

**HGCA Clinical Cardiology
Consultation Service
(Wilson/Kalife)
(1 month)**

During this rotation, the Cardiovascular Disease fellow (CF) who may be in the any year of the program functions as an independent Cardiologist. The subspecialty trainee is expected to attain competence in the diagnosis and treatment of hospitalized patients with an emphasis on patients with acute cardiac or vascular illness requiring general or intensive diagnostic evaluation or therapeutic intervention which may include but is not limited to:

- 1) Diagnosis and treatment of common cardiovascular disease states in hospitalized patients.
- 2) Recognition and treatment of Acute Coronary Syndromes including management in the Coronary care unit or general floors.
- 3) Recognition of all stages of congestive heart failure.
- 4) Diagnosis and treatment of patients who may undergo cardiac or vascular surgery. These patients will be managed by the CF with attending overview.
- 5) Recognition of various rhythm disorders. Subsequent diagnostic regimes will be implemented as reviewed by staff input.
- 6) Strategies for prevention complications associated with invasive diagnostic evaluation, therapeutic catheterization or cardiac surgery.
- 7) Recognition and management of atrial fibrillation, SVT, Ventricular Tachycardia, Ventricular Fibrillation as well as post operative arrhythmias.
- 8) Recognition, appropriate evaluation and management of valvular heart disease including: Aortic and Mitral Valve disorders
ASD or VSD- acquired or congenital
- 9) Recognition and evaluation of cardiac tumors, pericarditis,
- 10) Recognition and treatment of venous insufficiency including DVT, SVC obstruction, thrombophlebitis, and May-Thurner syndrome

The Cardiology fellow will develop expertise in the recognition, diagnosis and management of the spectrum of diseases that occur in an adult general medical/surgical hospital. The CD fellow will become proficient in the performance of a focused cardiovascular disease history and physical examination, differential diagnosis of vascular, valvular, myopathic and rhythm abnormalities along with the proper use of clinical electrophysiological, imaging tests and other laboratory modalities to facilitate diagnoses. The Cardiology fellow will dedicate the majority of the time to patient care responsibilities, and will be actively and directly involved in diagnostic and therapeutic decision-making. Although assigned to a hospital service, the Cardiology fellow will also see outpatients at his/her assigned continuity clinic. The Cardiology fellow will actively participate in scheduled teaching conferences through the week that include the Noon Cardiology Conference, the core curriculum seminars, Morbidity and Mortality case presentations, Cardiology Journal Club, and research conferences. They will be encouraged to participate in conference which pertain to electrophysiology, pathology and peripheral vascular disease.

The Cardiology fellow works one on one with attending physicians on each specific rotation. Under the guidance of supervising faculty, the Cardiology fellows are responsible for evaluating assigned patients on the service during initial and follow-up care over the course of their hospitalization. Internal Medicine residents, subspecialty medical students and pharmacy students may be assigned to the clinical service and will be supervised by the CD fellow. All patients are teaching patients on the inpatient services. The average daily census is typically 10-20 patients with 3-5 new consults each weekday. In the event that the service population exceeds the capacity of the CD fellow and associated residents or students, patients will be assigned a non-teaching status and cared for by the attending physician.

Legend for Learning Activities	
AR/FS – Attending Rounds/Faculty Supervision	JC – Journal Club
CC – Core Curriculum conferences	LR – Literature Review (independent)
DPC – Direct Patient Care	RC – Research Conference
MM – Morbidity and Mortality Conference	CAC – Cath Conference

Legend for Evaluation Methods for Fellows	
AE – Attending Evaluations	360° – 360° Evaluation
PDR – Program Director’s Review (twice annually)	

Principal Educational Goals by Relevant Competency

The educational goals and objectives for the CD fellow on this rotation are indicated for each of the six ACGME competencies in the tables below. The first column describes whether the objective is knowledge, skill and/or attitude. The third column lists the most relevant learning activities for that objective, and the fourth column indicates the evaluation methods for that objective.

A. Patient Care

Goal: CD fellows must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of Cardiovascular diseases.

Knowledge, Skills, Attitude	Objectives – Fellows will demonstrate the:	Learning Activities	Evaluation Methods
Knowledge, Skills	Ability to take a complete medical history and perform a careful and accurate physical examination with a cardiovascular disease focus	DPC, AR/FS	AE
Knowledge, Skills	Ability to write concise, accurate and informative histories, physical examinations and progress notes with a cardiovascular disease focus	DPC, AR/FS	AE
Knowledge, Skills	Ability to formulate comprehensive and accurate problem lists, differential diagnoses and diagnostic & therapeutic plans	DPC, AR/FS, CC, LR	AE, PDR
Knowledge, Skills	Ability to properly order and interpret results in diagnostic testing, including laboratory, electrocardiography, testing, radiographic, echo, MRI and nuclear medicine imaging.	DPC, AR/FS, LR, CC, JC,	AE

		CAC	
Knowledge, Skills	Ability to prescribe and appropriately utilize medical therapy for the prevention & treatment of cardiovascular disease in hospitalized patients, understanding the proper dosing and potential related adverse events and interactions	DPC, AR/FS, LR, CC, JC	AE

B. Medical Knowledge

Goal: CD fellows must demonstrate knowledge about established principles and evolving basic and clinical science of cardiovascular diseases as well as demonstrate growing familiarity with advanced concepts and rare diseases.

