

2018/2019

Annual Report



All of us will have a moment in our lives when either we ourselves, a family member, or a close friend will need surgery due to an accident or illness, or giving birth to a child. Many of us take access to surgery for granted and we have confidence in the care we receive.

Unfortunately, for some 5 billion people around the world, safe surgery is a luxury. In many low- and middle-income countries surgical teams face significant challenges in providing the best possible quality of care to their patients due to lack of adequate training or tools.

As the leading non-profit organization focused on improving surgical safety in low-resource contexts, Lifebox works with surgeons, anesthesia providers, nurses, hospital managers, professional societies, ministries of health, and other non-profits to strengthen the systems that make surgery safer. We bring much-needed tools and training directly to health providers where they work.

Over the past year, we are proud to report that Lifebox has significantly increased our activities across our three priority areas: improving anesthesia safety, reducing surgical infections, and increasing operating room teamwork. We have shown marked results in reducing surgical infections in Ethiopia, piloted new workshops in WHO Surgical Safety Checklist implementation and operating room safety, developed a new surgical headlight, and delivered pulse oximeters to over 1000 anesthesia providers.

Your donations have allowed Lifebox to make surgery and anesthesia safer for millions of patients around the world. Thanks to your generosity, we have been able to continue supporting surgical teams working in the most difficult of conditions and strengthened their capacity to provide safer care for their patients. We look forward to achieving even more in the years to come.

Thank you for your support!



Chair
Atul Gawande



Global CEO
Kris Torgeson

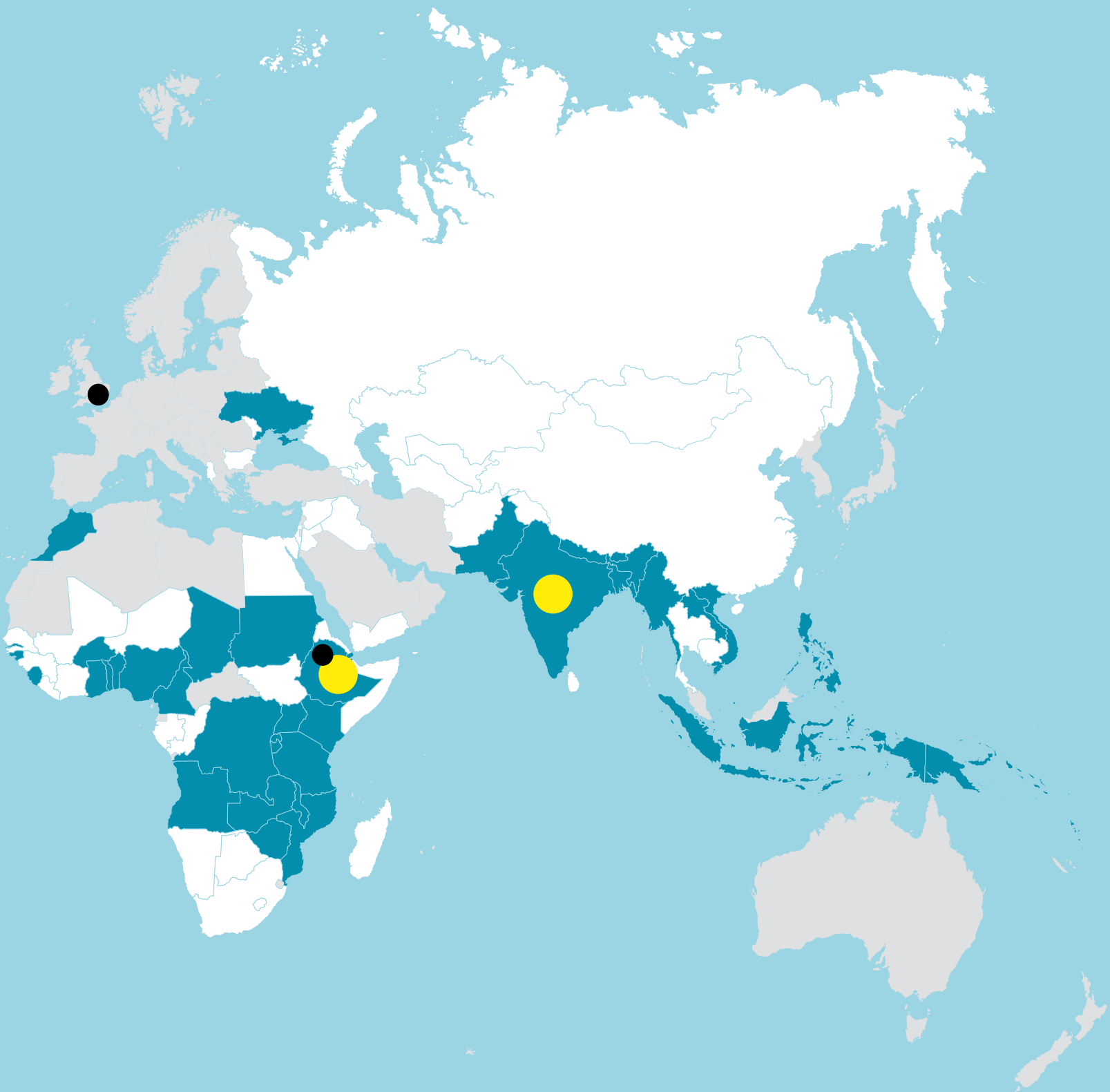
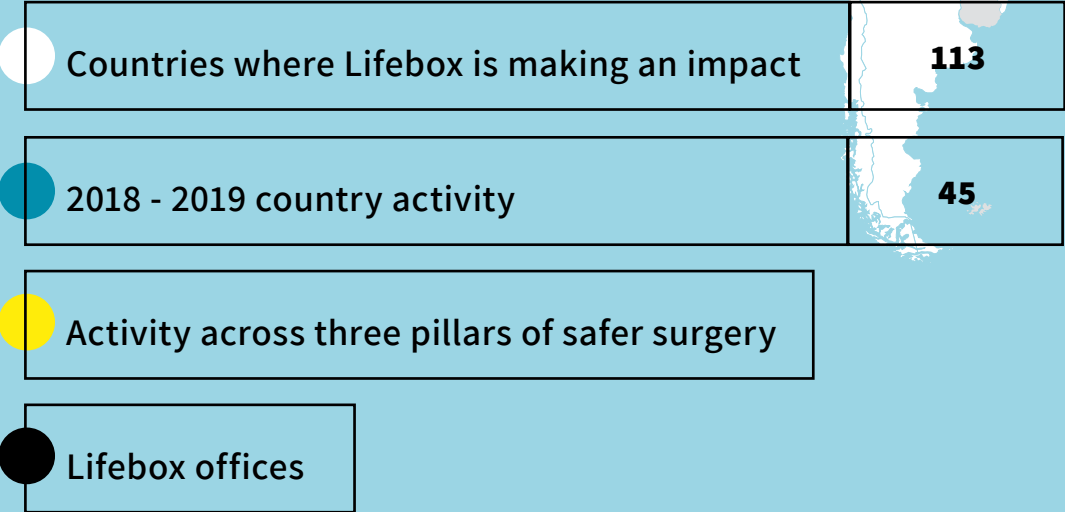
“It is not enough to say we are just doing surgery. If it’s not safe surgery with proper quality, then we’re doing nobody any good. Our focus and mission is to assure that when patients have that surgery, that it’s safe and that it’s effective.”

