

Cath Lab Digest

A product, news & clinical update for the cardiac catheterization laboratory specialist



CATH LAB SPOTLIGHT

University of Vermont Health Network - Champlain Valley Physicians Hospital (CVPH) Heart Center

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The University of Vermont Health Network - Champlain Valley Physicians Hospital (CVPH) is a 300-bed hospital in northern New York that is part of a 6-hospital network. The UVM Health Network - CVPH Heart Center in Plattsburgh, New York, was recently ranked as one of the top 100 hospitals in the nation for cardiac care and has been ranked among the top 10% in the nation since 2008. With quality as the bedrock of our heart program, our cardiovascular team uses the most advanced techniques to provide patients with the best possible care.

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Happy Cardiovascular Professionals Week!

February 13-19, 2022

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CALCIUM CORNER

Management of Calcified Lesions in Hospitals Without Surgical Backup

CLD talks with B. Clay Sizemore, MD.

You have a long experience performing percutaneous coronary intervention in a hospital without surgical backup on site. Can you share more about your practice?

Cardiovascular Consultants of South Georgia is a private practice cardiology group with nine cardiologists and 12 advanced practice providers (APPs). Our interventional partners operate out of three hospitals. Our main hospital is Archbold Medical Center in Thomasville, Georgia, with a busy coronary and peripheral program, along with device implants, and we are anticipating the addition of a full spectrum of electrophysiology procedures in the near future. This site does not have on-site surgical backup. Our interventionalists maintain privileges at Tallahassee Memorial Hospital, about 30 minutes down the road, which is our surgical backup facility. We do our high-risk cases at this hospital, including left main, atherectomy, and elective mechanical support cases. We also do cases at Colquitt Regional Medical Center, where we have an active peripheral program and growing cardiac diagnostic lab.

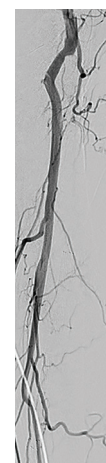
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ATHERECTOMY

Leipzig's Experience Using Rotarex™ Rotational Excisional Atherectomy for In-Stent Reocclusion in Peripheral Arterial Occlusive Disease

CLD talks with Andrej Schmidt, MD, PhD.



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University of Vermont Health Network - Champlain Valley Physicians Hospital (CVPH) Heart Center

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The CVPH Heart Center, with its elite team of cardiologists, has consistently been recognized as one the of the best cardiac care centers in the country. Heart patients in Northern New York benefit from our quality of our care and excellent outcomes, unique to our large rural area. We are not just caregivers and staff to our patients, but are friends and neighbors, offering expertise and compassionate care when and where our patients need it. We embrace our strengths and honor our differences, seeking to learn and grow together through honesty, respect, and teamwork.

Tell us about your cath lab.

Our Cardiac Catheterization Lab consists of a 6-bed holding area where we pre and post our patients for procedures, and 4 procedural rooms. We have 2 rooms that are primarily used for cardiac catheterizations and electrophysiology (EP) ablations, one operating room suite that is used for device implantations, and one procedural room for transesophageal echocardiograms (TEE), insertable cardiac monitors, tilt table testing,

and cardioversions. Our team consists of 30 staff members: 2 interventional cardiologists, 5 general cardiologists, 2 electrophysiologists, 7 advanced practice providers, 8 registered nurses (RNs), and 7 registered radiologic technologists (RT[R]s). Staff experience ranges from 3 years to 36 years, with varying certifications including registered cardiovascular invasive specialist (RCIS), registered cardiac electrophysiology specialist (RCES), cardiovascular RN (CVRN), cardiac medicine certification (CMC), certified emergency nurse (CEN), certified heart failure nurse (CHFN), and more.

We perform about 80 procedures per week. Our list of procedures includes:

- Transesophageal echocardiograms
- Cardioversions
- Tilt table testing
- Diagnostic left and right heart catheterizations
- Percutaneous coronary intervention (PCI)
- Fractional flow reserve (FFR), intravascular ultrasound (IVUS)



Figure 1. Members of the invasive cardiology team at Champlain Valley Physicians Hospital in the hybrid device implant operating room.

