



GICS

Global Initiative for Children's Surgery

Global Initiative for Childrens Surgery

- Gaps: Global Surgery and Child Health

- Joining efforts in children's surgery

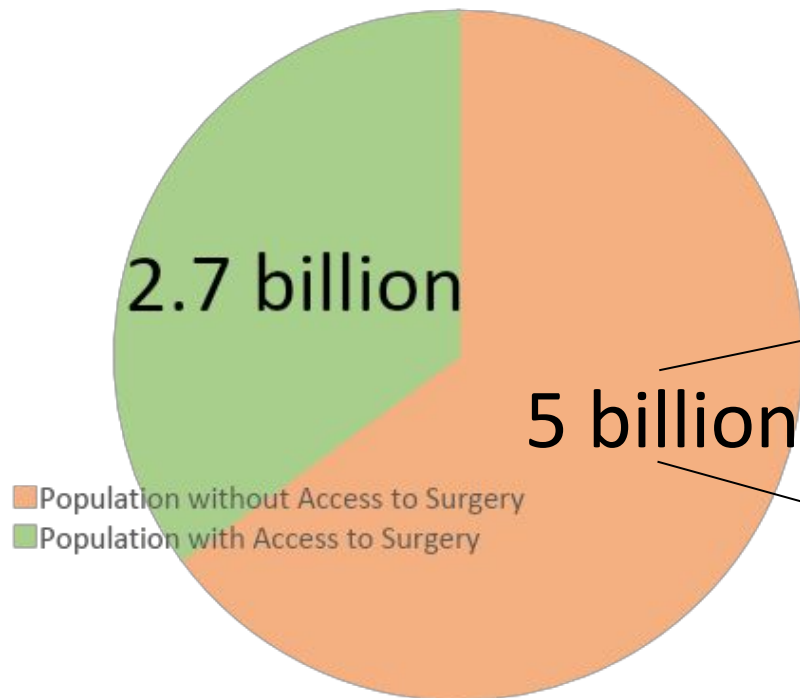
- Philosophy:

- “Northern voices dominate global health discussions”
(Shaikh et al. 2017 Health Pol Plan)

