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MVH Cardiology Consult rotation:

The rotation will follow the four week 28 day DAGMEC schedule.
The fellow will be assigned to a different single attending every week.
Rotation time is from 6am to 5pm Monday to Friday.
The fellow will rotate and follow one member of the teaching faculty per week.
The service over a whole month period will include CCU, ICU, advanced care, telemetry, EP and heart failure patients.
The fellow will be responsible for actively managing patients which will be assigned to him/her every Monday.
The fellow will follow these patients until they are discharged from the hospital.
If several patients on the fellow’s team are getting close for discharge he/she may be assigned extra patients to follow.

The fellow is expected to preround on his/her patients early in the morning, review the labs, images and notes and examine the patient.
The fellow will have results of echocardiographs, nuclear tests or caths for each patient ready for review and discussion.
The fellow will also formulate a tentative assessment and plan regarding patient care.
Notes should be done and pended, except for the plan for each patient prior to rounds.
Rounds will start around 9:00 or 9:30 depending on the attending.
The fellow will review the cath films and will be responsible for reading echoes and nuclear stress tests for each of his/her patients with the attendings supervision.
Bedside teaching during rounds will occur with focus on different aspects of Cardiology.
The fellow will be responsible for all the cross-cover issues on their team with the attending being available to answer questions.
In the afternoon, except for Tuesday the fellow will be available for assistance with new consults.
He or she will help out the afternoon attendings and NPs with new consults from 1-5pm.

The fellow will pick an interesting patient from their service at the end of every week to present and discuss later during the week during noon conference to other fellows and their attending.
This will be a case based discussion.
The attending will provide a short lecture once a week depending on their schedule.
During this rotation, the fellow will not scrub into cardiac cath procedures.

**MVH echo scanning rotation:**

This is a first year fellow rotation with second and third year fellows also being allowed to scan with a technician when they have down time.
In order to obtain Echo Level II status during the Cardiovascular disease fellowship training, a fellow is responsible for hands on scanning of 150 echoes.

The fellow is expected to arrive in the hospital by 8am on days when there is no morning conference and call Vocera *9665 and ask for Gretchen Prine.
She will assign the fellow to a technician for the day.
The technicians usually scan eight echoes a day.
They are very busy but have been very welcoming to us rotating and observing them.
The fellow will likely observe for the first week and participate in scanning and obtaining various views the next three weeks.

It is important to remember that it takes three years to learn echo and that this rotation is focused on learning the basics and getting comfortable with echo views echo and machines (we have the Phillips IE 33 and the EPIC 7).
The fellow is responsible for reading and learning about transthoracic echo views and taking notes on echo protocol that the technicians follow.
Hands on scanning will be provided with each patient.
The fellow will learn how to obtain the different transthoracic views as well as learn to operate the two machines.

It is important to be respectful and courteous to the technicians as they are making time for us to join them.
This is a great collaborative atmosphere where we learn the views and techniques from the techs and the fellows will contribute clinical background.
The fellow will record each echo they scan in New Innovations.
MVH echo rotation for second and third year fellows:

In order to obtain Echo Level II status during Cardiovascular disease fellowship training, a fellow is responsible for hands on scanning and interpretation of 150 echoes and reading a total of 300 echoes.

The fellow will be assigned reading privileges for the CCW reading software.

The fellow is expected to arrive in the hospital by 8am on days when there is no morning conference.

The fellow is expected to pre-read echoes which will be assigned to them by the technicians daily.

The attending assigned to the fellow for the day/week will review the films with the fellow in the afternoon.

During this rotation, the fellow will be given preference for participation in TEE, TAVR TEE and Wathman TEEs.

Additional experience in stress echo can be obtained in the MVH nuclear stress lab if desired.

MVH Nuclear:

The rotation will take place in the 122 Wyoming building.

The fellow will start at 8:30 am and assist Buffy (the nuclear technician) with obtaining images and injections of radiotracer.

The fellow will prered all the nuclear stress tests done in the Cardiology Clinic during the day as well as Jamestown outpatient tests which will be available in the inbox for the day.

They will learn how to obtain images, correct and process them for reading.

They will also learn how to use the nuclear software 4DM SPECT.

The nuclear tests will be reviewed with the attending in the afternoons.

