

Road Crash Epidemic **INCREASING** SIGN Needed More Than Ever

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.

TRAFFIC ACCIDENTS



1.35
million

deaths each year

20-50
million

injuries each year



50%

of world's population lives
on \$5.50 or less per day



Our Vision:

To create equality of fracture care throughout the world.

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.

SIGN Highlights 2018



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

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.

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 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.

thehub launched, enabling communication and consultation between SIGN Surgeons, and providing additional educational opportunities throughout the year.



2018

Accomplishments

22 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
- 0** no new SIGN Programs in 2018

● **Cameroon** ● **Kenya** ● **Myanmar** ● **Cambodia**

4 Regional Orthopaedic Conferences to educate surgeons on trauma surgery techniques.

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

SIGN Officers & Board of Directors

**Lewis G. Zirkle, MD, President & Founder,
Chairman of the Board**

Jeanne Dillner, CEO, 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

