

GLOBAL SURGICAL EXPEDITION | 2022 ANNUAL REPORT





Our Vision

To change lives by expanding access to surgical care worldwide.



From the Executive Director

Dear Friends.

In 2015, the Lancet Commission on Global Surgery was purposed to promote widespread access to safe and high-quality surgical care – something you and I take for granted. The LCGS Commission estimated that five billion people lack access to safe and affordable surgical care and that 143 million additional surgeries are needed each year to save lives and prevent disability due to surgical disease. For over 10 years, we at Global Surgical Expedition have been committed to playing a part in addressing this immense problem. We are proud to once again share with you the far-reaching efforts and impact that Global Surgical Expedition had over the last year toward improving access to surgical care worldwide.

With your support, we have now treated more than 1,200 patients and provided nearly 500 surgeries in Belize and Rwanda, where these surgeries were not an option. In 2022, we sent five surgical teams to Central America and Africa and provided 71 life-changing surgeries. This included our first trip to Botswana, which was a great success. With our local partners' support, we will be sending two teams annually and look forward to making an even greater impact.

Each of these trips is organized with a **focus on sustainability, value, and impact.** We promote sustainability by teaching our local surgeon partners so that they can offer more surgeries to patients after we leave. We also provide surgical equipment that allows local surgeons to help more patients in need. In 2022, we donated a resectoscope to our partners in Belize, allowing them to treat men with bladder obstruction related to prostate enlargement. We were thrilled to hear from our partners that this donated resectoscope has gotten frequent use and saved many men from chronic catheter use.

We promote value by looking for unique ways to allow our resources to positively impact the most people. At a cost of less than \$1,000 per surgery, we provide cost-effective care at great value for every dollar you donate to Global Surgical Expedition.

Finally, we focus on global impact with efforts that are more far-reaching than simply providing surgery. In addition to performing surgeries, we carry out global surgery research, advocacy, and global surgery education. These are the four pillars of our work and we are extremely proud of Global Surgical Expedition's accomplishments in all these areas in 2022. From our award-winning research on the relationship between surgery and poverty to graduating our first global health leadership track resident, our commitment to this broad approach is truly expanding the reach of our work.

As a result, we recently updated Global Surgical Expedition's Vision Statement to reflect our far more expansive goal: To change lives by expanding access to surgical care worldwide. Through all of our diverse activities – including surgery, research, advocacy, and education - we ultimately want to change lives!

We do all of this with your support - and we couldn't do it without you. Please take a look at all we've accomplished this last year and the many initiatives we have planned for the months ahead. I hope that you feel proud to be part of this growing organization and the thousands of lives you've helped to change. With your continued help, we can – we will – do so much more.

With heartfelt thanks.

David

David E. Rapp, MD Founder and President





Board of Directors Spotlight



I am so proud to be a member of GSE. We are invested in building in-country infrastructure with equipment and training for physicians in addition to bringing critical surgical care to patients who are suffering. Our work shows that treatment modalities like pelvic floor physical therapy can be successfully introduced in developing countries such as Belize.

- Dr. Quinn Lippmann



No one should suffer or die from the lack of basic surgical care. I chose to be part of GSE's mission because of its enormous potential. Their life-changing, and life-saving mission, is still in its early stages and I would love to see it grow to a bigger scale.

- Dayal Baxani



It has been a privilege and a joy to work with GSE over the last 10 years. My participation in GSE has been among the most rewarding experiences I've had as a surgeon. I'm very excited to see what we can accomplish together as the organization continues to grow and expand its reach throughout the world.

- Dr. Tim Bradford



Global surgery continues to be a major focus of my medical career. I am honored and excited to be part of GSE in its mission to "deliver surgical care to those in need," and I look forward to the future as we continue to grow and look for new opportunities to educate, conduct research, and care for patients abroad.