In order to achieve Level II training status in Nuclear Medicine during the Cardiovascular Disease fellowship, the fellow should interpret at least 300 cases under preceptor supervision from direct patient studies.
In addition, fellows acquiring Level II training should have hands-on, supervised imaging experience with a minimum of 30 patients: 25 patients with myocardial perfusion imaging and 5 patients with radionuclide angiography.

During downtime, the fellow can spend time reading or participating in the CoreScan radiation safety course, which is 80 hours of web based learning required for taking the nuclear boards. The fellow can also assist with office stress echoes and treadmill stress tests if desired. The COCATS requirement is to supervise and interpret 50 stress echoes and 50 tredmills in order to be able to practice independently.

**MVH Cath:**

This rotation will take place in the MVH cardiac catheterization laboratory. The fellow is expected to be present in the cath lab from 7am until 5pm to assist with procedures.

For the first year fellows, it is important to learn the scrubbing and sterile dressing techniques, the layout of the cath lab, how to set up the table, panning and assisting, as well as roles of the cath lab team.

The fellow will be responsible for periprocedural HP for the patient they would like to assist in cathing.

The indication for PCI and catheterization will need to reviewed for each patient. The fellow will have the most recent vitals ready, latest labs including CBC, renal panel and INR. Patient’s medical history, medications and surgeries will need to be reviewed as well as prior cath films and cath reports in order to know access used, procedures done and indications, anatomy and complications.

The fellow will have a tentative plan for access, evaluate radial and femoral access on each patient and perform an Allen’s test on each patient.

The fellow will have results of prior, echoes and nuclear stress tests ready for the attending and help with post procedure orders.

The fellow will write the post procedure note and make sure they review the anatomy with their attendings.
For the fellows, please note that you will need to learn the cath steps and technique in pieces, you will pick up different pearls and techniques from the various Cardiologist you rotate with. Plan to focus on learning a different aspect of cardiac catheterization each week. The attendings are allowing you to participate in the procedure with them, help out and be courteous and respectful to everyone in the lab.

Make sure to document the procedures you participated in. For Level II in cardiac catheterization you must be able to participate in 300 diagnostic cardiac catheterizations during your fellowship training and spent 6 months in the cardiac catheterization laboratory.

**Dayton VA Medical Center Rotation Guide:**

**VA Clinic:**

This is our longitudinal clinic for our 1st and 2nd year fellows, located in the Primary Care building on the first floor by waiting room C. Patients check in at the Green Desk. The official start time is 1 PM, but you can arrive as early as noon and start reviewing your patients. As there are 4 fellows often precepted by only 1 attending (Dr. Sequeira,) it’s strongly advised that you review your patients before clinic because it’s easy to fall behind. For new consults, select the consult “order” from the “consult” tab, go to “Actions” in the toolbar, select “complete consult”, and put our supervising attending’s name.

You can also start a new note, select the “Cardiology Fellow Consult Result” note, select the consult order from the list that shows up below, and enter the supervising attending. For a follow up note, start a new note, select “Cardiology Fellow Note,” and again put the supervising attending’s name in order to proceed.

It used to be up until now that we saw 6 patients each. We are trialing a new system where we each have 5 patients scheduled and have a 6th spot reserved for time-sensitive follow up appointments because we are booked out several months in advance otherwise.
ALWAYS order a follow up appointment for every patient using the “Return to Clinic” order in the main order list!

Some medications require special notes in order to place the order. For TSOACs, you will need to start a “Anticoag TSOAC evaluation note” prior to being able to place the order. Unless a patient is already enrolled in Anticoagulation Clinic, this will also prompt an order for a referral to Anticoagulation Clinic. There used to be a similar process for antiplatelets, but that does not appear to be the case anymore. You still need to mention in your notes why the patient needs to be on Plavix/Brilinta/Effient.

**VA Non-invasive—Echo:**

This is a 2 week rotation that is alternated with the Nuclear fellow. Your responsibilities on this rotation include supervising treadmill and dobutamine echo stress tests and tilt tables in the morning, performing TEEs, and preliminary reading of TTEs prior to going over them with the attending scheduled for that day, and reading Ziopatches.

The day starts at around 8:30AM, and you are required to check every procedure schedule prior to starting. If you are unsure about the stress test schedule, ask the ECG techs who are seated at the desks near the front of the department. To check each schedule, go to “Select Patient” and there should be a drop-down menu to the left of the window that pops up to select the appropriate “clinic.”

