# FREO2 Foundation

## **Impact Report**

(January - June)

Q3 & Q4 FY 2022/2023







FREO2 Foundation (FREO2) is a global not-for-profit organisation that aims to reduce the number of deaths of babies and children suffering from pneumonia in low resource settings.

We envision a world where every child can breathe, live and thrive. Our mission is to improve access to oxygen to save lives.

The FREO2 team is committed to saving lives by developing and deploying our novel medical oxygen technologies to improve access to oxygen and patient care at the periphery of the health system. FREO2 oxygen innovations are affordable, developed specifically to be installed in the most remote parts of the world and can provide a constant supply of oxygen, even during a power outage.

### How we work

The key differentiator of our approach is our absolute focus on the availability of oxygen and the delivery of oxygen as a service, not just the provision of technology.

#### **Product**

We develop fit-for-purpose oxygen innovations to increase oxygen access in under-resourced settings. Our Oxylink concentrator provides a continuous flow of oxygen to children, even during a power outage.

#### **Clinical Training**

We train local healthcare workers in pulse oximetry and medical oxygen delivery to improve clinical outcomes.

#### **Installation and Maintenance**

We install FREO2 oxygen systems in remote health facilities and up-skill local car mechanics, plumbers and electricians to install and maintain FREO2 technologies.

#### **Social Enterprise**

We constantly look for opportunities at FREO2 to catalyse social enterprises within local communities.

#### **Outreach**

We work closely with community health workers and families to influence care seeking behaviour, diagnosis and referral to higher levels of care for childhood respiratory illnesses.



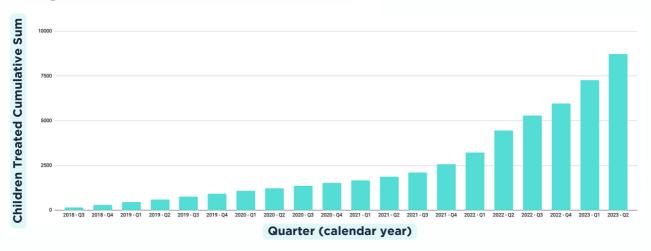




### Children treated with FREO2 enabled oxygen

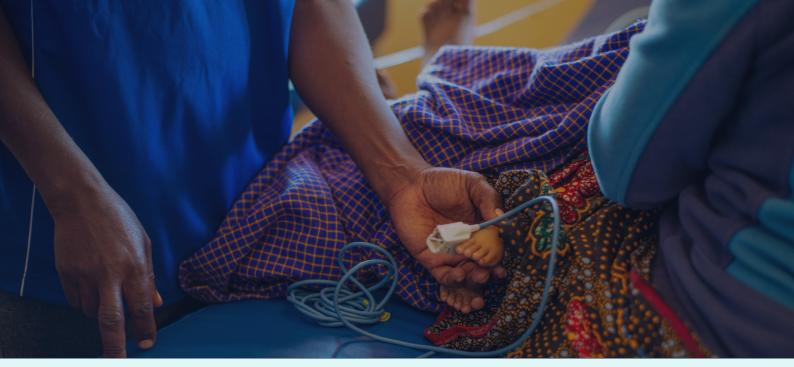


#### **Progression on children treated**



	To date	FY 22/23 target
Health workers trained in pulse oximetry and oxygen therapy delivery.	997	1,000
Remote health facilities with FREO2 systems installed.	43	53

lom	Beds serviced with FREO2 oxygen	Local FREO2 staff employed
	233	22





#### **Half-yearly Update**

### **Highlights**

- FREO2's Tanzanian and Ugandan teams came together in May to focus on how they will collaborate on our Maximising Oxygen Miles (MOM) Strategy.
- FREO2's Máire Ruane recently visited Tanzania. During the visit, Máire and the team had a meeting with Dr. Mollel, the Deputy Minister for Health, who pledged the support of the Ministry of Health (MOH) and himself personally to assist FREO2 in any way possible.
- Both FREO2 Uganda and Tanzania teams have been actively engaged in supporting their respective Ministries of Health in the development of National Oxygen Scale Up Plans. This marks a valuable opportunity to strengthen our collaborative relationships for scaling up FREO2 oxygen programs in these regions.



### **Half-yearly Update**

### **Key Learnings**

- In response to the rising transportation and fuel costs in the regions where we operate, FREO2 is actively exploring potential partnerships within the fuel industry to mitigate transportation expenses on the ground.
- To address the impact of escalating freight costs, we are working to negotiate discounts with freight organisations.
- During Matthew James' (FREO2 Product Development Manager) recent trip to the Pacific, he gained valuable insights into previously unrecognised benefits of the FREO2 system. Firstly, our systems enable "sympathetic installs", ensuring uninterrupted treatment during the installation process. Secondly, the compact transportability of FREO2's Oxylink system components has emerged as a key advantage, offering enhanced convenience during transportation. Find out more about Matt's learnings on page 6.