- Dr. Erik Grossgold



I was inspired to get involved with this organization after seeing the work my sister performed on multiple missions. I feel fortunate that Global Surgical Expedition has found value in my accounting knowledge and that I can support in ways that allows GSE's team of medical professionals do what they do best, provide exceptional care in developing nations while working to create sustainable environments so that the obstacles to care faced today are removed for future generations.

Matthew Kerr



Surgery

Global Surgical Expedition had a busy year providing surgeries and building surgical infrastructure. In 2022, GSE sent four surgical teams to Belize, treating 104 patients and provided 71 life-changing surgeries.

These surgeries treated men and women with bladder cancer, urethral stricture, bladder and kidney stones, prostate obstruction, and pelvic prolapse. We have been thrilled to hear from our patients and local providers who tell us how these surgeries have benefited their health and quality of life, allowing them to regain their lives.

These surgeries are only possible with an extensive supply of **advanced surgical equipment**. Over the last 10 years, GSE has built an infrastructure of surgical equipment both in the United States and Belize. To protect this precious equipment, GSE sent a team to Belize to help construct a climate-controlled storage unit. Led by Will Reynolds, this team successfully completed the unit that will allow items such as scopes, video towers, and generators to remain protected.



CRNA Sara Swank and nurse Ashley Denbrock administering anesthesia to a patient in Belize.

In 2022, Global Surgical Expedition also took our first trip to Bo**tswana.** This effort was led by Dr. Quinn Lippman, who traveled to Botswana in November to treat patients and prepare for the beginning of surgical efforts. We are actively involved in teaching residents as part of their new OB/GYN residency program. I am happy to report that this trip was very successful and GSE is about to embark on its first surgical mission to Botswana in 2023, with the focus on providing care for urinary incontinence and pelvic organ prolapse and training residents to provide this care in the future.

Botswana is one of many potential opportunities for GSE. Throughout 2022, we have been exploring collaborations with additional international partners, including in Guatemala and Honduras. We are excited at the possibility of expanding our reach and serving even more men and women in need.



Dr. Jonathan Starkman collaborating with Belizean surgeon Dr. Nicholas to help treat pelvic prolapse.

2022 Major Accomplishments



Research

GSE believes strongly in the need to perform research so that we can deliver efforts that are sustainable and carry the most impact and value. Our recent research project sought to understand the economic impact of urologic disease in Belize.

Education 3

A founding vision of GSE was to foster and excite future global surgical leaders. GSE continued its resident scholarships, allowing Dr. Mei Tuong to travel with GSE to Belize and enjoy her first medical mission trip.

We found that on average, **patients** reported a loss of 12% of their income due to related disability or physician appointments caused by their disease. Can you imagine losing 12% of your annual income because you have no access to simple surgery that would cure your illness? Or the impact that this would have on you and your family?

We then took it step further. We looked at the income loss specific to each disease so that we know which specific problems (such as prostate obstruction or bladder cancer) have the greatest negative impact on financial health. With this information, we are focusing more of our efforts on the problems that cause the most poverty.

You can see why research is so important and relevant to our work! We were thrilled that others were as excited as we were – for

this project, GSE was awarded **3rd place at the Global Surgery Research Symposium of the Royal College of Surgeons of** Ireland in Dublin!





Dr. Fionna Sun at the VCU ACCESS Symposium.

Dr. Mei Tong, urology resident, with Dr. David Rapp.

Dr. Tuong received GSE's twelfth student scholarship that we have been able to offer because of your support. These scholarships have had such a big impact on the future of young surgeons that we are increasing our scholarships to two annually starting in 2023!

But we must do more to address the global lack of surgical care – and we are. To help train global surgery leaders we're providing more formal educational opportunities and curricula. In conjunction with the University of Virginia Global Health Leadership Track, GSE was proud to support the development of a formal certificate program in global surgery/urology. GSE celebrated its first resident graduate, Dr. Clint Yeaman. GSE also involved many students and residents in its research efforts and these residents presented our exciting research at many prestigious research conferences throughout this last year. Combined, GSE is developing dedicated global surgery leaders who make global surgery a career rather than simply participating in occasional missions.

