

HUP DATE

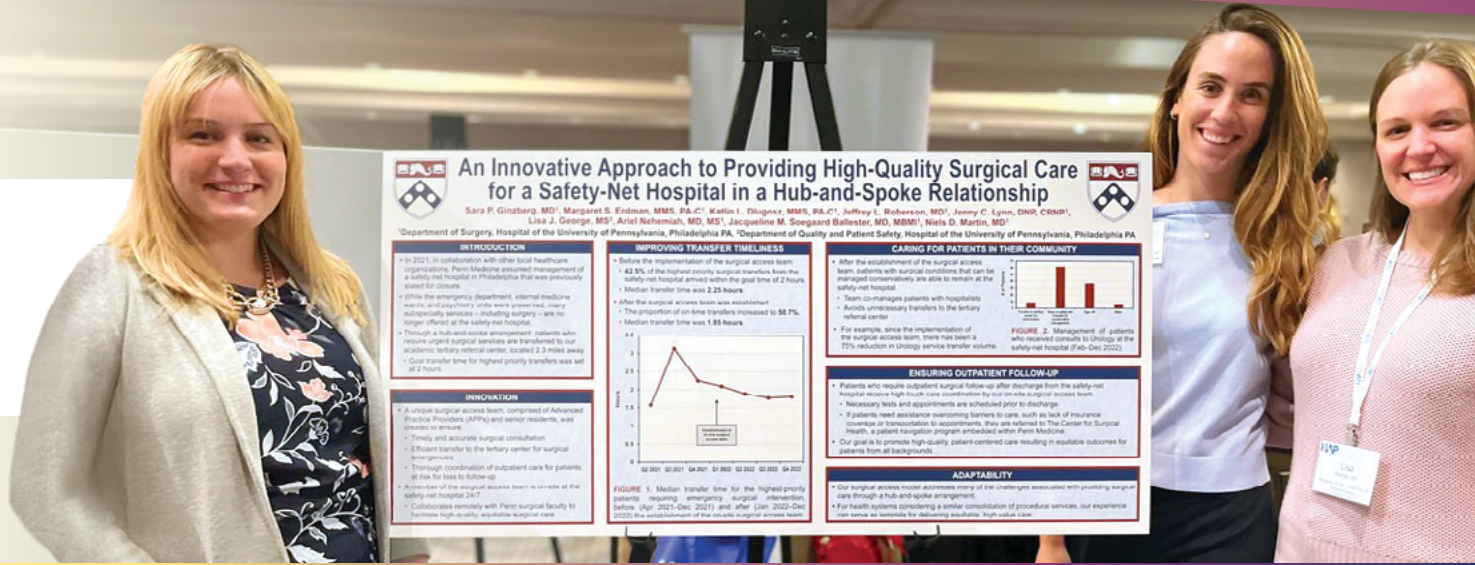
HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA

JULY/AUGUST 2023

MAKING SURGICAL CARE

Easy and Equitable

AT HUP-CEDAR



An Innovative Approach to Providing High-Quality Surgical Care for a Safety-Net Hospital in a Hub-and-Spoke Relationship

Sara P. Ginzberg, MD¹, Margaret S. Erdman, MMS, PA-C², Katlin I. Dlugosz, MMS, PA-C¹, Jeffrey S. Rubenstein, MD¹, Jeremy C. Lynn, MD, PhD¹, Lisa J. George, MS¹, Ariel Nehemiah, MD, MS¹, Jacqueline M. Soegaard Ballester, MD, MBS¹, Niels O. Martin, MD¹

¹Department of Surgery, Hospital of the University of Pennsylvania, Philadelphia PA, ²Department of Quality and Patient Safety, Hospital of the University of Pennsylvania, Philadelphia PA

INTRODUCTION

- In 2021, in collaboration with other local healthcare organizations, Penn Medicine assumed management of a safety-net hospital in Philadelphia that was previously slated for closure.
- While the emergency department, critical medicine services, and primary care were preserved, many non-essential services—resulting surgery—are no longer offered at the safety-net hospital.
- Through a hub-and-spoke arrangement, patients who require urgent surgical services are transferred to our academic tertiary referral center, located 2.3 miles away.
- Goal: transfer time for highest priority transfers was set at 2 hours.

