VA INPATIENT ROTATION

I. Rotation Description:

The VA inpatient rotation provides the senior cardiology fellow with a broad exposure to the care of the hospitalized cardiology and cardiac surgery patient.

The fellow will have substantial responsibility for the evaluation and treatment of inpatients requiring invasive cardiac procedures. As such, the inpatient fellow will work closely with the consult fellow and the junior invasive fellow in triaging patients requiring coronary angiography, percutaneous coronary intervention, and electrophysiologic testing, and device implantation. Whenever possible, the inpatient fellow will directly participate in invasive therapeutic procedures such as percutaneous coronary interventions and EP device implantation. Following the procedures, the fellow becomes responsible for the post-procedure care of patients not on the housestaff service.

During the rotation, the inpatient fellow is also expected to round on a bi-weekly basis with the Cardiac Surgery Service on post-surgical patients in the Medical/Surgical ICU and Intermediate ICU. The fellow is also strongly encouraged to observe at least one cardiac surgery case in order to better understand cardiac anatomy, cardiopulmonary bypass, cardiac anesthesia, and use of intra-operative TEE. At the start of the rotation, the inpatient fellow will contact the Chief Cardiac Surgery Resident in order to coordinate rounding and OR times.

The VA inpatient rotation also provides the senior fellow with an exposure to the care of pre- and post- cardiac transplant patients. Along with members of the Cardiac Transplant Service, the inpatient fellow will assist the housestaff with management of inpatients who are being evaluated for cardiac transplantation and patients admitted to the hospital as a consequence of complications of their heart transplant. The inpatient fellow will also participate in the discussion of patients evaluated in the Cardiomyopathy and Cardiac Transplant clinic on Wednesday mornings between 11:30 AM and noon.

Finally, the VA inpatient fellow will participate in the Cardiac Rehabilitation clinic on Thursday afternoons. In this capacity, the fellow will work with a team of health care providers, including a nurse practitioner and behavioral medicine specialist, in counseling patients who are post MI, post PCI, and post CABG regarding risk factor modification. At the start of the rotation, the fellow is given a booklet on cardiac rehabilitation published by the American Heart Association. During the course of the rotation, the fellow is expected to become familiar with the topics covered in this booklet.
II. Objectives:

Knowledge:
- The trainee should have an understanding of the pre-operative, anesthetic, surgical, and early post-operative care of the cardiac surgery patient, including understanding of medications, ventilation, hemodynamic patterns, pacemaker function, arrhythmias, bleeding, tamponade, low output states, and ventricular dysfunction.
- The trainee should understand the role of risk factor modification (hypertension, dyslipidemia, diabetes, exercise, smoking cessation) in the secondary prevention of cardiovascular diseases.
- The trainee should understand the role of immunosuppression in the management of the post-cardiac transplant patient. He or she should have an understanding of the indications, side effect profile, and dosing of the most commonly used immunosuppressives including corticosteroids, cyclosporine, tacrolimus, azathioprine, mycopholate mofetil, and sirolimus.
- The trainee should know the basic principles of allograft rejection surveillance and treatment of cellular and humoral rejection.
- The trainee should have an understanding of the risk factors, prevention of, detection, and treatment of coronary allograft vasculopathy.

Skills:
- The trainee should be able to provide traditional cardiac rehabilitation (i.e., counseling on diet, exercise, nutrition, stress reduction, and pharmacologic treatment of hypertension and dyslipidemia) services in the secondary prevention of cardiovascular disease.
- The trainee should be able to manage chronic complications resulting from the immunosuppression of post-transplant patients, including hypertension, dyslipidemia, diabetes, renal insufficiency, and osteopenia.
- The trainee should be able to serve as a consultant to the Cardiac Surgery service and provide recommendations regarding management of heart failure and arrhythmias during the immediate post-operative period.

III. Teaching Methods:
- Discussion of inpatient work-up (for patients being evaluated for invasive cardiac procedures) with the Cardiac Catheterization Laboratory and EP Attendings.
- Discussion of patients during Cardiac Surgery Rounds.
- Observation and direct patient care in the Cardiac Rehabilitation Clinic.
- Participation in Consult Rounds as they pertain to patients co-followed by the Heart Failure and Cardiac Transplant service.
- Participation in the Cardiomyopathy and Cardiac Transplant clinic management rounds.
- Self-paced reading of the *Active Partnership for the Health of Your Heart* booklet provided at the start of the rotation.

IV. Methods of Evaluation:
- Direct interaction with the Cardiac Surgery attending during surgical rounds.
- Direct observation of performance by the VA Cardiology faculty.
V. Bibliography:

An Active Partnership for the Health of Your Heart. American Heart Association, Dallas, TX 2002.

AHCPR Clinical Practice Guideline for Cardiac Rehabilitation. Department of Health and Human Services, Bethesda, MD 1996.