Mercy Ships Outcomes
and Impact Report 2025 - 2026

# From surgical care to stronger healthcare systems

How partnerships, mentorship and systems strengthening contribute to safer surgical care in Africa

Mercy Ships

# Contents


| | |
|---|---|
| Executive Summary | 2 |
| Our **Theory of Change** | 6 |
| Why this matters | 9 |
| What we are learning | 10 |
| **Outcome Area 1:** Stronger and more resilient health and education systems | 12 |
| From a small mentoring project to a sustained service | 14 |
| Promoting safer surgery in Sierra Leone | 16 |
| Increasing the number of specialist providers in West Africa | 18 |
| **Case Study:** Increasing the number of anesthesia providers in Guinea | 20 |
| **Case Study:** Changing who leads surgical care | 22 |
| The wider lesson from Outcome Area 1 | 23 |
| **Outcome Area 2:** People with better health and functioning | 24 |
| Reducing disability through our surgeries | 26 |
| Long-term surgical outcomes in Pediatric Orthopedics | 28 |
| Beyond Discharge | 30 |
| Reaching those most excluded from the surgical system | 32 |
| **Outcome Area 3:** Healthier, more resilient communities | 34 |
| Across Projects and Countries | 36 |
| **From evidence to action:** Looking ahead | 38 |
| 2025–26: The story in numbers | 41 |

# Welcome

## A Message from Programs Leadership

We believe every person is made in the image of God, with inherent worth and dignity, and that through service we can be a tangible expression of His love – bringing hope and healing and working towards greater wholeness for individuals, communities and health systems.

Every person deserves safe, timely and high-quality surgical care. For Mercy Ships, this means delivering surgery today while working alongside national partners to strengthen the professionals and systems that will provide care tomorrow.

This report provides selected examples of progress that are emerging from our work to date. It reflects work delivered on board our hospital ships and through long-term partnerships with government ministries, hospitals, universities and healthcare professionals. Together, these efforts aim to improve access to surgery, strengthen local services and support patients to live healthier, more independent lives.

The examples also show why lasting change takes time. Some of the outcomes featured here build on partnerships that began more than a decade ago. Others are early results from newer projects. Across them all, the common thread is local leadership: sustainable progress is strongest when it is shaped, owned and led by the people and institutions responsible for healthcare in their own countries.

This is not a comprehensive account of every Mercy Ships project or every result achieved to date. It is a focused selection of projects that help demonstrate emerging outcomes, practical learnings and the value of combining direct surgical care with longer-term health system strengthening.

We are grateful to all the healthcare professionals, governments, partners, volunteers and supporters whose commitment makes this work possible.

Above all, we give thanks to God, recognizing that lasting transformation is ultimately His work and that we are privileged to play a part in it. At the heart of Mercy Ships' service is our commitment to follow the way of Jesus, whose love and mercy call us to draw near to those in need and to join in God's work of healing and restoration.

Hendrik Storm /
*Vice President of International Programs*

GLOBAL MERCY

PHILIPS

Assisting Passengers

# Executive Summary

## What We Want to Achieve

Delivering safe, affordable surgical care directly to communities where it is most needed has always been at the heart of what Mercy Ships does and remains the foundation of our approach.

But we need to do more. We believe sustainable impact happens when healthcare systems are strengthened from within. This is why we work alongside governments, healthcare professionals and communities to improve access to safe, timely and high-quality surgical care.

That means investing not only in procedures, equipment and infrastructure, but also in the people, skills and systems that enable quality surgical care to continue long after a field service ends. Our approach includes:

- **Safe surgical care provision** – providing quality surgical care on board our state-of-the-art hospital ships.
- **Local leadership** – supporting local health leaders and institutions to shape priorities, strengthen decision-making and lead improvements within their own health systems.
- **Mentorship** – providing practical, hands-on mentorship that helps healthcare professionals build confidence, develop their skills and apply learning in their own clinical settings.
- **Training** – investing in the knowledge and capabilities of local healthcare professionals, helping build a stronger and more skilled surgical workforce.
- **Surgical safety** – strengthening practices, standards and processes that help ensure surgical and anesthesia care is delivered safely and effectively, including all related services such as biomedical, sterile processing and laboratories.
- **Systems improvement** – working with local partners to identify and address gaps in infrastructure, processes, equipment, supply chain, governance, surgical workforce, and clinical practice that can limit access to quality surgical care.
- **Long-term partnerships** – working alongside governments, hospitals, healthcare institutions and non-governmental organisations to support locally owned solutions and build progress over time.

Our programmatic work focuses on helping strengthen the wider surgical ecosystem, not simply delivering care, but strengthening the conditions for safe, effective and sustainable surgical services.

By working alongside local healthcare professionals and institutions, we aim to leave behind stronger skills, systems and capacity that continue to benefit patients long after our ships have departed.

This report highlights a growing body of evidence that lasting change is possible when immediate healthcare needs are addressed alongside long-term systems strengthening. From helping patients regain health and independence through surgery, to reducing infection risks in surgical services, expanding specialist medical education, and supporting locally led programs that have continued for over 15 years, Mercy Ships and its partners are contributing to stronger surgical ecosystems across Africa. Together, these achievements demonstrate both immediate benefits for patients today and investments in the healthcare systems that will serve future generations.

