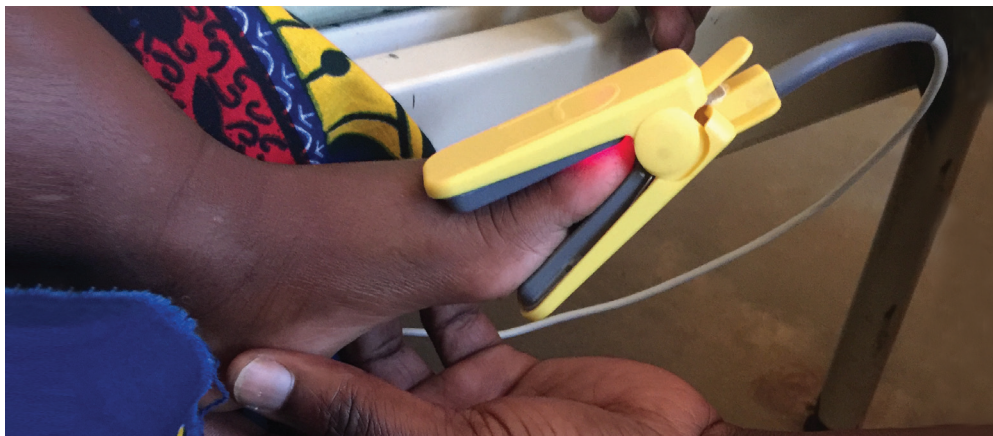


## Lifebox innovation

### Pulse oximetry probe for under-5s

*User-led design for frontline healthcare workers*



**Lifebox is a global nonprofit** working to make surgery and anesthesia safer, and a leader in oxygen monitoring technology for low-resource settings.

With support through a grant from the Bill & Melinda Gates Foundation, Lifebox has designed an innovative new pulse oximetry probe with the potential to radically improve access to oxygen monitoring worldwide.

**By the user, for the user:** community health workers in Bangladesh and Malawi were engaged at every step through a human-centred design approach. Further details are now available online via [lifebox.org/pneumonia](http://lifebox.org/pneumonia).

Pulse oximetry plays a critical role in the diagnosis and treatment of pediatric pneumonia, which kills nearly a million children under-5 each year. But challenges of design, cost and distribution have limited spread of the technology in countries where it can make a life-saving difference.

The new Lifebox probe is designed to be reusable, easy-to-use, child-friendly and used with multi-language educational materials that support critical decision making.

**This work has been supported by a grant from the Bill & Melinda Gates Foundation.**

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"To date there are few pulse oximeters in resource-poor settings that are suitable for use in children of all ages. As a result, pulse oximetry is poorly implemented and the lives of thousands of children suffering from pneumonia are needlessly at risk. The new Lifebox probe is potentially a game changer - it can effectively be used on all children, including newborns; it is durable, reusable, and low cost; and we hope it will be part of the solution in settings with the greatest burden of hypoxemia."

Dr Eric McCollum, pediatric pulmonologist

Lifebox is the only nonprofit working across professional societies, industry, academic institutions and ministries of health to make surgery and anesthesia safer.

Since 2011, Lifebox has provided more than 16,000 pulse oximeters to hospitals around the world, alongside training and introduction of the World Health Organization (WHO) Surgical Safety Checklist - making surgery safer for 10 million patients.