Atul Gawande

A world where safe surgery and anesthesia is not a luxury.

In just eight years, Lifebox has delivered programs to improve surgical and anesthesia safety in more than 100 countries.

Working closely with international and in-country partners, we have helped surgical teams improve the care they provide to an estimated 3.2 million people over the past year.



Visit our interactive global impact map to learn more: lifebox.org/our-impact

2018 / 2019 at a glance

3,200,000

Patients having safer surgery

45

Countries worked in

1054

Healthcare workers trained

21

Workshops held

132

New Lifebox trainers trained

1186

Estimated number of people introduced to the WHO Surgical Safety Checklist

50+

Organizations worked/partnered with

2,436

Oximeters distributed

571

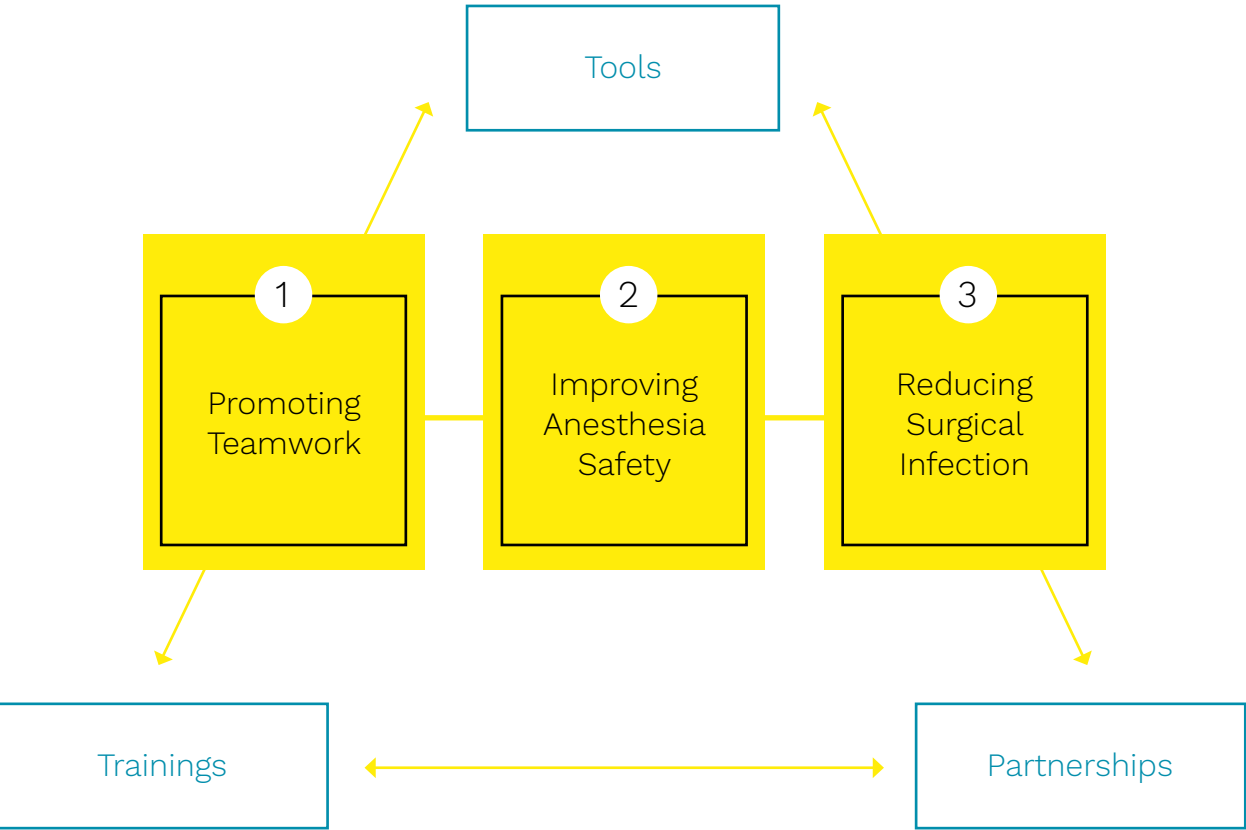
Spare probes provided

What we do

In 2011, Lifebox was founded by the authors of the WHO Surgical Safety Checklist - a life-saving tool that improves teamwork and communication in the operating room and has been proven to reduce complications and deaths from unsafe surgery by up to 40%.

Lifebox works closely with partners to provide the tools and training to surgical teams in resource-constrained settings to improve anesthesia safety, reduce surgical infection, and strengthen teamwork in the operating room.

Lifebox's Three Pillars of Safer Surgery

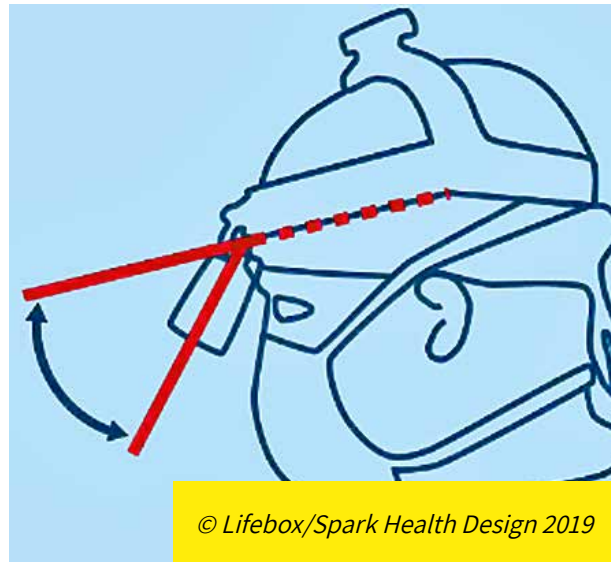


Teamwork

From pulse oximetry to reducing surgical infections and improving teamwork, the Lifebox way of working is rooted in the simple, evidence-based approach found in the Surgical Safety Checklist.

Effective use of the Checklist improves operating room teamwork, communication, and compliance with known-safety processes.

Examples of our impact:



Tools

Last year, we published a set of minimum specifications for a low-cost and high-quality surgical headlight adapted for low resource settings. With an estimated 24 million surgical patients at risk from inadequate lighting every year, Lifebox is working to procure a headlight that will meet the needs of surgical teams in settings where reliable lighting is not a given.