- Intra-aortic balloon pump insertion (IABP)
- Pericardiocentesis
- Permanent pacemaker insertion
- His bundle pacemaker insertion
- Temporary pacemaker insertion
- Micra leadless pacemaker (Medtronic)
- Implantable cardioverter defibrillator (ICD) (subcutaneous)
- Bi-ventricular permanent pacemaker/ICD implantation
- EP studies and ablations
- Insertable cardiac monitors
- Selective peripheral stenting. At this time, we do not perform any elective peripheral cases. We have a separate interventional radiology program that preforms most of our peripheral vascular procedures.

Does your cath lab perform primary angioplasty without surgical backup on site?

Yes, we perform primary angioplasty without surgical backup on site, but work closely with the University of Vermont Medical Center, which has the capability to perform coronary artery bypass graft surgery.

How has COVID-19 affected your cath lab and facility?

We learned very quickly that COVID-19 was here to stay and that we must work as a unified front. Many of our staff members were redeployed to other units like the intensive care unit (ICU), emergency department (ED), and other critical care areas, to help meet the needs of the hospital. In addition to the staff helping in other areas, we had a team on standby for any incoming cardiac patients. In the beginning of the pandemic, we prepared one of our cardiac cath labs to accommodate any COVID-19 patient. We started by emptying all of the unnecessary supplies in the lab and creating a policy to deal with a COVID-19 patient. To help minimize the aerosolization of the coronavirus molecules, we had our air handlers turned off to a neutralized system. Many trial runs were done to better prepare the staff and to make adjustments to our practice. While this pandemic was very challenging and tested our abilities, we strengthened our bond as a team and became a closer family.

We currently wear an N95 mask for all patients without a negative COVID result and regular personal protective equipment (PPE) for all other procedures with a negative COVID test. Our policy is to have our patients masked at all times, even if COVID negative.

The current practice in New York state is to have any outpatient tested 4 days prior to their cardiac procedure. If any of our patients are deemed urgent or emergent, a COVID test must be performed prior to starting the procedure and proper PPE must be worn by all staff. Many times a test has been done, but has not been resulted; if this is

the case, staff must wear N95 masks and treat as a possible COVID-positive patient. Physicians and team members are being tested as frequently as they wish; however, they are only required to test if they become symptomatic with one or more symptoms.

Any helpful tips re: your process of donning and doffing PPE?

It is very important to have an extra set of hands and eyes to help with the donning and doffing process.

How are you improving communication while wearing PPE?

We speak louder and more clearly, and communicate with a pad and paper if needed.

What do you expect will happen with your local population in the next few months?

Many fears are still associated with the COVID-19 pandemic that have decreased our patient volume. However, we are just beginning to see what we feel will be the start of the post COVID-19 influx we have been expecting.

Can you describe the extent and use of radial access at your lab?

All of our physicians are performing radial access for elective and non-elective cases, unless patient anatomy directs us to the femoral site. We also consider using the left radial or distal radial for patients with bypass grafting or difficult anatomy. Our data show that we are able to obtain access through the radial artery 77% of the time.

Who manages your cath lab?

Beth LeClair, MHA, BSN, RN, RCIS, CVRN, CMC, ECG-BC, is our director of cardiology services. She has been a registered nurse in the cardiac cath lab for 10 years. Beth has done many great things to support our mission to provide quality care to the North Country region and optimize services.

What is your percentage of normal diagnostic caths?

Our percentage of normal diagnostic catheterizations is 27%. This percentage based on the New York State Department of Health definition that any single <50% stenosis is classified as non flow-limiting disease.

Do you have cross-training? Who scrubs, who circulates and who monitors?

Yes, cross-training is an expectation in our department. All of our staff participates in cardiac catheterization and electrophysiology procedures. Our staffing for each procedural room consists of 3 staff members. One RN is designated to circulate each case and one RT(R) is designated to scrub each case. The third staff member, who monitors the procedure, can be either an RN or RT(R).



Figure 2. Two of our interventional cardiologists, Dr. Eric Gauthier and Dr. Roger Ishac, discussing a case.