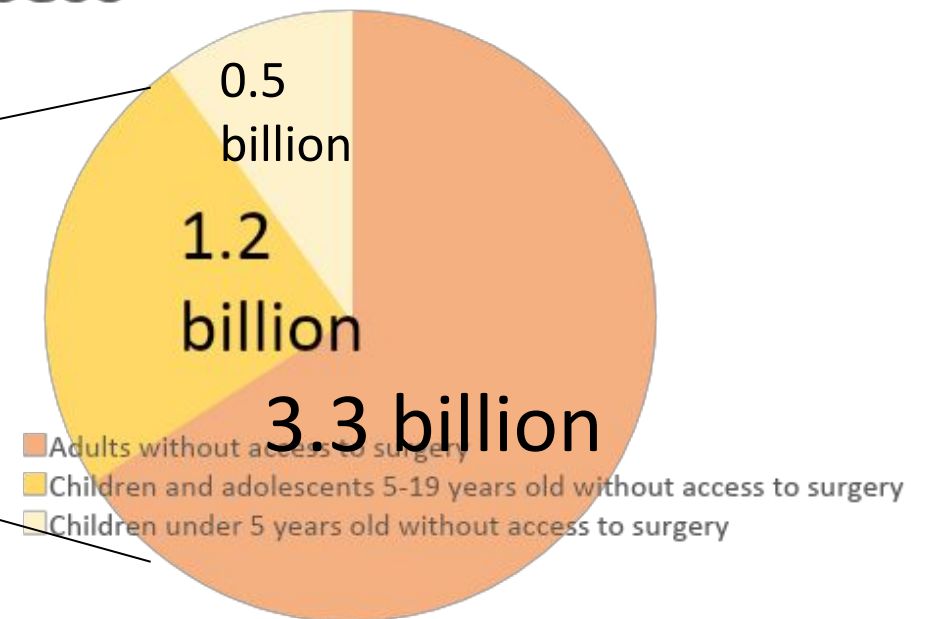


Surgical Access for Children

Global Population
7.7 billion



5 billion Without Surgical
Access



Childrens Surgical Conditions

- **Abdominal emergencies:** Sevenfold higher mortality in LICs
- **Congenital Anomalies:** 94% in LMICS, share of neonatal and infant mortality rising
- **Injuries:** More deaths ages 5-14 than HIV/TB/malaria
- **Cancer:** 43% of cancer cases in children undiagnosed globally
 - Southeast Asia and Subsaharan Africa



Last Meeting: GICS IV Johannesburg, South Africa January 2020



- Formed as Non- Profit Organization 2016
- Meetings 2016, 2017, 2018
- Leadership half LMIC / HIC
- Global Representation

Optimal Resources for Children's Surgery Guidelines

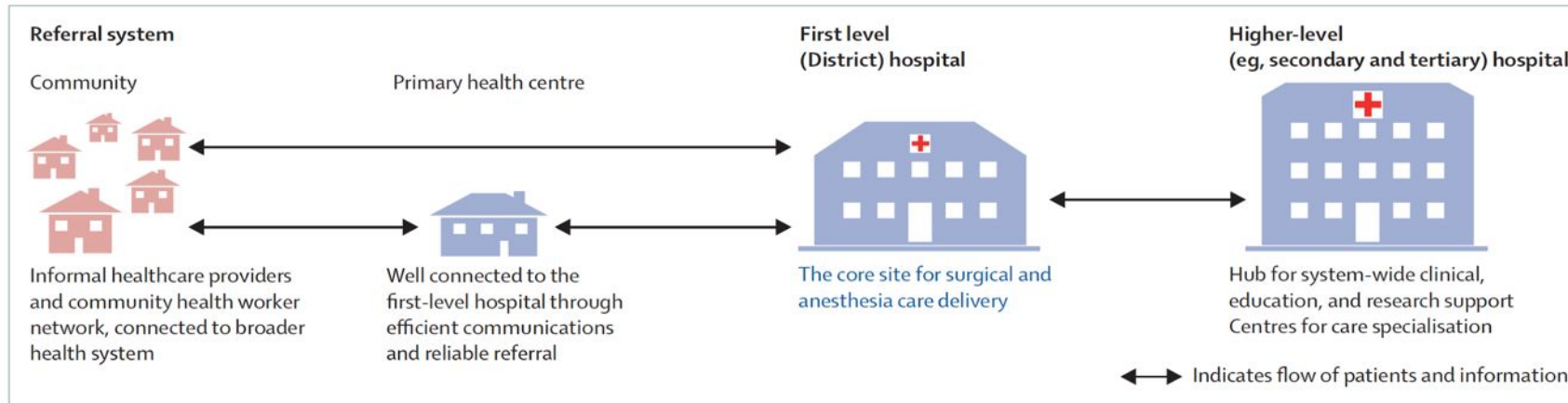
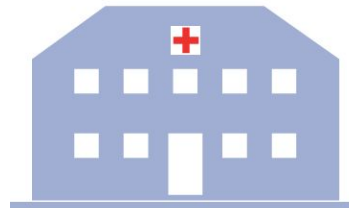


Figure 5: The surgical system

The surgical system is an interdependent network of individuals and institutions that reside within the health system.