There isn’t only one schedule to check, so be sure you look at: Day Cardio Stress, Day Cardo Dolbu Stress, Day Cardio TEE, Day Cardio Tilt Table.

Always check these schedules first thing or you will be the last person to know! There is a general login you can use for the echo reading software. Our echo reading room is in the back of the Cardiology department.
Melissa is our primary echo tech and will show you the ropes, so please ask! If you happen to have any down time, you can always ask her to scan if you’d like. For every procedure scheduled, you will need to obtain informed consent. For stress tests, you only need to write a procedure note. For TEEs, you will need to write a pre-procedure H&P and a procedure note.

There is a bin next to the door in the echo reading room where unread and completed Ziopatches go. Be sure to stay caught up on Ziopatches or they really add up!

You will need to write a note for each Ziopatch; in order to do so, you have to select the Ziopatch consult under the “consult” tab, go the Actions tab at the top of the screen, and then select “complete consult,” or you can start a new note, select the Ziopatch option, select the consult from the list that shows up in the same window, and then continue from there. Before signing your notes, always go over each Ziopatch with any available attending.

It’s often helpful to also add the ordering clinician as an additional signer so that they see the completed report if possible. Dr. Agarwal may ask you to contact the ordering clinician or the patient directly regarding any resulting recommendations. There are note templates for every procedure listed above.

In order to access them: S Drive:\\MCSLSDs\\Cardiology Department\templates. You should copy these into your own templates in CPRS so you don’t have to keep accessing this folder.

**VA Non-invasive—Nuclear:**

This is a 2 week rotation alternating with the echo fellow. The day starts around 8:30-8:45AM. Nuclear studies are completed in the Nuclear Medicine department on the 1st floor of the 330/hospital building.

Your responsibilities include performing Lexiscan and exercise treadmill stresses in the morning, followed by reading nuclear studies with the Radiologists in the afternoons. You will administer Lexiscan with the supervision of one of the nurse practitioners and she will assist you with exercise stresses.
You will almost always be working with one of our Cardiology midlevels, Laura Duncan. Every stress test needs consent and a procedure note.

You usually read with Dr. Seltzer and Dr. Sze and will need to ask whomever is reading that day at what time they would like to start. Usually you finish supervising stresses before noon and will have some downtime before reading studies, so use that time to read.

**VA Cath Rotation:**

At least a month prior to start of this rotation, you need to contact Toni in the Medical Administration department on the 2nd floor to obtain access to Cart-CL. It’s best to start the day as early as possible because you will be very busy with documentation.

Your responsibilities will include obtaining consent prior to each case (your cofellows will hopefully have done so at the time each procedure was ordered so you don’t have to,) complete a pre-cath H&P in Cart-CL prior to each procedure, perform left and/or right heart catheterizations with the attending assigned to that day, place post-procedure orders immediately after each case, review films with the attending, and write a procedure note using the Cart-CL system.

You will also need to see each patient before they are discharged and write a brief progress note; each patient should have their access site examined prior to discharge. Be sure to note only palpate but also to auscultate the femoral access site to evaluate for potential complications. You also need to formally discharge any intervention patients the next morning before noon. To complete all of this in a timely fashion, it’s easier to review each patient the day before.

To access the list, go to “select patient” and select “Day Cardio Cath Lab” from the clinic dropdown list. It’s also best to start the pre-cath H&P for each patient the day before. Always find out who the attending is for that day because, although there is technically a schedule, they can switch around.
Always make sure there are pre-cath orders in before each case!
To enter pre AND post cath orders, go to the orders tab, select “service order set by menu.”
Every patient needs a CBC, chem panel, and coags within 30 days of the procedure.

If a patient needs intervention, Dr. Agarwal or Dr. Mukerji will step in if they are not doing the diagnostic case already.
You will stay for each intervention unless the attending says you don’t have to.
You do not do the PCI procedure note!
Often times, if a patient had an intervention, the attending will ask you to schedule a follow-up appointment to be seen by yourself in a few weeks in the Cardiology department.

Of note, do not open a note in CPRS a day ahead since it will show the opened time.
If you need help, please don’t hesitate to ask your cofellows. This rotation can get very overwhelming.