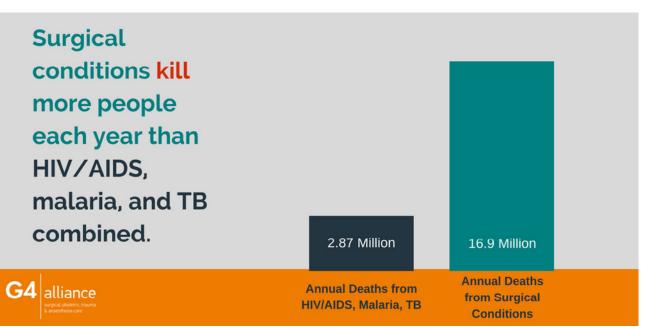
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Other Notable Accomplishments

2022 Major Accomplishments

Advocacy (4)

It is estimated that five billion people living in low and middle income countries (LMIC) lack access to safe and affordable surgical care and that 143 million additional surgeries are needed to save lives and prevent disability due to surgical disease. Advocacy is the cornerstone of generating the worldwide support needed to address this shortfall, which is why advocacy is one of the four pillars of GSE.



Infographic credit: The G4 Alliance

We participate in larger advocacy efforts as part of the G4 Alliance, a global group of more than 60 organizations across 160 countries, united in our efforts to advocate for access to SOTA care (surgical, obstetric, trauma, and anesthesia). Throughout this last year, GSE participated in many G4A meetings and its efforts to encourage support for surgical care through advocacy with the World Health Organization, the United Nations, and many other organizations at the forefront of global health.

GSE also advocates through storytelling. We create videos, articles, blogs, and other public awareness campaigns to educate the larger community to the need for surgical access. We are excited to announce the development of two new documentary projects under the leadership of Cody Huff, a talented filmmaker who has been telling GSE's story through film for many years. These documentaries will follow our educational efforts and our novel pelvic floor physical therapy program. We anticipate completion of these projects in 2023. Stay tuned.



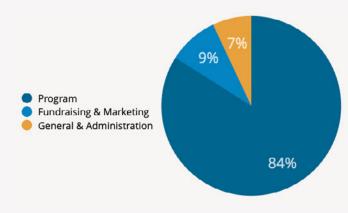
GSE presented our research on economic impact of urologic and gynecologic disease at two scientific meetings.

Program Stats

1299 **CUMULATIVE PATIENTS SEEN**

RESIDENT **SCHOLARSHIPS**

Financials





Dr. Rapp was a keynote speaker at the VCU ACCESS 2022 Symposium. Along with leaders from USAID and CDC, Dr. Rapp led discussions regarding strengthening global health efforts.













Pelvic Floor Physical Therapy: Growing a Global Program

While GSE's mission is to provide surgeries, an even better option is to provide a way to avoid surgery altogether. That's what GSE is doing in Belize. What began as a small initiative to introduce pelvic floor therapy treatments has turned into a life-changing program and we're excited to share with you our progress.

But now we're doing even more. Pelvic floor therapy (a comprehensive program to strengthen pelvic muscles) is widely recognized as an effective first-line treatment for incontinence, and we are excited to report that GSE just completed the first large phase of pelvic floor therapy development and testing in Belize.

Over the course of two years, GSE developed a therapy program and exercise guide, then sent our dedicated therapists to provide these services to women. To see if our efforts were effective, we tested our results:



Marielli Black, GSE Belize program coordinator, with the pelvic floor physical therapy team at Caye Caulker during a pelvic floor physical therapy outreach trip.



Pelvic floor physical therapist, Jeanice Mitchell, providing individualized pelvic floor care to women in Belize City.

Urinary incontinence is tremendously common in resource-poor countries. Most people know that these problems affect quality of life and cause embarrassment. But did you know that incontinence is associated with significant long-term disability? Or loss of work productivity, social isolation, and depression? Or that incontinence has been shown to be a predictor of death? This is why GSE has focused so much attention on bringing surgical treatments for incontinence to people worldwide.