National children's hospital



250 Members

13 specialties

44 countries

FREE DOWNLOAD

<http://escholarship.org/uc/item/7hc8w9s5>

ORECS – Use and Implementation

2. SUMMARY

Level of care	Type of facility (DCP3 classification)	Responsibilities	Age Treated	General Anesthesia	OPTIMAL RESOURCES FOR CHILDREN'S SURGICAL CARE				Quality and safety
					Human resources	Required skills	Infrastructure	Equipment & supplies	
Basic	Health center	Screening for surgical disease Resuscitation Referral to higher levels of care	All	No	Non-physician clinician Community Health Workers	Basic assessment and treatment skills	Infrastructure to support basic services	Wound care supplies	CME/CPD Periodic supervision and mentoring
Intermediate	First-level hospital	24/7 Emergency surgical care Diagnosis and treatment of common surgical diseases	All	Yes, not including complex cases and minimal comorbidity (Limit of ASA I or II)	Physician Anesthesiologist +/- anesthesia provider and perioperative nursing	Skills to treat emergency and essential childhood surgical conditions Anesthesia +perioperative care	Children's ward Functional operating room and recovery area	Emergency and essential surgical equipment & supplies for children	M&M review
Complex/ Advanced	Referral hospital: Second-level	Selected more complex cases	All	Yes, including some complex cases with comorbidities (Limit of ASA III)	General surgeon often present Specialists in some areas of children's surgical care	Surgical, anesthesia, nursing, and ancillary staff with advanced skills in the majority of children's surgical care	Children's clinics High-dependency units	Equipment and supplies to support selected more complex services	Trauma conference Tumor Board
	Referral hospital: Third-level	Comprehensive surgical care for children ²	All	Yes, including complex cases with comorbidities (All ASA)	Specialists in all areas of children's surgical care; Advanced nursing/allied health & Pediatric anesthesiologist	Surgical, anesthesia, nursing, and ancillary staff with advanced skills in all areas of children's surgical care	Neonatal and Pediatric Intensive Care Units (NICU/PICU) Burn Unit	Equipment and supplies to support full spectrum of children's surgical care	As above
	Referral hospital: National Children's hospital	Multidisciplinary and chronic care Training, education, research in all children's surgical specialties Development of standards of care & Advocacy	All	As above	As above	As above Training in multidisciplinary and chronic care	As above	As above	As above Multi-disciplinary program review

1. Levels of care defined as Basic (I), Intermediate (II) and Complex/Advanced (III). Higher levels assume presence of infrastructure/ services at lower levels
2. Type of complex/advanced care delivered at second and third level hospital and national children's hospital may vary considerably by resources available in a country
3. CME: Continuing medical education; CPD: Continuing professional development; M&M- Morbidity and Mortality; ASA- American Society of Anesthesia classification

- Gaps: Global Surgery + Child Health
- Specialty based working groups
 - Anesthesia / Orthopedics / Neurosurgery / Plastic / Nursing
- Thematic Work Groups
 - Trauma / Oncology / Congenital
 - Training / Research
- NGO - Academic partners



Past Chair Kokila Lakhoo



Emmanuel Ameh, Chair

Anesthesia – Perioperative Care

- 100 x higher mortality in children in Kenya than HIC
 - Newton et al. 2020 *Anesthesiology*
 - ASOS Peds (Alex Torborg)
- Limited anesthesia workforce
 - PATA – New Pediatric Anesthesia fellowship Training for Africa
 - Nurse Anesthesia
 - CANECSA and Fellowships
- SAFE course (WFSA)
- ***Much more work necessary in tandem (surgery/anesthesia)***



Zipporah
Gathuya



Faye Evans

Pediatric Surgical Nursing

- Central role of the nurse
- **Wound care manual**
- Family counseling for surgical conditions
- Pediatric Surgical Nursing curriculum
- Need to integrate nursing training



Olubunmi Lawal

Orthopedics

- Global Clubfoot Initiative
- Fracture Care
- Bone infections



“ETALO”

Fracture Simulation Drill
CORSU Hospital, Uganda
Moses Fisha Muhumuza (CORSU)
Coleen Sabatini (UCSF)



Vrisha Madhuri

Neurosurgery

- Led by William Harkness
- Created InterSurgeon – Network for Surgeons

InterSurgeon is an interactive website designed to bring individuals and organisations together in partnerships to improve surgical care globally.

