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Progress on Childhood Pneumonia: PATH's integrated approach

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Pneumonia remains the deadliest infectious disease worldwide, claiming the lives of more than 800,000 children under age five every year.



Under 5 mortality burden in India

1

1.2 million children <5 died of preventable causes in 2017¹

2

| Indicator | India | Uttar Pradesh |
|------------------|-------|---------------|
| IMR ² | 33 | 41 |
| U5MR | 37 | 46 |

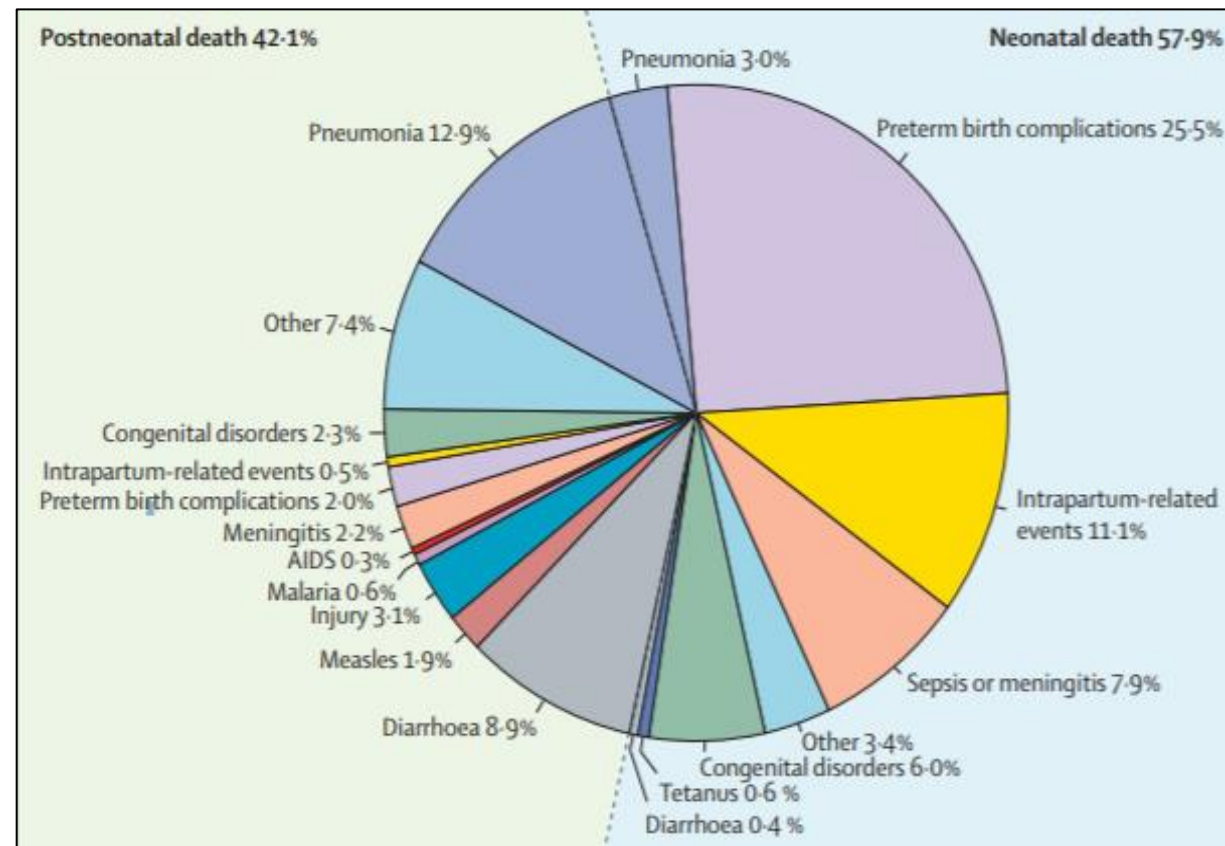
3

Evidence and guidelines exist for case management but are not always followed by health workers

4

Tools to strengthen implementation and augment the accuracy of guidelines can improve quality of care and reduce morbidity & mortality

India- Distribution² of deaths among children under age 5



- Per year: Pneumonia episodes: 30 million and Death: 140649
- Per month: 11721
- Per day: 390
- Per hour: 16

Challenges, opportunities for comprehensive & integrated approach



More than half of all neonatal deaths globally are due to severe respiratory distress syndrome, neonatal pneumonia and sepsis, and intrapartum-related conditions or asphyxia—all of which can cause dangerously low blood oxygen levels.