**81,600 surgical patients**
treated since Mercy Ships began in 1978

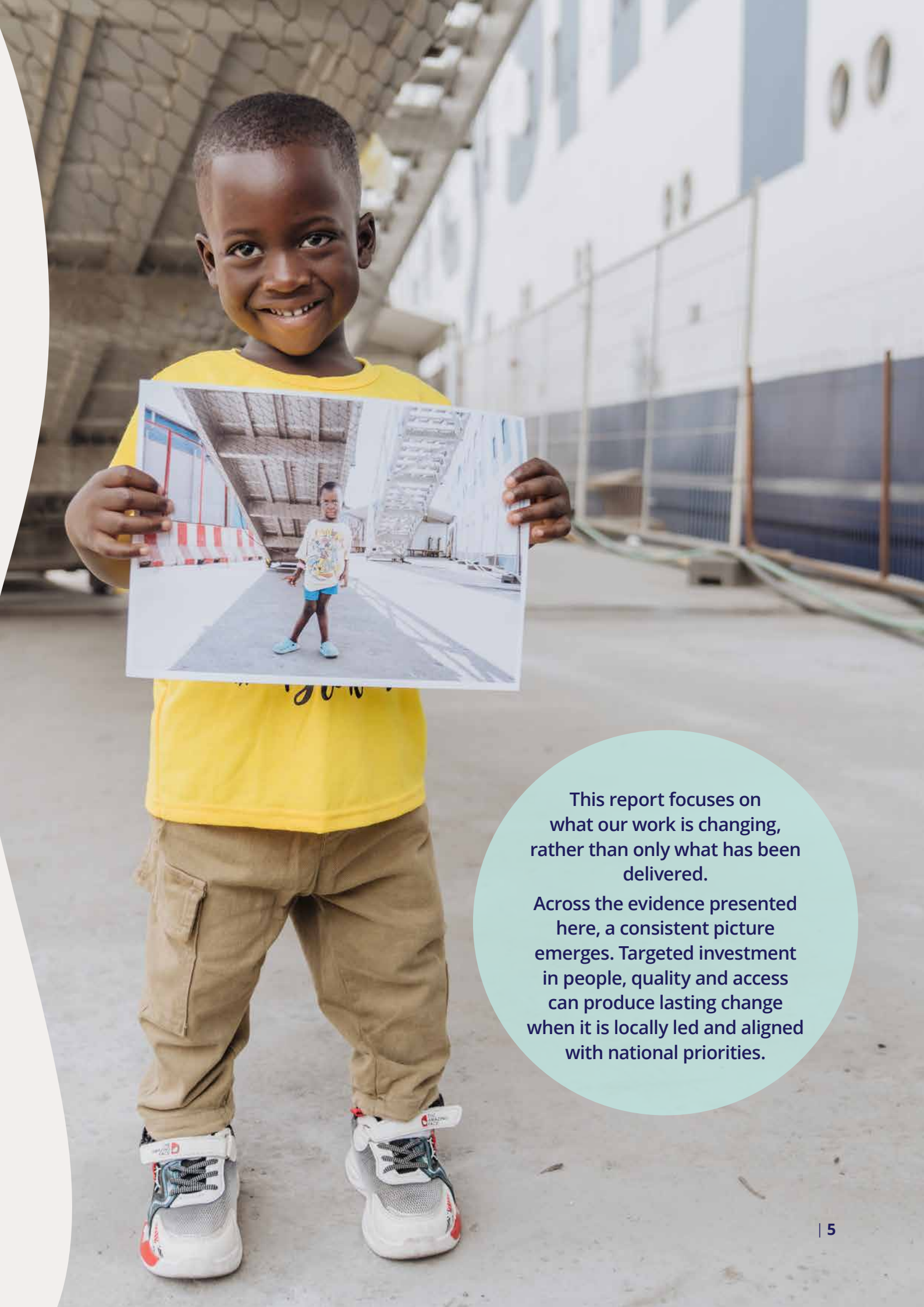
**6,148 patients treated**
in our Sierra Leone and Madagascar Field Services between 2023-2025

**314 students enrolled**
in specialist medical education since 2021

**59% average reduction in disability**
across these patients, 3 months after surgery

**50%+ reduction in surgical site infection risk**
after 1-year of support in the largest teaching hospital for surgery in Sierra Leone.

**15 years Clubfoot service sustained in Sierra Leone**
after our original 2011 mentoring project



This report focuses on what our work is changing, rather than only what has been delivered.

Across the evidence presented here, a consistent picture emerges. Targeted investment in people, quality and access can produce lasting change when it is locally led and aligned with national priorities.

# Our Theory of Change

## From service delivery to lasting outcomes

Mercy Ships uses hospital ships and technical expertise to transform lives and serve nations.

Our **Theory of Change** explains how direct surgical care, partnership and systems strengthening can contribute to lasting improvements.

In 2026, Mercy Ships refined its programmatic strategy around **four delivery channels**:

**1.**
Improved Surgical Care

**2.**
Sustainable Surgical Workforce

**3.**
Effective Governance & Leadership

**4.**
Improved Patient Pathways to Care

When these areas work together, we expect to see better run and equipped healthcare facilities, more confident and skilled surgical teams, stronger national education systems, better-informed use of resources and more patients able to access care.

## Three Outcome Areas:

**1**
Health and education systems are more resilient and better able to meet the surgical needs of their populations.

**2**
People have improved health and functioning, enabling them to care for themselves and contribute to their communities.

**3**
Communities are healthier and more resilient, with improved trust in their healthcare system.

If these changes occur as expected, the outcomes for a nation will be profound: healthcare systems better able to meet population needs, more people enjoying improved health and independence, and communities having greater trust in their healthcare system, so that **ever-increasing numbers of people receive the timely surgical care they need to flourish and fulfil their God-given potential.**

The projects in this first report pre-date the refreshed **Theory of Change**. They are therefore presented as evidence that helps illustrate the journey so far, rather than as projects originally designed against the new framework.

# Why this Matters

## Understanding the scale of the problem

Improving surgical care is about far more than operating rooms alone. Safe surgery depends on trained teams, strong systems, infection prevention, reliable follow-up and empowered local leadership.

Sub-Saharan Africa bears a dual burden: a high prevalence of surgically treatable conditions alongside a substantial unmet need for surgical care.

In many of the contexts where Mercy Ships serves, healthcare professionals work within significant constraints including limited equipment, workforce shortages and infrastructure challenges. These pressures can affect both the availability and quality of surgical care, particularly for people who already face barriers to accessing healthcare.

Long-term partnership and systems strengthening help create more sustainable surgical care for the future.

**More than 9 in 10 people in sub-Saharan Africa lack access to the surgical care they need.**

# What Are we Learning

## How to Read This Report

**The projects and statistics in this report are examples of measurable change. They do not represent the full scale of Mercy Ships' activities to date.**

The **Theory of Change** was adopted in 2026, while many of the featured projects began earlier. We have therefore organized existing evidence under the outcome area it most clearly supports. As future projects are designed around the revised strategy, later reports will be able to track progress more consistently across all three outcome areas.

But for this report (2025-26), we invite you on the journey with us as we reflect on the road travelled so far, and the achievements and learning that have, in large part, helped to shape and inform our revised **Theory of Change**; demonstrating the implementation experience and expertise of our colleagues and partners in their endeavours to transform lives and serve nations.

This report is ordered around the three outcome areas in the **Theory of Change** that serve as preconditions for the impact to be felt:

1. **Supporting healthcare and education systems to be more resilient and better meet the surgical needs of their populations**

2. **Supporting people to have improved health and functioning, so that they can care for themselves and their communities**

3. **Supporting healthier and more resilient communities with improved trust in their healthcare system.**

This report deliberately combines different kinds of evidence: service data, patient-reported outcomes, workforce data, quality-improvement measures and longer-term case studies. Together, they show both immediate results and the foundations for future impact.

Some findings are preliminary. In particular, the surgery outcomes presented here are based on three-month follow-up, while the orthopedic pilot provides one-year evidence for a smaller cohort. The report distinguishes reported outcomes from wider population-level change and avoids attributing broader results solely to Mercy Ships.

# Outcome Area 1:

## Stronger and more resilient health and education systems

**Safe surgery depends on more than an operating room. It requires skilled teams, reliable processes, strong institutions, effective education and local leadership.**

Mercy Ships began offering short medical capacity-building courses in 2013. As our partnerships developed, this approach expanded into longer-term support for hospitals, specialist services and health professions education. The selected projects in this section show how practical mentorship, quality improvement and investment in educators can contribute to stronger health systems.

The examples highlighted here have been selected because they illustrate different routes to the same outcome: locally led services that are better able to provide safe, sustainable surgical care.