- “Ohana One” Partnership for remote training and communication
- Scaling therapeutics for hydrocephalus
 - Endoscopic third ventriculostomy (CURE Hospital Mbale, Uganda)



William Harkness



James Johnston

Oncology

- WHO Childhood Cancer Initiative
 - Cancer control programs
- Increasing access to childrens cancer care
- Pediatric Surgical Oncology Training Courses
- Wilms as a target solid tumor
 - 60% target survival



Hafeez Abdelhafeez



Trauma

- Trauma Management Guidelines
- Integration of Pediatric Trauma Training into PTC
- Injury Prevention Materials on GICS website
 - Falls
 - Burns
 - Bike injuries
 - Battery ingestion
 - Pedestrian Safety



Abdelbasit Ali



Congenital Anomalies

- Community Identification of Birth Anomalies
- Common anomalies GICS Survey
- Structural Birth Defects Registries / Spot surveys
- Parent Support Groups
- WHO Birth Defects Program



Tahmina Banu

BIRTH DEFECTS SURVEILLANCE

**A MANUAL FOR
PROGRAMME MANAGERS**

SECOND EDITION

EXAMINATION OF THE NEWBORN FROM HEAD TO TOE FOR COMMON BIRTH DEFECTS

GENERAL OBSERVATION : If present, refer

• Looks ill • Lethargic • Abnormal cry • Not feeding • Colour of skin: a) Pale b) Blue c) Yellow

Wash your hands, before touching the baby

1 HEAD AND SPINE

1. Size too large > 38 cms (full term)
2. Size too small < 32 cms (full term)
3. Absence of skull cap
4. Swelling or protruding of the brain
5. Abnormal swelling of the spine



2 EYES, EARS, MOUTH AND LIPS

EYES

1. Eyelid – swelling
2. Eyelid – droopy
3. Gap in eyelid
4. Eyeball – absent
5. Eyeball – small
6. Inside the eye – corneal clouding
7. Inside the eye – opacity of lens/white reflex



EAR

1. Absent
2. Abnormal shape



MOUTH

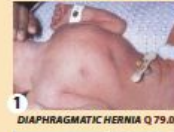
1. Cleft (split) lip
2. Cleft (split) palate
3. Cleft (split) lip and palate



3 ABDOMEN AND ANUS

ABDOMEN

1. Scaphoid (sunken and concave) with respiratory distress: X-ray chest
2. Distended: X-ray abdomen
3. Wall defect- gap with herniation of the gut



ANUS

1. Absent/imperforate/ abnormally positioned



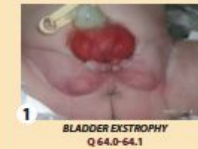
4 GENITALIA

1. Ambiguous genitalia
2. Vaginal opening absent
3. Urethral opening away from the tip of the penis – look where the urine comes out



5 URINARY TRACT

1. Bladder – not covered
2. Wrinkled abdominal wall
3. Urinary stream – check if male child



Distended bladder even after passing urine.

6 LIMBS (UPPER & LOWER)

1. Absence of a whole or part of upper limb
2. Absence of a whole or part of lower limb
3. Fused digits
4. Absence of digits or split hand/foot
5. Extra digits
6. Club foot



7 CHROMOSOMAL - DOWN SYNDROME

1. Face: Upward slanting eyes, fold on the inner corner of the eye (epicanthal), flat nose, small ear, small mouth, excess skin at the nape of neck
2. Palm: Single crease
3. Foot: Increased gap between 1st and 2nd toe



