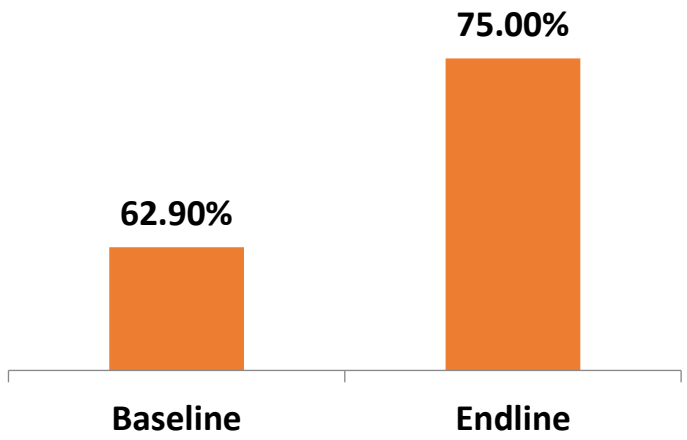
Outcome 1: Increased community awareness of pneumonia and improved care seeking

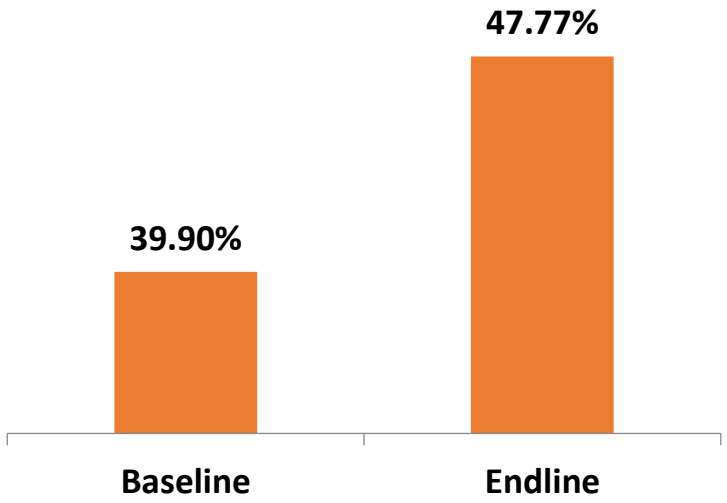
- Key Indicators (IR 1.2) Improved care seeking behaviour for pneumonia



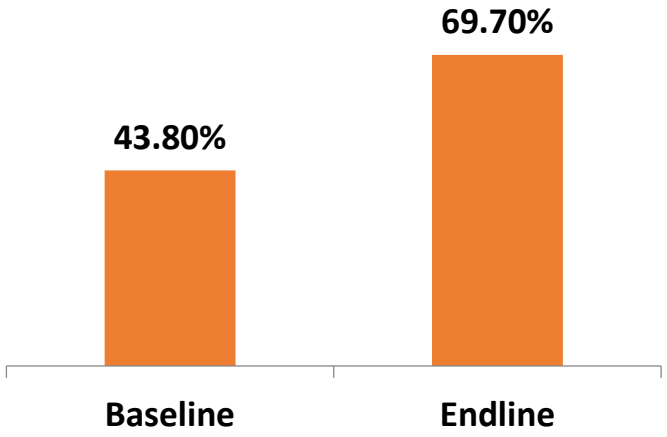
Percent of children (12-23 months) fully immunized



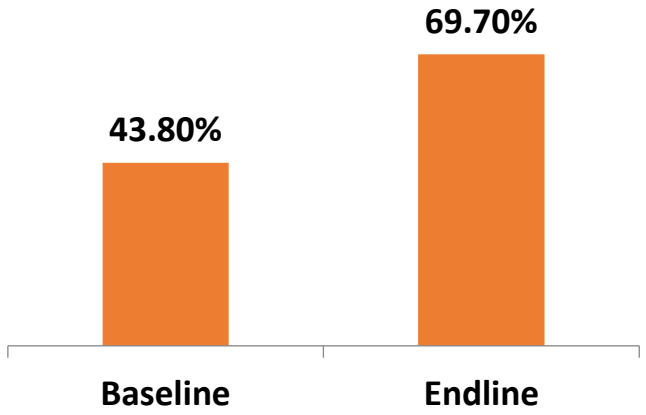
Percentage of children under 5 years of age with acute respiratory infection taken to a health facility