### **News From Uganda**

#### With Sheillah Bagayana

The past half-year has been marked by productive partnership developments following the Breath of Life conference. Data collection for the Transition to Scale program has been successfully completed, laying the foundation for future initiatives.

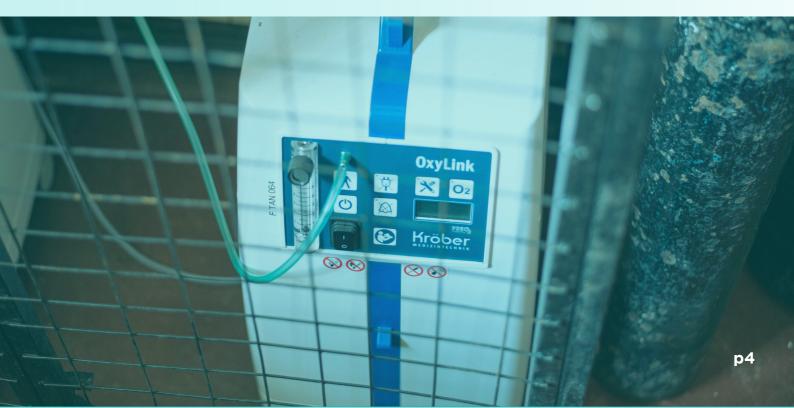
In collaboration with the Adara Group, the team conducted a comprehensive clinical training session at Nakaseke Hospital, focusing on oxygen therapy delivery and hypoxemia diagnosis. Additionally, our collaboration with Uganda's Ministry of Health has been instrumental in supporting the development of their National Oxygen Scale-Up Plan, further solidifying our commitment to improving oxygen access together.

To ascertain the oxygen needs and determine the strategic direction for future program implementations, the team conducted a comprehensive oxygen survey in the Northern and Eastern Regions. This data will guide our efforts in identifying priority sites and regions most in need of oxygen support.

On the technical front, the team recently performed routine maintenance on fifteen oxygen systems, ensuring optimal longevity. The Uganda team has also initiated a specialised training program for local oxygen technicians. Through four comprehensive training sessions, 22 oxygen technicians were equipped with essential skills in routine maintenance of our oxygen systems and were provided with necessary maintenance tools. The recent acquisition of new Oxylink concentrators has also replenished our in-country storage and is providing support to our Swap-and-Go model.

Health Facilities Supported: 22 Children Treated: 4979

Health Workers Trained: 791 Beds Serviced: 110





### **News From Tanzania**

#### With Br George Massay

The past six months have been exciting for the FREO2 Tanzania team. We successfully launched our second Oxygen as a Service program with the Oxygen CoLab, completing installations and clinical training at four new sites. Additionally, we have been dedicated to upgrading two FREO2 supported sites and conducting maintenance across all supported health facilities.

During this period, we embarked on an exciting new venture with the introduction of our Outreach and Advocacy strategy. This involved conducting radio campaigns, hosting twenty church sessions, and distributing educational materials and flyers to raise community awareness about the signs and symptoms of pneumonia in babies and children as well as piloting a new pulse oximetry training at the Hydarer and Masqaroda dispensaries. Our clinical team has made significant strides by incorporating our newly developed Gender Equity modules into our clinical training programs, marking the successful completion of our three-year gender equity strategy.

Our Program Manager, Msira Mageni, had the privilege of presenting a pitch for FREO2 at the prestigious Sankalp Annual Event in Nairobi. Moreover, we have been strengthening our local strategic partnerships with POLARG, MOH, and the Doris Mollel Foundation as well as working closely with the Ministry of Health on the Oxygen Scale-up Plan.

Health Facilities Supported: 19 Children Treated: 3692

Health Workers Trained: 206 Beds Serviced: 105



### **News From The Pacific**

#### With Dr Divi Ogaoga

This has been an extremely exciting period for the FREO2 team in the Pacific with the successful launch of our oxygen systems at two pilot sites: Helena Goldie and the National Referral Hospital. This significant milestone was enabled by the visit of Matthew James (Product Development Manager) and Paul Giansiracusa (Innovation) in February to the Solomon Islands. Matt and Paul not only supported the installations, but also helped to <a href="Launch our FREO2 Snorkel innovation">launch our FREO2 Snorkel innovation</a> at the two new sites. Dedicated efforts have been invested in operationalising the Monitoring, Evaluation, and Learning system, which is now up and running. We are delighted to share that 54 children in the Pacific have already received life-saving oxygen treatment enabled by FREO2!

