By dividing residents into three separate teams, the general surgery residency at the University of Washington (UW) Department of Surgery has implemented an emergency restructuring of its program, with the aim of minimizing exposure to COVID-19 among its surgical resident workforce.

“Most residencies function the same way,” said Amer Nassar, MD, a general surgery chief resident at UW who recently authored an article in JAMA Surgery on the restructuring. “You have a large common area where almost all the residents sit and are in contact with one another. They interact on a personal, as well as professional, level. They then attend rounds together and examine patients. It’s very easy for a virus to spread in this setting, especially if it is airborne. We wanted to limit that scenario. To do that we had to restructure our entire approach to taking care of patients.”

In recent weeks the AMA has offered guidance for protecting residents and medical students during the COVID-19 pandemic.

**Isolating resident teams**

Prior to the COVID-19 outbreak, UW’s Division of General Surgery consisted of five subspecialty teams at one of the hospitals, with an average of four residents per team. With Seattle being one of the cities hit hardest by the pandemic, and with the residency program staff understanding the potential strain the absence of one team member could have, those five teams were reorganized into three larger teams, which were isolated from one another.

“Coronavirus is very much spread from person to person,” Dr. Nassar said. “It’s contagious, and it spreads in a discrete way because there is a prolonged asymptomatic period. Our fear was that if one resident was infected, they would spread it to the other residents and by the time we realized there’s a contagion within our group, it would be too late.”
This shift was made possible in part due to the fact that most elective surgeries have been put on hold at UW and hospitals across the nation, as well as most elective surgical clinic appointments being significantly limited.

“From a surgical perspective we have seen a decrease in the usual workload we expect this time of year,” Dr. Nassar said. “The majority of our workload is elective cases, and we have cut down on that given the restrictions.”

New responsibilities for the new teams

The article offers details on what is now expected of surgical residents in each area of care.

**Inpatient care:** In this capacity, surgical residents are expected to participate in daily rounds, new consult staffing, admissions and discharges and documentation. These residents will be taking care of patients post-surgery until they are discharged.

**Operating care:** These residents are the only group of the three working in a surgical setting. They coordinate operative care of patients, perform assigned operations then sign patients off to surgical residents working on the inpatient care team.

**Clinical care:** These residents work remotely, to isolate from potential exposure to COVID-19. They participate in virtual rounds and are available to input orders. They also can potentially perform an initial assessment on a patient via a telehealth appointment.

A blueprint for other programs?

A University of Washington Department of Surgery resident did contract COVID-19, but these isolation measures were in place at the time.

“That resident went into isolation, and it hasn’t affected the team structure,” Dr. Nassar said. “If we hadn’t done this, that one specific team might have been affected more adversely. Fortunately, no one else on that specific team got sick. As of now, we haven’t had an instance where we have been forced to restructure due to an entire team loss.”
For surgery programs in COVID-19 hotspots, Dr. Nassar believes this type of adaptation to service—with tweaks based on specific needs—makes sense.

“I would encourage any program to consider implementing such a system,” he said. “Any hospital that is considering it, should probably do it. The risk is the loss of a large portion of the resident manpower. The main concepts to a successful restructuring are doing it early, implementing it swiftly and having the ability to potentially revise it on a daily basis, because you’re never going to have a perfect plan from day one.”

The AMA has curated a selection of resources to assist residents, medical students and faculty during the COVID-19 pandemic to help manage the shifting timelines, cancellations and adjustments to testing, rotations and other events at this time.