DATE: 1 July 1999

TO: CARDIOLOGY FELLOWS

SUBJECT: FELLOW RESPONSIBILITIES AT THE PALO ALTO VAMC

The following memo enumerates some of the responsibilities of the Cardiology fellows as they rotate through the Palo Alto VAMC. The rotation is somewhat unique in the Stanford Cardiology fellowship training program in that fellows will be involved in all aspects of clinical Cardiology. They will be expected to compile the sum of the clinical information from each patient, and to formulate a comprehensive plan for patient management. The rotations will be quite busy; therefore, the faculty are committed to supplying rewards in the form of teaching and experience for each service that the fellows and residents supply.

RESPONSIBILITIES: Four fellows are on rotation at the VA at all times during this academic year. These include a junior invasive fellow, a senior invasive fellow, a senior noninvasive/Consult fellow and a fellow in the Cardiology Ultrasound Laboratory. The respective duties of the fellows are outlined below.

**Junior Invasive Fellow**

A. **Clinics:** The fellow will attend Cardiology Clinic Mondays (9:00 A.M. to 12:00) and Tuesdays (1:00 to 4:00 P.M.). Although it is unnecessary to discuss every patient with an attending, the interesting patients should be presented. All patients requiring an invasive procedure must be discussed with an attending prior to being scheduled for the procedure. The fellow should expect to go over patients seen by the students on the rotation. Cardiology clinics are also held Wednesday and Thursday mornings. Although the fellow will not routinely attend these clinics, he/she may be needed occasionally.

B. **CCU Rounds:** The fellow is encouraged to attend CCU rounds Wednesday mornings from 7:30 until 8:30. The fellow must be familiar with all Cardiology patients in the IICU.

C. **Cardiology Consults:** The fellow may be asked to perform inpatient Cardiology consultations from time to time when the Consult team becomes overloaded.

D. **Treadmill Testing:** The cath fellows are responsible for supervision of exercise tests Monday PM and Thursday PM. This responsibility should be divided between the junior and senior cath fellow.

E. **Cardiac Catheterization Laboratory:**
1. Patient scheduling: Scheduling for all patients will be coordinated through the Cath Lab staff. Some patients may be scheduled by various physicians in the Section, and by the Cardiology nurses; again, however, this should be coordinated through the cath lab. They have also been instructed to schedule elective patients from outside referrals, and to obtain necessary clinical information. The fellows need to communicate with them on a daily basis, to review scheduled studies. If an inpatient or an outpatient in the clinic requires catheterization, scheduling for these patients should also be coordinated through the cath lab. Where additional clinical information is required, the fellows should communicate directly with the referring physician. The aim here is that a referring physician can call in and make a direct appointment for a procedure on his/her office without having to try to locate a physician. Discussion of the patient will occur at a later time.

Arrangements for admission or transfer should be made through the Transfer Coordinators—either Shelley Segall or Myrlyn Alvarado. They will determine bed availability, and will make all the arrangements necessary for transfer. Ms. Segall can be reached at extension 65130 or pager 11773. Ms. Alvarado is at extension 66969 or pager 11932.

2. Outpatient cath procedures: Patients who meet the appropriate criteria may be admitted to the Outpatient Surgery Services (OSS) Unit, at extension 64875. These patients arrive on the day of the procedure. Depending on the complexity of the procedure and the results, the patients may be discharged home the same day, or may be admitted to the Medical Service for extended hospitalization. If they are not admitted to Medicine, then the cath fellow will need to dictate a discharge summary. A useful mechanism for dealing with patients who travel from a distance is to make an appointment for the patient at the Hometel. This unit provides a bed only for a patient (and sometimes for the spouse as well). No meals are provided, and the patient must take his/her own medications. Reservations should be made as far in advance as possible, as the unit does fill up. The telephone extension is 61333. Patients are encouraged to check into the unit before 5 PM. Between 5 and 10 PM the AOD from the Emergency Unit will register the patient. No patients are to be entered into the Hometel after 10 PM.

3. Patient work-ups: The junior fellow will see all patients who are scheduled for cath lab procedures. Through examination of the patient and other documents, the fellow will determine the appropriateness of the procedure and will decide on the type and extent of the procedure to be performed. The fellow will also obtain informed consent for the procedure, and will write pre-catheterization orders. This data will be discussed with the senior fellow.