Global estimates suggest that one in five sick newborns has hypoxemia upon admission to a hospital



Administering oxygen therapy, antibiotics, and other supportive care practices for severe neonatal infections could save the lives of more than 400,000 babies each year.



Pneumonia is the world's leading infectious cause of death in children younger than five years, and at least 13 percent of children admitted to a hospital with severe pneumonia have hypoxemia.

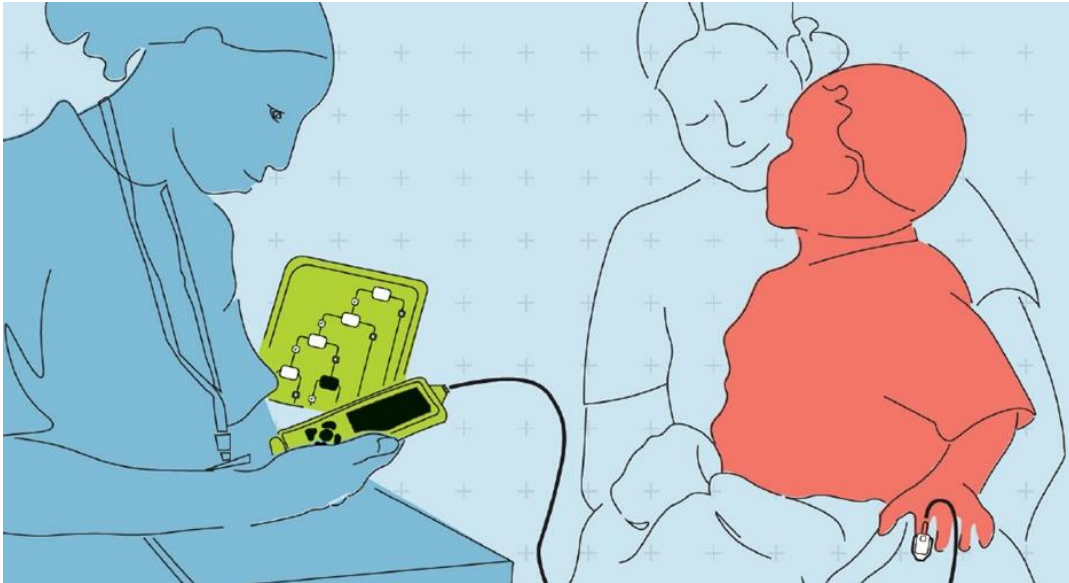


Improved oxygen delivery systems could reduce childhood pneumonia– related mortality by at least 35 percent in high burden, low-resource settings.



Pulse oximetry and oxygen therapy could save up to 120,000 children's lives each year

To better serve marginalized people and accelerate global progress against pneumonia, PATH is harnessing an integrated array of cost-effective solutions that can hit the disease from multiple angles, including vaccines, access to appropriate diagnostic tools, and treatments.