Figure 3. Members of our invasive cardiology team at Champlain Valley Physicians Hospital in one of the cardiac catheterization rooms.

Are there licensure laws in your state for fluoroscopy?

Yes, as per New York State Department of Health regulation, other than the physician, a licensed radiologic technologist is the only staff member able to turn on, test, and utilize fluoroscopy. In our lab, the physicians step on the pedal, while a dedicated RT(R) at the table will manipulate the x-ray equipment, including panning the table, positioning the II, and changing the angles.

How does your cath lab handle radiation protection for the physicians and staff?

Our lead radiologic technologist monitors our department's radiation usage. We have quarterly radiation safety meetings, along with a monthly

report to demonstrate each individual's radiation exposure. After each case, we document the amount of fluoroscopy used. To better protect ourselves, every staff member is issued a lead apron, thyroid collar, and dose badge when they start in the department. Lead glasses and caps are used by physicians and RT(R) at the table, and are available to anyone else who chooses to use them. In the monthly reports, anyone exceeding limits receives re-education from the hospital radiation safety officer and is presented with their radiation dose. Our lead technologist is responsible for the visual and manual inspection of all lead twice a year. Any lead suspected of being in poor condition undergoes a fluoroscopy inspection.



Figure 4. Members of our invasive cardiology team at Champlain Valley Physicians Hospital in one of the cardiac catheterization rooms.



Figure 5. Members of the invasive cardiology team celebrating Dr. Timothy Garrand's final case. Dr. Timothy Garrand started the program at Champlain Valley Physicians Hospital back in 2005.

How are you recording fluoroscopy times/dosages?

The monitor person is responsible for all fluoroscopy information. At the end of each case, the fluoroscopy times and doses are documented into the patient's chart.

What is the process that occurs if a patient receives a higher than normal amount of radiation exposure?

Any patient that has received an extended radiation exposure will be flagged in our system and our lead radiation safety officer is notified. Prior

to the patient's discharge, our advanced practice providers or physicians will do a skin check on the patient, and provide the patient with education, verbal and written, regarding signs and symptoms of exposure. The patient receives a follow-up office visit to evaluate any adverse reaction.

What are some of the new equipment, devices and products recently introduced at your lab?

We have recently remodeled two of our catheterization rooms by installing the Philips Azurion x-ray system with ClarityIQ, a state-of-the-art technology

that has decreased our radiation exposure by 75%. The Philips Azurion system allows multi-modality imaging, offering flexibility and efficiency in our lab. We have also implemented the use of a potassium ferrate hemostatic patch, the StatSeal (BioLife), a topical hemostat that quickly forms an occlusive seal to stop the flow of blood. StatSeals have mostly taken the place of our radial compression devices. With the use of the StatSeal, we are able to get our radial access site patients out earlier and have reduced the risk for radial artery occlusions. We have also started implanting leadless pacemakers (Micra and Micra AV).

How does your lab communicate information to staff and physicians to stay organized and on top of change?

In order to stay on top of the constant and revolutionary growth of interventional cardiology, communication is essential. We do weekly cath conferences to discuss any interesting cases and discuss any up-and-coming information. We also organize monthly staff meetings, where we can communicate any change that has been made or relay any information that needs to be received. In addition to the meeting we hold amongst our staff, our service line has a quarterly meeting that is attended by quality coordinators as well as physicians to display our data and discuss our statistics.

How is coding and coding education handled in your lab?

Coding is handled by our certified coder specialized in cardiac procedures. If there are questions regarding a particular case, they speak directly with the physician to clarify. In addition to reviewing all procedural and equipment usage reports, our coders provide ongoing coding education to the physicians in order to ensure documentation comprehensively reflects patient acuity and procedures done.

Who pulls the sheaths post procedure, both post intervention and diagnostic?

All of our staff should be competent in pulling arterial and venous sheaths. Typically, after a diagnostic or interventional case, the sheaths are pulled in the room by an RT (R) or RN, or are pulled in our holding area, depending on the procedural room schedule. Staff must perform 10 sheath pulls under direct supervision of a preceptor before being considered proficient to perform sheath removals independently.