4. All patients evaluated for cath will be presented to the attending cardiologist before the case. The fellow should have reviewed the basic laboratory results (CBC), electrolytes, BUN, creatinine, glucose, PT, PTT, platelet count), the resting electrocardiogram, and the chest x-ray in the admission report. All other pertinent cardiologic tests including echocardiograms, treadmill tests, Holter monitors, thallium scintigrams, previous catheterization or operative reports, and radionuclide ventriculograms should be included. A recent CXR must have been reviewed prior to catheterization.
5. During the catheterization, the junior invasive fellow will perform the right and left heart catheterization. As in the past, we recognize that the learning curve differs among various fellows. As the fellow's general catheterization skills improve, he/she may have the opportunity to perform coronary angiography. Such decisions will be made at the discretion of the cath lab attending.

6. Following routine catheterizations, the cath lab personnel will be responsible for removing the vascular sheaths and for obtaining hemostasis. At times, the junior invasive fellow may need to perform this task. If sheaths are to be removed on a weekend, the fellows will be responsible for sheath removal.

7. Hemodynamics will be interpreted by the junior invasive fellow. These will be reviewed by the senior invasive fellow and the attending.

8. Catheterization reports will be completed promptly. The reports must be completed no later than the day after the procedure. In addition, letters to the referring physician will be prepared. The referring physician may include an outside physician, or a physician from the General Medical Clinic, or one of the subspecialty clinics. If no primary physician is identifiable, a "To Whom it May Concern" letter should be dictated for the Cardiology file. These letters should briefly review the clinical syndrome, the basic test results, the findings at catheterization, and explicit recommendations regarding treatment and follow-up. The catheterization reports and patient care letters are dictated. The responsibility for preparation of these documents will be shared by the junior and senior fellows. The patient care letters should be prepared only after a determination has been made regarding the recommended therapy for the patient. This is a valuable document when reviewing the procedure and the decisions re therapy when these patients surface in the clinic. Because of the difficulties of having complete hospital records available, the patient care letter, along with the catheterization report, is often the best way to assess the patient.

Dictation Instructions. Before dictating a catheterization report or a patient care letter, you will need to obtain an ID number from David Giroux in the Cath Lab. To dictate a document, dial 9-1-888-223-4184. You will be asked to enter your ID No., (9 plus last four digits of your social security number, plus a # sign) and the work type. The code for a Cardiac Catheterization Report is 38; the code for a patient care letter is 44. The codes for conducting the transcription are:

- Hold: 1
- End job: 8
- Record/pause: 2
- Mark impression/diagnosis: 9
- Short review: 3
- Move to end: 44
- Fast forward: 4
- Move to beginning: 77
- Disconnect: 5
- To end one rept and start another: 8
- Rewind: 7

For questions or problems, call extensions 65599 or 65690.

The cath report should be dictated as “Released, not verified.” One should not designate the report as a draft, as this can not be accessed through the computer. The attending cardiologist will need to review the report, and then sign online. At this time, the status will be changed to “Released, Verified.”
Although the cath report is dictated on the day of the procedure, the patient care letter is not dictated until a course of management has been determined for the patient. Thus, the letter should not be dictated until after the patient is discussed with CV surgery and the other faculty. A running status report for reports and letters should be kept in the cath lab office.

The dictated reports will be delivered to Donna and Gay in the Cardiology office area. The fellows and attendings will need to proof and sign the letters and reports, and then return them to the office area for the necessary xeroxing and distribution.

9. It is crucial that the referring physician be contacted by telephone on the day of the catheterization with the report of the findings, and a proposed plan. Additional follow-up telephone calls should be made as indicated. It is absolutely critical that this function be performed religiously, as it is necessary to insure future referrals from these physicians. When the referral is from an outside facility, it is usually best if the phone call is made by the attending. Please work hard to facilitate this.

10. All patients undergoing cardiac catheterization need to have fasting cholesterol, HDL, and triglycerides drawn the morning of the procedure.

11. All patients undergoing evaluation for valvular disease require in house dental consultation prior to discharge.
Senior Invasive Fellow
A. Clinics: The fellow will attend the Monday morning and Tuesday afternoon clinic. He/she may be called upon to assume some responsibility as a junior attending in discussing cases with the Medicine resident, or medical students.

