

Rachel's Shadowing Log

Date and Time of Shadowing Experience	Number of Shadowing Hours	Provider Name and Location	Rounds/Specialty Shadowed
June 23 rd , 2023 9:30am – 2pm	4.5	Dr. Kumar MD, Tampa General Hospital	Inpatient Cardiac Transplant Rounds
July 6 th , 2023 9:30am – 2pm	4.5	Dr. Kumar MD, Tampa General Hospital	Inpatient Heart Failure Rounds
September 11 th , 2023 7:15am – 4:45pm	9.5	Hannah Jacon, PA-C University of Florida Health Shands Hospital	Pediatric Congenital Heart Operating Room

*Virtual shadowing hours are documented separately

Note: Log does not include clinical hours for BSN nursing program

Shadowing Reflection

Cardiac Transplant Rounds and Heart Failure Rounds Reflection (6/23/2023 and 7/6/2023)

During my rounds with Dr. Kumar, I was able to observe the interactions that he was able to have with other members of the healthcare team. He started his rounds with seeing patients in Tampa General's CTICU, who have either had heart transplants or were candidates to receive a heart transplant in the coming days. I work as a patient care technician in the Transplant Unit at Tampa General Hospital, which is a medical-surgical unit for patients who have received transplants after they meet the criteria to become a floor patient. Having seen some stabilized heart transplant patients in my unit and as someone who is interested in pursuing a job in critical care in the future, I enjoyed seeing Dr. Kumar's impactful work with his transplant patients in the critical care setting. My heart failure rounds were similar to the heart transplant rounds except we focused on all patients experiencing heart failure rather than transplant specific patients. Through this experience, I found that I was interested in working with pre and post-surgical patients.

During my rounds with Dr. Kumar, I developed a greater interest in working with patients who have cardiac conditions, and I would be interested in working with transplant patients in the future. During the clinical rounds that I shadowed I found myself observing the dynamic of the interdisciplinary teams involved in the care of a patient in the ICU including the ICU nurses, nurse practitioners, physician assistants, physical therapy, occupational therapy, respiratory therapy, and pharmacy which Dr. Kumar led. In my future career, I want to work as a part of an interdisciplinary care team. This experience has reinforced my interest in pursuing critical care nursing after graduation, and my desire to explore the subspecialties available within the intensive care nursing setting.

Shadowing a Pediatric Congenital Heart Operating Room PA-C (September 11th, 2023)

I spent today observing a 9-hour-long open-heart surgery on a 3-month infant in order to install a LVAD device. This 3-month-old was born with severe aortic stenosis and a congenital defect which caused formation of only one of the normal three cusps in the aortic valve. Due to that congenital deformity, the child presented with aortic stenosis which failed to improve with a previous procedure done with intention to improve blood flow through the aorta. Due to this, the patient developed left sided heart failure and was placed on the waiting list for a heart transplant. As a temporary measure to improve blood flow to the body while waiting on a donor heart, the patient was sent to UF Health Shands to get an LVAD placed. The patient came into the operating room sedated, on a ventilator, and on ECMO to bypass blood flow to the heart.

The first part of the procedure was diverting blood flow from the heart. It looked like they had added some additional tubing to the heart to divert blood flow directly from the heart. Before surgery, the blood flow had been connected to ECMO through the central line (I think, this is an area of the surgery that was not fully clear to me while shadowing) As this portion of the procedure was occurring, I could physically see the heart beating in the patient's chest. Once this was done, medication was given to slow and then stop the heart from beating so that the LVAD could be installed.

For the LVAD to be installed, the surgeon cut a hole in the bottom of the left ventricle to attach one cannula of the LVAD pump and then cut a hole in the aorta, distal to the area of aortic stenosis, to attach the second cannula of the LVAD pump.

The procedure used a Berlin LVAD pump which was different from the LVAD's that I am used to seeing in my Patient Care Tech job on the adult transplant unit at Tampa General Hospital which are the HeartMate brand LVAD's. The Berlin LVAD is a pulsatile LVAD pump which means that the pump alternates between positive and negative pressures to move blood in a way that bypasses the left ventricle. The pump uses negative pressure to pull the blood from the left ventricle into the pump and then uses positive pressure to push the blood in the pump back into the aorta through the cannula. I learned that the Berlin LVAD is used in small children while the HeartMate VAD's are used in teenagers and adults. Unfortunately, while patients with a HeartMate VAD can be discharged home, patients with a Berlin VAD must stay in the hospital. Therefore, the Berlin LVAD is a more temporary and invasive measure than an LVAD.

The next portion of the procedure was to stitch the portion of the aorta beneath the LVAD cannula shut so that no blood could move backward into the heart once the pump was working. Once this portion of the procedure was completed, the sternum was left open, and a patch was placed over the surgical inclusion because the patient had a large amount of edema in the chest and the surgical team deemed it best to leave the chest cavity open so that fluid buildup in the chest would not risk compressing the heart. The patient also was connected to three chest tubes to drain the wound (one in the Left pleural cavity, one in the right pleural cavity, and one in the pericardial space).

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This was a special experience because it was the first time that I had observed open heart surgery and observed a patient with many lines, catheters, and drains.