



ANNUAL REPORT

2023



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OUR VISION

143 million additional surgeries are needed annually to prevent the avoidable disability and death that result from untreated surgical disease.

Our vision is to help make surgical care accessible to all and to transform health and lives around the world.

From the Executive Director

Dear GSE Supporters,

It is my pleasure to write to you for the first time as the Executive Director of Global Surgical Expedition. Over the last several years, it has become clear that there is great potential for GSE to significantly increase its impact, and now is the moment to act on that. To that end, in July, after more than 10 rewarding years as a volunteer surgeon and Board of Directors president, I stepped into the position of Executive Director to lead a focused effort to bring GSE to the next level of growth. And we're on the move.

Over the last six months of 2023, we constructed a GSE 5-Year Strategic Plan to create a sustainable organizational future, to expand our operations into more countries, and to transform more lives around the world.

In 2023 alone, we sent nine medical teams to Central America and Africa, providing 117 surgeries, each of which made one life infinitely better. We established a presence in Botswana and made our first trip to Honduras. Now we need to "grow" both these new programs, and we need to add more countries where we know that GSE can make a significant difference – countries where we've already made the first connections.

In Belize, we continued over the last year to expand our novel pelvic floor physical therapy program, which is designed to conservatively treat women with urinary incontinence so they avoid the need for surgery. In countries where people are mired in poverty, not having to have surgery means not missing work and the family gets the paycheck it depends on. Now that we've proven the success of this program, we want to teach and empower nurses and midwives in Belize to deliver this care to many more women.



*I'm proud to report that with your support GSE has now treated more than **1,500 patients** and provided more than **600 surgeries**.*

In preparation for Year 1 of the GSE Strategic Plan, we developed important infrastructure pieces to allow for the growth of our services, operations, communications and team. Kelly Tain joined GSE in March and will be leading fundraising and communications efforts that are critical to supporting our surgical efforts and getting our stories to you and the community. You'll meet Kelly on page 10 of this report. We have also begun the process of expanding our Board of Directors and adding more service line champions to our GSE team. You'll meet Will Reynolds on page 10 and find out what he and many others do behind the scenes to help us fulfill our mission so cost-effectively.

As a supporter of GSE, you know there is a terrible lack of access to basic surgical care – including up to 50 percent of our world's population. That means that men, women and children suffer avoidable disability or death – along with resulting poverty, malnutrition, and social inequity – all because they can't get the simple surgical procedures you and I take for granted.

I'm proud to report that with your support GSE has now treated more than 1,500 patients and provided more than 600 surgeries. All these efforts are a reflection of our commitment to collaboration, both with our local partners abroad and also many other dedicated non-profit organizations all working toward the similar goal of delivering surgeries to those in need.

We continue to be grounded in our four-pillar approach – surgery, research, education, advocacy – and you'll see in this report how this leads to mission success. We are very proud that our 2023 surgeries were provided at a cost of \$515 per surgery. And we were able to do this while maintaining 86% of contributions used for program expenses. In short, we provide cost-effective care at great value for every dollar you donate to Global Surgical Expedition.

Your support makes all this possible and I am deeply grateful. As you look through this report, I hope you'll feel proud of our successes and the life-changing surgeries you helped us carry out. I hope, too, that you'll feel the building momentum of an organization that is growing and stands on the cusp of doing much, much more. We're grateful for your continued support.

With heartfelt thanks,

David E. Rapp, MD
Founder and Executive Director



Leadership Spotlight



Dr. Quinn Lippmann

I am so proud to be part of GSE. Each year our impact continues to grow and we are able to increase access to surgical care. Through unique programs including our pelvic floor therapy initiative and urogynecology teams, I am very proud to help support health care equity for women and increase women's access to health services, learning, and economic opportunities.



Dayal Baxani

I am particularly proud of GSE's diverse mission that makes a bigger impact. Not only do our teams provide surgeries, but we make a bigger impact through our education, advocacy, and research programs. No one should suffer or die from the lack of basic surgical care and GSE's broad programs offer immense potential to meet that goal.



Dr. Tim Bradford

For more than 10 years, I have had the privilege of participating in GSE's efforts. Being part of GSE's surgical outreach teams in Belize and helping so many in need get surgical care has been among my most rewarding experiences as a surgeon. Our future is bright as we continue to grow and I am excited to work towards a world in which surgical care is accessible to everyone.