### The journey so far...

Early projects focused on short courses in areas such as trauma care, anesthesia and safe surgery. These remain useful where continuing professional development is limited. Over time, partners identified a need for deeper support that connects training with mentorship and the broader surgical ecosystem (including equipment, policy, leadership and institutional development).

A second priority has been the shortage of specialist health workers and educators. Since 2021, Mercy Ships has supported advanced training while also working with educational institutions so that countries can build their own pipeline of specialists.

The examples that follow show both sides of this approach: strengthening care today and developing the workforce for tomorrow.

**15 years later** original Mercy Ships trainees still leading clubfoot services in Sierra Leone

Demonstrating the lasting value of training and mentorship, with local expertise gainfully employed and continuing to provide specialist care.

**90%+ WHO Surgical Safety Checklist compliance achieved** from a 0% baseline at Sierra Leone's largest teaching hospital

Helping surgical teams identify and prevent avoidable risks, contributing to safer care and better outcomes for patients.

**50%+ reduction in surgical site infection risk** observed at Connaught Hospital, Sierra Leone's largest teaching hospital

Fewer surgical site infections mean fewer complications for patients, faster recovery and reduced pressure on already stretched healthcare services.

**314 students** enrolled in specialist medical education since 2021

More specialist providers are critical for local surgical provision to be more accessible and to improve the quality of care and patient outcomes.

**58 graduates of specialist medical education** by November 2025, of which 89% are already in faculty or clinical roles, with 392 projected graduates by 2030

More graduates occupying faculty roles within universities makes it possible to establish or strengthen a country's own specialist education program, training future healthcare professionals including surgeons, dentists and anesthetists, as well as biomedical and laboratory technicians, to name a few.

## Three examples illustrate this evolution:

**15 years**
A clubfoot service remaining locally led for 15 years

**Safer-Surgery Project**
A hospital-wide safer-surgery project showing early gains in patient safety

**Specialist Education Program**
Building the future surgical workforce

# Example 1: A sustained service

## From a small mentoring project to a sustained service- 15 years of sustained clubfoot services in Sierra Leone, reflecting the combined efforts of Mercy Ships 2011 mentoring project, the Ministry of Health, and partners.

### The opportunity

In 2011, there were no established clinics in Freetown providing the Ponseti method for clubfoot correction. Without timely treatment, children with clubfoot may experience pain, difficulty walking and face barriers to school, work and community life. Sierra Leone's Ministry of Health was seeking to expand access to specialist care.

### The partnership response

The introduction of the Ponseti method for Clubfoot care was established through a coordinated effort by various national and international clubfoot and physiotherapy organizations providing advocacy, resources, training – alongside a strong commitment from the Ministry of Health.

In 2011, the Ministry of Health recruited its first National Clubfoot Coordinator, and together with Mercy Ships, planned the 8-month Ponseti clinic mentorship project. The project sought to ensure complementarity with the pre-existing efforts to establish Clubfoot clinics in Freetown.

The resulting eight-month mentoring project during our Sierra Leone Field Service (2011) trained a multidisciplinary group spanning diagnosis, casting, minor procedures and bracing. The project also contributed to local brace provision before standardized imported braces became available.

### What changed

In the years following our intervention, national leadership, advocacy and engagement through various partners continued, to ensure alignment with national priorities. These efforts paid off. Fifteen years later, members of the original cohort continue to lead clubfoot services. The two leading clinics in Freetown treated 91 children in 2025, representing 28% of all reported clubfoot cases nationally (MiracleFeet CAST data, 2025). The Ministry of Health now reports 16 Clubfoot clinics across the country, demonstrating national expansion.

Its longevity shows how targeted investment in skills, leadership and institutional support can continue benefiting patients long after our field service ends.

### What we learned

- Local involvement in selecting participants helped identify professionals with the capability and commitment to lead the service.
- Short term training interventions have the greatest sustained benefits when strategically aligned with long-term national institutional and local priorities.
- Institutional backing enabled training to support longer-term professional development and leadership.
- Investment in leadership and long-term partnership rather than a one-off course.

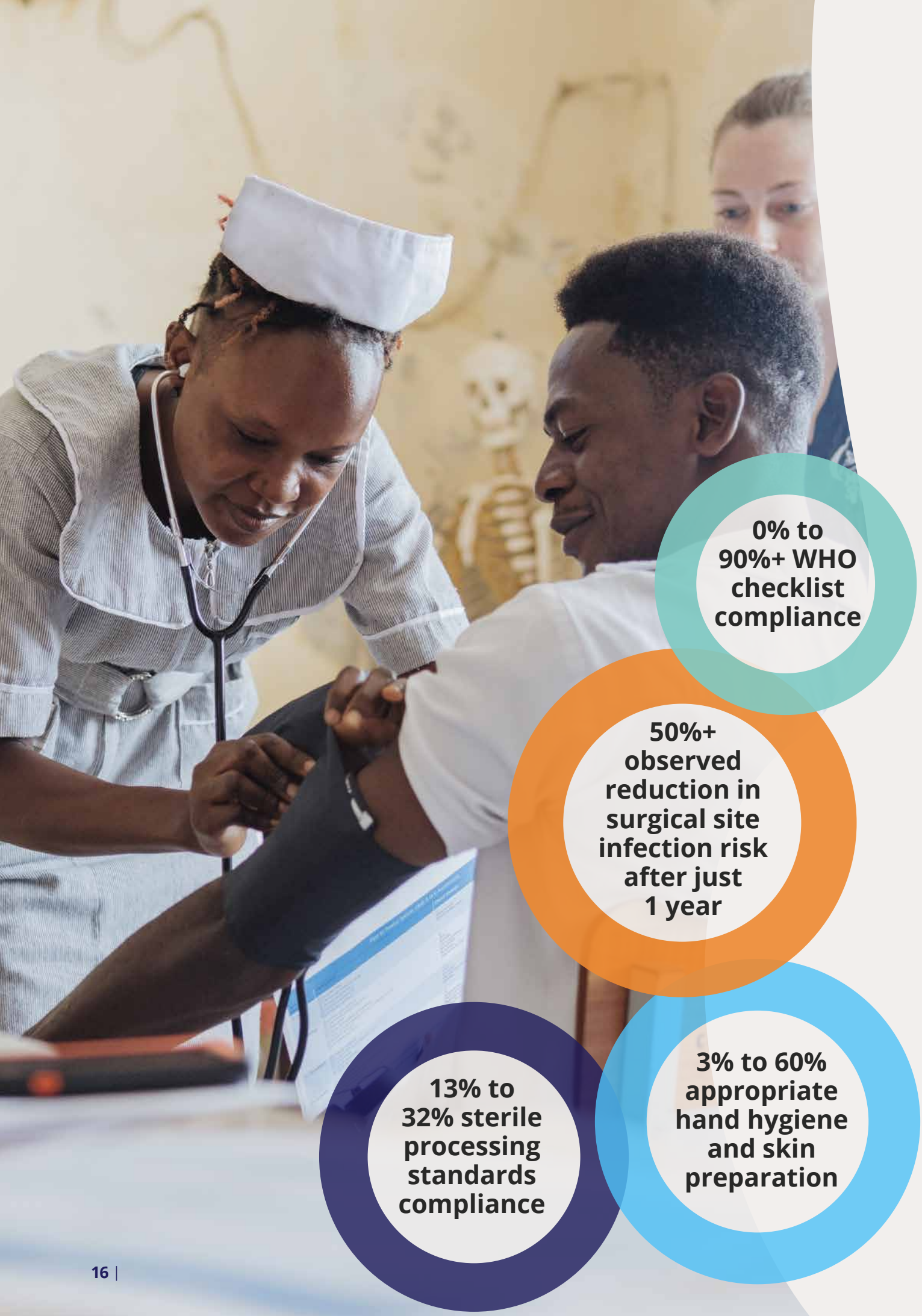
**91 children treated by the two clinics in 2025,** representing 28% of cases treated nationally

