

## **Supervision of Fellows SAUSHEC Cardiology Fellowship**

### **SUMMARY:**

**WITH CONCURRENCE OF STAFF, ACTIVITIES/PROCEDURES THAT FELLOWS MAY PERFORM OR SUPERVISE HOUSESTAFF:**

- Place central lines.
- Place PA catheters.
- Place arterial lines.
- Perform thoracentesis and paracentesis.
- Place transvenous temporary pacing wires.
- Perform cardioversion (with anesthesia support).
- Admit patients.
- Supervise standard, nuclear, stress echocardiogram, and pharmacologic (adenosine and dobutamine) exercise tests.
- Provide initial (preliminary) interpretation of electrocardiograms or exercise tests. Once certified by passing the in-service ECG exam, second and third year fellows may independently interpret electrocardiograms and ECG stress tests.
- Perform admission history and physicals, and co-sign housestaff admission history and physicals.
- Provide inpatient and outpatient care at the level of a general internist.
- Perform emergent tracheal intubation (ACLS).

### **OUTPATIENT CLINIC:**

- All patient visits will be countersigned by the clinic attending with direct supervision always immediately available.
- For First year fellows at SAMMC, all new patients will be interviewed and examined by the clinic attending (direct supervision). At WHASC, new patients with complicated medical histories or who are being consented for a procedure, will be interviewed and examined by the clinic attending (direct supervision). Follow up patients or uncomplicated patients such as “basic trainees” with atypical chest pain, will be reviewed with staff.
- For second and third year fellows, all new patients will be reviewed with staff. All charts of follow-up patients will be reviewed and countersigned by staff. Selected patients (complicated patients, patients with a significant change in treatment course) will be reviewed with staff at time of presentation.
- For all year levels, all patients to be referred for an invasive diagnostic or therapeutic procedure will be discussed in full with staff prior to referral.
- Patients referred for an invasive procedure will be interviewed and examined by the procedure staff prior to the procedure.
- Patients referred for preoperative cardiac evaluation will also be presented to staff.
- Senior level Fellows may provide supervision for residents and first year Fellows in the Outpatient Clinic.

**PACEMAKER/ICD CLINICS:**

- Second and third year fellows demonstrating advanced programming skills will be allowed to program implantable devices without staff in direct attendance, print documentation of the programming, and review the printout with the attending staff.

**ECHOCARDIOGRAPHY:**

- After initial echocardiography training (one month echo rotation) and demonstrated competence, fellows are certified to perform transthoracic echocardiograms.
- After initial echocardiography training, fellows may provide preliminary readings of the echocardiogram. However, all echocardiograms will be reviewed by staff, and all echocardiogram reports will be co-signed.
- The senior Fellow (second or third year) is the primary contact and operator for all transesophageal echo studies. Staff will be in attendance for these procedures.
- (An exception is transesophageal echo studies performed in the operating room with the guidance of anesthesia staff. However, any interpretation of OR studies must be confirmed by staff prior to any action taken by the surgery team based on the results of the TEE).
- All echocardiograms will be reviewed by staff, and all echocardiogram reports will be co-signed.

**PROCEDURES:**

- All catheterization laboratory procedures will be under direct supervision of the staff. With approval of the attending, initial arterial or venous access may be obtained by the fellow. Senior Fellows demonstrating competence may participate as an assistant to junior Fellows during cardiac catheterization.
- Direct supervision by staff for all patients receiving conscious sedation.
- Pre procedure, counseling notes, informed consent, and pre procedure re-assessment notes may be written by either staff or the fellow.
- Preliminary reports may be written by staff or the fellow.
- After review with staff, the fellow will prepare the formal procedure report. This will be corrected, co-signed or electronically verified by the staff as the official procedural report.

**CARDIOLOGY CALL:**

- Call duties are performed by 1st, 2nd, and 3rd year fellows under the supervision of a staff cardiologist.
- The call Fellow and their staff are responsible for in-patient or emergency room consultations requested during off-duty hours. Fellows are expected to come in for any critically ill patient or any admission that may require emergent intervention.
- Over the three-year period, Fellows are given increasing conditional independence in call duties. However, staff must be consulted immediately for any patient who acutely becomes critically ill, requires intubation, sustains a cardiac arrest, requires an invasive cath lab, ICU or transesophageal procedure (all cath lab, TEE, and some ICU procedures require staff in attendance), requires DNR orders, or expires during the call period.

