As COVID-19 continues to touch communities near and far, many vulnerable people who were already struggling with food and housing insecurity, lack of access to health care, and unemployment have found these systemic issues further exacerbated by the pandemic. Fortunately, many compassionate and community-minded individuals have been able to step up in this time of need to serve their neighbors.

In true Good Samaritan fashion, three of these driven and dedicated volunteers are Pennsylvania Hospital staff members. Instead of pausing their projects and waiting for the pandemic to abate, they opted to use the funds they earned from the Penn Medicine CAREs Grant program to give back and make a difference in their communities.

A Camden Cornerstone Perseveres

For ten years, the Open Door Clinic at St. Wilfrid’s Church in Camden, New Jersey, has served community members in need with the support of compassionate volunteers like Endoscopy nurse Melinda Lamb, BSN, RN. Whether a migrant worker needs a free blood pressure screening, a low-income family needs food for their children, or a homeless individual needs warmer clothes, the clinic — typically open on the third Saturday of each month — is ready to help. However, when the pandemic swept into the region, the level of need in this already vulnerable community increased exponentially. Lamb knew exactly what to do.

With her fourth CAREs grant, she purchased nonperishable items like rice, beans, peanut butter, pasta, and canned vegetables to fill bags that she and her fellow volunteers now distribute weekly. These essentials have been supplemented by fresh sandwiches made by generous community members, bread and baked goods donated by local businesses, personal hygiene products and diapers, and gift cards. Since the end of March, volunteers have distributed more than 2,000 bags to hungry families — sometimes more than 100 on a single Saturday — as well as 30 backpacks filled with supplies for local children returning to school. In order to minimize possible exposures, and to continue hosting open dialogues to examine the impact of institutional racism, unconscious bias, and the roles we all play in unmasking these systemic issues. Through virtual and in-person listening sessions, staff had the opportunity to discuss challenging, but crucial questions about what leadership, infrastructure, and policy changes they believe are needed to build a more just, diverse, equitable, and inclusive culture at Pennsy and across Penn Medicine. It is vital that everyone has the opportunity to share their perspectives throughout this process, and I truly appreciate the people who took the time to participate in the latest discussions.

I am also deeply grateful to have such empowered and engaged staff members serving on our new Nomination Committee. Their guidance and collaboration with our Executive Leadership Team facilitators will be integral as we continue identifying opportunities for meaningful change.

Over the coming weeks, the committee will review applications for workgroup volunteers and ensure that our six thematic groups include staff from a wide range of disciplines, departments, and diverse backgrounds. These groups align with the themes identified by the Office of Inclusion and Diversity’s Action for Cultural Transformation (ACT) framework — culture, people, clinical, research, education, and community — and will meet regularly over the next two years to create short- and long-term goals.

As we move forward in this essential work together, there will be ample opportunities for all of us to get involved, share our voices, and take action. Thank you for joining me on this journey. I look forward to sharing additional updates on our collective efforts with you soon.
Whether a patient is undergoing a minor procedure or complex surgery, Penn's surgeons and specialists are committed to delivering advanced, personalized care. In order to get patients back on the road to health more quickly and comfortably, these teams consistently embrace cutting-edge tools and enhanced surgical approaches that can improve efficacy and accuracy. Here are three recent innovative firsts led by the hospital's neurosurgery and orthopaedic surgery teams:

**A Spine Tech Trial Run**

The Penn Spine Center at PAH recently integrated two new innovative products into their practice: a kind of "spine surgery GPS" and a robotic arm to assist with direction. For neurosurgeon Jang W. Yoon, a 3D CT image of the spine allows surgeons often rely on X-rays when placing a screw or a plate in the spine, with images taken when the patient is in multiple positions, often a two-staged approach. However, with the addition of intraoperative CT scans and the use of a robotic assist device — like those used in other minimally invasive procedures such as hysteroscopies and for treating head and neck cancers — surgical teams can place screws without meeting the patient.

"While the jury is still out on whether these kinds of technologies impact hospitalizations or recovery times, [I find that] they improve surgical workflow and cut down on OR time by reducing the need for multiple images," Yoon said. "We're always bringing in new technology to better care for patients, and I think in the next ten years we'll consistently have robots assisting in our spine surgeries."

**Creating Nearly Natural Knees**

When a patient with debilitating knee pain undergoes a traditional total knee replacement (knee arthroplasty), their surgeon often removes one or two ligaments, depending on the ligaments' condition. However, Neil P. Sheth, MD, chief of Orthopaedic Surgery, is one of a handful of surgeons in the nation who opts to preserve all four ligaments whenever possible to help his patients' new knees feel natural and move normally. To do this with more precision, Sheth began utilizing robotic technology — much like Yoon — to assist this surgical approach.

"When we think about adopting new technology, it's not about getting a new toy; we need to think about what problem we're trying to solve, and how it can help our patients," Sheth said. "Robotic assist devices aren't going to inherently improve outcomes in every type of procedure, but if one patient's knee needs 3.7 degrees of slope and the next patient needs 5.1 degrees of slope, using these kinds of tools can help account for those differences more accurately that I could on my own."

This kind of technology helps Penn's orthopaedic surgeons prepare their surgical plan in advance, in an effort to have a more accurate implantation of the ligaments. Pairing the use of robotic assist devices with Sheth's own precision and experience in saving all four ligaments allows the surgical teams meet each patient's unique anatomical needs.

**A Revolutionary Approach to Hip Revision**

Hip replacements are one of the most common joint replacement operations, but sometimes fixation does not go as planned due to bone loss or other issues, and revision surgery is required. This summer, Sheth operated on a patient who received their implant at another hospital, then the entire construct failed within a few days. He quickly recognized that the problem could be solved by placing a long screw in the patient's pelvis, though this approach is very technically complex.

"You're trying to put a screw in a narrow corridor that's maybe seven millimeters wide, and the biggest blood vessels are two millimeters away. But if you're going to do these types of cases, you've got to take the risk and put screws where you need them," Sheth said. "The right screw in the right spot will prevent patterns of failure and improve the longevity of the implant."

Reflecting on comments from colleagues who have expressed interest in watching him perform this challenging procedure, he set up a cadaver lab to determine what types of intraoperative X-rays are most successful in helping surgeons determine whether this screw placement is safe for their patient. Sheth and the Orthopaedic Surgery residents he has trained in this approach are now working on a paper describing this game-changing technique.