Where are patients prepped and recovered?

We have a 6-bay holding area where we prep our patients for procedures. We have a 5-bed post area where we post all of our patients post procedure that are being discharged. All of our staff rotates through the holding area and cardiac cath labs in order to maintain proficiency in all phases of the procedure. If the patient is a diagnostic case only, they will recover in our cardiovascular recovery

area, but if we do a percutaneous intervention and the patient is not a candidate for same-day discharge, the patient is recovered in our Cardiovascular Care Unit and discharged home in the morning. We mostly do manual compression in conjunction with a StatSeal for our radial artery access patients. If we have a difficult time achieving hemostasis, a radial compression device is applied, but with the addition of the StatSeal to our lab, we have dropped our use of the radial compression devices by 95%. For the groin patient population, if the vessel is determined to be appropriate for vascular closure, a device is deployed. If there is ever an issue with an unstable groin and we cannot achieve hemostasis, our cardiac cath lab staff are the only staff members allowed to supervise the groin and apply a FemoStop (Abbott Vascular) if needed, which will be monitored by our staff only.

How is inventory managed at your cath lab?

We have our lead technologist and a few select individuals who do all the purchasing for our department. We use the SpaceTrax inventory management system (Stanley Healthcare) to help better assist us with our inventory, along with random inventory counts to verify the amount shown in the computer is the amount we have on hand. We also participate in bulk product buying to better reduce the cost of equipment used in the cath lab.

Has your cath lab recently expanded in size and patient volume?

Our patient volume has steadily increased over the past five years. The rise is felt to be coming from the expanded territory we serve and specific to referrals coming from hospitals to the west of us.

Can you share information about your lab's door-to-balloon (D2B) times and ways staff have worked together both internally and across disciplines?

Our current D2B time is 42 minutes. Over the past 5 years, we have had consistent 42-46 minute D2B times. We have found that timely detection, staff education, and earlier activation have played a pertinent roll in our above-average D2B times. We used to have monthly meetings to discuss any outlying patients (D2B times >90 minutes), but during these meetings, we did not have any cases to discuss and have since changed our committee to meet quarterly. Something that we have found beneficial to our D2B times is the activation of the ST-elevation myocardial infarction (STEMI) team 30 minutes prior to the incoming transfer from an outside facility and early activation if a STEMI is en route with an EMS crew.

Who transports the STEMI patient to the cath lab during regular and off hours?

If we have a STEMI that arrives in our Emergency Care Center, the Emergency Care nurse will transport the patient to our department. If there will



Figure 6. A few of our advanced practice providers and cardiology physicians.

be a delay in transport or if the ED nurse is unable to transport, our staff will go and transport the patient. We have a large geographic area to which we provide service and transport can be arranged via ambulance, airplane, or helicopter. If a STEMI patient is en route from a transferring facility, the ambulance or flight crew will transport the patient directly to our cath lab.

What do you do when the call team is already busy doing a procedure and a STEMI comes into the ED?

In the rare event that the call team is in procedure and a STEMI patient comes into the Emergency Care Center, we evaluate and treat each situation individually. If the call team is almost complete with the prior procedure, they finish the procedure they are doing, and notify the ED that the call team is busy and to prepare the STEMI patient as much as possible. We also call the patient care coordinators and the receiving unit to come down to the cath lab and receive the patient. We have also had to pull the patient off the table with an arterial sheath in place and had our patient care coordinator stay with this patient until the call team was able to resume care. We try to limit the call team to doing only emergent cath patients. For all other procedures physicians want done during off hours, we will ask if other team members would like to volunteer before utilizing the call team.

What measures has your cath lab implemented in order to cut or contain costs?

Staff education and awareness plays a big role in containing costs. Simply by helping our staff better understand the importance of knowing what supplies cost has helped reduce wasted supplies. We also participate in bulk product buying to better reduce the cost of equipment used in our cath lab. Our lead technologist is very conscious of the supply cost and frequently monitors costs to help us get the best price. We have also switched to manual compression with a StatSeal versus

radial compression device for our diagnostic cases to decrease cost per case and time per case has not been affected. With this implementation, the patient length of stay has also decreased.