DOWN SYNDROME Q90

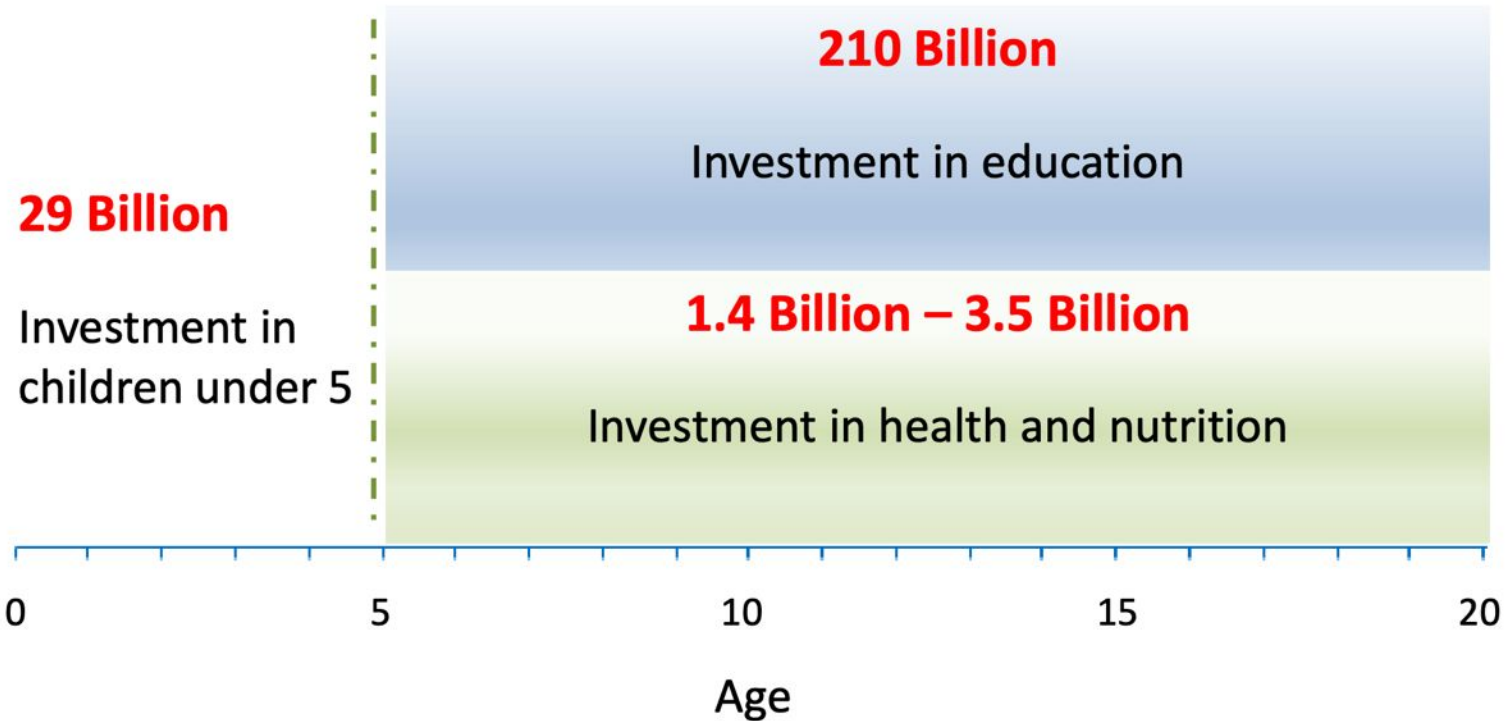
Disease Control Priorities 4

- The “First 8000 Days of Life” (Bundy et al)
 - Overemphasis on first 1000 days
 - 99% of Google scholar publications under 5
 - 210 billion investment on education; 4 billion on health
- Health needs of children continue beyond 1-5
- Outlining the expansive childrens surgical role
- Emphasis on Platforms, and costs, benefits