B. Electrocardiograms and Exercise Tests: The fellow may be called upon to interpret ECG’s, especially in the absence of Dr. Froelicher. He/she will share responsibility for supervision of treadmill tests Monday and Thursday afternoons.

C. CCU Rounds: The senior fellow is encouraged to attend Wednesday AM IICU rounds, unless there is an early cath case, which will take precedence.

D. Cardiac Catheterization Laboratory:
   1. The senior invasive fellow needs to be aware of the specific details surrounding each case. The senior invasive fellow has primary responsibility for the coordination of the invasive rotation at the VA. As such, this individual must know all of the important details concerning the patients who have been seen, or for whom procedures are being considered.
   2. During the right and left heart catheterizations, the senior invasive fellow will assist the junior fellow, and will aid in the instruction of the fellow. Early in the rotation, however, the cath lab attending will primarily instruct the junior fellow, and the senior invasive fellow will be less active during the early stages of the case.
   3. As with the junior invasive fellows, it is recognized that the learning curve among individuals varies. Initially, the fellow will engage the catheters in the ostia of the coronary arteries, and will inject contrast. As the fellow's skills progress, he/she may learn to set up views, and to pan. Again, such decisions are at the discretion of the catheterization attending.
   4. The senior invasive fellow will be responsible for seeing patients who are to undergo PTCA. This will require examining the patient, obtaining consent, and writing pre-PTCA orders. The fellow will also need to be certain that an ICU bed is available for the patients post PTCA. In addition, the fellow is required to submit the patient’s name to the operating room supervisor by 8:30 on the morning prior to the PTCA. This is now done on-line. You should review the procedure for this with Evelyn Mickevicius (Surgery Administrative Assistant) at Extension 65738.

   During the procedure, the fellow will assist the primary PTCA operator(s). After the procedure, the fellow will be responsible for following the patient, and for removal of vascular sheaths and for obtaining hemostasis. The fellow will also be responsible for the preparation of the PTCA report, and for dictation of letters to referring physicians. The fellow will also make arrangements for follow-up of the patients who have undergone PTCA.

   5. The senior invasive fellow will back up the junior fellow in situations where the workload increases. For example, if the noninvasive fellow is ill, or is pulled off service, the senior fellow will assist with consultations, treadmill tests, and patient work-ups.
Senior Consult Fellow

We anticipate that the senior consult fellow will function to some degree as a junior attending at the VA. The fellow will have considerable responsibilities in house staff and student teaching and in patient care decisions. An attending will also oversee these activities, and will have ultimate responsibility.

A. CCU: The fellow will assume responsibility for being an attending in the CCU, and will attend CCU rounds Monday through Friday mornings (7:30-8:30 AM). The fellow will be responsible for daily, direct interactions with the house staff in the MSICU/IICU, and will make direct recommendations regarding patient care. The fellow will facilitate communication between the Medicine house staff and all of the Cardiology clinical services which may interact with critically ill patients in the MSICU/IICU.

B. Consultation Service: The fellow will oversee the Cardiology consultation team. This team will also be comprised of a Stanford Medicine resident, and up to six medical students. The fellow will perform much of the teaching of medical house staff and students, and will be primarily involved in patient care decisions on these patients.

C. Electrocardiograms/Treadmills/Holters: The fellow will be involved with reviewing ECG's, exercise tests, and Holters with the resident and students on the Consult team, and will arrange teaching sessions with them daily. Interesting studies will be reviewed with the faculty attending on the service.

D. Clinics: The fellow will attend the Monday morning and Tuesday afternoon Cardiology Clinics. On days where there are no students on the rotation, the fellow will attend the Thursday morning Cardiology Clinic.

E. Cardiac Transplantation: The VAPAHCS is now involved in a program of cardiac transplantation. As such, patients will be referred from the Western U.S. for evaluation and treatment. The consult fellow will be responsible for overseeing the day-to-day management of these patients. He/she will supervise the house staff team responsible for the patient, and will be intensely involved in the care of these patients. Dr. Frances Johnson is the attending responsible for this program, and the fellows should interact primarily with her.