What quality control measures are practiced in your cath lab?

We provide individual patient data to the American College of Cardiology's National Cardiovascular Data Registry (ACC-NCDR) and New York State Department of Health databases. We also hold weekly cath conferences, where we review patient cases and lesions with our physicians. Monthly morbidity and mortality meetings are held to review cases, and include acute kidney injury rates and bleeding incidents.

How do you determine contrast dose delivered to the patient during an angiographic procedure?

The RT (R) at the table will calculate the amount of contrast used during the case and the monitor person will document the amount used in the patient chart for future reference if needed.

Are you tracking the incidence of contrast-induced acute kidney injury in patients?

Yes. This data is tracked in the National Cardiovascular Data Registry (NCDR) per provider. We are always very conscious of our patient's lab work, which must be completed within 30 days of the angiogram. We also educate our outpatients to hydrate a few hours before the procedure and we hydrate our patient prior to procedure with IV fluids, if the patient's health allows. Contrast doses are documented in the patient procedure report and the operating physicians state the amount in their dictation. Physicians define patient care and follow-up if needed.

Who documents medication administration during the case?

The circulator in the room, always a registered nurse, documents the medications given intra



Figure 7. Leadership team, from left to right: Madelaine Ryan BSN RN RN-BC CMC RCIS, Lead RN; Sevket Taskin RT(R) RCIS, Lead Technologist; Eric Gauthier MD, Cardiology Medical Director; Dominick Hendrickson AVP of Professional Services; Beth LeClair MHA BSN RN RCIS CMC ECG-BC RN-BC, Director of Cardiology Services.

procedure. If there is a time when the circulator is busy, the monitor person is able to do a read-back to verify a verbal order from the circulating nurse and document accordingly.

Are your physicians dictating their cath procedure reports, or do they use a structured reporting tool?

Currently, our physicians are using a structured reporting tool that they customized, McKesson Cardiology, to outline their procedural reports.

Do you use the American College of Cardiology National Cardiovascular Data Registry (ACC-NCDR) or any other data collection registry?

Yes, we currently use the NCDR for Cath and EP.

How are you populating the registry data records? Who is inputting the data, and is any of it accomplished through in-lab systems?

We have two full-time cardiac quality RNs that input the data. About 20% of the data cross to the CardiacCare EHR cardiac registry software (Cedarone); the quality RNs validate the data that have crossed and manually input the remaining data.

How does your cath lab compete for patients? Has your institution formed an alliance with others in the area?

CVPH has a very unique referral system, underscored by its unique geographic isolation. Currently, our hospital referral system spans 5 counties. Within those counties, we have 6 primary referral hospitals.

How are new employees oriented and trained at your facility?

New registered nurses hired into the cardiac cath lab must have 2 years of previous critical care experience and be advanced cardiac life support (ACLS) certified. They receive orientation for 2 to 3 months, depending on comfort level. A total of 6 months of on-call orientation is required prior to being allowed to be the only nurse on a call team. New cardiovascular technologists are required to be registered radiology technologists (RT[R]s); they must obtain their contrast injection license and be ACLS certified. They undergo a 6-month on-the-job orientation process.

What continuing education opportunities are provided to staff members?

Educational growth is encouraged in our institution. Our nursing staff is allowed up to \$4000 for tuition reimbursement each year. They also receive up to \$1000 every two years for education funds. Our RT(R) staff can receive up to \$2500 for tuition reimbursement and an additional \$1400 every 2 years for educational opportunities. On top of these funds, our nurses are given an additional \$500 every year for each certification they hold. Our RT(R)s are all on a ladder system (levels I through III) that increases their hourly rate based on years of experience and certifications obtained. At this time, we have vendors offer in-services to help educate staff on any new equipment or re-educate on equipment that is not used frequently.

How do you handle vendor visits to your lab?