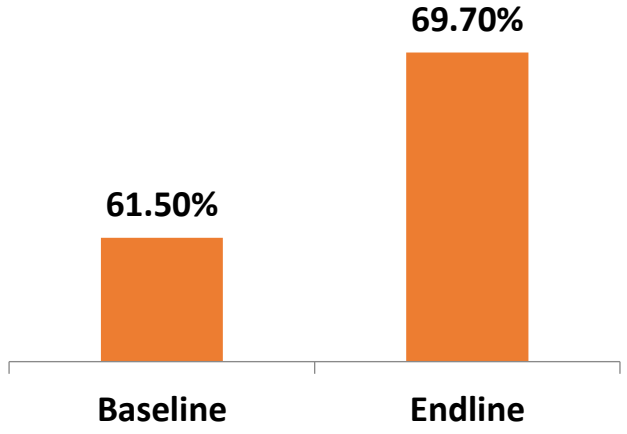
Percentage of children (12-23 months) immunized with three doses of PCV



Percentage of children (12-23 months) with three doses of Pentavalent vaccine



Percentage of children exclusively breastfed for 6 months



Percentage of children initiated complimentary feeding

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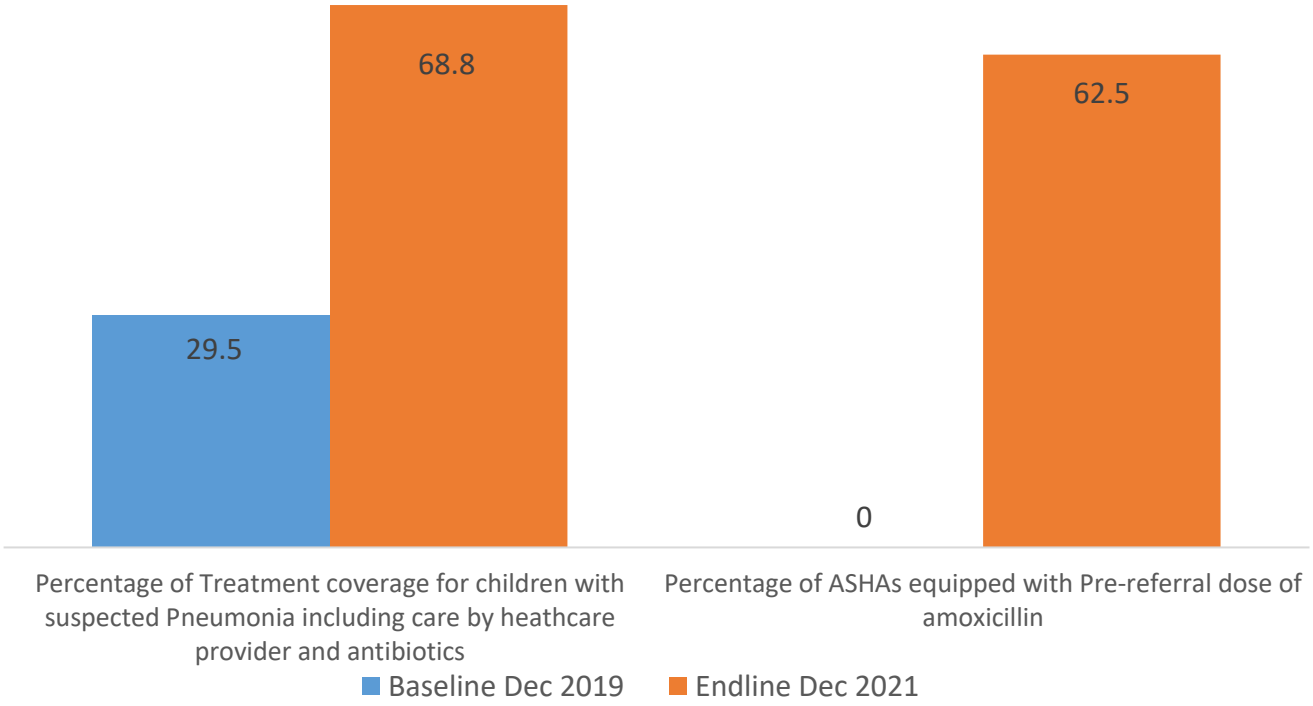
Outcome 2: Improved case detection and its management community and facility level