Better access to smart tools to detect severe illness in children



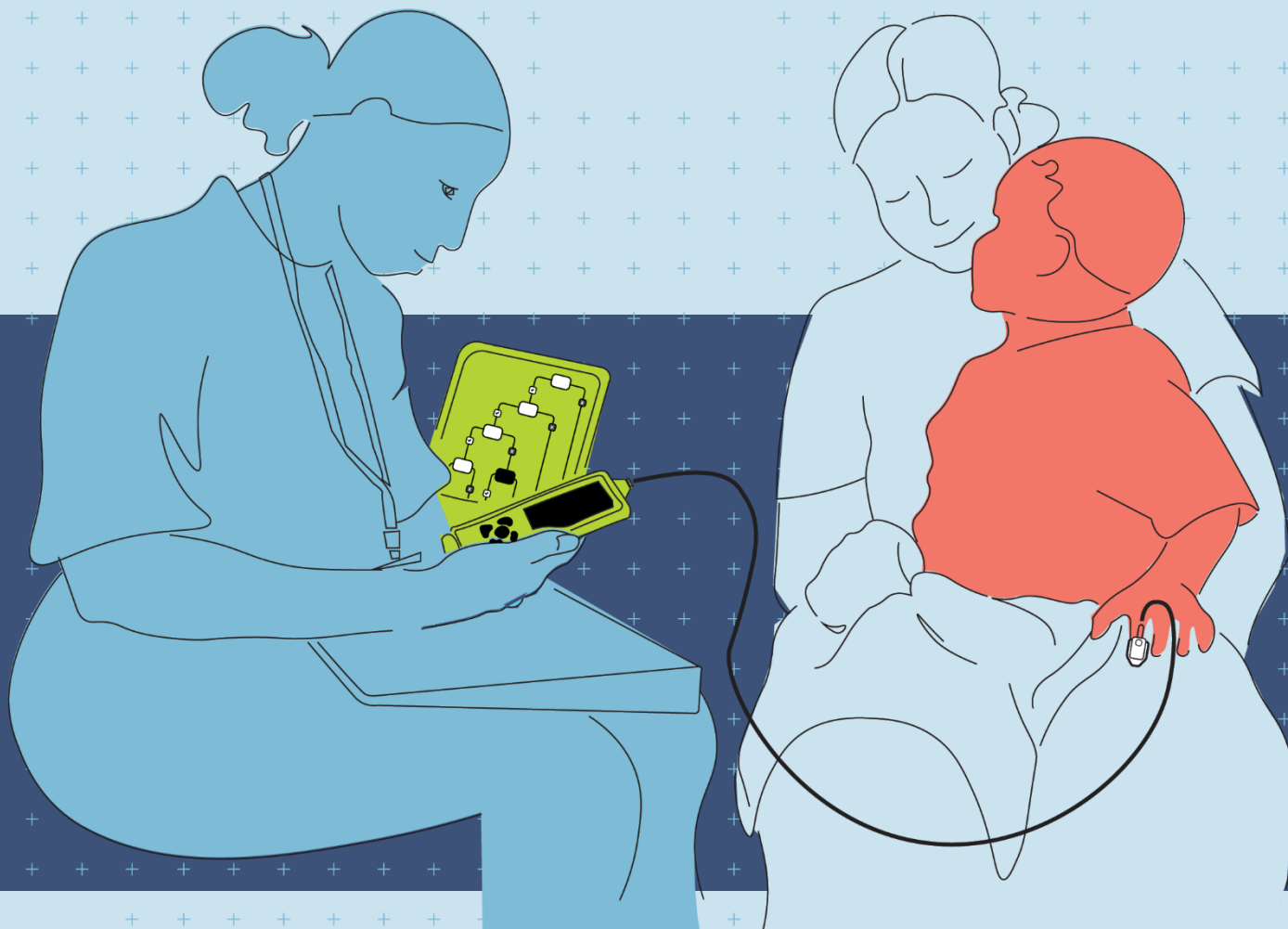
Better access to safe oxygen

TIMCI

Tools for Integrated
Management of
Childhood Illness

Tools for Integrated Management of Childhood Illness-

Pulse Oximeters & Multi-modal devices



Tools for Integration Management of Childhood Illness

1 Objective

Improved detection and management of severe disease in children under 5 and improve rational use of resources (medicines, referral) by equipping them with pulse oximetry and electronic clinical decision support algorithms