Our lead technologist schedules our vendor visits and put them on the leaders' calendar to notify staff when a vendor will be in-house. On average, we will get each vendor to come in once a month to go over expired equipment, no crosses, and inventory. The

vendor is required to check in using our RepTrax system, which is where the vendor obtains their ID badge. At this time, we do not have restrictions on the frequency of vendor visits, but we do require an appointment to be made prior to a visit. We primarily only allow our stent, balloon, and device vendors in to the department. Other vendors are evaluated on a case-by-case basis.

How is staff competency evaluated?

Our staff performs annual competencies on most of the equipment used in our cath lab. If we identify an area that needs re-education, we bring in a vendor to help circulate the education and provide hands-on learning. We mainly focus on the low frequency and high risk equipment first, and then complete other competencies during the year.

Do you require your clinical staff members to take the registry exam for Registered Cardiovascular Invasive Specialist (RCIS)? Does staff receive an incentive bonus or raise upon passing the exam?

Staff are currently not required to take the RCIS exam, but are encouraged. The incentive for our registered nurses to take the exam is a \$500 bonus every year for any certification obtained. Cost to sit for the exam or any materials needed for the certification is paid for by our institution. If a radiologic technologist chooses to take the RCIS exam, they begin climbing the ladder (levels I through III) based on years of experience and RCIS/RCES certifications. Every step up on the ladder results in a fairly significant raise.

Does your lab have any physical (layout) bottlenecks or limitations?

We recently have combined our EP lab into one of our cardiac cath labs, which has created some scheduling challenges. We are still currently in the evaluation phase and plan to reevaluate after 6 months to see if an additional EP lab is needed. Inventory and storage are active challenges as well.

What do you like about the physical space in which you work?

We recently remodeled our 2 cardiac cath labs and breakroom. After this remodel, our staff are loving the new sleek look and feel to our department. Now, when you walk into our labs, you notice the ambient lighting, the 60-inch screen where you can view the images, and the state-of-the-art x-ray system. One added bonus the staff and physicians were able to gain in the remodel is the addition of the Amazon Alexa to our labs, with Bose speakers. The background music provides a calm, comforting environment for the patient and can be a morale booster to the staff. We commonly find the patients asking Alexa to play their favorite music.

Is there a particular mix of credentials needed for each call team? Are staff permitted to leave

early or start later after a night of on-call?

Our call team consists of 3 team members: one must be a registered nurse, another must be a technologist, and the last team member can be either RN or RT(R). If staffing and the schedules permits, after being called in, team members are able to leave early or arrive late for their shift if they wish.

How does your lab schedule team members for call?

Our director does our call schedule a year in advance for people to acknowledge and plan accordingly. There is a total of 4 call teams, which allows each call team to do one weekend a month of call (Friday, Saturday, and Sunday) and one night a week. If a person has a vacation or needs time off, they are expected to find coverage or switch with their peers. We also have very eager staff members that love to pick up call if people want or need the time off. The way we do our holiday rotation is each call team does one holiday a year. The holidays for which our department has chosen to use a rotating call system are New Year's Eve, Fourth of July, Thanksgiving, and Christmas. This results in our call team being on one major holiday a year and not repeating that holiday for four years. At this time, our staff are very satisfied with the call rotation and always willing to help out if needed.

Within what time period are call team members expected to arrive to the lab after being paged?

All call team members are expected to arrive within 30 minutes of the STEMI activation. Once the universal page has been dispersed, each call team member must call back within 5 minutes of activation.

Do you have flextime or multiple shifts? How do you handle slow periods?

The majority of our staff work 8-hour shifts, but we recently added a few 10-hour shift positions. One of the driving motives for this change was staff satisfaction. With the addition to staff satisfaction, we were also able to help eliminate some incremental overtime. At this time, we have staggering shifts starting at 0630, 0730, and 0830. During slow periods, staff is allowed to leave, as long as there is enough staff for one room. Otherwise, stocking, inventory cycle counts, cleaning, education, and next-day case prep occurs.

Do staff members have any little or big particular perks that you might like to share?

Staff enjoys the flexibility we have when it comes to leaving early, coming in late, or days off. We have free on-site parking. We have a lot of funds allotted to us for educational opportunities, as mentioned above. If staff want to leave early after a night of call, we ensure they are the first to leave. We frequently have lunch provided to us.