Dr. Michelle Little with women during a pelvic floor physical therapy clinic in Belize City.



Pelvic floor physical therapist, Jeanice Mitchell, leading a pelvic floor physical therapy education session for women in Belize.

70% THE AVERAGE DEGREE OF **IMPROVEMENT WAS 7 ON A SCALE OF 10.**



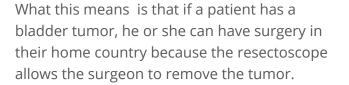
SIGNIFICANT IMPROVEMENTS WERE NOTED IN AVERAGE MUSCLE STRENGTH AND ENDURANCE.

These results highlight the **tremendous** impact we can make. To reach larger numbers of women requires training local providers to deliver this care themselves, and reaching program sustainability is GSE's goal for the months ahead. We look forward to sharing with you updates on this next phase.

A critically important part of increasing access to surgeries is providing equipment. While local surgeons throughout the world often have the training to perform surgeries, many times they lack the expensive equipment that is needed. That is where GSE – with your support – helps.



Dr. Chris Ballantyne performing surgery with a resectoscope to treat prostate obstruction.



A resectoscope, along with the monitors, lighting, and generators that are part of the surgical system, can cost tens of thousands of dollars. But one resectoscope can change or save thousands of lives. Your support enables GSE to secure more of this critical equipment for the countries we serve.



A resectoscope.

A resectoscope is an expensive scope that allows surgeons to see the urethra and bladder. And, through special channels inside the resectoscope, surgeons can insert a variety of instruments to treat disease such as removing a bladder tumor or obstructing scar tissue.



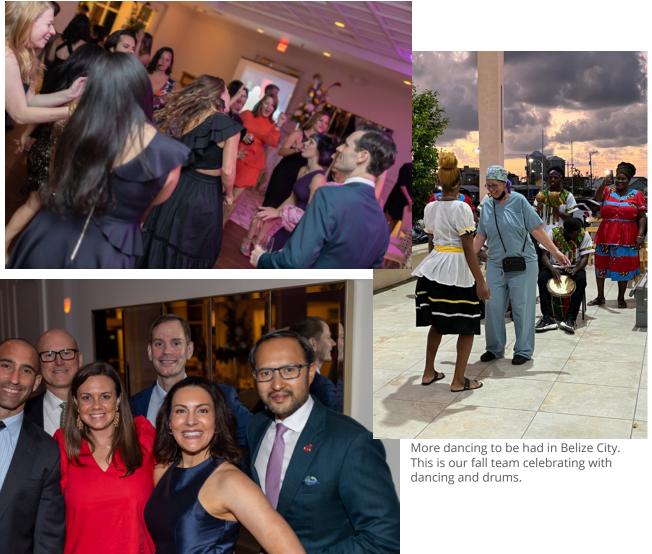
Dr. Grossgold providing resectoscope training to local surgeons.

Our Annual

Our GSE Gala continues to grow every year. The 2022 Gala was special because it marked 10 years of providing surgeries to people in underserved countries. Great food, great music, great commitment to supporting GSE's mission. These photos from our 10-year celebration are proof that doing good can be good fun.

Save the date and join us on November 11, 2023 for this year's Gala.

Dancing the night away at our 2022 gala.





GSE Board of Directors enjoying a wonderful night.







scientific conferences throughout 2023, including the Consortium of Universities for

Global Health.

What we can accomplish in the months ahead depends on your support. Having you as our partner will determine how many lives GSE can change -- and how many we can save. Please make the most generous gift you possibly can to give others access to the surgeries you and I take for granted. Make your tax-deductible gift today! Ways to give:

Online Donations:

https://globalsurgicalexpedition.org/donate/

Check: Global Surgical Expedition 5829 Ascot Glen Drive Glen Allen, VA 23059

Email Us: info@globalsurgicalexpedition.org





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