- Fellows must contact staff regarding in-patient admissions within 12 hours for routine admissions, and as soon as feasible (ie within one hour) for critically ill patients admitted to the CCU.

## **JOB DESCRIPTIONS**

**First year fellow:** A first year fellow (Junior fellow) is a fellow in their first year of cardiovascular disease fellowship training. First-year fellows participate in patient care at the San Antonio Military Medical Center and Wilford Hall Ambulatory Surgical Center cardiac care units, clinics, ancillary testing and inpatient consultation services. Additionally, they participate in patient care at the cardiac catheterization laboratory. In the clinic, every new patient is seen first by the fellow, then in conjunction with a cardiology faculty member. The fellow is responsible for documenting his participation in the medical record, with a full clinic note. In the CCU, the fellow sees each patient, who is also seen in all cases within 24 hours by an attending physician. The fellow is responsible for making initial recommendations on new admissions and coordinating care on follow-up inpatients on the cardiology service, and for documenting his participation promptly and appropriately in the medical record. The fellow is responsible for teaching internal medicine trainees and medical students cardiology pertinent to the patient situations which arise in the course of care. The fellows are responsible for realizing when there is a significant question relating to patient care to which they are uncertain, and for seeking answers from the literature and from the attending cardiologist. On the inpatient consultation service each consultative request is seen by an attending cardiologist. The fellow is responsible for making initial recommendations and documenting the cardiologic opinion promptly and appropriately in the medical record. The fellow is responsible for making follow-up consultative rounds independently and reporting significant changes or problems or developments to the attending cardiologist.

**Second year fellow:** A second year fellow (Junior fellow) is a fellow in their second year of cardiovascular disease fellowship training. Second-year fellows are assigned to participate in any of the San Antonio Military Medical Center, Wilford Hall Ambulatory Surgical Center, Audie Murphy VA Hospital and Keesler Medical Center services in cardiology. In the second year, the same rules of supervision apply to CCU, clinic, and inpatient consultation services, but frequency of direct supervision of the attending diminishes as the fellow demonstrates procedural and clinical competency and is therefore granted more conditional independence.

**Third year fellow:** A third year fellow (Senior fellow) is a fellow in their third and final year of cardiovascular disease fellowship training. Third-year fellows are assigned to participate in any of the San Antonio Military Medical Center, Wilford Hall Ambulatory Surgical Center, Audie Murphy VA Hospital, Methodist Transplant Hospital and William Beaumont Medical Center services in cardiology. Supervision for the third-year fellows in noninvasive testing is the same as second year, except that it is expected that the fellow be more experienced and that the questions he asks will reflect more complete understanding of the noninvasive disciplines and be of a more complex nature. For the more complex noninvasive tests, direct supervision by faculty is still required for each

procedure, and the faculty member reviews the graphic record in each case, either during or after the procedure. However, direct faculty involvement diminishes, with less faculty intervention during the course of the procedure and more mere observation for quality and safety assurance. It is expected that the third year fellow functions that the level of a staff cardiologist, creating and forming acceptable medical plans and taking on more responsibility.

## **SUPERVISION OF CARDIOLOGY FELLOWS**

**INTRODUCTION:** In the United States, cardiovascular diseases comprise the leading causes of both hospital admissions and mortality. Accordingly, the purpose of the San Antonio Uniformed Services Health Education Consortium (SAUSHEC) Cardiovascular Disease Fellowship Training Program (the Program) is to prepare the graduate internist to excel as a consultant in cardiovascular disease. As the Program's graduates will all serve as active duty cardiologists, the Program places special emphasis on treating cardiovascular disease in the military population.

The increasing volume of information to be acquired and the complexity and acuity of the patients with cardiovascular illness has necessitated an increase in the training requirements for physicians who wish to become practitioners of cardiology. Trainees will receive an extensive experience in the catheterization laboratory, echocardiography laboratory, coronary care unit, treadmill lab, nuclear medicine, electrophysiology, pediatric cardiology, cardiac surgery, and in-patient cardiovascular consultation. As the Fellow's training progresses, the Fellow will be given graded responsibility for the care of the patient. At the conclusion of training, the Fellow will have meet requirements for admission to the examination for the Subspecialty Board on Cardiovascular Diseases of the American Board of Internal Medicine (ABIM).