Matthew Kerr, GSE Treasurer

I was inspired to get involved with GSE after seeing the amazing efforts of our physicians, nurses, and other healthcare professionals. I serve as GSE's treasurer and I am particularly proud of our fiscal record and stewardship. Because of this, we were able to perform surgeries at a cost of only \$515. That's an amazing accomplishment!



Dr. Erik Grossgold

Global Surgery is a major focus of my career and I am excited to be a part of GSE and its growing efforts. I am thrilled to lead our new surgical program in Honduras, which offers so much potential to expand our reach and help more people in need. I am very excited about GSE's future.



Will Reynolds

I have always had a passion for charity work and desire to get involved. I work for a medical equipment supplier and was excited to learn how my work could expand the care offered to patients. There is so much that goes into providing surgeries and equipment infrastructure is a big part! I am looking forward to helping build the laparoscopic program in Belize and changing the lives of so many.

2023 Major Accomplishments



Dr. Mark Stoltzfus overseeing anesthesia care during surgery.

MEDICAL OUTREACH

Global Surgical Expedition had a very busy year delivering medical and surgical care to those in need. **GSE sent nine medical teams to Belize, Guatemala, Honduras, and Botswana! Together, we treated 257 patients and provided 117 life-changing surgeries.** These surgeries treated men and women with bladder cancer, urethral stricture, bladder and kidney stones, prostate obstruction, urinary incontinence, and pelvic prolapse. Our patients continue to reach out to us with gratitude and to tell us how their lives are transformed after receiving this care.



Dr. Tim Bradford performing endoscopic surgery in Belize.

Global Surgical Expedition continued to grow our new efforts in Botswana. We sent two surgical teams that provided urogynecologic care for pelvic prolapse and fistula. These trips were very successful, delivering critically important care to women. These surgeries not only allow women to live a life free from the devastating discomfort and embarrassment from pelvic floor disorders but also highlight GSE's efforts towards health care equity and women's empowerment that is critical in low-income countries.

Sustainability is an important part of our efforts. Our goal is to ensure more men and women have access to surgical care worldwide. While sending teams is an important part of that effort, sustainability is better achieved by teaching and empowering surgeons in our partner countries to perform surgeries themselves. In 2023, **thirty-nine attending and resident surgeons from partner countries participated in our training missions!** We are also excited to have begun developing virtual training modules to help educate foreign surgeons, allowing for even more impact.

2023 Major Accomplishments



RESEARCH

Just performing surgeries is not enough. We need to focus on the surgeries that help the most. So GSE conducts research to help us understand how to do that – how to identify and focus on the surgeries that make that most impact. And by impact we mean not only improving our patients’ health, but also financial well-being and social equity.

Here’s an example: we recently finished a 3-year study designed to understand the economic impact of urologic disease in Belize. We found that on average, **working patients reported a loss of 55% of their income** due to related disability or physician appointments caused by their disease. Can you imagine losing 55% 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?

What did we do next? We looked at the income loss specific to each disease and found that prostate enlargement is a condition that is associated with larger amounts of income loss. Why? Because these patients often have long-term bladder catheters and have to take frequent time away from work to visit the doctor for catheter changes.

Taking this information, we focused on treating prostate enlargement, developing communication strategies with our medical partners in Belize in order to identify these patients. With that in place, we identified over 20 men with long-term catheters and were able to provide surgical care to fix their problem and get rid of the catheter. In doing so, we enabled them not only to feel better, but to also avoid economic hardship related to their condition! This example shows how important research is to our mission. We are proud to have presented this research at several national and international conferences in 2023.

INTERNATIONAL JOURNAL OF
SURGERY: GLOBAL HEALTH

Economic Evaluation Study

OPEN

Economic impact of urinary incontinence and pelvic organ prolapse in women in Belize

Jacqueline Zilliox, MD^a, Clinton Yeaman, MD^a, Raj Desai, MS^b, Devang Sharma, MD^{a,c}, Rajesh Balkrishnan, PhD^b, David Rapp, MD^{a,c,*}

Introduction: Urinary incontinence (UI) and pelvic organ prolapse (POP) are prevalent in low-income and middle-income countries (LMIC). Although the significant clinical and social impacts of UI/POP are well-described, less is known regarding their microeconomic impacts. This study aimed to assess the microeconomic impact of UI/POP in the LMIC country of Belize.