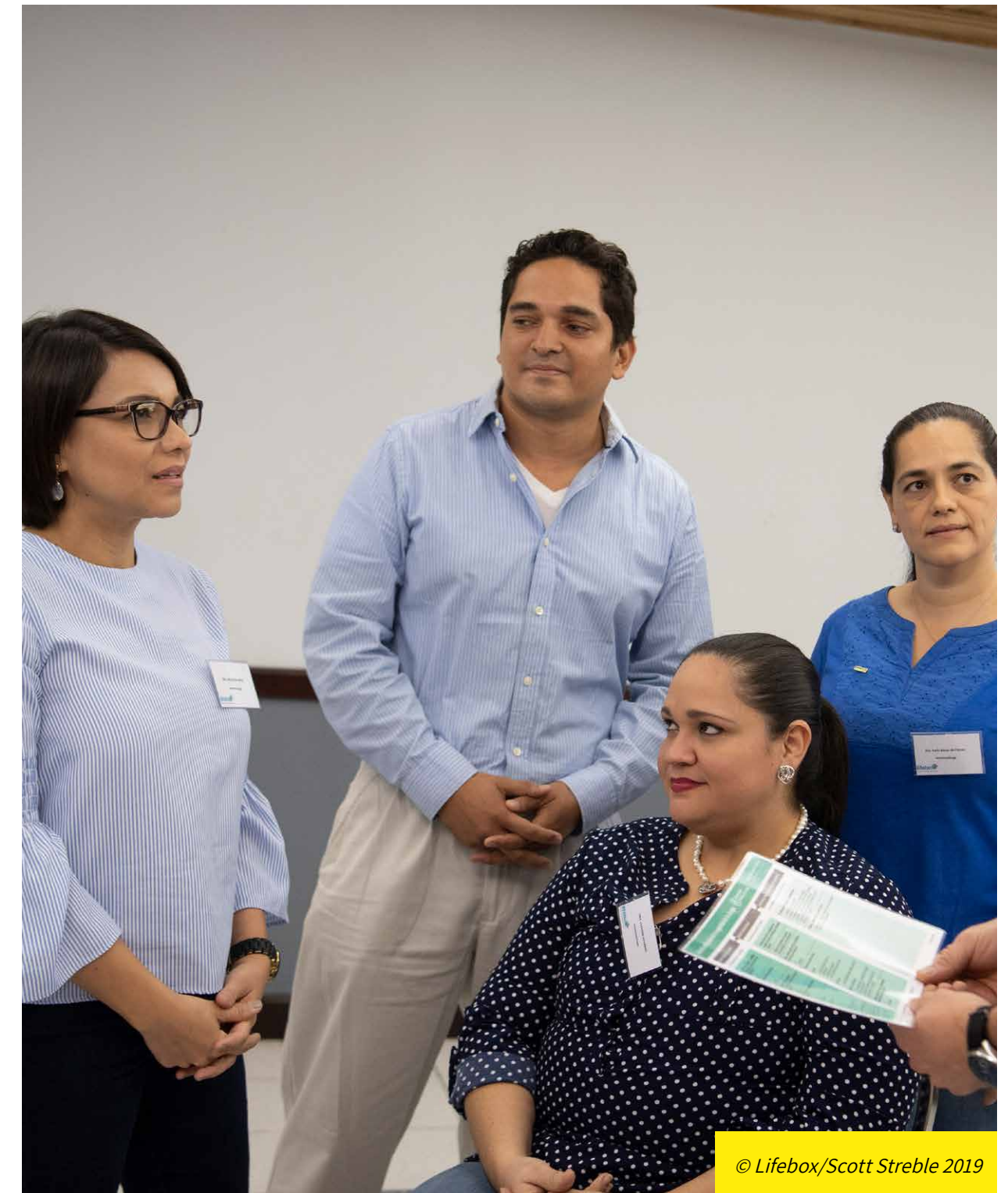


Training

In partnership with CARE India and with support from the Department of Anaesthesia Education Fund at Great Ormond Street Hospital, Lifebox organized the first SAFE Operating Room workshop in India, an interactive course involving opportunities for multi-disciplinary teams to come together to break down hierarchies and learn how to build safe teamwork in the OR. Our Bihar workshop included a 'training of trainers' session with 46 anesthesiologists, surgeons, and nurses from across India.

Partnerships

In 2019, Lifebox launched work with the anesthesia societies of El Salvador, Guatemala, Honduras, and Nicaragua to pilot our first WHO Surgical Safety Checklist Implementation workshop in Central America with support from the IZUMI Foundation.



Anesthesia Safety

Our low-cost pulse oximeter dramatically improves patient safety

during anesthesia. To date, we have placed over 20,000 Lifebox pulse oximeters in the hands of surgical teams in more than 100 countries. Over the last year alone, we distributed 2,436 pulse oximeters to hospitals and clinics in need of safe anesthesia, together with training.



Tools