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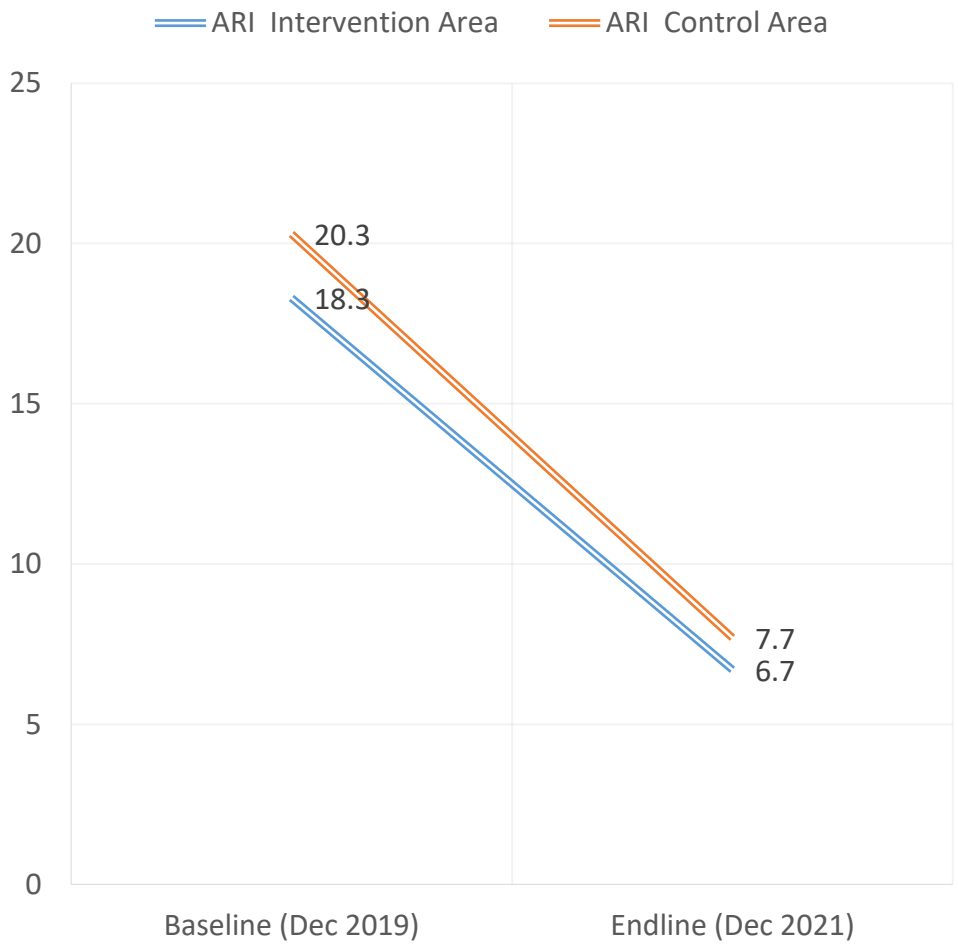
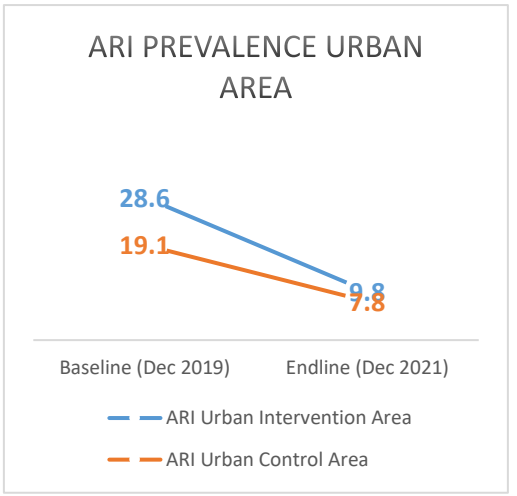
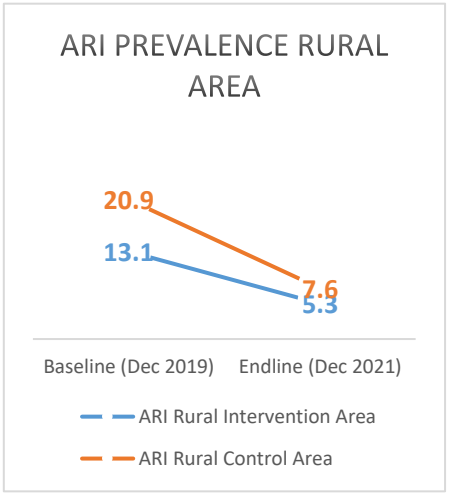
RESULTS







