Providence Sacred Heart Medical Center Successfully Deals with Covid-19.

By Jim Kenyon, CBET, WSBA Board Member 8-29-2020

I recently spoke with Cau Le, Clinical Engineer, at Spokane's Providence Sacred Heart Medical Center's Clinical Engineering Department about the group's experiences with COVID-19 pandemic. Cau has been at PSHMC since November 2008 and works primarily with ventilators and related Respiratory Therapy devices. I started our conversation asking when the first COVID19 patients arrived at the hospital and how the department responded to this new situation.

Cau told me that Sacred Heart was fortunate to have 30 new Drager 500 ventilators ordered and delivered prior to the start of the pandemic. These ventilators were going to replace thirty 840 devices which the hospital subsequently kept to support a possible influx of patients.

A special location was set up for pandemic patients. The medical center had established an infectious disease ward for Ebola patients a few years earlier and this now was transformed into their COVID-19 unit. A total of 15 patient rooms were cleared for this purpose and Cau's role was to work with IT and make sure each room was wired and functional with ventilators talking to the electronic medical record system. Patient monitoring was also needed, equipment was secured from a third-party vendor to meet that need and additional CE staff installed it. All was in place by the time the first four COVID-19 patients arrived in late February. The unit has not filled up to date and ultimately the hospital did not experience a large influx of pandemic patients.

I asked Cau what changes were made at the hospital to deal with the infectious nature of the virus and he related what most if not all healthcare facilities have instituted. Limited entrances to the building for the public, temperatures taken at those locations along with questionnaires that listed possible COVID-19 symptoms. All staff were required to wear masks unless in an office or workspace social distanced from coworkers. The large cafeteria was rearranged to place tables six feet or more apart and staff did not utilize it as often as in the past.

The Clinical Engineering Department at the 700+ bed facility has over 20 technicians. Last year, the department relocated from the bottom floor of the main building , Level 5, up three floors to Level 2. The new location was somewhat crowded and additional space was found when a lab was moved off same floor. This secondary move occurred in June in the midst of the pandemic wave and was completed with little fanfare. With the new space, social distancing was readily achievable with mask mandates in both work areas still required. Cau related that he is limited on where he can work on ventilators as medical air and oxygen outlets are required on many of the devices he works on. So he primarily PM's and services ventilators in the shop.

One situation that came unexpectedly was the need for some accessories for the new ventilators. There was a need for hoses and connectors that wasn't included with the new ventilator purchase and a shortage had ensued as facilities literally around the world was clamoring for these parts. Cau had to order individual connectors and hose material to construct his own hose sets and it literally took him days to make up all that was needed. Its amazing what can be the weakest link in a chain of parts and/or accessories when the world has suddenly turned upside down.

I asked about preventive maintenance schedules, had they been interrupted and/or modified? Cau told me some PM's were delayed but not by much. He was able to complete those lagging PM's with some overtime and assistance from another technician. Currently, PM's are up to date for him.

During the interview, I mentioned to Cau that another technician I spoke to a few months ago told me that at his organization on the westside of Washington, that the period from late February to late March had been overwhelming at times with a large influx of pandemic patients, shortages of PPE, ventilators and spare parts at time. That technician shared that looking back on that time only two months removed was for him, "my shining moment" in his 30+ years in the Biomed field. I asked Cau if he had a similar feeling. He replied, "You know, I did." He had thought it over for a few seconds before he replied, I don't think he had thought about his efforts in that way until I asked that question.

Then Cau went on to say, "We came together as a team." Paraphrasing here, he told me that in this time of great need and worry, the team came together in a way it hadn't in the past. There were projects that needed to be done (monitors and vents installed in the now COVID-19 unit with IT to install network infrastructure for example) and everyone pulled together. That camaraderie is still present today and a positive fallout from our current situation.

Finally, I asked Cau what was the biggest impact that the pandemic had on him. His answer surprised me at first and then I realized this is probably the answer that the majority of healthcare workers would say. He told me, "Its not at work, its when I go home. I have a new baby, a son, along with my wife who takes care of him. My worry is that I may bring the disease home and put my loved ones at risk." He went on to say, " When I get home, I set aside my work clothes, shower and then I can hold my baby safely." We conducted our conversation over the phone but I could hear and feel the concern in his voice. I asked Cau his son's name; "Grayson Quinn Le", he replied, "Quinn is my father's name." What a beautiful name I told him. It brings the situation home when you hear someone you know talk about the most precious gifts in their life and the worry that what they do for a living may endanger them. Someday the pandemic will end, my hope is that our lessons learned will stay with us for a long, long time.