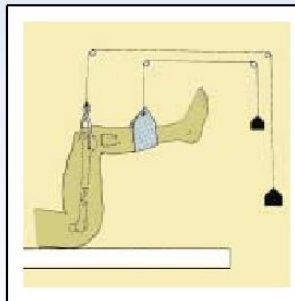
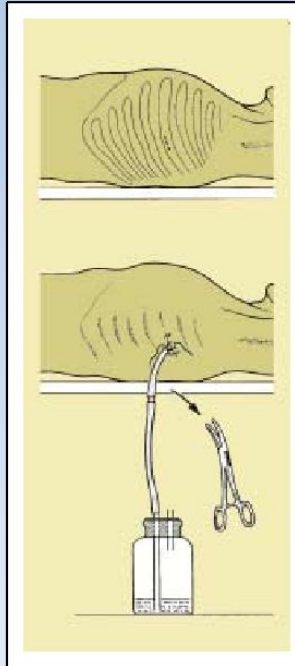
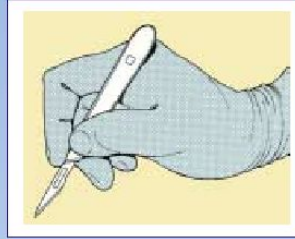
Justina Seyi-Olajide

Estimates of public spending on children and adolescents in LLMICs (US\$ billion per year)



- Human capital contributes to 70% of the wealth in HIC; <40% in LMIC
- “More investment needed for LMIC to develop their most vulnerable populations to attain their full potential as adults”

Surgical Care at the District Hospital



World Health Organization



Neema Kaseje

- Modules for Childrens Surgery Emergencies at the District Hospital
- WHO Learning Academy
- “ECO” Care

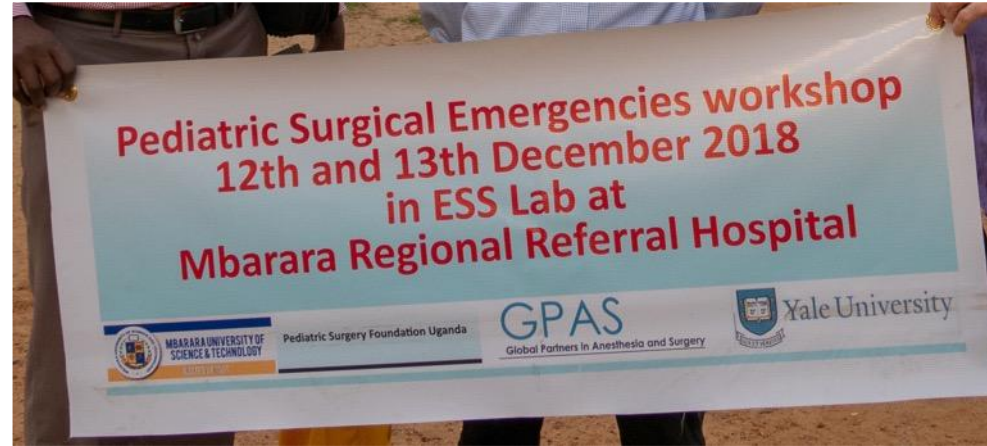
Uganda: Pediatric Surgical Emergencies Workshops for Rural Providers



Phyllis Kisa



Martin Situma





SURGICAL SYMPOSIUM CONTRIBUTION

Unifying Children’s Surgery and Anesthesia Stakeholders Across Institutions and Clinical Disciplines: Challenges and Solutions from Uganda

Phyllis Kisa¹ · David F. Grabski² · Doruk Ozgediz³ · Margaret Ajiko⁴ · Raffaele Aspide⁵ · Robert Baird⁶ · Gillian Barker⁷ · Doreen Birabwa-Male⁸ · Geoffrey Blair⁶ · Brian Cameron⁹ · Maija Cheung³ · Bruno Cigliano⁵ · David Cunningham¹⁰ · Sergio D’Agostino⁵ · Damian Duffy⁶ · Faye Evans¹¹ · Tamara N. Fitzgerald¹² · George Galiwango¹³ · Domenico Gerolmini⁵ · Marcello Gerolmini⁵ · Nasser Kakembo¹ · Joyce B. Kambugu¹⁴ · Kokila Lakhoo¹⁵ · Monica Langer¹⁶ · Moses Fisha Muhumuza¹³ · Arlene Muzira¹ · Mary T. Nabukenya¹⁷ · Bindi Naik-Mathuria¹⁸ · Doreen Nakku¹⁹ · Jolly Nankunda²⁰ · Martin Ogwang²¹ · Innocent Okello¹ · Norgrove Penny²² · Eleanor Reimer²³ · Coleen Sabatini²⁴ · John Sekabira¹ · Martin Situma¹⁹ · Peter Ssenyonga²⁵ · Janat Tumukunde¹⁷ · Gustavo Villalona²⁶

