

Cardiology Rotation Curriculum Danbury Hospital

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I. Educational Purpose

Two of the most important goals of the section of Cardiology at Danbury Hospital are excellence in patient care and teaching. There are full-time hospital based cardiologists, most having faculty appointments at Yale, Columbia or New York Medical College. There is a Cardiovascular Diseases fellowship program in place at Danbury Hospital, teaching all aspects of cardiology. A medical student or medical resident (trainee) taking a cardiology elective at Danbury Hospital will spend time with our faculty cardiologists, as well as our cardiology fellows. Medical Students or residents rotating on the inpatient consultation service will receive a broad education in consultative cardiology. This will include learning how to perform a focused history and physical exam, appropriate use of diagnostic testing, and applying relevant clinical studies to patient care. In addition, the rotating medical student or resident will be exposed to both diagnostic and therapeutic procedures such as echocardiography, nuclear cardiology techniques, cardiac catheterization and percutaneous intervention. The hospital performed approximately 1700 catheterizations, 400 coronary interventions, and nearly 200 open heart surgeries. The noninvasive laboratories perform over 900 echocardiograms and 5000 nuclear cardiology procedures annually. The cardiology service uses a 50 bed hospital floor dedicated to cardiac care, with a 20 bed combined ICU/CCU/ Over 2000 admissions occur annually on the cardiovascular service.

II. Principal teaching methods

Cardiology consultation elective rotation:

- A. The trainee will participate in the evaluation and management of cardiac in-patients on the cardiology consult service at Danbury Hospital supervised by Cardiology faculty and fellows. An attending cardiologist dedicated exclusively to the cardiology consult service will make rounds, perform consults, and hold didactic teaching sessions daily from 8:00AM to 5:00 pm.
- B. Each patient evaluated by the trainee will be seen with the cardiology attending during daily management rounds.
- C. Trainees will follow their patients during the course of the patient's diagnosis and therapy. As patients undergo various diagnostic and therapeutic modalities such as echo and nuclear studies, as well as invasive cardiology procedures and surgery, the trainee will follow along and develop an appreciation and understanding of these procedures.

- D. During the cardiology rotation, trainees will be expected to attend the following regularly scheduled didactic conferences:
- i. Cardiac Catheterization Conference in which angiograms and hemodynamic data are discussed (4:30 PM Wednesdays)
 - ii. Fellows Morning Report Conference (8-9AM on Monday, Tuesday, Thursday)
 - iii. Cardiovascular Board Review Conference (12 PM Wednesdays)
 - iv. Fellows Lecture Series (12 PM Fridays)
 - v. Journal Club
 - vi. ECG conference (8:00 AM Wednesdays)
- E. Opportunities exist for participation in clinical research if the trainee is interested in joining a project underway at Danbury Hospital.

Sample Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday
8:00 am	Fellow's Morning Report	Fellow's Morning Report	ECG Rounds	Fellow's Morning Report	
9:00	Work Rounds	Work Rounds	Work Rounds	Work Rounds	Work Rounds
10:00					
11:00	Cardiology Fellow's Report		Cardiology Fellow's Report		Cardiology Fellow's Report
12:00			Board Review Series		Fellows Core Lecture Series
1:00					
2:00					
3:00					
4:30			Cath Conference		

III. Educational Content

In the process of clinical evaluation of cardiology in-patients and consult patients, the trainee will gain experience in the diagnosis and management of a broad range of cardiovascular diseases. The cardiology service typically includes patients in various stages of acute and chronic cardiovascular diseases, including ischemic and nonischemic heart failure, acute coronary syndromes, valvular heart disease, pulmonary embolism, and heart rhythm disorders. In addition, the trainee will increase his or her skill in performing preoperative cardiac evaluation of patients undergoing both elective and emergent non-cardiac surgery according to the American College of Cardiology and American Heart

Association (ACC/AHA) guidelines.

In cardiac testing situations, the trainee will gain valuable insight into the indications, contraindications, and reliability of commonly ordered diagnostic tests. Cost-effective health issues are regularly addressed in this setting.

The trainee on the cardiology rotation will attend and participate in didactic sessions which emphasize differential diagnoses and pathophysiology of common and less common cardiovascular conditions. The schedule for these sessions is outlined above.

Trainees have online access to standard cardiology texts and journals through the Danbury Hospital Library and are encouraged to read both landmark articles as well as current literature.

IV. Principal Educational Methods

It is recognized that utilizing multiple teaching methods serves trainees best. Mentorship and faculty role models are vital to encourage trainees to focus on the skills and knowledge that they need to develop. Additionally, trainees will learn by direct patient care, discussion with the attending and fellow of the diseases they are evaluating. They will be encouraged to seek out additional educational resources such as journals and textbooks.

V. Method of Evaluation

The learning objectives and requirements will be reviewed at the beginning of the rotation and feedback will be given on trainees' progress within the first half of the rotation. At the end of the rotation, a formal evaluation will be completed by the cardiology attending(s) primarily involved in the trainee's cardiology rotation. This should be inclusive of input from the cardiology fellow, and other members of the consult team. Evaluations will be completed online using an electronic system. The evaluation system is based on the ACGME Core Competencies of medical knowledge, patient care, professionalism, communication, problem-based learning and improvement, and system-based practice.

VI. Specific Competency Objectives

A. Patient Care

- i. By the conclusion of the cardiology rotation, trainees will demonstrate effective communication skills with patients and their families including gathering complete history and physicals and relaying this information to the attending physician and appropriate consulting services when appropriate.

B. Medical Knowledge

- i. A broad range of knowledge is needed to be successful as a cardiologist, and the cardiology trainee will be introduced to these concepts during their cardiology rotations. These concepts include pathophysiology and management of valvular heart disease, heart failure, acute coronary syndromes, and preventive cardiology.

This includes knowledge of the landmark clinical trials that provide the evidence basis for the practice of cardiovascular care.

- C. Practice Based Learning and Improvement
 - i. Trainees will demonstrate self-initiative in the use of information technology to access and retrieve materials for self education pertaining to cardiovascular disease.
 - ii. Trainees will locate, appraise and assimilate cardiovascular evidence from scientific studies related to their patient's cardiovascular health problems.

- D. Interpersonal and Communication Skills
 - i. Trainees will keep appropriate therapeutic relationships with patients and their families; in addition, residents will develop effective professional relationships with medical and allied staff involved in patient care.
 - ii. Trainees at all levels will maintain comprehensive and timely medical records.

- E. Professionalism
 - i. Throughout the rotation, trainees are expected to exhibit reliability in their clinical duties, as well as integrity and respect in their interactions with patients and colleagues. This includes sensitivity and responsiveness to culture, age, gender, and disability.
 - ii. Trainees at all levels will demonstrate a commitment to ethical principles involved in cardiovascular care or withholding clinical care, confidentiality of patient information, informed consent and business practices.
 - a. Demonstrate responsiveness to the needs of patients and society that supersedes self-interest.
 - b. Demonstrate a commitment to excellence and on-going professional development.

- F. Systems Based Practice
 - i. Trainees will develop an understanding of delivering cost-effective cardiovascular care, allocating resources, and how their patient-care activities may affect other healthcare organizations and society at large.
 - ii. Trainees will understand the role of the cardiologist in advocating for the quality of cardiovascular patient care and assisting patients in dealing with system complexities.
 - iii. Trainees will demonstrate an understanding of a concise presentation of patients to attendings and demonstrate writing of progress notes and initial consultation.