Methods: The authors performed a prospective survey-based assessment of patients with urologic disease during surgical trips to Belize in 2019–2021 by the charity Global Surgical Expedition. This study is a post-hoc analysis focused on a subset with urogynecologic disorders. Patients completed a 17-item survey focused on disease impact on work, caretaker responsibilities, and finances. The primary study outcome was income loss resulting from work impairment or absence related to UI/POP, calculated using the validated work productivity and activity impairment questionnaire.

Results: Forty-nine women with UI (n=15) and POP (n=34) completed surveys. The majority (73% UI; 88% POP) reported their condition negatively impacted their lives. In the analysis of 21 patients able to provide financial data, 6 (29%) patients reported missing work and 10 (48%) reported impairment at work due to UI/POP. This resulted in a loss of 6.7% (UI) and 8.5% (POP) in total income per capita. When also accounting for direct treatment costs, the total cost attributable to UI/POP was 28% (2%, 51%) of weekly income.

Conclusions: In Belize, UI and POP significantly impair work and caretaking responsibilities, resulting in considerable lost income and cost. Efforts are thus necessary to provide surgical care for UI/POP in LMIC to address not only the quality of life but also the financial health of individuals and families.

Keywords: global surgery, microeconomic impact, pelvic organ prolapse, urinary incontinence

Introduction

Global burden of surgical disease

In 2015, the Lancet Commission on Global Surgery (LCGS) estimated that five billion people lack access to safe and affordable surgical care^[1]. As surgical disease is estimated to comprise up to one third of the global burden of disease, this lack of surgical access results in an estimated 17 million annual deaths, notable life years of life lost and life lived with disability, and a significant reduction of quality of life (QOL)^[2–4]. In an effort to promote surgical infrastructure development across low and middle income countries (LMIC), the LCGS identified core indicators of surgical care access including specialist work force density and surgical volume metrics^[1]. Notably, the LCGS core indicators included the risk of catastrophic expenditure from surgical care^[4].

GSE’s research evaluating the economic hardship caused by urogynecologic disorders was accepted for publication in International Journal of Surgery: Global Health.



Dr. David Rapp, presenting GSE research at the annual meeting of the Consortium of Universities for Global Health in Washington, DC.



GSE resident scholar, Chris Ballantyne (University of Virginia), operating during his international experience in Belize.



GSE resident scholar, Ashley Matthew (Virginia Commonwealth University), with mentor Dr. Tim Schuster on her international trip.

EDUCATION

GSE’s educational efforts are two-fold. We want to help empower surgeons in our partner countries to deliver more surgeries. So we provide educational initiatives to give them the surgical training they need. We also provide training for nurses, anesthesiologists, surgical technicians, and the many other important members of the surgical team. Surgery is much more than just the surgeon and training these equally important team members is an important part of our mission.

In order to accomplish the goal of training foreign surgeons, we need a large number of dedicated surgeons from the United States. Surgeons who focus their career and skills towards training foreign surgeons and building this sustainable model. These US surgeons require education and training in global surgery to be able to serve as teachers and work in the complex world of global surgery. And that’s what we do.

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. We also teach residents from many universities through our resident scholarship program. In 2023, GSE supported international training experiences for residents from University of San Diego, University of Virginia, and Virginia Commonwealth University. Combined, GSE is developing dedicated global surgery leaders who make global surgery a career rather than simply participating in occasional missions.



Dr. Charles Nager teaching a Bostwana trainee to perform surgery for pelvic organ prolapse.

2023 Major Accomplishments



Dr. Matthijs Botman representing Netherlands Society for International Surgery at the G4 Alliance board meeting in Geneva.



GSE's talented filmmaker, Cody Huff, overseeing the film viewing.

ADVOCACY

We need 143 million additional surgeries each year to prevent avoidable disability and death due to surgical disease. And to avoid the resulting poverty and social inequity that accompanies surgical disease. Advocacy is the cornerstone of generating the worldwide support needed to address this need, which is why advocacy is one of the four pillars of GSE.

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 and to share with you the exciting and diverse efforts we are accomplishing. In 2023, we were excited to share a **new documentary about GSE's amazing educational programs for residents**. This film was completed under the leadership of Cody Huff, a talented filmmaker who has been telling GSE's story through film for many years. We encourage you to take a look at this film on our website. Cody is also working on another project about our transformational pelvic floor physical therapies efforts in Belize.



The first showing GSE's public awareness film about global surgery education.

