

High Flow Nasal Oxygen

Area/Type: Medical R&D; Incubator

Sponsor/Support: OC Paris, OC Belgium Medical Director

Length/Project Status: 18 months; **ONGOING**



TRANSFORMATIONAL
INVESTMENT
CAPACITY

Project Summary

Problem

Respiratory distress is one of the most common life-threatening presentations in neonates and children, and lower respiratory tract infections remain one of the **leading causes of under 5 years old mortality worldwide**. In low resource settings there is **limited access to respiratory support**.

Proposed Solution

Deploy and test Humidified High-Flow Nasal Oxygen (HFNO). Following positive experiences in Yemen, demonstrate that HFNO use in routine is feasible, scalable and could dramatically change care management for children suffering from respiratory distress. Scale up implementation of HFNO in 4 project sites combined with operational research in collaboration with Epicentre: Sierra Leone, Afghanistan, Yemen and Bangladesh.

Co-work with the manufacturer on the re-usability process of one component for better access and sustainability.



Potential Impact

- **Improved health outcomes in children with primary respiratory pathologies**, especially acute respiratory infections such as bronchiolitis and pneumonia.
- Improved management of critical patients with lower respiratory infections

Viability

- Leverages learnings from previous MSF implementations in neonatology and paediatrics at Al-Salaam Hospital in the city of Khameer, North Yemen.

Risk Mitigation

- Conducted advanced discussions at the cell, coordination and project level for field buy-in; strong willingness from several projects to start implementing this test-and-learn project.

Scalability

- Aligns with MSF's strategic objectives to **increase access to medical products, improving quality of care** as well as focusing on a **person-centred approach**.
- Incorporates a "standard kit" on SharePoint with documentation needed to implement HFNO activities in MSF settings