No Child Should Die for Lack of Oxygen

The Fiji Oxygen Project



No child, no person, should die for lack of oxygen. Severe pneumonia in children and severe newborn illnesses, for which oxygen is a life-saving treatment, are leading causes of death in the Pacific and worldwide. This project will address the pressing and challenging need in Fiji to ensure that those needing oxygen, those with severe hypoxic (oxygen-starved) illnesses, get it.

The project will meet the need through carefully tested technology, using robust oxygen concentrators, to get oxygen to those who do not have it. The project will also ensure that an improved supply of oxygen translates into better clinical outcomes through enhanced detection and case management of hypoxic illnesses.

The Challenge Facing Children in Fiji

Oxygen is a vital commodity across the health service In Fiji, oxygen is typically supplied in cylinders, which but is expensive and logistically difficult to provide. are very expensive, difficult to move and require a Severe pneumonia in children, anaesthetics for surgery and care of newborns are instances in which oxygen is needed. Approximately 200 children die each year in children as a result of severe pneumonia and newborn illnesses.

For severe pneumonia, oxygen reduces death by 35% а 'must-have' WHO and is according to treatment guidelines. Improving the availability, affordability and clinical use of oxygen is a high priority for the Fiji Ministry of Health and Medical Services, with whom Cure Kids and the University of Auckland is partnering in this work.



reliable supply chain. While hospitals in larger centres may have reliable oxygen supplies, smaller facilities often do not, and this leaves the people they serve vulnerable, both children and adults. Pacific countries need a solution that saves lives by getting oxygen to those who need it without adding a burden to stretched health budgets.



The Oxygen Solution

Oxygen concentrators, machines which filter nitrogen from air to supply >85% pure oxygen, are much more cost effective than cylinder oxygen, and do not require transport back and forth. If the right equipment is used, they can work well in tropical countries. However, oxygen concentrators require reliable power, which is a barrier to their use in Fiji. We are using carefully specified 24/7 oxygen systems incorporating oxygen concentrators, with solar power where needed, and batteries for power storage.



The long-term goal is that no child in Fiji dies for lack of oxygen.



The Ultimate Goal

This programme draws on successful work carried out in Africa by Dr Stephen Howie (University of Auckland) and colleagues, and current pilot work in Fiji at Nausori Health Centre (pictured above, left), Nabouwalu Hospital, and Taveuni Hospital, providing proof of principle.

The solutions being used in this project are highly scalable, and the ultimate goal in view is national coverage to ensure that no communities are left unprotected. Ultimately, we want every child in Fiji to have access to a reliable oxygen supply. The proposal made here is intended to realise the next stage of this vision over 2.5 years, a critical period that will form the bridge between the pilot phase and the successful implementation of a full-scale national programme.

Rotary Partnership

Cure Kids, the Rotary Club of Remuera Inc (International Partner), the Rotary Club of Taveuni (Host Partner), the Fiji Ministry of Health and the University of Auckland have formed a partnership that will enable the Project to be upscaled through support at a club level, in New Zealand and Fiji, and with the support of the Rotary Global Grant Programme. The partnership will deliver on the objective of ensuring that, no child should die for lack of oxygen.

The Funding Need

Parties involved are working to raise (overall) NZD \$650,000 to ensure as many of these units as possible are installed nation-wide in Fiji.

The project is expected to be funded from

TOTAL	\$650,000
Rotary Global Grant	\$250,000
Rotary District Designated Funds	\$100,000
Donations	\$300,000

Key Contacts

<u>Cure Kids Fiji</u> *Tim Edmonds*, General Manager, 021 841 047 *tim@curekids.org.nz*

<u>Fiji Ministry of Health</u> **Dr Eric Rafai**, Deputy Permanent Secretary Public Health

University of Auckland Dr Stephen Howie, Associate Professor

<u>Rotary Club of Suva</u> *Malini Raghwan, PDG D9920,* +679 999 3541 *mraghwan@gmail.com*

Rotary Club of Remuera Inc

rotaryremuera@gmail.com https://rotaryremuera.club/

Hon. Peter Salmon, CNZM QC, 021 520 214 prsalmon@xtra.co.nz

Roy Austin, CNZM, 021 656 400 roy.austin@northington.co.nz

Professor Emeritus Bob Elliott, CNZM, 027 292 4177 bob@profelliott.com

Tony Fortune, PDG D9920, 029 915 2405 tony.fortune@fortunemanning.co.nz



Help to achieve this essential life-saving project