Incorporating Childrens Surgery into National Surgical Plans


- Emmanuel Ameh / Tina Seyi-Olajide
 - National Surgical Plan for Nigeria
 - Already partially funded, leading with childrens surgery implementation
- Lubna Samad - National Plan for Pakistan
- Use of ORECs document for needs assessment / gap analysis

Pediatric Surgery International (2021) 37:529–537
<https://doi.org/10.1007/s00383-020-04813-x>

REVIEW ARTICLE



Inclusion of Children's Surgery in National Surgical Plans and Child Health Programmes: the need and roadmap from Global Initiative for Children's Surgery

Justina O. Seyi-Olajide¹  · Jamie E. Anderson² · Neema Kaseje³ · Doruk Ozgediz⁴ · Zipporah Gathuya⁵ · Dan Poenaru⁶ · Walt Johnson⁷ · Stephen W. Bickler⁸ · Diana L. Farmer⁹ · Kokila Lakhoo¹⁰ · Keith Oldham^{11,12} · Emmanuel A. Ameh¹³ · On behalf of Global Initiative for Children's Surgery

NGO Partnerships

- KIDS OR Africa 2030 Initiative
 - 120 centers of excellence
 - Nearly 60 ORs installed by end 2022
 - Including Kakuma Refugee Camp
 - Training partnership with Smile Train
 - E learning platform
 - COSECSA / WACS
 - Data collection support
 - Advocacy initiative



David Cunningham
CEO



Garreth Wood
Founder



Rosemary Mugwe
Africa Director

GICS Surveys

- Economic Impact on Families of Childrens Surgery
- Wilms Tumor Practices
- Burn Survey
- COVID Impact
- Vaccine equity and uptake
- Prenatal Evaluation
- Wound care survey

Growth Opportunities

- Dialogues on Equity in Global Health Programs
- Integration with Child Health Initiatives
- Impact on Global Goals beyond Health
 - Poverty, Development, Gender, Inequality
- Expanded Flow of Knowledge
 - LMIC ↔ HIC
 - LMIC ↔ LMIC across regions
- Amplifying Children's / Family's Voices
 - "Making the invisible visible"
- Sustainability
- ***Managing systemic failures in global health***

Join GICS!

globalchildrenssurgery.org



Become a member of GICS

GICS wants to engage providers of surgical care throughout the world, and we welcome you to join our efforts. We try to gather members every 1-2 years, but the bulk of our work is accomplished through the various committees and working groups between our meetings. Annual membership dues are used to defray costs and to help subsidize travel for low-income members to attend our meetings. Dues vary by where you work:

- High-income physician (USD 100)
- Low- and middle-income physician (USD 25)
- Nurse (USD 10)
- Provider, other than physician or nurse (USD 10)
- Trainee (USD 10)
- Email updates only (no charge)
- Organizations (dependent on annual budget)

Dues will be waived upon request if they are a financial hardship.

Email us at GICSurgery@gmail.com if you wish to join GICS or if the dues are prohibitive and you would like an exemption.

[Click here](#) to be taken to our Member Website. After selecting a password, you will be able to enter your contact information and pay your dues.



Marilyn Butler

Can join as individual or institutional member
Last GICS Webinar Feb 19-20 2022
Next Meeting Philippines Early 2024