
Rotational Echocardiography Guideline

Educational Purpose of the Rotation

The echocardiography rotation permits the Sub-specialty residents (SSR) to perform “hands on” echocardiographic studies. Under the direction of attending physicians and an echocardiographic technologist the resident is provided with the tools and expertise to perform echocardiographic studies independently. This rotation usually occurs early on in the training cycle to permit the SSR the opportunity to perform studies and gain confidence in reading studies as well.

This is a required rotation and generally sub-specialty residents are provided with one rotation block during their three year educational experience. These rotations, coupled with the TEE experience, permit them to perform (hands-on) and interpret a minimum of 150 echocardiographic studies during their training period.

Rotation Attendings

George Abela MD	Edward Helble DO	Richard Pinke DO
Appa Bandi MD	Todd Hickox DO	David Rhine MD
Thomas Brown DO	John Ip MD	James Schafer MD
Mark Castellani MD	Michael James DO	David Strobl DO
Nam Cho DO	George Kleiber DO	Joni Summit DO
Joel Cohn MD	Kirk Laman DO	Ranjan Thakur MD
Christopher D’Haem	Dale Leffler DO	Ronald Voice MD
Gaurav Dhar MD	Chad Link DO	Mathew Wilcox DO
Carlos Fernandez DO	Daryl Melvin MD	Peter Yoo MD
Ibrahim Shah MD	Mohan Madala MD	Omar Bakr MD
Majid Mughal MD		

This rotation occurs at Michigan State University, Sparrow Health System, McLaren Greater Lansing and the Thoracic and Cardiovascular Institute. Sub-specialty residents assigned to this rotation work with both echocardiographic technologists and attending physicians. The echocardiographic technologists are the key to learning the “hands-on” aspects of performing the studies and the attending physicians provide the interpretation and educational expertise for echocardiographic reading.

Resources

All of the listed institutions are equipped with modern, up to date, echocardiographic equipment. In addition, there are reading stations where sub-specialty residents are expected to sit with the attending physicians to review, discuss and dictate the final reports. Given the variety of locations it is important to note that the sub-specialty residents have access to several different brands of echocardiographic machines, technical approaches (views) and pathologies.

Responsibilities

The expectations and responsibilities of this rotation apply to all sub-specialty residents (this is a required rotation):

1. Participate in echocardiographic testing with “hands on” experiences with echocardiographic technologists.
2. Participate in reading, discussing and completion of reports of testing with attending physicians.
3. Work effectively and actively participate with all members of the team including the echocardiographic technologist, attending physician, nurses or other health care personnel.

Objectives

By the conclusion of the training program the sub-specialty resident will have completed one to two rotations in Echocardiographic Imaging. The sub-specialty resident will:

1. Demonstrate a proficiency in obtaining echocardiographic views sufficient to diagnose common cardiac conditions. (Pericardial effusion, cardiac tamponade, etc.).
2. Demonstrate proficiency in interpretation and dictation (under the direction of the attending physician) of echocardiographic studies.
3. Demonstrate the ability to appropriately recommend clinical management guidelines based upon echocardiographic findings.
4. Recognition of abnormal results requiring immediate or urgent intervention and ability to contact the appropriate personnel (referring physician, attending physician, etc.) to initiate action.

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5. Demonstrate a proficiency in appropriate request for studies including echocardiography, stress echocardiography, dobutamine echocardiography and the utilization of contrast agent for image enhancement.

Instructional Methods

Attending physicians and echocardiographic technologists participating in this rotation will:

1. Supervise and instruct the sub-specialty residents in accordance with the Supervision policy.
2. Provide an atmosphere allowing for responsible patient care while encouraging sub-specialty residents to assume more responsibility as skill levels progress.
3. Provide sub-specialty residents with ongoing feedback regarding the progression of skills.
4. Provide structured teaching opportunities including appropriate literature references/citations for review and discussion.

Evaluation Process

At the conclusion of each rotation:

1. Attending physicians and echocardiographic technologists will summarize and accurately describe the sub-specialty resident's performance on the provided evaluation form. The evaluator will discuss review this evaluation with the sub-specialty resident and both will sign their acknowledgment and return the form to the Program Office for review and inclusion in the sub-specialty residents overall bi-annual evaluation.
2. The sub-specialty resident will summarize and accurately evaluate the faculty performance, technical training and overall rotation on the form provided and return it to the Program Office where it is tabulated and, to protect anonymity, destroyed after tabulation.

Readings: As assigned.

Schedule: Please refer to the master sub-specialty resident schedule.

Competency Level: Completion of all Echocardiography and Non-Invasive Rotations would permit the Subspecialty resident to qualify for Level 2 competency under COCATS 3 Guidelines. A log must be kept on all echo procedures done.