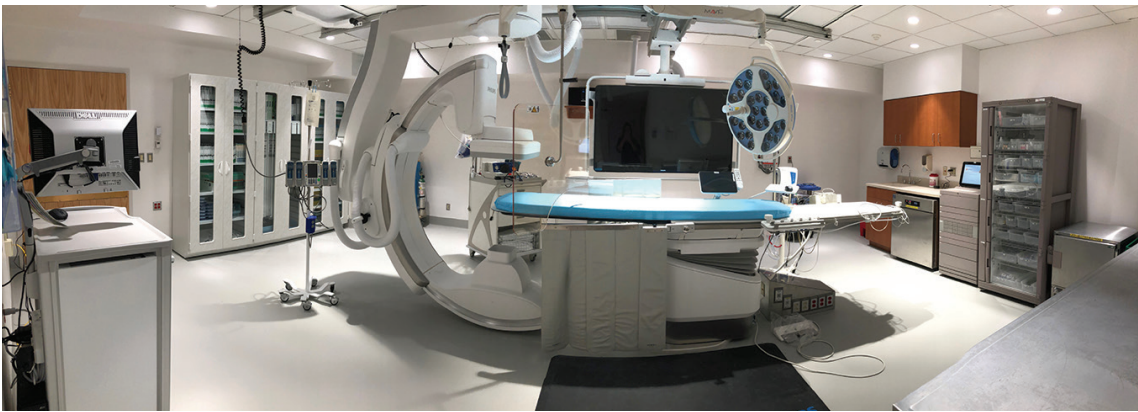


Figure 8. One of the two new state-of-the-art Philips Azurion cardiac catheterization labs at Champlain Valley Physicians Hospital.

Has your lab recently undergone a national accrediting agency inspection?

Our lab has successfully undergone a Joint Commission inspection and we have begun our journey to attain Magnet status. Although we were successful with the Joint Commission survey, we still perform tracers to ensure the standard is maintained.

What trends have you seen in your procedures and/or patient population?

We have recently seen an increase in volume in the younger patient population. We used to see mostly 70- to 80-year-old STEMI patients, but now we are seeing 40- to 60-year-old STEMI patients more frequently. Likely related to COVID-19, it also feels as if the STEMI population is even more frail due to staying at home longer before coming in to seek care.

What is unique or innovative about your cath lab and staff?

Our staff is unique in the sense that we have an eager and motivated group of employees who are always willing to learn and help out. Our group loves new procedures, technologies, and advances. We are a very close-knit team and consider each other family. Out of the 16 dedicated cath/EP lab employees, 14 have a certification that pertains to the work we do every day. We have not needed travelers in over 12 years. We have very little turnover in the department and when we do have an opening, it goes very quickly internally to radiology technologists or RNs waiting for a spot to open up.

Is there a problem or challenge your lab has faced? How was it addressed?

A major issue that we are facing in our area and nationwide is the shortage of EMS crews. To help shorten our door-to-door time, we have added a helicopter for transportation and we are working closely with our network to increase EMS services for our network affiliate hospitals. At this time, thrombolytics are being utilized for patients at all of our referral hospitals, as none of them can guarantee a 120-minute door-to-balloon time.

What's special about your city or general regional area in comparison to the rest of the U.S.? How does it affect your "cath lab culture"?

Our facility is very rural and our population is largely made up of community members who were born, raised, and live here, as have their parents and grandparents, their entire life. As a result, we have a very family-oriented community and lab. There is typically someone in the department that knows or is related to a lot of the patients that come through the lab to receive services. As one would say, this makes what we do truly hit closer to home.



A question from the American College of Cardiology's National Cardiovascular Data Registry:

How do you use the NCDR Outcome Reports to drive quality improvement initiatives at your facility?

As a network, we do a yearly report on all of our NCDR data. At the end of the presentation, we present the 3 top initiatives for the service line for the following year. The initiatives are picked based on the data from NCDR and where the biggest opportunity presents itself. As a facility, we review our data quarterly and make adjustments as needed. ■

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