**VA Inpatient Consult Rotation**

This is a 4 week rotation. The day starts around 8:30AM.
You will supervise (usually) 2 residents and 2 or more medical students.
You are responsible for inpatient and ER consults.
The ER may call you at one of the phones in the consult room or page you directly regarding consults.
Inpatient consults are printed out only, the printer is in the consult team room at the back on the Cardiology department.
**Please make sure the printer always has paper!**
There is paper in the waiting room of the Cardiology department; after hours, go to the Pulmonary department to get paper.
There is no common list that updates automatically.

There is a way to make your own list; ask Umbreen to show you how.
There is a sign-out sheet that needs to be updated daily. In order to access this, go to S Drive:\\MCSLSDs\\Cardiology Department\\sign out
Overnight VA call is covered by the Kettering fellows.
It’s best to sign out any sick patients and all patient prior to the weekend.
You are responsible for covering holidays during the day. You will also need to cosign every resident’s note before the attending does. Sometimes, if you’re really busy, the attending will get to it before you and that’s fine. Each attending is assigned to one week on service.

**VA Invasive II / Device Rotation:**

This rotation is precepted by Dr Sharma. Dr Parikh is also involved.
Make you to get a list of patients for the month from Dr Sharma on your first day.
This will include patients who have been scheduled for a device placement, upgrade or generator change by the fellow from prior block.
The pacemaker and AICD placements usually occur on Thursday but depending on the cath lab schedule they can also happen on the other days of the week.
Most all of the devices are implanted in the Cath Lab. Rarely we do have to go to the operating room usually for patients that need to be monitored a little bit more closely in terms of their hemodynamic status.
On the device day make sure you get to the VA 15 minutes earlier and make sure you change your scrubs to the VA issued scrubs.
Ask Cheryl Barnes for your key card in order to obtain scrubs.
You will also need to sterile scrub longer for these procedures.

For every procedure you will need to put procedure orders which just follow the standard Cath Lab orders except for making sure you order antibiotics Ancef 1 gm IVPB q8hr, 3 doses only. First dose to be given in pre-op holding area immediately before procedure. Use Vancomycin if PCN-allergy.

Each new device placement will need an admission consult to be placed with Cardiology as the admitting service in CPRS after the procedure is done.
You will need to put in the admission orders, diet, labs for the next day, chest x-ray for the next day, patient’s medications and in addition to routine recovery orders.
You will be responsible for discharging the patient the following day.
You will need to interrogate the device, write the medication reconciliation note, discharge instructions as well as a discharge summary.

The patient should be discharged before noon the following day.

You will also need to make sure from your attending to give the patient a follow-up date week from procedure for site check as well as a device clinic appointment.

During this rotation you will also see new consults that have been referred for pacemaker or ICD placement.

You will evaluate the patients in clinic, discussed appropriateness criteria and indication with your attending and consent the patient for the procedure as well as order baseline labs and chest x-ray.

Get IMED consent from CPRS Consent--choose the step-by-step consent.

Thursday and Friday afternoons are the device clinics.

You are not obligated to go and interrogate devices during that time however this is a great opportunity for you to learn and interact with the device representatives who will let you perform the device interrogation on your own with their supervision.

You may have to adjust their cardiac medications, start anticoagulation or be evaluated for device or generator change.

Occasionally you will also interrogate patients during NP and CHF clinic as well as floor patients in the VA.

You will see the site check patients and write the note.

Dr. Sharma might give you a list of patients to call to schedule for device evaluation or generator change.

We get referrals from many of the VA around Dayton and occasionally you may need to make some phone calls and scheduled patients.
VA CPRS tips
PRE-TEE, POST-TEE, PRE-CATH, POST-CATH orders can be found under “service order set by menu” Pre-cath need CBC, Chem Panel, PT/INR, PTT within 30 days.

Echo, EKG, Holter or Ziopatch orders under “Procedures” Stress test (of any type) is under “Nuclear Medicine”

TED stockings/ compression hoses = consult “Prosthetics” and mention the amount of pressure (e.g. 20-30 mmHg), Knee or Thigh High

Home BP monitor cuff= consult “Prosthetics” and mention the size of cuff

NPO is a “free text order”.

Medications: For inpatient orders, especially IV meds, don't click on IV meds. That is only for drips. Select unit dose medication and you can find the option of IV medication. Any IV drips if you don't know how much ml/h or ml/min you have to select, just enter 1 in the respective boxes and describe the rate at which you want in mg or mcg/min.