2 Key Activities

1

Introduction of pulse oximetry & CDSAs in primary care facilities

2

Evidence generation for pulse oximetry & CDSA introduction

3

Market strengthening for adapted multimodal devices

4

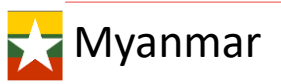
Creating conditions for scale-up

3 Geographies

Implementation countries



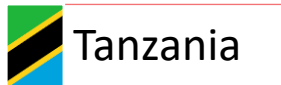
India



Myanmar



Senegal



Tanzania

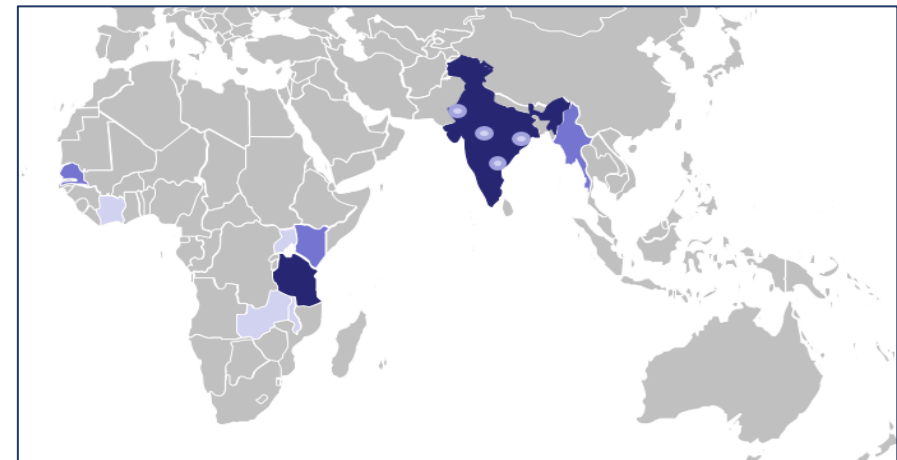


Kenya

Observer countries / states

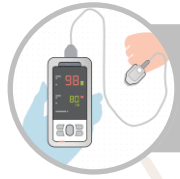
Côte d'Ivoire, Malawi, Uganda, Zambia

Indian states of Andhra Pradesh, Madhya Pradesh, Odisha, and Rajasthan



TIMCI : Interventions

To improve detection and management of severe disease in children under 5 years



Detection of hypoxemia by using handheld pulse oximeters



Development of electronic clinical decision support algorithm



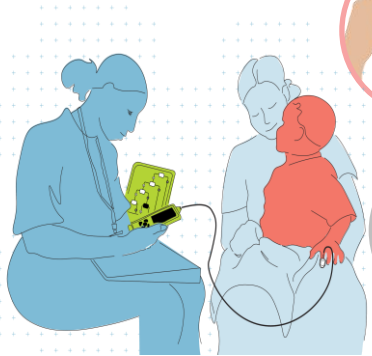
Introduction of new generation Multimodal Devices