OUR ANNUAL Gala

Once again, the GSE family celebrated, danced, and raised support for our efforts.

The 2023 Gala was held at the Commonwealth Club and included a night of fine dining, dancing to the great music of Klaxton Brown, and a commitment to saving lives around the world.



We even had a special live guest – Dr. Tim Schuster dropped in by video, live from Belize in the middle of a surgical outreach trip. Dr. Schuster and GSE's resident scholar, Ashley Matthew from Virginia Commonwealth University, gave GSE's supporters a front row view of what it's like to be on a life-changing surgical trip.



Enjoy some photos from our celebration. The GSE Gala continues to grow every year and the 2024 Gala will be a night to remember!

Save the date
2024 Annual Gala



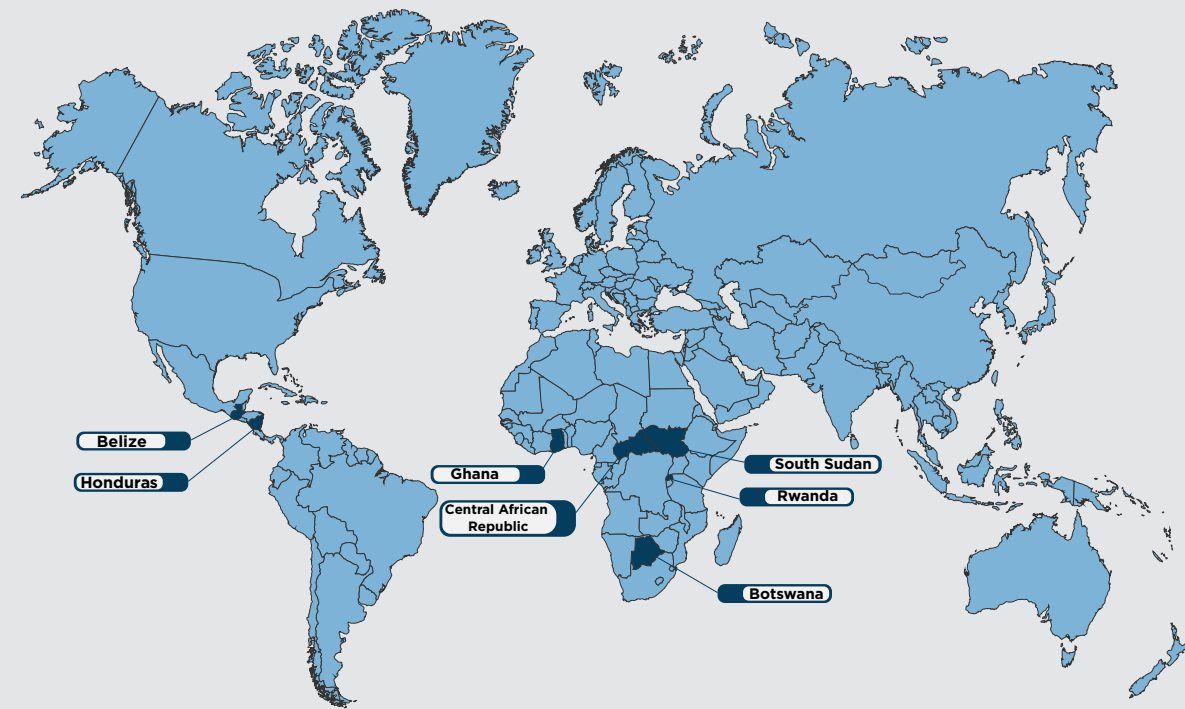
November 2, 2024



The Commonwealth Club, Richmond, VA

Growing Our Impact

We are beginning our exciting 5-year transformation plan to grow our organization and to expand our programs around the world. Take a look at some of the pieces that are part of that growth!



With the collaborative efforts that GSE is developing, we anticipate exciting expansion in our efforts worldwide.

Growing Our Team



Kelly Tain, Director of Fundraising and Development

Kelly joins us as a seasoned fundraiser with over ten years of experience in fundraising and development. She has helped numerous organizations reach their fundraising goals, leading to greater success and funding for their mission. Kelly is excited to bring her talents to GSE and use her talents to help make a transformational impact in the lives of so many around the world. Kelly earned her degree from the George Washington University and is fluent in German.