In Cameroon, we organized the delivery of 242 pulse oximeters. Together with our partner, the Cameroon North Westerner's Association of Anesthetics (CAMNOWAA), we ran a series of pulse oximetry workshops for anesthesia providers to improve their knowledge and skills in using this essential monitoring equipment.



Training

In March 2019, we organized a standalone Lifebox workshop in Bangladesh, a first for the country. Over 60 healthcare providers attended, including nurses and support staff, all of whom were provided with training in pulse oximetry and teamwork. The Bangladesh Society of Anaesthesiologists (BSA) partnered with us to make this workshop possible.



Partnerships

Over the past 5 years, the Australia and New Zealand College of Anaesthetists (ANZCA), the Australian Society of Anaesthetists (ASA), Interplast Australia & New Zealand (Interplast) and the New Zealand Society of Anaesthetists (NZSA), have helped us strengthen anesthesia and surgical safety in the Asia-Pacific. Known as Lifebox Australia & New Zealand (Lifebox ANZ), the grouping has helped raise funds for projects across the region.

Reducing Surgical Infection

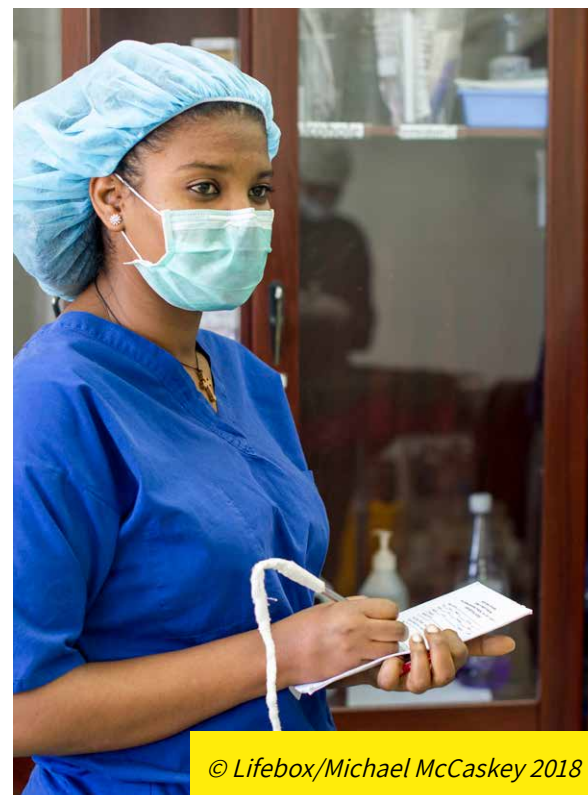
In 2016, we launched “Clean Cut” - a quality improvement program that seeks to reduce surgical site infections by improving compliance with proven infection-reduction measures.