**9 healthcare professionals trained in 2011**

**15 years later: original trainees still leading services**

### Looking ahead

Clubfoot care is now integrated within the Ministry of Health's scope of services. Mercy Ships has no new clubfoot activities planned in Sierra Leone, but the experience continues to inform future work: align training with national strategies, combine skills development with mentorship, invest for the long term and strengthen monitoring of care quality.


0% to 90%+ WHO checklist compliance
50%+ observed reduction in surgical site infection risk after just 1 year
13% to 32% sterile processing standards compliance
3% to 60% appropriate hand hygiene and skin preparation

# Example 2: Promoting safer surgery in Sierra Leone

## Quality Improvement at Connaught Hospital, Sierra Leone's largest surgical hospital (2024-27)

### The opportunity

Sierra Leone's largest teaching and surgical hospital is also a referral centre for complex surgical care. The Ministry of Health identified surgical site infections as a patient safety concern. At baseline, the hospital had limited systems for monitoring infection and surgical performance, inconsistent use of standard safety practices and restricted access to surgery-specific training for nurses.

### The partnership response

At the main teaching hospital in Sierra Leone, Mercy Ships and our partners – Lifebox, the Medical and Surgical Skills Institute (MSSI), and Sterile Processing Education Charitable Trust (SPECT) – are combining quality improvement, infection prevention, sterilization practice development, nurse mentorship and procedure development in this 3-year project. The hospital established a 13-person quality-improvement team, trained 21 staff in sterilization practices, and strengthened peri-operative nursing practice. To date, 19 nurses have completed a 6-week peri-operative course and 45 surgical ward nurses received mentorship.

### What changed

The first year produced measurable gains in safety and infection prevention. The observed risk of surgical site infection fell by more than half. WHO Surgical Safety Checklist compliance rose from 0% to more than 90%, appropriate hand hygiene and skin preparation increased from 3% to 60%, and compliance with sterile processing standards rose from 13% to 32%.

The project also strengthened collaboration between theater, ward and support teams and increased local ownership of improvement tools.

### What we learned so far

- Training and mentorship must be matched by functioning equipment and reliable procurement.
- Data collection is more sustainable when built into routine workflows.
- Patient communication needs attention alongside technical practice.
- Complex change requires flexible implementation and strong in-country relationships.

### Looking ahead

The next phase will focus on sustaining improvements, strengthening patient communication, embedding mentorship in daily practice, integrating safety data into hospital management and addressing infrastructure and equipment needs. The results presented here cover the first year and should therefore be understood as encouraging early evidence from an ongoing programme.

# Example 3: **Increasing specialist providers in West Africa**

## Building clinicians, educators and future training capacity

### The opportunity

Shortages of specialist healthcare professionals limit access to care, while shortages of qualified educators constrain the ability of universities to train future specialists. Mercy Ships' Medical Education Sponsorship Program addresses a perpetuating cycle at the heart of many health-system constraints: too few specialists to meet current needs, and too few qualified educators to train the next generation.

### The partnership response

The Medical Education Sponsorship Program supports advanced training in priority fields including surgery, anaesthesia, nursing, dentistry and biomedical sciences. Participants receive financial support, mentorship and professional development, often through regional university partnerships where specialist programs are not available in their home country.

The model prioritizes future educators as well as clinicians, because graduates who teach can extend the effect of an individual investment across generations of health workers.

### What changed

Since 2021, 314 individuals have been supported across 16 specialties and 22 countries. As of November 2025, 58 participants had graduated. Of these, 89% are now working in teaching, clinical practice or dedicated medical and dental clinics. Thirty-one graduates were teaching in health professions education, 12 were providing specialist clinical care and 15 were working in dedicated clinics.

The early cohorts suggest that sponsorship can contribute both to increased immediate service capacity and to a longer-term multiplier effect when graduates teach future professionals. Current projections indicate that 392 people may complete recognised internships, certifications or specialist degrees by 2030.

### What we learned so far

- Mentorship and professional support are critical in encouraging sponsored students to share a vision of change in their own countries
- Alignment with ministries, universities and workforce priorities strengthens the pathway from training into service.
- Specialist education requires long-term commitment, often over several years.
- Educators extend the value of each investment by helping train future cohorts.

### Looking ahead

A mid-term review in 2026-27 will examine progress and learning. Future investment will place greater emphasis on institutional capacity, including faculty development, curricula, teaching and simulation facilities, and clinical training opportunities.

**12 graduates delivering specialist clinical care**

**314 individuals supported** since 2021

**58 graduates as of November 2025**

**31 graduates teaching**

**16 specialties represented**

**1.4% dropout rate**

# Case Study:

# Increasing the number of anesthesia providers in Guinea

## Supporting a locally-led vision for safer surgical and maternal care

The Guinean anesthesia journey began as we were preparing for our Guinea Field Service in 2018-19, when the government approached Mercy Ships to support the development of a national anesthesia education program. They had a vision: establish the country's first nurse-anesthesia education training program. In the years that followed, Mercy Ships worked alongside them to support this vision, aligning to their timelines and priorities.

The resulting Nurse Anesthesia education program was locally designed, driven, and led by Guinea's anesthesiologists, with Mercy Ships providing targeted support where requested for equipment, education, faculty development and accreditation. Their Nurse Anesthesia education program graduated its first four nurse anesthetists in 2021 and has since expanded to 20 students per cohort. Graduates are now working in hospitals across the country.

Research presented by one of the program's founding professors in April 2026 reported major changes at Conakry's main maternity hospital. Use of spinal anesthesia for routine caesarean sections rose from 1.96% to 94.88%. Over the same period, reported maternal mortality associated with routine caesarean sections fell from approximately 10.2% to 0.34%. These results show the potential contribution of a stronger anesthesia workforce and why it is essential to support national priorities to strengthen the surgical workforce.