- ARI Prevalence reduced to 6.7% (Dec 2021) from 18.3% (Dec 2019)
- ARI Prevalence in female 5.4% and in male 7.7%
- 64% male and 36% female having ARI symptoms
- Directly reached 1,12,908 children (0-5 years of age) on Protect, Prevent and Treat interventions

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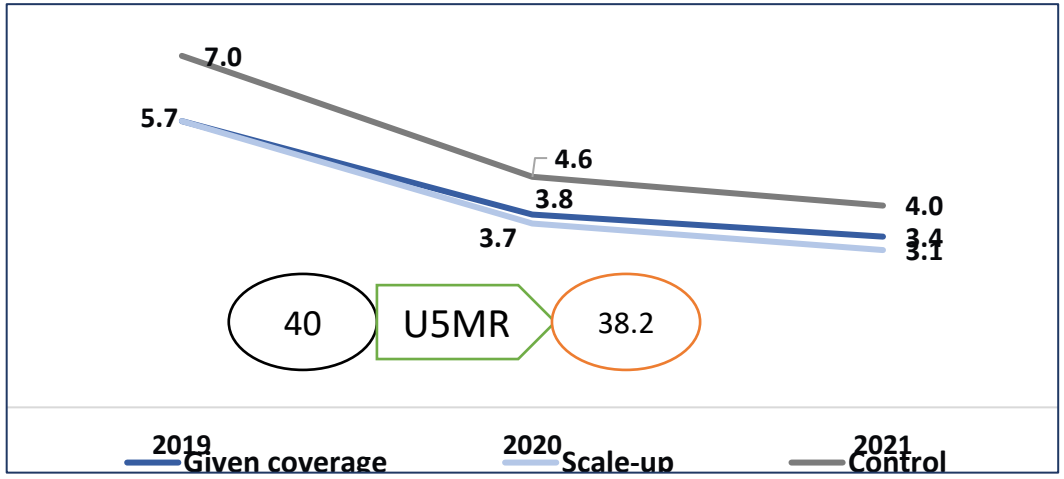
Impact on Incidence and Mortality of Pneumonia (Modelling List Tool)