Capacity building of Health care staff on pulse oximetry



Promote rational use of antimicrobials



Scale & Partnerships

1 Impact



Patient care
50k+ sick child
consultations



Health systems
participation
3 districts,
120 PHCs



Technology &
Innovation
Introduction &
evidence
Capacity building HCW



Community
engagement
9000 + ASHAs
Care seeking

2 Key Activities



Support NHM, GoUP in SAANS implementation & monitoring



Network with ASHA: Improve care seeking behavior



Track & improve hypoxemia cases, outcomes & referrals



Strengthen pneumonia surveillance through HMIS systems

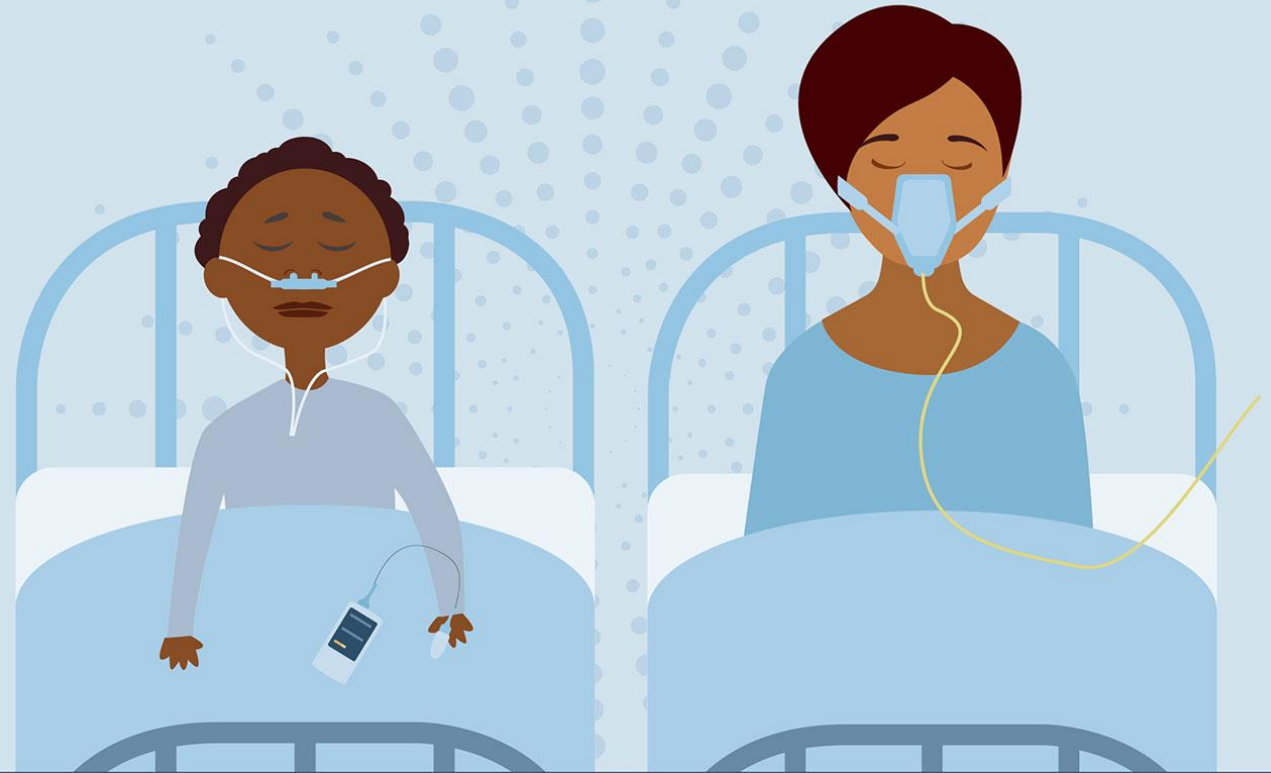


Scale up intervention learnings in observer states and beyond

Oxygen access is a **matter of life and death.**

We must invest in **oxygen for ALL**

including children suffering from pneumonia, COVID-19 patients, and beyond.



MARKETS MATTER: CLOSING THE OXYGEN GAP

C-19 Respiratory Care Coordination Project

Goal: Support C-19 high burden states in improving reliable access to a comprehensive respiratory care treatment package—both as part of the immediate COVID-19 response and to strengthen respiratory care systems.

Objectives



Establish respiratory care coordination

1



Rapid respiratory care capacity assessment

2



Supplier Landscaping and Outreach

3



Support for informed State-specific decision-making on procurement and use of respiratory care products