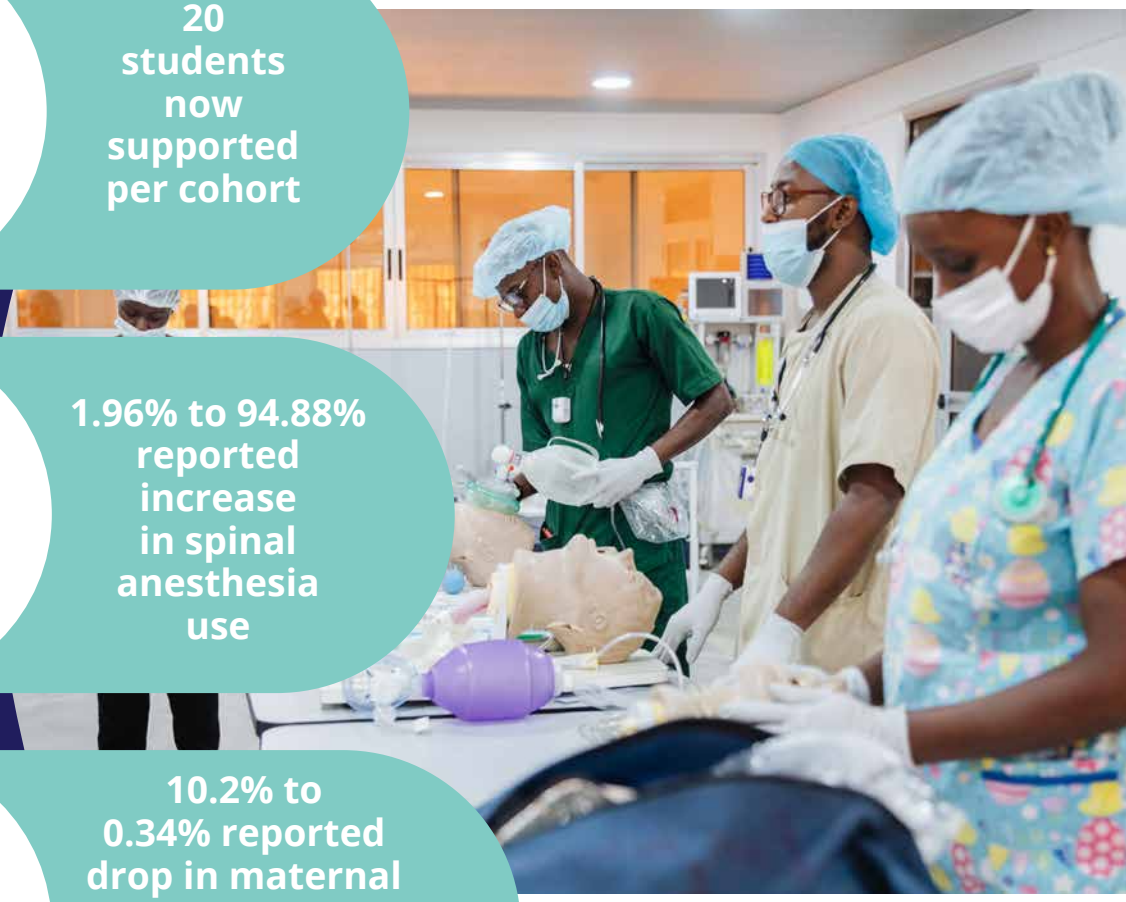
### The journey continues

By supporting a local vision and working to their timelines instead of our own, the Nurse Anesthesia diploma program is successfully entrenched in the education system. Our support respected the long-term vision, and in doing so, allowed them to determine the scale and pace of change. We are continuing this journey together. Mercy Ships is also sponsoring specialist anesthesia training for 13 Guinean physicians in Benin and Côte d'Ivoire. Two of the original program champions have achieved CAMES professorship status, and a third is expected to complete the final examinations in 2026. These developments will help Guinea to establish its own specialist anesthesia education program in the future.

### Partnership in practice

The vision, leadership and results belong to Guinea's anesthesia community. Mercy Ships is proud to have played a supporting role in that locally led journey.

**4 nurse anesthetists in the first graduating cohort**



**20 students now supported per cohort**

**1.96% to 94.88% reported increase in spinal anesthesia use**

**10.2% to 0.34% reported drop in maternal mortality associated with routine cesareans** (in the study setting)

# Case Study:

## Changing who leads surgical care

### Supporting women in surgery (Guinea)

The Medical Education Sponsorship Program is also supporting greater representation of women in specialist surgery in Guinea. In March 2024, nine women entered general surgery and ear, nose and throat specialisations with support from the Medical Education Sponsorship Programme. Four went on to earn diplomas of specialisation, becoming the first generation of women trained in general surgery in Guinea.

**1st generation of women trained in general surgery in Guinea.**

**9 women in Guinea entered general surgery and Ear, Nose and Throat (ENT) specializations in 2024**

**4 of these women earned specialist diplomas in 2026**

Their achievement represents an important step in strengthening the specialist workforce and widening participation in surgical leadership. As these graduates begin work in general and visceral surgery, they can provide specialist care while also helping make future career pathways more visible to those who follow.

***"Their achievements mark a historic turning point, and we are honored to have supported these leaders as they step forward as specialists in general and visceral surgery, inspiring others to follow their path."***

*Estelle Mouadeu Toualeu, Medical Education Sponsorship Manager*

### The wider lesson from Outcome Area 1

Across clubfoot care, surgical safety and specialist education, the strongest results come from combining investment in people with supportive institutions and locally owned systems. Skills matter, but they have greater and more durable value when professionals have the leadership, equipment, policies, data and partnerships needed to apply them.

# Outcome Area 2:

## People with better health and functioning

**Long-term systems change is essential, but people also need access to safe surgery now. Since 1978, Mercy Ships has provided free specialist surgical care to over 81,600 people.**

People who cannot access timely surgery may live with avoidable pain, disability and stigma. Cost, distance, limited specialist services and concerns about quality can all delay treatment. Through our hospital ships, outreach, transportation support, inpatient care, rehabilitation and follow-up, Mercy Ships works with host nations to address immediate need while contributing evidence for better future services.

This section presents emerging findings from Sierra Leone and Madagascar, together with a one-year review of orthopaedic patients in Sierra Leone. The patient-outcome evidence shows that the free surgical care we provide on board the Africa Mercy and Global Mercy are producing meaningful improvements in functioning and quality of life. It also highlights the barriers that remain within national health systems: cost, distance, limited specialist capacity and concerns about quality.

# Reducing disability through our surgeries

## From treatment to restored function: preliminary patient outcomes from Sierra Leone and Madagascar (2023-25)

### The project

Between 2023 and 2025, Mercy Ships provided free specialist surgery to 6,148 patients in Sierra Leone and Madagascar across seven specialties: general, maxillofacial/head and neck, ophthalmic, pediatric orthopedic, pediatric, reconstructive plastic and women's health surgery.

| VESSEL | COUNTRY | NUMBER OF PATIENTS | NUMBER OF SURGERIES | NUMBER OF SURGICAL PROCEDURES |
|---|---|---|---|---|
| Global Mercy | Sierra Leone (2023 - 2025) | 4,073 | 4,515 | 6,913 |
| Africa Mercy | Madagascar (2024 - 2025) | 2,075 | 2,315 | 3,568 |

Care extends beyond the operation. Depending on their needs, patients may receive accommodation before surgery, inpatient nursing, pain management, rehabilitation, outpatient follow-up and practical or emotional support. Patient-reported information is collected before and after treatment to understand health, equity and financial impact.