Incidence Rate of ARI in Rajasthan

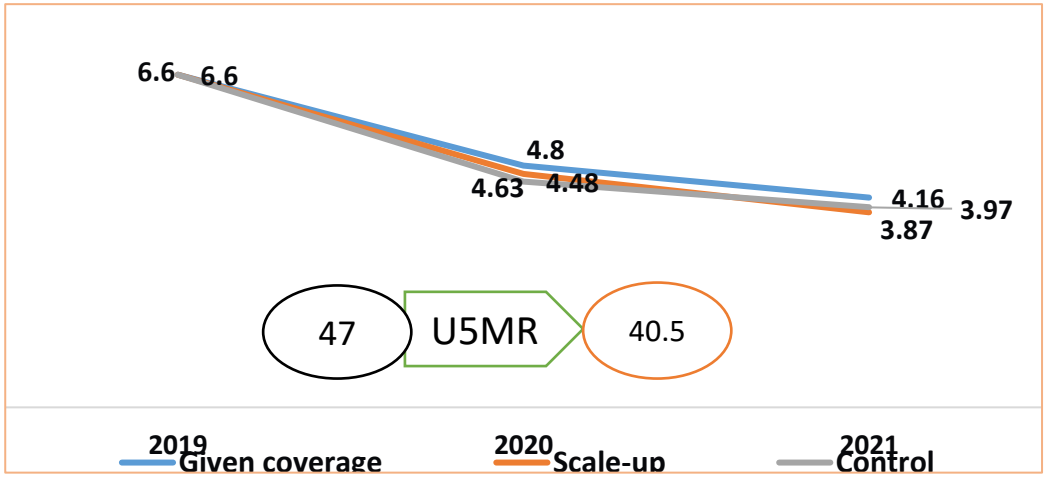


As per the model, the Incidence rates of ARI in children under the age of five years (Number of cases per child-year has reduced from 5.7 (2019) to 3.4 (2021) in the intervention area.

It would have further reduced to 3.1 (2021) if there was complete coverage of the program in Tonk district.

As per the model, the Incidence rates of ARI in children under the age of five years would have reduced from 2.9 (2019) to 1.72 (2021) if the program coverage was followed state-wide & 1.58 (2021) if the program was implemented with complete coverage state-wide.

Incidence Rate of ARI in Uttar Pradesh



As per the model, the Incidence rates of ARI in children under the age of five years (Number of cases per child-year has reduced from 6.6 (2019) to 4.16 (2021) in the intervention area.

It would have further reduced to 3.87 (2021) if there was complete coverage of the program in the Bahraich District.

As per the model, the Incidence rates of ARI in children under the age of five years (Number of cases per child-year would have reduced from 3.5 (2019) to 2.2 (2021) if the program was implemented state-wide & 2.0 (2021) if the program was implemented with complete coverage state-wide

Estimated Additional 383 Lives of 0-5 Years Saved in Interventi on area

Potential to save 40,576 lives state wide

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Recommendations

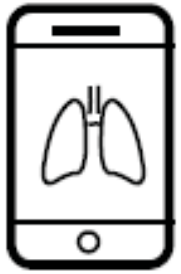
Project VISHWAAS

Adaption of National Policy

- Ensure localization, dissemination, and implementation across states and district level
- Ensure sustainable financial resources across multiple sectors to support pneumonia control efforts

Service Delivery: Digital Solutions Across Public and Private Points of Care

- Technology enabled case management of severe pneumonia at frontline health workers and health facility level
- Include pneumonia skill lab training in Pre-Service Education (PSE) program & CHO Certificate Program
- Strengthen pneumonia control interventions within facility-based care, including integrated community case management



Technology Enabled Community Prevention & Care Seeking

- Application of innovative digital tools (Mhealth) to push behaviour change among caregivers of under 5 children
- Use community structures to reinforce pneumonia messaging,
- Empower communities to own pneumonia control and ensure accountability

Supply & Distribution

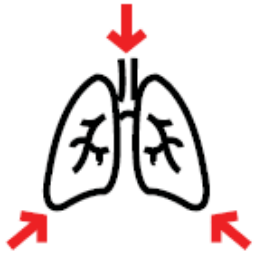
- Support local procurement of Amox DT and increase availability across public and private points of care
- Strengthen the distribution of vaccines to last-mile communities
- Strengthen the supply of pulse oximetry, oxygen, and related products at facilities
- Strengthen the supply of clean cooking fuels at the community level

Data & Information Systems

- Inclusion of pneumonia relevant indicators in routine data collection via HMIS
- Strengthen aspects of data collection, analysis, and use most critical for pneumonia-relevant indicators at national, state and district levels

Use of Point of Care Diagnostics

Research and investment in use of point of care diagnostics for pneumonia treatment and management – pulse oximetry, respiratory monitors



Coordination & Convergence

- Develop an accountability framework
- Ensure states have relevant coordination mechanism
- Strengthen convergence of sectoral programs and departments Engagement of private health sector

Save the Children

THANK YOU !!!