The oversight of the Program is accomplished by the Steering Committee. Standing members of this committee include the Program Director, the Associate Program Director, and the Service Chiefs (or Assistant Chiefs) of SAMMC and WHASC. Additional members of this committee include one staff member at large (alternates each year between the SAMMC and WHASC staffs), and two Fellows (one Army, one Air Force). Each staff member has one vote, and each Fellow has one-half vote. Meetings are held monthly to evaluate the program, to review the progress of the Fellows, and to provide strategic planning for the program.

Cardiology Fellows are all board eligible or board certified in Internal Medicine by the American Board of Internal Medicine. Accordingly, Fellows are expected to be responsible for in-patient and out-patient care at the level of an internist. As patients are referred to the Cardiology Service for subspecialty evaluation or care, this aspect of patient care rendered by Fellows must receive close supervision by staff cardiologists.

The supervising physician is defined as that staff cardiologist who has immediate oversight responsibility of all aspect of patient care rendered by the Fellow.

All aspects of patient care are ultimately the responsibility of the supervising physician. Supervising physicians have the right to decline Fellow participation in the care of their patients without penalty, and when allowing care of their patients by Fellows do not relinquish their rights or responsibilities to: examine and interview; admit or discharge their patients; write orders, progress notes; and discharge summaries; obtain consultations; or

to correct medical record entries by the Fellow, deemed to be erroneous or misleading by crossing through the erroneous statement and initialing the change.

When a Fellow is involved in the care of a patient it is the Fellow's responsibility to communicate effectively with their supervising physician regarding the findings of his or her evaluation, physical examination, interpretation of diagnostic tests, and intended interventions.

## CARDIOLOGY OUTPATIENT AND CONTINUITY CLINICS

### Outpatient Clinic Rotation:

The outpatient clinic rotation is conducted during the first and second years of Fellowship. Fellows will perform a comprehensive evaluation of patients referred for cardiac catheterization to include a comprehensive history and physical, review EKGs and CXR, perform (or review) all functional assessments, and to perform an echocardiogram. Depending on the complexity of the patient, staff will confirm the salient features of the history and physical obtained by the Fellow. Both direct and indirect (immediately available direct) supervision are utilized with each patient reviewed with the attending prior to disposition. These studies are reviewed in depth with the attending staff/supervisor. All completed Fellows charts will be reviewed and countersigned by supervisor/staff.

### Continuity Clinic:

Fellows are assigned a weekly, half, or full-day outpatient clinic in which they are the primary Cardiologists for their patients. Fellows evaluate between one and three new patients and up to six follow-up patients per clinic session. A staff cardiologist is available as a clinic preceptor and Fellows are required to present all new patients and encouraged to present selected follow-up patients to the preceptor for discussion and formulation of diagnostic and therapeutic plans. For Fellows, all new patients will be presented to staff at the time of the visit. Staff will confirm the salient features of the history and physical obtained by the Fellow as needed. Routine, uncomplicated patients, such as basic trainees with atypical chest pain, can be presented at the end of the clinic session. Any patient to be referred for an invasive diagnostic or therapeutic procedure (for example, cardiac catheterization, percutaneous intervention, device implantation, transesophageal echocardiography, or electrophysiologic study) will be discussed in full with staff prior to referral. Patients referred for preoperative cardiac evaluation will also be presented to staff.

Fellows and staff will provide appropriate documentation of staff involvement. All completed Fellows charts will be reviewed and countersigned by the supervisor/staff. The countersignature demonstrates the supervisor/staff has accepted responsibility for the cardiology care provided by the Fellow, and that the supervisor/staff has had the opportunity for input into, or to alter, the patient care plan. Both direct and indirect (immediately available direct) supervision are utilized.

Progression to senior level status will depend upon continued demonstration that the Fellow is providing appropriate care. This will be accomplished by direct observation by the attending staff, by Fellow chart review, and by formal rotation evaluations attesting that the Fellow has met the education objectives of the outpatient clinic experience

throughout the first year in the outpatient clinic. Senior level Fellows may provide supervision for residents and first year Fellows in the Outpatient Clinic.

#### Pacemaker/ICD Clinics:

Fellows will participate in Pacemaker Clinic directly supervised by a cardiologist with privileges in pacemaker implantation and pacemaker follow up. Fellows demonstrating advanced programming skills will be allowed to program implantable devices without staff in direct attendance, print documentation of the programming, and review the printout with the attending staff. Both direct and indirect (immediately available direct) supervision are utilized.