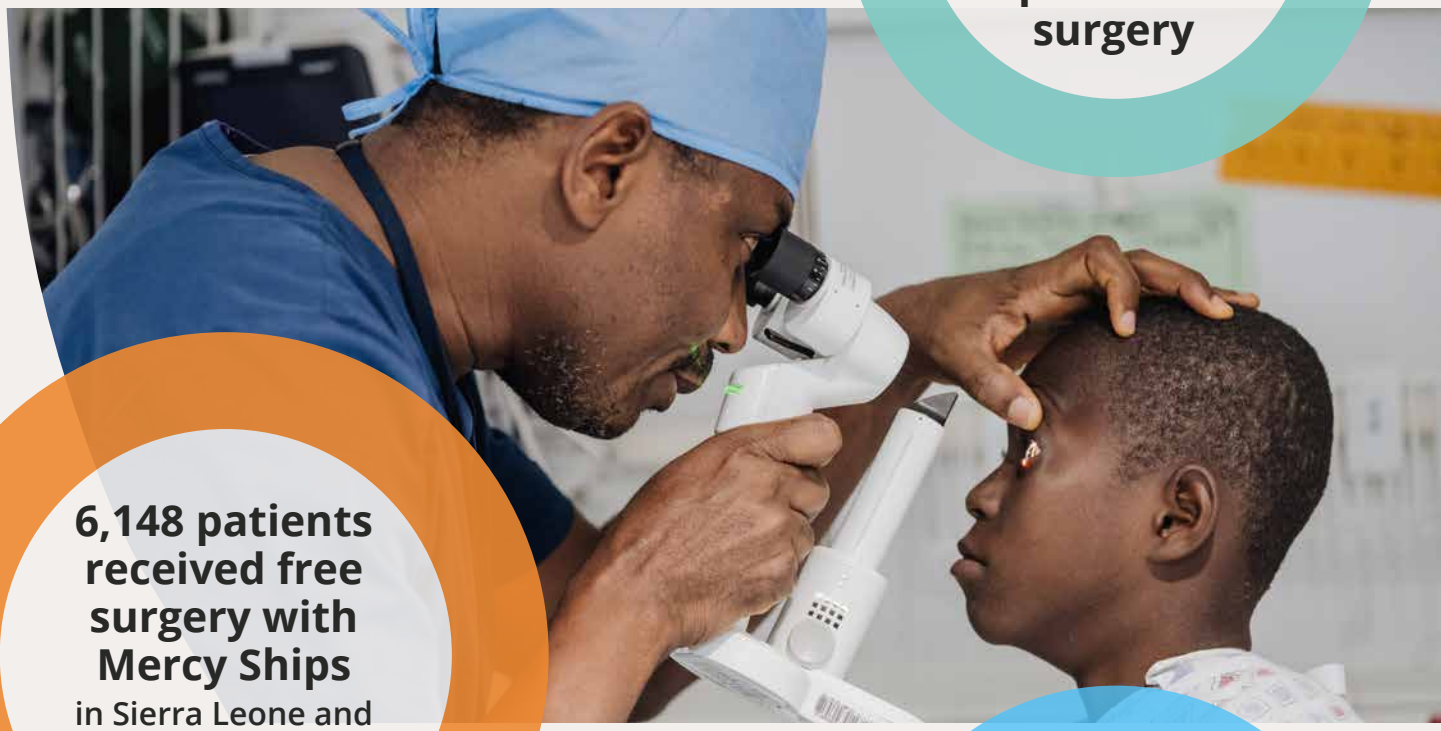
### Health and functioning

Three months after surgery, patients reported an average 59% reduction in disability across mobility, independence, cognition, self-care, social participation and daily functioning across all specialties. Improvements were recorded across every surgical specialty. Ophthalmic surgery showed the largest reduction at 89%, followed by general surgery at 70%, maxillofacial at 55%, plastic reconstruction at 49%, pediatric general surgery at 48% and orthopedics at 45%.

Patients also reported improvements in household responsibilities, personal care and emotional wellbeing.

- Average 54% improvement in being able to undertake household responsibilities
- 64% average improvement in ability to undertake personal care
- 90% average improvement in emotional wellbeing

**89% largest reported disability reduction: ophthalmic surgery**



**6,148 patients received free surgery with Mercy Ships**
in Sierra Leone and Madagascar between 2023 and 2025

**59% average reduction in reported disability at 3 months**

These findings are preliminary because 12-month data had not yet been collected for the full group, but the direction of change is encouraging: surgery is helping people regain function, independence and dignity.

**46 pediatric patients returned for a clinical assessment**
one year after surgery

**165% increase**
in functional ability score

**From 40.5 to 97.5 (out of 100) increase in self-rated health score**

**77% reduction in pain**

# Long-term surgical outcomes in Pediatric Orthopedics

## A one year follow up review in Sierra Leone

### Why follow-up matters

An operation is only one point in a patient's journey. Long-term follow-up can show whether people recover, experience complications and regain function. In 2025-26, Mercy Ships reviewed children who had received corrective knee surgery in Sierra Leone, combining patient-reported outcomes with clinical assessment and X-ray imaging.

### What changed

Forty-six children returned for a one-year assessment.

- Average functional ability rose from 3.4 (out of 10) before surgery to 9.1 one year later, an increase of 165%.
- Average pain fell from 3.9 to 0.9 (out of 10), a reduction of 77%.
- Self-rated health rose from 40.5 (out of 100) before surgery to 97.5 one year later.

The improvements recorded at discharge were maintained or improved further over the following year. This provides evidence that corrective surgery supported lasting gains in mobility, comfort and everyday functioning, rather than only a short-term clinical change.

### Mariama's story

***"Before I was mocked, but that won't happen now."***

Mariama lived with painful, outward-bowing legs that made walking and daily activities difficult. After corrective surgery in Sierra Leone, she reported less pain and greater ability to help at home. One year later, her progress had continued. She looked forward to taking part in family life with greater independence.

### What we learned

- Long-term follow-up adds important evidence beyond discharge measures.
- Patient-reported outcomes help connect clinical change with daily life.
- Future reviews will require a coordinating body, use of local facilities, imaging access and referral pathways once the ship has departed.

### Looking ahead

Mercy Ships will work with local hospitals to develop follow-up models that can operate without the ship's facilities. Orthopedic conditions including Rickets and Blount's disease will remain a focus, while experience from this pilot will inform the gradual expansion of outcome reviews to other specialties.

OUT
PATIENT

# Beyond Discharge

## What long-term follow-up adds

The orthopedic pilot demonstrates why outcome measurement must extend beyond the operating room. Discharge measures show whether a patient leaves hospital safely; longer-term follow-up shows whether treatment translates into sustained improvements in everyday life.