Echo Fellow

A. Echo Laboratory: The fellow will meet with the Echo Lab staff daily for discussion of the pending cases, and prioritization of echo requests. This meeting should take place first thing in the morning, on arrival of the sonographers. The fellow will directly participate in the studies involving complicated and interesting cases, such as transesophageal echoes, or bubble/shunt studies. In the case of such a study, the fellow will arrange the logistics for performing the procedure. If a bubble/shunt study is to be performed, the fellow is required to start the IV. He/she will be expected to interpret the ultrasound studies, and will arrange to meet with the echo attending daily for the reading sessions.
B. Clinics: The Echo fellow may be called upon to provide backup for the various Cardiology clinics throughout the week. In addition, the Fellow may need to provide support to the Cardiology Consultation team.

C. Exercise Tests: The Echo fellow will be responsible for supervising treadmill tests Tuesday AM.

Conferences
A. Invasive (Cardiology/Cardiovascular Surgery) Conference: This conference will serve as both a working conference with the CV surgeons, and a teaching conference. Cases for management will be selected by the cath team for presentation. Emphasis will be placed on controversial or interesting patients. The cath fellows are expected to present interesting literature which may pertain to the cases. **The clinical information must be complete.** The fellows are expected to have present at the conference all clinical information regarding these patients, as well as copies of the ECG and hemodynamic reports. In addition, pertinent other studies such as echo's, treadmill tests, CXR's, or nuclear studies should be made available for review at the conference. The presentations should be thorough but concise.

B. ICU Conference: The Consultation fellow will be responsible for conducting the ICU conference twice a month. These are held on Thursdays at noon in the Med-Surg ICU Conference Room. The target audience is primarily housestaff and ICU fellows, and the topics should be relatively straightforward cardiovascular medicine areas (examples: diagnosis and treatment of acute MI, Thrombolysis, Pericardial effusion, etc.) Topics and times should be coordinated with Dr. Eddie Atwood.

Outside Referrals for Transfer or Admission
We currently function as a tertiary care facility for a number of other VA hospitals in the region. In particular, we deal with the VA's in Reno, Martinez, and Livermore. **For logistical reasons, direct patient transfers must be arranged by either Shelley Segall (Ext. 65130, pager 11773) or Myrlyn Alvarado (Ext. 66969, pager 11932) the Transfer Coordinators for the Medical Service.** In order to encourage future referrals, it is imperative that we act expeditiously to respond promptly and effectively to our referral physicians. Telephone calls from referring physicians should be answered immediately, and the patients should be transferred as quickly as possible. Even though some patients may be less than optimal transfers, we should cheerfully deal with these patients in order to get the more interesting referrals. Importantly, when these patients have been evaluated, a personal telephone call to the referring physician, as well as a patient care letter is required.

On Call Responsibilities
As in the past, fellows who are on call for the University Hospital are also on call for the VAMC. If the on-call schedule is changed for any reason, the VA operator as well as the Stanford page operator must be notified. An attending on-call schedule for the VA is published each rotation. This schedule is separate from the cath-angio attending schedule at the University Hospital. The fellows should feel free to contact the attending regarding clinical decisions. Should an angiogram or a complicated procedure such as a pericardiocentesis be required, the
attending must be notified. We require that all patients presenting with acute myocardial infarction at night or on the weekend be evaluated by a fellow.

If contacted about a patient who needs a Cardiology consultation at night or on the weekend, the VA patients deserve and require the same consideration and effort as patients at the University Hospital. If one of the on call fellows happens to be busy at the University Hospital, then the senior on call fellow will be contacted. He/she is then required deal with any problems at the VA. The Consult fellow will sign out to the senior on call fellow for the weekend. This procedure will occur Friday afternoon or evening. Although the primary responsibility for signing out is with the VA Consult fellow, the senior on call fellow should also be considered obligated to make contact regarding potential patient care problems before the weekend. The senior on call fellow is required to make IICU rounds Saturday and Sunday mornings. On Monday morning, the on call fellow should speak again with the Consult fellow to convey information regarding patients seen over the weekend.
The VA rotation is assumed to be a **full time** activity for all the Cardiology fellows rotating through the Section. While each of us must occasionally run errands or go to the University Hospital, fellows are expected to be at the VA during most usual working hours. If there does not seem to be enough clinical activity to keep you busy, please ask the attendings.

The rotations at the VA have been both valuable and popular. The faculty at the VAMC are dedicated to providing excellent clinical care to patients, and to providing an outstanding learning opportunity for the fellows. It is hoped that the rotation will continue to improve through these efforts.