IMPROVING TRANSFER TIMELINESS

- Before the implementation of the surgical access team:
 - 43.8% of the highest priority surgical transfers from the safety-net hospital arrived within the goal time of 2 hours.
 - Median transfer time was 2.25 hours.
- After the surgical access team was established:
 - The proportion of on-time transfers increased to 50.7%.
 - Median transfer time was 1.85 hours.

CARING FOR PATIENTS IN THEIR COMMUNITY

- After the establishment of the surgical access team, patients with surgical conditions that can be managed conservatively are able to remain at the safety-net hospital.
- Team co-manages patients with hospitalized referral center.
- Approximately 50% of patients who require surgery are transferred to the tertiary referral center.
- For example, since the implementation of the surgical access team, there has been a 75% reduction in Urology service transfer volume.

ENSURING OUTPATIENT FOLLOW-UP

- Patients who require outpatient surgical follow-up after discharge from the safety-net hospital receive high-touch care coordination by our on-site surgical access team.
- Necessary tests and appointments are scheduled prior to discharge.
- Patients need assistance concerning barriers to care, such as lack of insurance coverage or transportation to appointments. They are referred to The Center for Surgical Health, a patient navigation program embedded with Penn Medicine.
- Our goal is to provide high-quality patient-centered care resulting in equitable outcomes for patients from all backgrounds.

ADAPTABILITY

- Our surgical access model addresses many of the challenges associated with providing surgical care through a hub-and-spoke arrangement.
- For health systems considering a similar combination of procedural services, our experience can serve as a template for developing equitable, high-value care.

In early 2021, as Mercy Philadelphia Hospital prepared to transition to the PHMC Public Health Campus on Cedar, making sure patients still had access to all the care they would need was a crucial concern. Penn Medicine took on the role of staffing the emergency, inpatient, and behavioral health services at what's now known as HUP-Cedar. However, patients needing surgeries and other resource-intensive procedures would get that care at the main HUP campus at 34th and Spruce streets (HUP-Spruce).

Identifying which patients need surgery, and how urgently, would be a challenge without surgeons on-site. There was also the matter of making sure the patients, many of whom receive Medicaid and may lack access to primary care, received the appropriate surgical follow-up care. “For them, the 2.3 miles’ distance to the main HUP campus is not inconsequential,” said **Lisa J. George, MS**, a master improvement advisor for HUP Quality and Patient Safety based at Cedar. “So it is important that we design solutions to support them.”

The answer: an innovative model in which two physician assistants, **Margaret “Maggie” Erdman, MMS, PA-C**, and **Katlin “Katie” Dlugosz, MMS, PA-C**, along with senior surgical resident physicians, provide full-time, in-person surgical consults at HUP-Cedar and collaborate remotely with Penn surgical faculty. The on-site surgical access team began in early 2022 and manages an average of over 20 surgical consults per week, in addition to coordinating follow-up care. The HUP-Cedar Surgery Quality Improvement Workgroup—founded by George and HUP surgical resident **Sara Ginzberg, MD, MS**, to monitor patient outcomes under this new care model and drive process improvement—was recognized in

► From left: Margaret “Maggie” Erdman, MMS, PA-C, Katlin “Katie” Dlugosz, MMS, PA-C, and Lisa George, MS, presented the HUP-Cedar surgical access initiative at the Hospital and Healthsystem Association of Pennsylvania Leadership Summit in Harrisburg this spring.

April with an achievement award at the Hospital and Healthsystem Association of Pennsylvania Leadership Summit in Harrisburg.

Helping Patients on Their Way to Surgical and Non-Surgical Treatments

Evaluating patients at HUP-Cedar means it's possible to assess whether their condition requires surgery, to support them through their follow-up care needs either way, and to speed up access to emergency surgery when needed.

One of the workgroup's main goals is to support the on-site team in providing the right care at the right time for each patient's needs. Many patients have conditions that do not require immediate surgical intervention, and by identifying these patients up front, the on-site team has significantly reduced the number of unnecessary patient transfers to HUP-Spruce, which in turns helps patients return home faster. As an example, the on-site team saw over 200 consults at HUP-Cedar for urology conditions in their first year, but only 10% of those required transfer for surgical urologic care at HUP-Spruce, Erdman said.

For patients facing significant barriers to follow-up care, such as lack of health insurance or transportation challenges, the team collaborates with Penn's Center for Surgical Health, which provides one-on-one surgical patient navigation for uninsured and underinsured patients.. Helping these patients at every step of the way means they won't need to return to the Emergency Department the next month with the same problem, Ginzberg said.