- Patients reported greater ability to walk, run, squat, carry water and participate in school or community life.
- Clinical improvements were sustained and, in some measures, continued to improve over the following year.
- Patient-reported outcomes helped connect clinical change with improvements in daily life, such as independence, wellbeing and social integration.
- Future follow-up will need to be carried out through local healthcare facilities, enabling continued measurement after our Field Services end.

### Looking ahead

Mercy Ships intends to develop practical local models for longer-term outcome review and gradually expand monitoring to additional specialties, particularly where long-term outcomes can inform treatment decisions.

# Reaching those most excluded from the surgical system

## Access and equity

Patients were reached from every region of Sierra Leone and Madagascar, demonstrating that supported outreach, selection and transportation can extend access beyond major urban centers. However, patients living closer to treatment centers remain overrepresented. Reaching remote communities will continue to require deliberate investment in patient identification, transport and support.

### Barriers to care

Cost was the most reported reason patients had previously been unable to access surgery within their own health system: 88% of surveyed patients in Madagascar and 81% in Sierra Leone identified care as too expensive. In Sierra Leone, 52% of respondents also expressed concerns about the quality of available surgical care.

Providing surgery free of charge removes a major barrier, but it does not eliminate every cost. Patients may still face temporary accommodation, food, communication expenses or loss of income. During their Mercy Ships care journey, some reported borrowing money, selling possessions or reducing education spending.

### What we learned

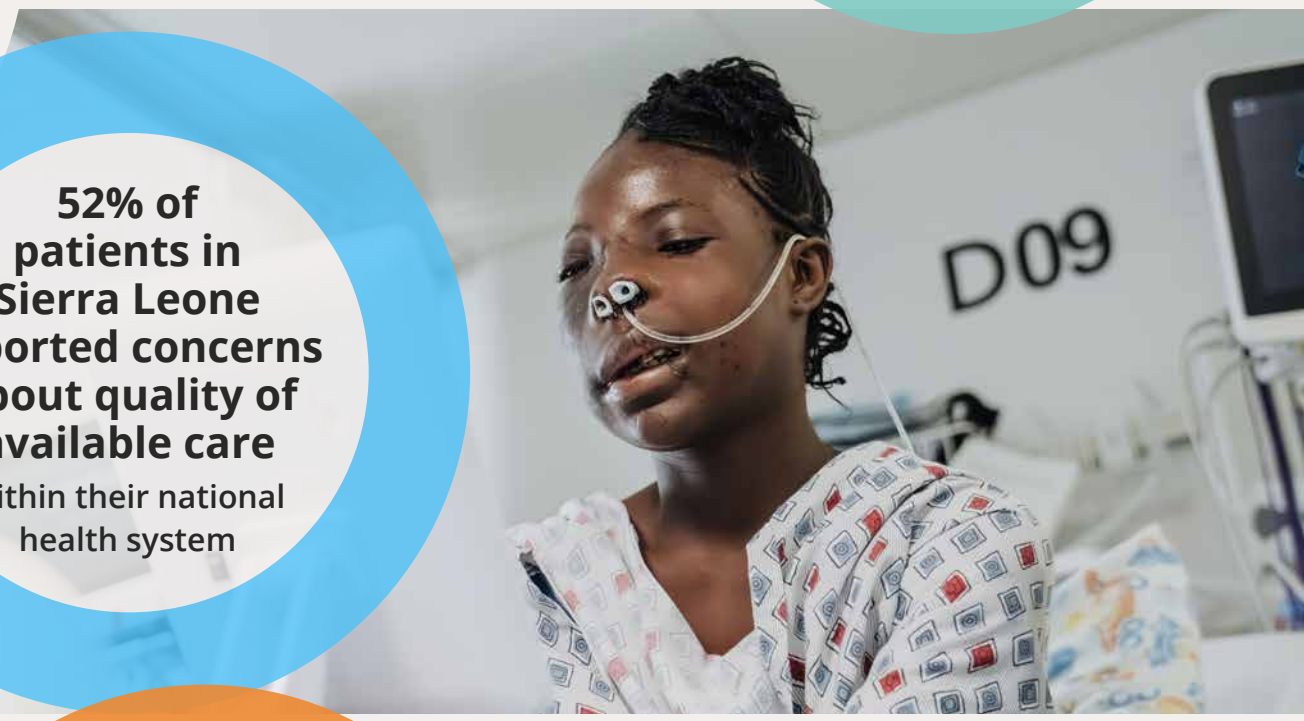
- Surgery can deliver substantial improvements in health, independence, and social integration.
- National reach is achievable, but distance continues to affect who accesses care.
- Indirect costs can create hardship even when surgery itself is free.
- Demand continues to exceed available operating capacity, making effective operating room use a major opportunity for impact.

### Looking ahead

Future work will strengthen understanding of patient pathways, align selection with national priorities, improve support for remote and vulnerable patients, and explore ways to reduce indirect costs. Mercy Ships will also continue refining surgical schedules and operating room use so that more patients can benefit from available capacity.

Twelve-month follow-up findings are expected to deepen understanding of whether the early improvements are sustained.

**81% of our patients in Sierra Leone said cost had prevented previous access**
within their national health system




**52% of patients in Sierra Leone reported concerns about quality of available care**
within their national health system

**88% of our patients in Madagascar said cost had prevented previous access**
within their national health system

# Outcome Area 3:

## Healthier, more resilient communities

The refreshed **Theory of Change** identifies healthier, more resilient communities and greater trust in healthcare as a third outcome area. The 2025–26 portfolio contains early signals relevant to this outcome, but the evidence base is not yet sufficiently developed for a strong external assessment.

### What the current evidence suggests

Improved access can reduce preventable disability and increase participation in family and community life.

Stronger local clinical services can improve the quality and safety of care available within health systems.

Patient experience and confidence matter: in Sierra Leone, more than half of surveyed patients reported concerns about the quality of available surgical care before accessing Mercy Ships' surgeries.

Local leadership and institutional ownership are recurring features of the projects showing the most durable progress.

Future reports will build the evidence needed to understand community-level change and trust in healthcare more systematically.

# Across Projects and Countries

## What we are learning

### Four lessons across the report

The examples in this report represent different countries, timeframes and types of work. Together, they point to four principles that shape sustainable progress.

1. **Local leadership matters:** Change is more likely to last when healthcare professionals, institutions and ministries shape priorities and lead implementation. The continued leadership of clubfoot practitioners in Sierra Leone shows how locally owned expertise can extend impact well beyond a field service. The sustained success of Guinea's Nurse Anesthesia Diploma program is linked to its leadership developing it on their own timeline according to their needs.

2. **Training alone is not enough:** Skills have greatest effect when supported by mentorship, equipment, policies, data and accountability. Our experience working on quality improvement within Sierra Leone's largest surgical and teaching hospital shows why workforce development and system improvement must progress together.