#### NON-INVASIVE CARDIAC STUDIES:

##### Echocardiography:

Fellows will master the understanding and performance of transthoracic, transesophageal and stress echocardiography in a system of graduated responsibility as they rotate through the Echocardiography laboratory in each of the three years of Fellowship. Fellows work side-by-side with staff cardiologists who over-read each echocardiography study and directly supervise the Fellow in the performance of stress echocardiography and transesophageal echocardiography. Senior Fellows are encouraged to pre-read digital echo studies to encourage independent reading skills.

The senior Fellow (second or third year) is the primary contact and operator for all transesophageal echo studies. The first year Fellow may assist in these studies, but does not act as a primary operator.

All echocardiograms will be reviewed by staff, and all echocardiogram reports will be co-signed. Both direct and indirect (immediately available direct) supervision are utilized for transthoracic echocardiograms. Transesophageal echocardiograms are directly supervised.

Fellows will be evaluated using the "Evaluation of Cardiovascular Disease Trainees" form. In addition, a rotation specific critique will be completed on Supplemental Fellow Evaluation Forms. Specific recommendations for improvement are also made during biannual evaluation sessions with the Program Director and Associate Program Director. Fellows will be deemed competent based on 1) achieving the sufficient procedural numbers (as per the American College of Cardiology and the American Society of Echocardiography) for transthoracic, transesophageal, and stress echocardiography, and 2) successful evaluations by staff.

#### PROCEDURES:

Fellows performing procedures that they are not certified to perform unsupervised should be supervised by the physical presence of the supervising physician. In general, all first year Fellows will be certified at the start of the academic year to perform central and arterial line placement, pulmonary artery catheter placement, and the performance of exercise and pharmacologic stress testing with oversight supervision available. After initial echocardiography training, fellows are certified to perform transthoracic

echocardiograms. After passing an in-service ECG test given in the second year, Fellows are certified to read ECGs and stress electrocardiography without overreading of staff. With demonstration of competence, Fellows can also place temporary pacing wires and perform electrical cardioversion (with anesthesia support) with indirect supervision with direct supervision available. Invasive cath lab and echo lab procedures that are tracked to demonstrate competence are listed in attachment A. Direct supervision by staff is utilized with any procedure in the invasive cath lab.

## INPATIENT CARE:

### Coronary Care Unit (CCU):

Fellows will master the care of acute cardiovascular emergencies/urgencies in a system of graduated responsibility as they rotate through the CCU in each of the three years of Fellowship. Fellows work side-by-side with staff cardiologists and medical housestaff in the care of critically ill patients. Teaching is accomplished both on a practical level as management decisions are made on individual patients, and on a more didactic level during morning rounds. CCU rounds are held 7 days a week with a staff cardiologist in attendance. New patients are presented by the housestaff and extensively discussed including physical examination, differential diagnosis, and options for diagnostic testing. The Fellow will perform a comprehensive cardiovascular history and physical and document this by a Cardiology Fellow Note. The Fellow's findings, diagnosis and plans will be discussed in full with the attending. The attending will confirm the essential elements of the history and physical exam, and will co-sign the Fellow Note or indicate his or her concurrence with the Fellow's assessment and plans as part of the Attending Note. Both the Fellow and attending note will be accomplished within 24 hours of the patient's admission. The Fellow or the attending will co-sign the intern or residents History and Physical and Admission note. Attending staff will write a weekly note for patients in an acute care setting, or as warranted by the patient's condition. Attending staff will write a note at least twice a week for patients in an intensive care setting, or as warranted by the patient's condition.

The junior Fellow (first or second year) will manage all cardiac patients hospitalized in the MICCU, CCU, and step down units (or equivalents). The junior Fellow is directly responsible to the staff-attending physicians on the cardiology wards. Responsibilities include conducting daily CCU rounds with the attending, residents and medical students. Successful completion of the junior Fellow rotation will be documented by staff at end of the month evaluations.

As the senior Fellow on the CCU rotation, the Fellow will act as a ward team leader, similar to an attending in responsibility and function, but still being overseen by a staff cardiologist. The senior Fellow will discuss all patients and therapeutic plans in detail with the staff. The staff will confirm the essential history and exam findings and document this by way of the Attending Note. The senior Fellow may assist the cath Fellow on Cardiology Service cases (if approved by the attending cardiologist based on the senior Fellow demonstrating competence in the cath lab).