Faster Emergency Access to the Operating Room

Another major focus of the workgroup is to ensure that patients who need emergency surgery are transferred to HUP-Spruce without delays. Through months of collaboration with the transfer center, the PennSTAR ground medical transportation program, and Perioperative Services, the group built a process for patients with surgical emergencies to be taken directly from HUP-Cedar into a HUP-Spruce operating room (OR). Previously, patients had to be transferred to an inpatient bed first.

“You can imagine that adds a bunch of time; first there has to be an empty bed, which often there isn't, and then there's the physical time it takes to wheel the patient to the bed first; and then pick them up again, and wheel them to the operating room,” Ginzberg said. “And if it's truly an emergency, you can't afford that.”

As part of this new process, the OR can start staffing the room, pulling supplies, and getting everything set up to receive the patient prior to their arrival. Dozens of patients from Cedar as well as other hospitals in the region had utilized this direct-to-OR pathway as of March 2023.

“We've seen it benefit patients coming from all over, both from our other Penn Medicine hospitals and beyond,” Ginzberg said. “I can't prove it, but I have to believe that [the changes] have saved lives and complications.”



'Sorry for Your Loss'

“You would never have known what their struggles were ... Their friends, and even our immediate family, did not know what was going on.”

— HUP cardiac anesthesiologist **Bonnie Milas, MD**, speaking about losing her two sons to the opioid crisis, in a story for the Penn Medicine Listening Lab



► Bonnie Milas, MD, a cardiac anesthesiologist at HUP, demonstrates how to use naloxone to reverse an overdose from opioids.

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Making Surgical Care Easy and Equitable at HUP-Cedar

'Sorry for Your Loss'

Nearly 3,000 Miles Is Nothing for This Grateful Transplant Patient

A Mother and Son Get Through Cancer Together

International Overdose Awareness Day is Aug. 31. Go to pennlisteninglab.org/stories/sorry-for-your-loss to hear Milas' story, and if you are living with someone who is struggling with substance use disorder, visit REVIVEme.com, an American Society of Anesthesiologists website that Milas spearheaded, with resources including a video demonstration on how to revive an opioid overdose victim with naloxone.

Nearly 3,000 MILES Is Nothing

for This Grateful Transplant Patient

It's not uncommon for patients to drive many miles for their appointments at Penn Medicine. Heart-lung transplant recipient Evan Rood, 32, went the extra mile—or rather, thousands of them. In March, the Seattle architect flew across the country for his five-year follow-up visit at the Hospital of the University of Pennsylvania (HUP). While some patients would choose to get their follow-up care locally, Rood is filled with deep gratitude for the team that not only took a chance on him when other transplant centers would not, but with whom he formed deep bonds.

Rood first fell ill while in college in Oregon, and after he graduated in 2014, he finally received a diagnosis of systemic sclerosis, a rare, chronic autoimmune condition often leading to life-threatening lung and cardiac diseases necessitating transplantation. In 2016, living in Seattle, he was in heart failure and his condition rapidly deteriorated to the point he urgently needed combined heart-and-lung transplantation surgery.

Many lung and heart transplant programs rejected Rood as a transplant candidate due to his challenging underlying diagnosis; there are few thoracic organ transplant centers in the country willing to take on this patient population. His cardiologist at the University of Washington, in Seattle, advised him to reach out to Penn's lung transplant program based on the program's experts in performing transplants in patients with this condition. Pulmonologist **Maria Crespo, MD**, and cardiac and thoracic surgeon **Christian Bermudez, MD**, medical and surgical directors of Penn's lung transplant program, respectively, accepted his case, and performed his transplant in March 2018.

"Evan represented a technical and management challenge considering his need for a combined heart and lung transplant in the setting of his scleroderma and connective tissue disease that makes the postoperative care much more complicated," Bermudez said. "His drive, willingness to overcome any obstacles, and perseverance stimulated the team at Penn to offer him transplant despite a rapid decline in his health condition. We are proud of what we have accomplished working together with Evan and his family."

Rood lived at HUP for more than 15 months before and after the transplant, including multiple rounds of rejection, but he was able to go home to Seattle in March 2019 feeling "reborn." He returned to Philadelphia in the fall of 2019 for his six-month follow-up appointment, and if not for the COVID-19 pandemic, he would have returned for many more visits before his five-year visit in 2023.