4

Key Activities



Training (ToT) for rational and hygienic use of oxygen



Constituting state and district level committees for monitoring and coordination



Rapid demand and quantification and baseline assessment



Recommendations on new C-19 equipment selection and placement



TA support for oxygen related procurement activities in state

Project Reach and Geography in India

1

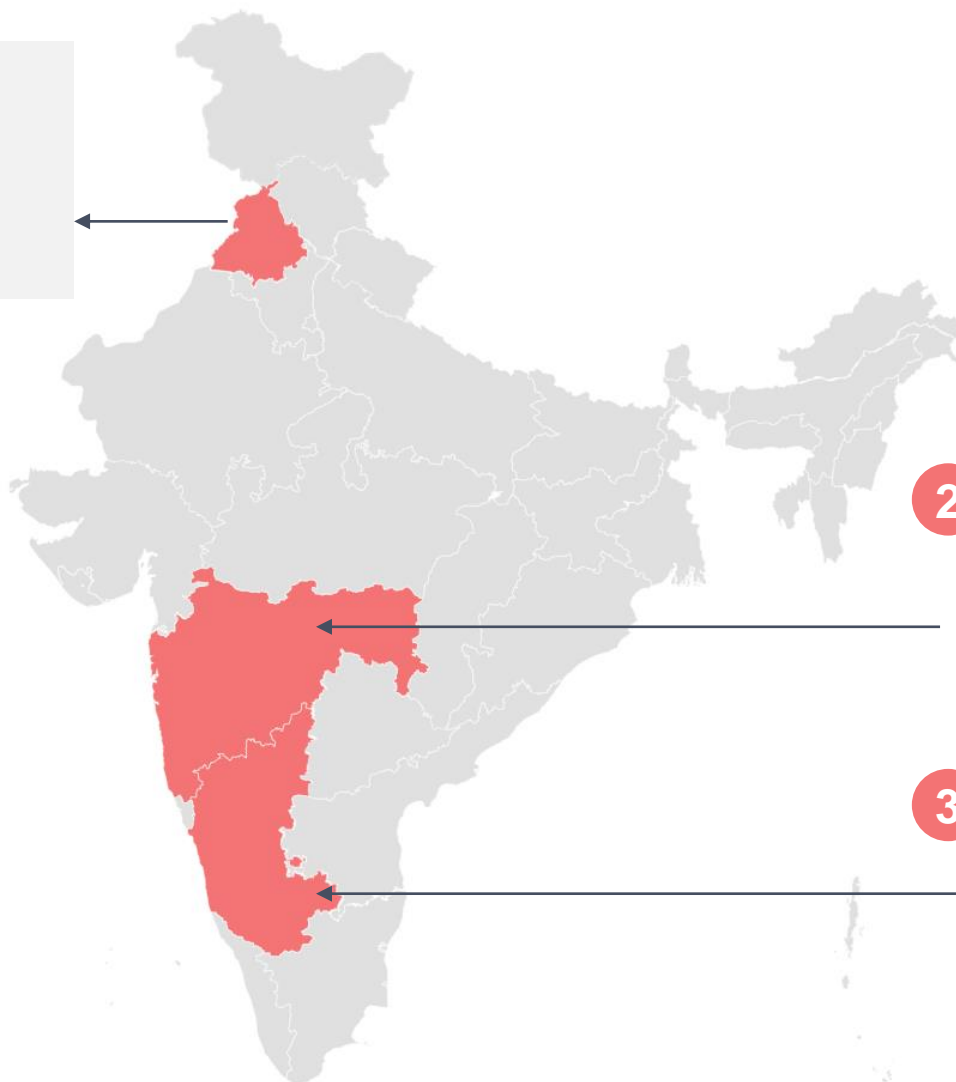
Punjab

Population**: 30.3 million

NMR: 13

IMR: 20

U5M:23



2

Maharashtra

Population** : 127 million

NMR: 13

IMR: 19

U5M:22

3

Karnataka

Population**- 64.6 million

NMR: 16

IMR: 23

U5M:28

Focused Countries

1. Cambodia

3. Ethiopia

5. Kenya

7. Liberia

9. Nigeria

11. Vietnam

2. the Democratic Republic of the Congo

4. **India**

6. the Lao People's Democratic Republic

8. Malawi

10. Senegal

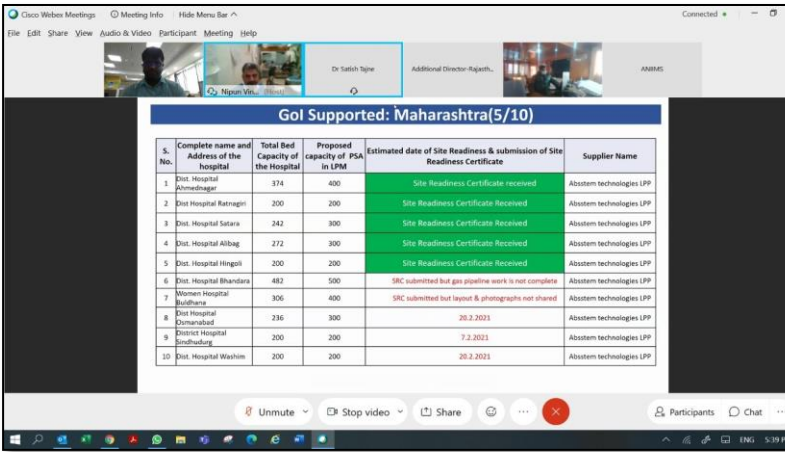
12. Zambia

Partners

1. Clinton Health Access Initiative
2. The Every Breath Counts Coalition

Collaboration with partners and other sectors

1. Supporting states to **prepare for national review meetings** related to PSA and oxygen preparedness meetings
2. Coordinating meetings between state and districts
3. Coordinating with vendors-PSA, cylinder re-fillers suppliers, LMO plants
4. With partners and experts working in Medical O2 space to facilitate capacity building at state level (AIIGMA, UNICEF, JHPIEGO, CHAI, UNDP etc.)
5. Dissemination of information from national level to districts (what's app groups, virtual calls)
6. PATH resource Library: <https://a2o2resources.org/>



The screenshot shows a Google Meet window with a table titled "Govt Supported: Maharashtra(5/10)". The table lists 10 hospitals with their details and the status of their Site Readiness Certificate (SRC) submission.