For Non-Formulary (NF) medications we need to fill out the progress note, after which the order automatically pops up.

Get templates from seniors for – TEE, Ziopatch, Consult note, clinic note, Tilt table etc Encounters: Your Attending is always the primary.

Checking Schedules in CPRS:

Day Nuclear Stress Test
Day Cardio Echo
Day Cardio TEE
Day Cardio Fellow Tuesday
Day Cardio Cath lab
Day Cardio device
Vacation:

We discourage vacation during your VA consult and cath rotations (because another fellow has to fill in for you during that time) as well as MVH consult months (attendings are taking their time off to teach you). You will need to have your request submitted 30 days in advance to

Call:

Call schedule will be available three months in advance.
Please note you will need your attending signature, VAMC clinic attending signature (Dr Sequeria) and CHIEF fellow signature (as the second clinic attending signature) prior to submitting to Dr Wase for final approval.
This is to prevent multiple requests off during the same week.
The VAMC policy is to make sure your clinic is closed out 45 days in advance otherwise you will either have to come to the clinic or walk in your patients during other days.
During call you are responsible for 5-9pm in house coverage with fellow being paged from the access center to see new consults Monday to Friday.
You will see the consults, write a note and staff with your attending.
If there are a lot of consults placed you can leave some for the night NP.
The fellow will be available for STEMI coverage from home until 7am the following morning.
In the event that the fellow comes in after midnight for an alert or to see an acutely ill patient they will be excused from the morning conference.
This is a new approach for this academic year so don’t abuse this privilege.
The fellow is responsible for letting the chief fellow know why they will not be at the morning conference.
The fellow is responsible to go to their daily responsibilities that day, but you will get extra time to sleep.
Please note that we do have a fellow call room which is located on the 7th floor near MEdED
The code is 4132. The room is assigned only to our service and it is a single room.
We can also use once of the call rooms in the Cardiology third floor SEA. The code change every few months. There are showers, restroom, bed and a computer in the call rooms. During the assigned call on Saturday and Sunday the fellow will come and preround on selected patients in the ICU and CCU. They will also assist with consults until afternoon. The STEMI call occurs from 7am Saturday morning to 7am Sunday morning. After daily work is done the fellow will be available for home call to see acutely ill patients and come in for STEMI coverage.

**STEMI alerts:**

The fellow needs to respond to a STEMI alert page within two minutes and call the number provided or the access center. Please note we are not the primary physician to call for STEMI, therefore you will have to make sure that the provider who initiated the STEMI alert has talked to the Interventionalist on call. Afterwards the fellow needs to be in the hospital within 30 minutes. The fellow is responsible for evaluating the patient, writing the HP, placing the admission orders. Depending on how quickly the fellow arrives they may have to go to ED first as a physician is needed to bring the patient to the cath lab. The procedure note will also become the first year responsibility after the first five months. During a STEMI the fellow will observe and assist as much as possible but also in the beginning they will mostly scrub in and observe. Please be respectful and courteous to the staff.
Call during holidays:

The call during the holidays follows a “weekend” schedule with the consult fellow coming in to round on their patients and another fellow taking over at 5pm.
If there is no consult fellow the fellow on call for the day will be available for STEMI and acutely ill patient call from 7am to 7am the next morning.
The holidays will be split so that no one fellow is on call for most of the holidays.

Didactics:

A didactics schedule will be provided at the start of every block.
The fellows are responsible for being on time for lecture and knowing if they are presenting a topic.
The first year fellows will be incorporated into the didactics schedule in the second part of the year.
After the first few months they will be assigned Journal Club and MM to present.
Monday schedule consists of VAMC noon conference and MVH conference with either Nuclear Cardiology or Pharmacist lecture at 4pm twice a month.
Journal club is once a month on Monday and is directed by Dr Broderick.
Tuesday is Cardiovascular Disease guidelines given by the fellows.
Wednesday at noon conference we will discuss cath lab and CCU topics alternating with echo reading. The preceptor is Dr Sadhu.
Wednesday morning at 7:30-9:30am is the Cath conference, fellows can sit in for this lecture if time allows.
Thursday morning will discuss echo guidelines, this will be presented by fellows.
Every third Thursday morning we will have MM, this will be fellow driven after the first two months.
Friday is EP, alternating with ECG reading, the preceptor is Dr Wase.
A research meeting will occur every two months.
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