In the interim, he has stayed in touch with many care team members, who, besides providing medical care, played board games, shared their lunch breaks, and just spent time with him when he lived at HUP. During his recent trip back, he made time to see many of them for happy hours and other non-medical visits.

"Penn hires great medical personnel who go above and beyond for their patients," Rood said. "I was in the hospital long enough that I created a community of friends among my nurses, doctors, physical therapists, and occupational therapists ... They meant so much to my family."

Today, Rood lives with his girlfriend, works for an architecture firm, owns his own design consultancy,

▶ Left: Evan Rood and his younger sister Mica—who served as his guardian during the transplant process—pose for a photo in March 2023 with some of his care providers on the ICU floor where he spent several months in 2018.

Right: During Rood's five-year follow-up visit, Maria Crespo, MD, his pulmonologist and the medical director of Penn's lung transplant program, took him on a tour of the HUP-Pavilion.

and coaches high school lacrosse. He says he is under no illusions that he is cured—he takes several different medications daily—but he feels confident about his future, something that wasn't guaranteed five years ago.

It is unusual and special that Rood continues to receive his follow-up lung transplant care at Penn, but "like us, he is committed and values the team-based approach that we take," said **Stacey Doll**, director of clinical operations for transplant administration. It is also significant, but not unusual, for HUP staff to connect deeply with patients and their families during prolonged pre- and post-transplant hospitalizations, Crespo and Bermudez said.

"A bond forms between a patient, their caregivers, and the team as there are often shared goals around the fight to survive and treat a life-threatening condition," Crespo said. That closeness comes from the wait for an organ that may not come in time to sustain life; the challenges of post-operative recovery; and the re-acquisition of activities of daily living, such as self-care, walking, meal preparation, and driving. "Every case is special and unique ... The HUP staff recognize this and personalize care."

A MOTHER AND SON GET THROUGH CANCER Together

Charlene Heard has been through a lot. When her teenaged son Myles was diagnosed with leukemia in early 2021, in the middle of the COVID-19 pandemic, the single mother had recently lost her mother and her aunt—two key members of their support system. Then, in between visits to the Children's Hospital of Philadelphia (CHOP) for Myles' chemotherapy, Heard was diagnosed and treated for two brain aneurysms. And in April 2022, she received her own cancer diagnosis at Penn's Abramson Cancer Center. She had bilateral breast cancer, with a different cancer in each breast, and she also carried the BRCA gene mutation, which is linked with an increased risk for breast and ovarian cancer. A few months before her double mastectomy at the Hospital of the University of Pennsylvania (HUP), her sister suddenly died.

How does one go on? Heard said her love for her only child kept her grounded. "I didn't want to bring down his spirits by sulking and crying all the time," Heard said. "I had to remind myself of the things my father instilled in me: 'You get your emotions out, and now it's time to refocus and look at what you're trying to achieve.' ... I had to think about what was best for my child."

On Dec. 15, 2022, Heard completed 15 weeks of radiation at the ACC with Myles, then a freshman at Temple University, by her side. **Emily E. Smith, CRNP, MSN**, a nurse practitioner in Radiation Oncology who treated Heard, said it was a privilege to be part of the community caring for Heard and her son and to share in their joy. "Charlene's strength and determination during her treatment are inspiring to every member of her care team," she said.

While Heard was happy to finish her treatment, her proudest moment came on April 30, 2023, when she stood beside Myles

as he rang the chime at CHOP's Buerger Center for Advanced Pediatric Care, signifying the end of his own cancer treatment. With them were many friends and neighbors from their West Philadelphia community who have rallied around them with meals, financial donations, and emotional support during this whole journey.

As of now, both Heard and her son are cancer-free, and she approaches the future with gratitude for everyone who was there for both of them, including the care teams at CHOP and Penn. "Myles and I have both faced a lot of adversities," Heard said, "and I am just so incredibly indebted to everyone."

▶ Above, Charlene Heard documents the moment as her son Myles rings the chime signifying the end of his leukemia treatment. A few months earlier, as seen below, he was by his mom's side when she rang the bell at the Abramson Cancer Center to celebrate the end of her radiation treatment for breast cancer.



▶ HUPDATE

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CONTACT HUPDATE AT:

Department of Communications
3600 Civic Center Boulevard
5th Floor, Suite 500
Philadelphia, PA 19104-4310

phone: 215.789.0172

email: Daphne.Sashin@PennMedicine.upenn.edu

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