3. **Data improves decisions:** Quality-improvement measures and long-term patient follow-up help teams understand what is changing, where further support is needed and how future care can improve. They also support accountability to patients and partners.

4. **Partnership supports sustainability:** The strongest foundations are built with local systems, not for them. Alignment with national priorities makes programmes more relevant and increases the likelihood that improvements will continue.

Together, these lessons define Mercy Ships' approach: direct surgical care provides an essential starting point, but lasting impact comes from using that platform to strengthen the people, practices and systems that make safe surgery possible.

EXIT

mercyships.org
Mercy Ships

# From evidence to action: Looking ahead

## Progress is visible, but there is more to do

Healthcare partners continue to work within significant constraints, including infrastructure limitations, equipment shortages, workforce gaps, follow-up logistics, procurement challenges and limited access to reliable data. These conditions can slow progress and make it harder to sustain safe practice.

They also help define the next opportunities. Workforce mapping can guide investment towards the most urgent skills gaps. Stronger institutional monitoring can move learning from a project requirement into routine management. Local follow-up models can protect continuity after a ship departs. More responsive patient support can reduce the burden of distance and indirect costs.

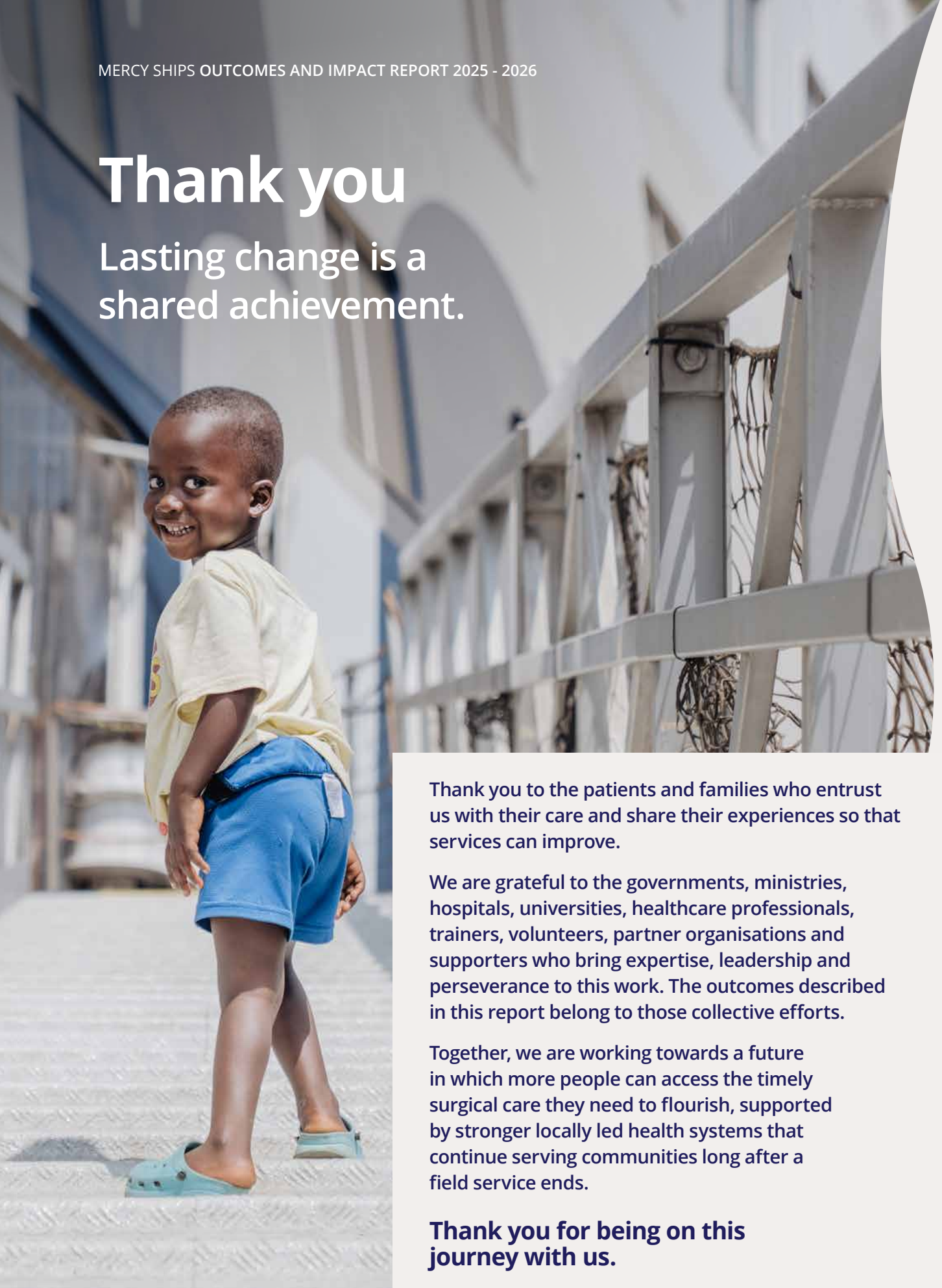
Mercy Ships will continue to build on the foundations described in this report through:

- expanded surgical-safety and quality-improvement initiatives;
- stronger mentorship and workforce-development models;
- improved outcome and impact measurement;
- closer collaboration with ministries, hospitals and education institutions; and
- continued investment in sustainable local leadership.

The goal is not only to deliver more procedures. It is to help patients experience better outcomes, support healthcare professionals to provide safer care and contribute to systems that are increasingly able to meet the needs of their populations.

# Thank you

## Lasting change is a shared achievement.



Thank you to the patients and families who entrust us with their care and share their experiences so that services can improve.

We are grateful to the governments, ministries, hospitals, universities, healthcare professionals, trainers, volunteers, partner organisations and supporters who bring expertise, leadership and perseverance to this work. The outcomes described in this report belong to those collective efforts.

Together, we are working towards a future in which more people can access the timely surgical care they need to flourish, supported by stronger locally led health systems that continue serving communities long after a field service ends.

**Thank you for being on this journey with us.**

# The story in numbers

**209,800 dental patients treated**
by Mercy Ships since 1978

**59% average disability reduction**
at 3 months in the two featured Field Services

**6,148 patients treated**
by Mercy Ships in the two featured Field Services (Sierra Leone and Madagascar, 2023-25).

**50%+ reduction in surgical site infection risk**
at Sierra Leone's largest surgical and teaching hospital

**58 specialist training graduates**
as of November 2025

**91 Sierra Leonean children treated for Clubfoot in 2025,**
through clinics initially supported by Mercy Ships in 2011

**165% increase in orthopedic functional ability**
one year after receiving surgery with Mercy Ships.

**81,600+ surgical patients treated**
by Mercy Ships since 1978

These figures tell only part of the story. Behind each number is a person, a healthcare professional, a family or an institution whose capacity to access, provide or sustain safe surgical care is changing.

Mercy Ships, P.O. Box 1930,
Garden Valley, Texas 75771

Mercy Ships Global Association,
Chemin de la Fauvette 98,
1012 Lausanne, Switzerland