Will Reynolds, GSE Specialty Champion (Equipment)

Surgical equipment is a critical part of empowering our partners to perform surgeries. Surgeons and anesthesiologists in our partner countries may have the expertise to perform needed surgeries but lack necessary equipment. Will is a crucial part of our team as he works with many companies throughout the medical industry to secure equipment donations that make our efforts possible. Will and his collaborators also travel with GSE teams to help train local operators about equipment use and maintenance.

Take a look at GSE's equipment in action



The Power of Partnership

Together we can go far! GSE has developed numerous collaborations with other organizations that support surgical care delivery. Some of those partnerships have already produced great impact. In partnership with Partners for Medical Relief, GSE conducted another surgical trip to Belize in October.

We are also developing a new General Surgery program to provide laparoscopic surgery for gallbladder disease. GSE is excited to be in discussions for numerous additional collaborations that will enable more surgeries in many specialties and in more countries. We have also developed collaborations with academic institutions to help provide training for more residents and support valuable research initiatives.



Dr. Ken Essig during a combined surgical trip with GSE and Partners for Medical Relief.

The Power of Prevention

One of the best ways to address the lack of surgical care is to avoid the need for surgeries in the first place. This is where our novel prevention and conservative treatment programs play a role.

Under the direction of dedicated GSE pelvic floor physical therapists Jeanice Mitchell and Michelle Little, GSE has developed and initiated our pelvic floor therapy program to help treat women with urinary incontinence. Our initial experience was a big success and now we are looking to make this program sustainable in Belize and other countries. To do this, we will begin training local providers to deliver this care year round.



Pelvic floor therapist, Dr. Michelle Little, providing education to local education champions in Belize.



Pelvic floor therapist, Jeanice Mitchell, teaching Marielli Black about pelvic health.

GSE in Pictures



Nurse anesthetist Brooke Nelson recovering a patient after surgery in Belize.



Surgery involves the whole family. A GSE patient with her daughter before surgery.



The GSE Team and local partners in Botswana during a long day of surgeries.



Drs. Rapp and Grossgold appearing on the morning news broadcast in Belize.

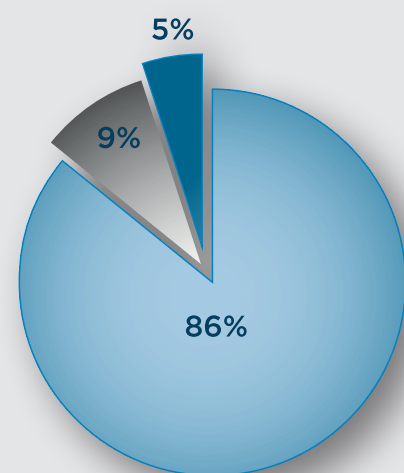


A large bladder stone after successful surgery. Stones like this are common and cause pain, infection, and kidney damage.



Nicholas Rapp (15) in the OR. GSE is committed to fostering future humanitarians by introducing young learners to global surgery.

GSE in Numbers



Total funds allocated

- Programs - 86%
- Fundraising - 9%
- Administration - 5%

Sources of Revenue

| | |
|----------------------|-----------|
| Contributions | \$173,626 |
| Gift-in-kind | \$10,736 |
| Contributed services | \$334,200 |

Total **\$518,562**

How funds were allocated

Programs Services

| | |
|----------------|-----------|
| Programs | \$429,058 |
| Fundraising | \$43,258 |
| Administration | \$24,644 |

Total funds allocated **\$496,959**

GSE in Stories



Delvin's Story

He was a vibrant 12 years old boy when he fell while playing on a balance beam at the local park. Like any other child. As he fell, the beam struck his groin and damaged his urinary channel. He awoke the next morning in great pain and unable to urinate due to the blockage. Local doctors emergently placed a tube through the lower abdomen into his bladder to drain the urine. There are no surgeons in his entire country that can perform surgery to reconstruct his urinary channel.

Delvin would have lived with this tube forever.

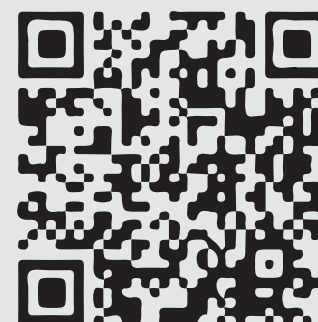


Underwent successful repair of urethra.

We Need Your Support Today

Helping more patients like Delvin 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!



donate now

WAYS TO GIVE:

Online Donations:

<https://globalsurgicalexpedition.org/donate/>

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