By engaging all members of the surgical team as well as hospital management, the program helps the team to map out their hospital’s surgical safety processes, identifying where these can be strengthened, and ultimately highlighting opportunities for improvement.

“Clean Cut” is showing significant results in reducing surgical site infection rates in the eight initial hospitals in Ethiopia where we piloted the program with the Ethiopian Federal Ministry of Health and support from the GE Foundation’s Safe Surgery 2020 initiative.

Tools

Lifebox “Clean Cut” sites in Ethiopia have seen a 78% improvement in the confirmation of instrument sterility and a 35% improvement in the proper timing of prophylactic antibiotic administration — both proven measures for reducing surgical site infections. The first five hospitals that implemented the program have seen more than a 30% reduction in surgical site infection rates.



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Training

We partnered with the Canadian non-profit Sterile Processing Education Charitable Trust (SPECT), to develop the tools and training needed to improve instrument decontamination and sterilization processes in resource-constrained countries. Together we piloted the ‘Safer Surgical Instruments’ training module in Ethiopia and have since run workshops in Central America in partnership with the regional anesthesia societies.

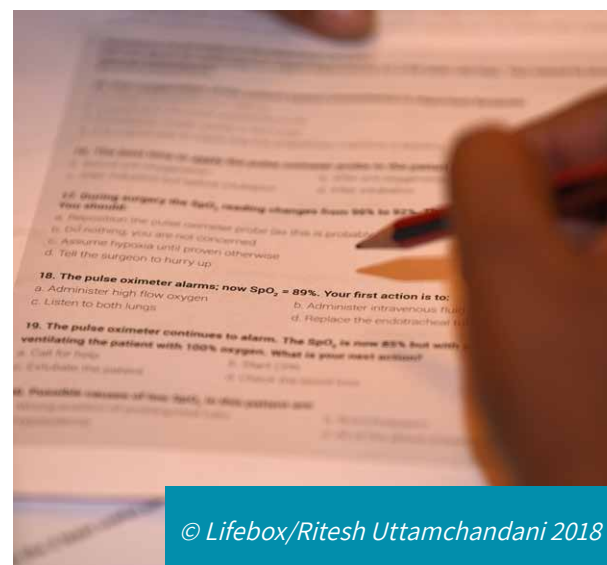
Partnerships

Since 2017, Lifebox has collaborated with Black Lion and Menelik II hospitals to expand and refine our “Clean Cut” program. We have also continued to strengthen our reach by partnering with five additional hospitals in Ethiopia.

Impact and Research

Lifebox programs are based on

evidence of what works. We invest in research as well as monitoring and evaluation of our programs so that we can learn from and share our results. Here you can find a sample of notable publications about Lifebox's work over the past year:



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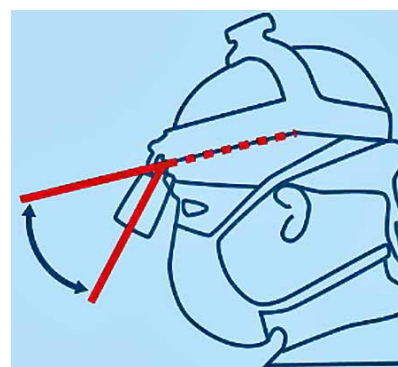


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Pediatric Pulmonology

March 2019

Performance of a novel reusable pediatric pulse oximeter probe. [Carina King PhD](#), [Tisungane Mvalo MD](#), [Kristen Sessions BSc](#), [Iain Wilson MB ChB](#), [Isabeau Walker MD](#), [Beatiwel Zadutsa Dip](#), [Charles Makwenda MSc](#), [Tambosi Phiri MSc](#), [Nicholas Boyd MSc](#), [Mike Bernstein BSc](#), [Eric D. McCollum MD](#)



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JAMA Surgery

November 2018

Minimum specifications for a Lifebox Surgical Headlight. [Jared A. Forrester, MD](#); [Kris Torgeson, MSc, MPhil](#); [Thomas G. Weiser, MD, MPH](#).



© Lifebox 2017

BMJ Global Health

June 2018

Adoption of paediatric and neonatal pulse oximetry by 12 hospitals in Nigeria: a mixed-methods realist evaluation. [Hamish R Graham](#), [Ayobami A Bakare](#), [Amy Gray](#), [Adejumoke Idowu Ayede](#), [Shamim Qazi](#), [Barbara McPake](#), [Rasa Izadnegahdar](#), [Trevor Duke](#), [Adegoke G Falade](#).