Knowledge, Skills, Attitude	Objectives – Fellows will:	Learning Activities	Evaluation Methods
Knowledge	Diagnose and treat common cardiovascular in hospitalized patients	AR/FS, CC, DPC, JC, LR,	AE, PDR
Knowledge	Recognition of unusual or uncommon cardiovascular diseases not typically cared for by primary care physicians.	AR/FS, CC, DPC, JC, LR, RC	AE, PDR
Knowledge	Demonstrate knowledge of appropriate referral for therapeutic catheterization or surgical procedures for cardiovascular diseases	AR/FS, CC, DPC, JC, LR, RC, CAC	AE, PDR
Knowledge	Diagnosis and treatment of rhythm disturbances including appropriate referral for electrophysiological study, cardiac pacing, ICD and RFA.	AR/FS, CC, DPC, JC, LR, RC	AE, PDR
Knowledge	Recognize complications of various invasive catheter-based and cardiovascular surgical procedures, including appropriate management.	AR/FS, CC, DPC, JC, LR, MM	AE, PDR
Knowledge	Understand strategies for prevention of cardiovascular disease through medical therapy, diet and lifestyle modification.	AR/FS, ICC, CC, DPC, MLR, JC, CPC	AE, PDR
Knowledge	Recognize and manage valvular heart disease including knowledge of diagnostic assessment, activity prescription, medical therapy and antibiotic prophylaxis.	AR/FS, CC, DPC, JC, LR, RC, CAC	AE, PDR
Knowledge	Be capable of appropriate ordering and initial interpretation of radiographic, echo, nuclear, hemodynamic and angiographic examinations.	AR/FS, CC, DPC, LR, CAC, RC	AE, PDR

C. Interpersonal Skills and Communication

Goal: CD fellows must demonstrate the knowledge, skills and attitudes necessary to develop and maintain appropriate interpersonal relationships and to communicate effectively with patients, families, colleagues and the public.

Knowledge, Skills, Attitude	Objectives – Fellows will:	Learning Activities	Evaluation Methods
Skill	Communicate sensitively and effectively with hospitalized patients and with their families	DPC, AR/FS	AE
Skill, Attitude	Display a willingness and ability to teach medical students, pharmacy students, medical residents, nurses and ancillary service personnel	DPC, AR/FS	AE, 360°

D. Professionalism

Goal: CD fellows must demonstrate the knowledge, skills, and attitudes necessary to practice professionally responsible, ethical and compassionate care in clinical cardiovascular diseases.

Knowledge, Skills, Attitude	Objectives – Fellows will:	Learning Activities	Evaluation Methods
Knowledge, Skill, Attitude	Interact professionally towards patients, families, colleagues, and all members of the health care team	DPC, AR/FS	AE, PDR, 360°
Attitude	Display an appreciation of the social context of illness especially in hospitalized, critically ill patients	DPC, AR/FS, CC,	AE
Attitude	Provide mentoring and act as a role model for junior members of the care delivery team	DPC	AE
Skill	Participate in the decision for diagnostic test requests or referral for intervention reviewing the ethical aspects of that decision	DPC, AR/FS	AE
Knowledge, skill, Attitude	Fulfill all the requirements to assure the privacy and confidentiality of all the medical information of the patient.	DPC, AR/FS	AE, PDR, 360°

E. Practice-Based Learning and Improvement

Goal: CD fellows must demonstrate the knowledge, skills, and attitudes necessary to initiate self-directed and independent learning. CD fellows must keep abreast of current information and practices relevant to cardiovascular disease.

Knowledge, Skills, Attitude	Objectives – Fellows will:	Learning Activities	Evaluation Methods
Attitude	Demonstrate a commitment to professional scholarship through the systematic and critical perusal of relevant print and electronic medical literature, with an emphasis on the integration of basic science with clinical medicine, and evaluation of information in light of the principles of evidence-based medicine	DPC, AR/FS, LR, CAC, CC, JC, RC	AE, PDR
Skill, Attitude	Demonstrate a commitment to learning through	CC, CAC,	PDR

	participation in research and producing formal presentations and/or publications	JR, RC	
Skill, Attitude	Integrate knowledge learned through participation in ward rounds, teaching conferences and other educational activities into their practice (e.g., observation of long-term outcome of interventions and medical care applying lessons to patients with acute illness)	DPC, AR/FS, JC, RC	AE, PDR

F. Systems-Based Practice

Goal: CD fellows must demonstrate the knowledge, skills, and attitudes necessary to manage effectively in multiple, diverse, complex systems of care to provide effective treatment, consultation and referrals for patients.

Knowledge, Skills, Attitude	Objectives – Fellows will:	Learning Activities	Evaluation Methods
Knowledge, Skill	Demonstrate the ability to work in the outpatient clinic coordinating routine follow-up of chronic illness, evaluation and management of new cardiovascular illness and assisting in system development that ensures appropriate disease management and health maintenance practices	DPC, AR/FS, LR	AE, PDR
Skill, Attitude	Display a willingness and ability to help the requesting physician in a consultative or co-management capacity, according to the needs of the situation	DPC, AR/FS	AE, PDR
Skill, Attitude	Integrate knowledge learned through participation in ward rounds, teaching conferences and other educational activities into their practice	DPC, AR/FS	AE, PDR
Attitude	Participate in refinement of care delivery systems ensuring provision of evidence-based care (e.g., participation and refinement of STEMI protocol)	DPC, AR/FS, RC	PDR
Attitude	Consider the cost-effectiveness of diagnostic, prevention and treatment modalities when selecting such strategies for patients.	DPC, AR/FS, CAC, JC, LR, CC	AE

The rotation is not only great for its educational goals but for its teaching the Cardiology fellow about medical care in general. When the rotation is over, the Cardiology Fellow will have gained a vast degree of competence in the diagnosis and treatment of Patients with all forms of cardiovascular disorders.

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