| S. No. | Complete name and Address of the Hospital | Total Bed Capacity of the Hospital | Proposed capacity of PSA in LPM | Estimated date of Site Readiness & submission of Site Readiness Certificate | Supplier Name |
|--------|---|------------------------------------|---------------------------------|---|-------------------------|
| 1 | Dist. Hospital Ahmednagar | 374 | 400 | Site Readiness Certificate received | Abstem technologies LLP |
| 2 | Dist Hospital Ratnagiri | 200 | 200 | Site Readiness Certificate Received | Abstem technologies LLP |
| 3 | Dist. Hospital Satara | 242 | 300 | Site Readiness Certificate Received | Abstem technologies LLP |
| 4 | Dist. Hospital Albag | 272 | 300 | Site Readiness Certificate Received | Abstem technologies LLP |
| 5 | Dist. Hospital Hingoli | 200 | 200 | Site Readiness Certificate Received | Abstem technologies LLP |
| 6 | Dist. Hospital Bhandara | 482 | 500 | SRC submitted but gas pipeline work is not complete | Abstem technologies LLP |
| 7 | Women Hospital Buldhane | 306 | 400 | SRC submitted but layout & photographs not shared | Abstem technologies LLP |
| 8 | Dist Hospital Dahanu | 236 | 300 | 20.2.2023 | Abstem technologies LLP |
| 9 | District Hospital Indraprastha | 200 | 200 | 7.2.2023 | Abstem technologies LLP |
| 10 | Dist. Hospital Washim | 200 | 200 | 20.2.2023 | Abstem technologies LLP |

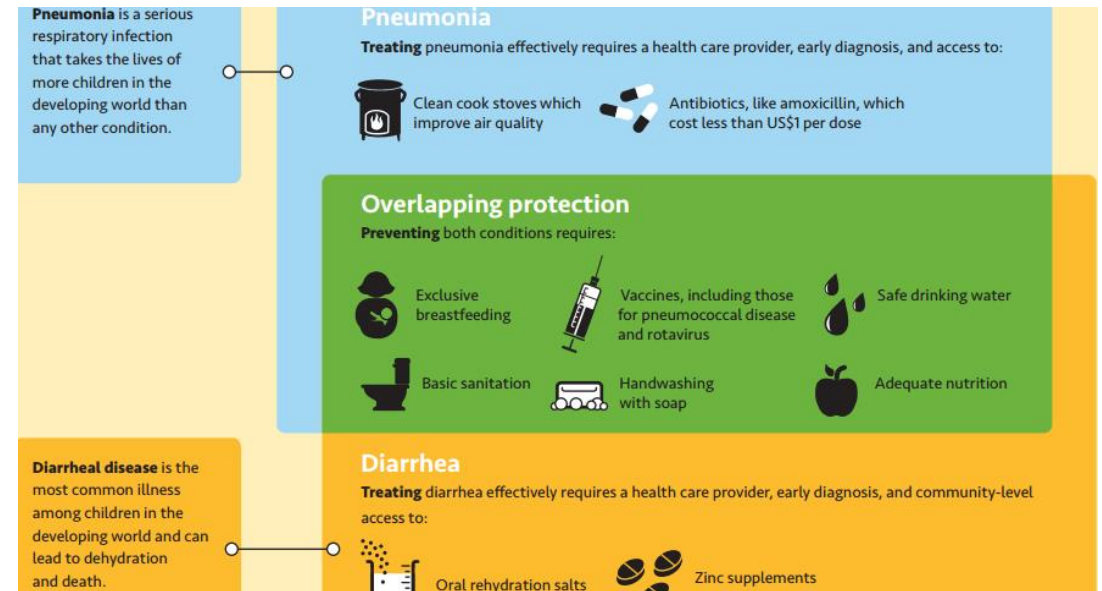
Review Meeting with Govt



Inox Modinagar plant, Uttar Pradesh

Integrated, coordinated and Comprehensive approach is required for Pneumonia control

Many of the broader interventions that help prevent pneumonia—such as breastfeeding, nutrition, sanitation, and hygiene—have overlapping benefits to prevent other childhood diseases, like diarrhea. Integrated and coordinated approaches across diseases and sectors can maximize impact, decrease costs, and increase efficiency.



Thank YOU