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Canadian Journal of Anesthesia/Journal canadien d'anesthésie

Volume 66, Issue 2 (February 2019)

A friend in need: evaluating the impact of Lifebox in Burkina Faso Un ami dans le besoin : évaluer l'impact du Lifebox au Burkina Faso. [Dr Angela Enright](#)

Volume 66, Issue 2 (February 2019)



© Lifebox 2017

Evaluation de l'impact du projet Lifebox au Burkina Faso sur la pratique de l'oxymétrie pulsée et la checklist de l'organisation mondiale de la santé pour la sécurité du patient au bloc opératoire. [Cheik Tidiane Hafid Wind-Pouré Bougouma](#), [Nazinigouba Ouédraogo](#), [Rawéléguinbasba Armel Flavien Kaboré](#), [Kélan Bertille Ki](#), [Ibrahim Alain Traoré](#), [Sié Ouattara](#), [Gérard Zongo](#), [M Lankoandé](#), [Salah Idriss Séif Traore](#).



© Lifebox/Ritesh
Uttamchandani 2018

British Journal of Surgery

Volume 106, Issue 2 (January 2019)

Disseminating technology in global surgery. W. S. Bolton, N. Aruparayil, A. Quyn, J. Scott, A. Wood, I. Bundu, J. Gnanaraj, J.M.Brown and D. G. Jayne



© Lifebox/Marco Carraro 2018

American College of Surgeons Panel

At the 2018 American College of Surgeons' Clinical Congress, Lifebox hosted a panel of surgical experts from across the world to discuss the impact of the WHO Surgical Safety Checklist in their operating rooms.

Checking in on the Checklist - Ten Years of the WHO Surgical Safety Checklist was moderated by our Special Advisor Alex Haynes and our Clinical Advisor Tom Weiser, and featured Lifebox Chair Atul Gawande, Tihitena N. Mammo, Adriana Margarita Serna Lozano, and King-David Terna Yawe.



Click to read: lifebox.org/professional/publications

Our Fellows



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The Lifebox McCaskey Safe Surgery Fellows program was set up in early 2018 and supports six Ethiopian fellows from within four professions working together in the surgical department -- nursing, ob/gyn, anesthesia, and surgery -- with the aim of developing their skills in teamwork, quality improvement, and research over the course of a year. The first cohort of McCaskey Fellows have used their expertise in surgical safety to support the Federal Ministry of Health's safe surgery initiative.

Nichole Starr - Safe Surgery Ethiopia Fellow

"Health improvement programs of any kind cannot be successful without realistic input and feedback from our local partners on the ground. Lifebox understands this and makes local input a priority in implementation".



Myles Monaghan
Safe Anesthesia
Tanzania Fellow

"Equipment such as the Lifebox pulse oximeter is vital to improve the welfare of patients undergoing anesthesia in Tanzania. However, the importance of educating the providers is even more essential".

Our Global Team

Lifebox's team may be small but our impact in improving surgical and anesthesia safety is great because our partners carry us with them. Thank you to all of our incredible colleagues and friends who have helped us to go that extra mile. Here are just a few of those who have helped Lifebox continue to reach surgical teams around the world and improve the safety of surgery for many more patients in the past year.

Christina Fast - SPECT

"Partnering with Lifebox allows us to amplify each other's impact on the ground toward our common goal of infection prevention".



Gilles Eloi Rwibuka - Burundi

"Working with Lifebox means a strengthening of Burundi's surgical ecosystem to deliver safer care in our country's operating theaters"



Dr. Rob McDougall - Lifebox ANZ

"The Lifebox ANZ coalition gives Lifebox a greater reach in the Asia-Pacific region, working closely with national anesthesia societies, surgical groups and ministries of health to distribute oximeters and provide education on safer surgery and anesthesia"

Dr. Jannicke Mellin-Olsen - World Federation of Societies of Anaesthesiologists (WFSA)

"As a proud founder and supporter of Lifebox, the WFSA is delighted to be partnered with Lifebox, working together to improve the situation for the 5 out of 7 billion people who do not have access to safe, timely and affordable anesthesia and surgery."



Drs. Milind & Manjushah Shah - India

"In India, we talk about unity in diversity. We are sure that this partnership will go a long way to reach the unreached and bring change in healthcare"

Dr. Tihitena Negussie Mammo - Ethiopia

"Our work with Lifebox has helped us to create a great link between staff members from different hospitals by creating a platform for safer surgery through the necessary training".



Mathurin Ipack Ipack - Cameroon

"Our project with Lifebox is a project of hope. Hope for safer surgery and anesthesia, in a country where at least 60% of anesthesia sites are in rural areas"

With thanks

For making a life-saving difference.

Special thanks to our key supporters, founders, and donors:

Joan Archer
Rebecca Barnett
Sarah Beavis
Loredana Berkowitz
Harris Berman & Ruth Nemzoff
Josh Bresler
Amanda Burden
Andrew Calciano
Charles Cote & Annette Schure
Robert Culver
Dayton Foundation
Susan Denike
Elizabeth Drum
Faye & Andrew Evans
Atul Gawande
Kathy and Al Gordon Fund
Great Ormond Street Anaesthesia
Education Fund
Alexander Hannenberg