Moreover, FREO2 clinical training programs have been conducted at the two sites, receiving an enthusiastic response from local health workers. They eagerly embraced the opportunity to deepen their understanding of FREO2 systems and enhance their skills in delivering optimal oxygen therapy. We look forward to the continued success and expansion of FREO2-enabled oxygen interventions in the Pacific.

Health Facilities Supported: 2 Children Treated: 54

Health Workers Trained: 53 Beds Serviced: 15



### **FREO2 Stories**

Click the images below to read the full-article

### On Mafia Island, oxygen is no longer a 10 hour journey

When FREO2 announced a collaboration with Tanzania's Ministry of Health (MOH) to improve oxygen access on Mafia Island, many wondered - why this particular island? It wasn't until the FREO2 team arrived on the island alongside the Doris Mollel Foundation that we really understood why the MOH needed our assistance there...



### The Show Must Go On: Sympathetic Installs

For stakeholders with little experience of FREO2 Oxylink systems, the installation of oxygen systems can seem a potentially stressful undertaking for health centre staff, patients and their families. With this in mind, FREO2 approaches all our installations with a sympathetic mindset that takes into consideration the needs and well-being of everyone involved...

#### Oxygen Delivery in Remote Health Facilities

The pandemic has illuminated the critical importance of access to medical oxygen for patients in low-resource settings. Many remote health facilities lack reliable access to oxygen, making it difficult to provide life-saving care to those who need it most. However, the FREO2 Oxylink system provides an innovative solution to provide oxygen in these remote locations...







"Since we have installed this new oxygen delivery system from FREO2...it has made things easier for us".

**Dr. Davis Kombe**Mafia District Hospital



"We believe the investment FREO2 is making in Mafia Island is going to be one of the most remarkable investments that our government will forever cherish".

**Doris Mollel**Doris Mollel Foundation



#### FREO2 Innovation at the University of Melbourne



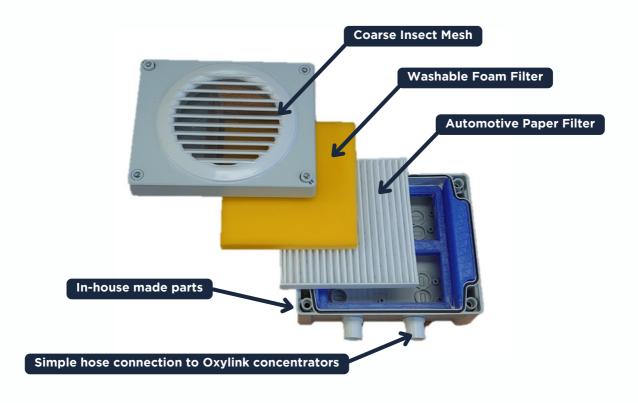
# FREO2 Snorkel to pilot in the Pacific.

We are thrilled to announce that FREO2's latest 'Snorkel' innovation has commenced its pilot program in the Solomon Islands.

Many oxygen concentrators in low-resource settings malfunction due to overheating and compressor motor failure, typically caused by blocked air intakes, filters, or debris accumulation in the compressor. FREO2 Snorkel is designed to support our <a href="Oxylink-5 concentrators">Oxylink-5 concentrators</a> through an additional filtration system at a low cost, to extend the lifespan of our oxygen concentrators, without affecting performance or requiring electricity.

The FREO2 Australia team have been working closely with suppliers and have manufactured two components for Snorkel at the University of Melbourne using our 3D printer. As part of our collaboration with Bollé Safety AU, 50 Snorkel devices have now been assembled for deployment.

In February this year, the FREO2 team launched Snorkel at two sites in the Solomon Islands. The remaining Snorkels are in the process of being distributed to Uganda and Tanzania for site-by-site rollout as regular site maintenance is performed.





# A big thank you to our supporters!



























































- The completion of implementation plans for FREO2 in Uganda and Tanzania, providing a strategic roadmap to support the three-year Maximising Oxygen Mlles (MOM) Strategy.
- The highly anticipated launch of the National Oxygen Scale-up Plans in Uganda marking a significant step towards enhancing oxygen access on a national level.
- The Uganda team is expanding our technical trainings through regional workshops.
- Installations across ten new facilities in Uganda and Tanzania!
- FREO2 engages in collaboration with Save the Children Uganda in an exciting new partnership that aims to advance oxygen therapy and hypoxemia management training.
- FREO2 Uganda embarks on a site visit with EGPAF (Elizabeth Glaser Pediatric AIDS Foundation) and FHI-360 in South Western Uganda.
- In the Solomon Islands, extensive research is underway to identify the facilities most in need of oxygen supply, where 10 donated oxygen concentrators, donated by UKAID, will be deployed.

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