During the CCU rotation, the "Evaluation of Cardiovascular Disease Trainees" form and Supplemental Fellow Evaluation Form is completed for each Fellow. Specific

recommendations for improvement are also made during biannual evaluation sessions with the Program Director, Associate Program Director and Steering Committee?.

The CCU rotation involves direct supervision during morning rounds and indirect supervision with immediately available direct supervision during the day. During on-call hours the staff are available by pager systems and cell phones and will come in to assist the fellow if needed (indirect supervision with available direct supervision).

#### Cardiac Catheterization Laboratory:

Fellows will master the understanding and performance of diagnostic cardiac catheterization in a system of graduated responsibility as they rotate through the Cardiac Catheterization Laboratory in each of the three Fellowship years. Staff and Fellows work together to perform each case, with increasing responsibilities granted to the Fellows as their technical and cognitive abilities progress. The primary teaching responsibility of this rotation lies with the staff cardiologists who rotate into the laboratory on a monthly basis. In all cath lab cases, the supervising physician will be in attendance in the catheterization laboratory.

On patients referred for catheterization, the Fellow will perform a directed history and physical examination and review all pertinent ancillary testing, and document these findings on Cardiac Catheterization Note. The Fellow will counsel the patient regarding informed consent and document this as well. Prior to the case, the staff will confirm the essential elements of the history, physical, ancillary tests, and document his or her agreement with the Fellow's findings, assessment, and plans for the procedure. At completion of the study, the staff will write a brief procedure note. After the final procedure of the day, staff and Fellows meet to analyze the cineangiograms and pressure tracings for each case and the findings are integrated into a final diagnosis. The Fellow will dictate the formal procedure report. This will be corrected, co-signed or electronically verified by the staff as the official procedural report. Direct supervision is utilized on all procedures within the invasive catheterization lab.

See attachment A for the procedures tracked for each fellow in the cardiac catheterization laboratory.

During this rotation, the "Evaluation of Cardiovascular Disease Trainees" form and Supplemental Fellow Evaluation Form is completed for each Fellow. Specific recommendations for improvement are also made during biannual evaluation sessions with the Program Director, Associate Program Director and the Steering Committee. To progress to the senior level status, the Fellow will have had to successfully perform over 200 catheterization procedures. Upon graduation, to be recommended for privileging to independently perform adult catheterizations, the Fellow will have had to successfully perform or assist with 300 catheterizations. In each case, the Fellow will also have to have had passing evaluations in all catheterization rotations.

Senior Fellows may participate as an assistant to junior Fellows during cardiac catheterization. The senior Fellow must demonstrate proficiency in the performance of cardiac catheterization. At the first opportunity during their third year, the senior Fellow will be directly observed performing cardiac catheterization as the primary operator. If in the judgement of the staff cardiologists, the third year Fellow is found competent; the Fellow may be allowed to perform as the second operator for a junior Fellow. However, if

the third year Fellow requires further caseload, the Fellow will continue to perform catheterizations as the primary operator.

#### Cardiology, Congestive Heart Failure, and Arrhythmia Service Consultations:

Fellows will master the management of common cardiovascular problems encountered in a consultative setting, such as perioperative management of patients with heart disease undergoing cardiac surgery, management of atrial fibrillation, management of congestive heart failure, evaluation of syncope, and management of postoperative arrhythmias in the Cardiothoracic surgery patients, etc. Fellows will work alongside a staff cardiologist on a team that may include a medical resident and/or medical student. Each new consultation will be discussed with the staff member and appropriate diagnostic and therapeutic plans developed. The Fellow on the Consultation Service is responsible for obtaining a history and performing a complete cardiovascular physical examination on each patient. The Fellow reviews pertinent laboratory data and electrocardiograms and plans further evaluation, which may include echocardiograms, stress tests, and cardiac catheterization. The Fellow then integrates all the data and the case is reviewed in detail with the staff cardiologist on the service. The Fellow will write a comprehensive consultation note, and document staff (by name) concurrence with the consultation. The consulting staff is responsible for all the recommendations made by the consultant team. The consulting staff will countersign the note or write a note concurring with the Fellow's note. Both direct supervision and indirect supervision with immediately available direct supervision are utilized.

During these rotations, the "Evaluation of Cardiovascular Disease Trainees" form and Supplemental Fellow Evaluation Form (Attachment 2) is completed for each Fellow. Specific recommendations for improvement are also made during biannual evaluation sessions with the Program Director, Associate Program Director and Steering Committee.