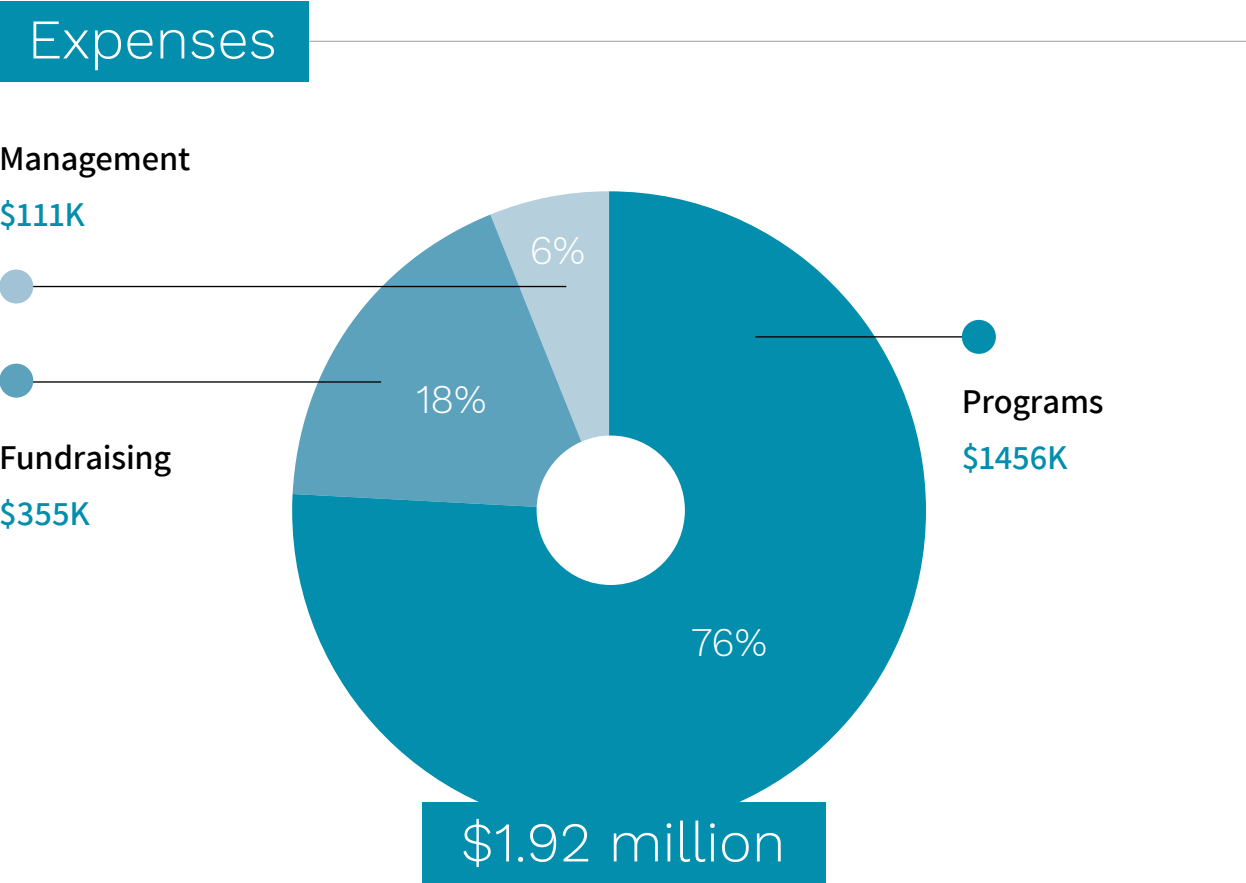
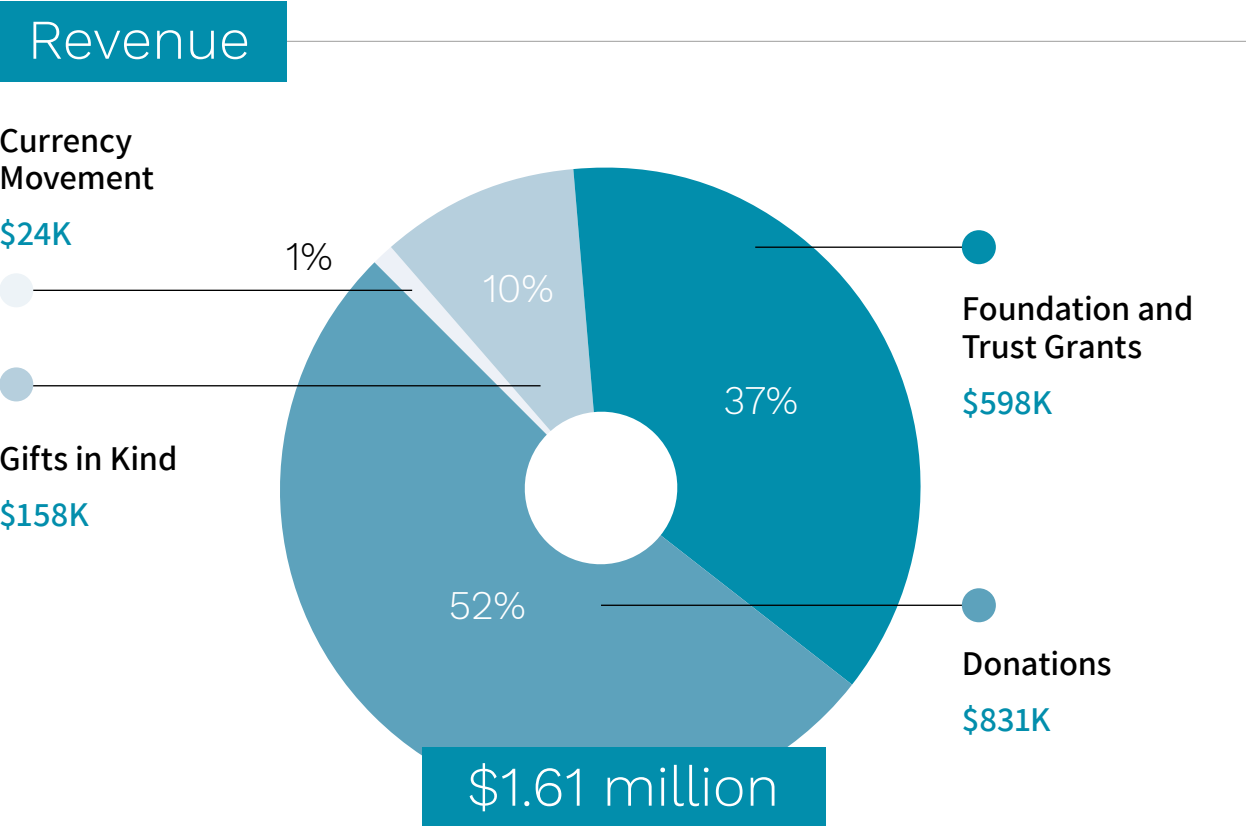
Hiscox Foundation
Kessler Charitable Trust
Michele & Howard Kessler
Michael McCaskey
Mersey School of Anaesthesia
Robert & Eleanor Meyers
Porath Family Foundation
Michael Regan
Barbara Reid
Rothera Family Charitable Trust
Alison Schofield
Khaleel Seecharan
Suffolk Construction
Teleflex Incorporated
Brian Vaughan
Thomas Weiser
Stacie Wong
Jason Yeung



