The World Health Organization’s 2018 Global Status Report on Road Safety reveals that an estimated 1.35 million people are killed in traffic accidents every year, and 20 to 50 million more are injured, requiring surgical care to avoid disability. The accidents are rising more rapidly in developing countries, where adequate surgical care is often inaccessible, especially to people in poverty.

According to the World Bank, nearly half of the world lives on $5.50 or less per day. These people cannot afford to purchase implants needed to repair broken bones, so they often forego treatment or lay in traction for months for their bones to heal.

SIGN is needed to provide implants and instruments to hospitals that treat the injured poor.

Our Mission:
To give the injured poor in low and middle income countries access to effective orthopaedic care by donating education and implants to surgeons who work in low-resource hospitals.

Our Vision:
To create equality of fracture care throughout the world.
Every SIGN Surgery in 2018 changed a person’s life.

Every broken bone healed helps a mother, father, child, brother, sister, or friend recover from a devastating injury and resume their life.

SIGN Implants are also effective for correcting life-long limb deformities. Children like Aldrin, who are born with leg deformities, are able to walk upright for the first time in their lives thanks to SIGN Surgery.

Go to signfracturecare.org/aldrin or text ALDRIN to 91999 to see a video of Aldrin’s transformation.

Dr. Jun Valera with Aldrin after his SIGN Surgery.

Humble Acceptance

US Department of Defense Medal for Distinguished Public Service was awarded to Dr. Lewis G. Zirkle by Secretary of Defense, James Mattis.

Healing Limbs & Transforming Families

Innovation & Research

125,000+ Cases in the SIGN Surgical Database were analyzed. This confirmed that the SIGN Fin Nail is as effective as the standard SIGN Nail in comparable femur fractures.

The Fin Nail takes $\frac{1}{2}$ the surgery time as a standard nail, which greatly increases efficiency in busy hospitals.

New FX Plates and Benders were developed by SIGN Engineers. Surgeons are able to bend the plates to match each patient’s unique bone structure. This stabilizes the fracture to enable proper healing.

Education Accelerates

131 SIGN Surgeons from 28 countries shared their research and learned a wide variety of surgical techniques at the SIGN Conference in Richland, WA. This year we expanded the Bioskills Lab, where surgeons were able to practice new techniques on human tissue, to teach orthopaedic techniques beyond SIGN Surgery including pelvic fractures and using muscle flaps to cover the bone in serious injuries.

The hub launched, enabling communication and consultation between SIGN Surgeons, and providing additional educational opportunities throughout the year.
Regional Orthopaedic Conferences to educate surgeons on trauma surgery techniques.

SIGN Programs were activated in new hospitals, increasing access to effective and affordable surgery.

In 2018:
- 11 countries started 1 new program
- 2 countries started 2 new programs
- 1 country started 3 new programs
- 1 country started 4 new programs
- 11 countries started 1 new program
- 2 countries started 2 new programs
- 1 country started 3 new programs
- 1 country started 4 new programs
- no new SIGN Programs in 2018

2018 Accomplishments

228,979 Patients healed since 1999

SIGN’s Sustainable Development

SIGN Fracture Care is working to support the United Nations Sustainable Development Goals in the areas of trauma care and increasing access to health care services.

Goal 3.6 Halve the number of deaths and injuries from traffic accidents

We provide surgical repair for injuries caused by road traffic accidents, helping patients quickly recover and return to work or school.

Goal 3.8 Ensure universal health coverage and access to quality essential health care services and medicines

We donate orthopaedic instruments and implants to government hospitals so that effective care is available and affordable for every patient with a broken bone.

Goal 3.C Sustainably increase health funding and the health workforce in developing countries

We increase the surgical workforce by providing surgeons in developing countries with relevant orthopaedic education. We encourage them to stay and work in their home country by donating the implants they need to perform effective surgery for the injured poor.
89% of expenses directly supported SIGN Programs.

SIGN Financial Info
Note: Audited Financial Info

2018 TOTAL REVENUE $5,224,619
Program Services $6,327,894
Management & General 363,926
Fundraising 458,431
TOTAL EXPENSES $7,150,251
ENDING NET ASSETS $9,368,401

SIGN Officers & Board of Directors
Lewis G. Zirkle, MD, President & Founder, Chairman of the Board
Jeanne Dillner, GEO, Secretary/Treasurer
Richard Gellman, MD
Randall Huebner
Stephen Schwartz
Carla Smith, MD, PhD
John Staeheli, MD
David Whitney, MD
Thomas Vasileff, MD
Patrick Yoon, MD
David Shearer, MD

10 Programs reporting the most SIGN Surgeries in 2018
914 Cambodia: Kossamak Hospital
673 Tanzania: Muhimbili Orthopaedic Institute
592 Pakistan: Gilani Hospital Complex
386 Kenya: Cottolengo Mission Hospital
384 Myanmar: Yangon General Hospital
381 Tanzania: Dodoma Regional Referral Hospital
348 Ethiopia: Soddo Christian Hospital
328 Ethiopia: St. Paul Hospital
322 Cambodia: Friendship Khmer Russian Hospital
278 Pakistan: Ghurki Trust Teaching Hospital