Lifebox 2018-19 Fiscal Year Financial Accounts

OPERATING REVENUE	2018/19	2017/18	Changes
Trusts & Foundations	597,994	655,152	-57,158
Donations	831,076	716,320	114,756
Gifts in Kind	157,640	229,667	-72,027
Other Revenue	0	16,484	-16,484
Currency Movement	23,834	-69,322	93,156
Total Revenue	1,610,544	1,548,302	62,242
OPERATING EXPENSES			
Program Expenses	1,455,619	1,545,908	-90,289
Fundraising	354,914	141,865	213,049
Management Expenses	111,412	96,364	15,048
Total Expenses	1,921,945	1,784,137	137,808
Surplus/Deficit	-311,400	-235,835	-75,565
COMPOSITION OF NET ASSETS			
Unrestricted Funds	669,683	784,979	-115,296
Currency Reserve	81,963	62,466	19,497
Restricted Funds	204,206	282,543	-78,337
Total Net Assets	955,852	1,129,988	-174,136

Source: Audited annual accounts of Lifebox Foundation, Inc. (USA) and Lifebox Foundation (UK) for the period 1 April 2018 to 31 March 2019.



Net Assets	Mar 31st '18 \$956K	Mar 31st '17 \$1.13M
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Community

A snippet of the support Lifebox has received over the last 12 months:



Reception, Boston

Last fall, Lifebox friends and partners gathered together at the home of trustee Dr Faye Evans in Boston to introduce new board members and our work in Ethiopia.



Climbing Kilimanjaro for Lifebox

Lifebox champions Lauren Anders Brown and Ed Fitzgerald took fundraising for Lifebox to new heights as they conquered and summited Mount Kilimanjaro.



ASA- Lifebox Resident Challenge 2018

In association with the American Society of Anesthesiologists (ASA), Lifebox coordinated the Resident Challenge, which saw residency programs across the US competing to raise the most funds for Lifebox. A special thanks to all of the residents who participated, including from the University of Miami, University of Rochester, and the University of South Carolina.



Mortgage or Mongolia?

Vanessa and Simon took on the adventure of a lifetime by taking a year out to cycle from London to Beijing and raise life-saving funds for Lifebox.



Tough Mudder

Lifebox staff, Mansi Tara, Marco Carraro and Remy Turc along with friend Darren De Claro, tackled 2 hours of mud and obstacles to raise vital funds for safer surgery.

Governance



Lifebox is steered by a Global Governance Council.

With decades of experience spanning clinical work, research, community engagement and resource management, the Global Governance Council has its roots in the WHO Surgical Safety Checklist and its eye on the future of global safe surgery.



Chair
Atul Gawande



UK Patron
The Lord Ribeiro KT CBE



© Lifebox/Lifebox Global Governance Council meeting in London, 2018

Global Governance Council Members



William Berry



Miliard Derbew



Angela Enright



Faye Evans



Alexander
Hannenberg



Deborah
Lotterman



Alan Merry



Pauline Philip



Nobhojit Roy



Isabeau Walker



Tom Weiser



Jason Yeung

Emeritus Trustee



Iain Wilson

Special Advisors



Michael Bernstein



Ed Fitzgerald



Alex Haynes



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Cover image Lifebox champion and pediatric
anesthesiologist Dr. Susana Albrego in
San Salvador, El Salvador, 2019.
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