#### RESPONSIBILITIES BY YEAR LEVEL:

Progression to the next year status will depend upon continued demonstration that the Fellow is providing appropriate care. This will be accomplished by direct observation by the attending staff, by Fellow chart review, by formal rotation evaluations attesting that the Fellow has met the education and procedural objectives of the rotation, and by semiannual review of clinical competency performed by the Fellowship Steering Committee. Competency in procedures will be based on successful completion of the minimum number established by the Steering Committee (see attachment), and by staff documentation of competency for that procedure.

**First Year:** The first 4 months of the 1st year will be less intense and is meant to be a time for the trainees to gain an initial experience in echocardiography and cardiac catheterization prior to assuming responsibilities in the CCU. The rest of the year is meant to provide a foundation of understanding in the diagnosis and treatment of cardiovascular disease and skills in the performance of the various cardiovascular procedures. Fellows will be responsible for providing patient care and making management decisions, under the supervision of a staff cardiologist. For all new patient encounters (CCU, Clinic, or consults), first year Fellows are required to discuss the patient

in detail with the staff cardiologist. All EKGs, noninvasive studies, and echocardiograms are over-read by staff physicians.

**Second Year:** The 1st and 2nd years will be very similar in terms of the level of responsibility granted to the trainees. In the outpatient clinic, 2nd year Fellows may briefly review uncomplicated new patients at the end of the clinic session. After successful completion of the EKG in-service exam, 2nd year Fellows will be granted conditional independence to read EKGs. During echocardiography rotations, 2nd year Fellows are the primary operator and interpreter of transesophageal echocardiograms.

**Third Year:** By the beginning of the 3rd year, the Fellow should have attained a level of clinical competence to permit more independent work. The trainee will be functioning close to the level of consultant in cardiovascular disease, with less direct supervision. In particular, each Fellow will have 2 months of experience in the role of acting staff attending on the cardiology wards. During these months the Fellow will still be supervised by a credentialed faculty member but they will be expected to function in every way as the attending on the service. The cases will then be discussed with and reviewed by a staff cardiologist prior to implementing major management decisions. The Fellow's other responsibilities will expand to include a greater role in teaching, both in a formal sense with more presentations of didactic lectures and informally acting as teachers and mentors to the junior Fellows.

In each year level, it is the responsibility of the trainee to keep accurate procedure logs of all procedures performed and interpreted during all rotations. An annual summary of the total procedures will be annotated in the training file at the end of each year of training. Achieving a minimum level of competence will be determined based on rotation performance and accurate documentation of procedures.

#### FELLOW CALL RESPONSIBILITIES:

Call duties are performed by 1st, 2nd, and 3rd year Fellows with a staff cardiologist. In-house call is not required as SAMMC has in-house call teams staffed by an internal medicine resident and intern at all times. The call Fellow and their staff are responsible for in-patient or emergency room consultations during off-duty hours. Fellows are expected to come in for any critically ill patient or any admission that may require emergent intervention. Over the three-year period, Fellows are given increasing conditional independence in call duties.

Staff must be consulted immediately for any patient who acutely becomes critically ill, requires intubation, sustains a cardiac arrest, requires an invasive cath lab, ICU or transesophageal procedure (all cath lab, TEE, and some ICU procedures require direct supervision by staff), requires DNR orders, or expires during the call period. Fellows must contact staff regarding in-patient admissions within 12 hours for routine admissions, and as soon as feasible (ie within one hour) for critically ill patients admitted to the CCU.

Call duties have been assigned as follows: Call is performed by a designated fellow (Night float system) at two week intervals with one day off per week. The remaining call is performed by the CCU fellow. In the event that a Fellow is approaching the RRC

mandated work hour restrictions, the alternate Fellow will perform call. This format allows for each Fellow to have on average at least one day off in seven, and at least four days off per 28-day cycle. On average, first year Fellows will perform seven to nine weeks of call, and second year Fellows will perform six to seven weeks of call. Third year fellows will perform four to five weeks of call. The total work week of the CCU and on-call Fellows will be monitored carefully to insure compliance with an 80 hour or less work week, no more than 30 consecutive hours and 10 hours between shifts.

As noted above, on-call supervision by cardiology staff is indirect although with direct supervision available if needed. On-call staff are available through the paging system or cell phone.

#### HAND-OVER PROCES:

The rotation schedule and clinical assignments of the Cardiovascular Disease Fellowship are designed to minimize the number of transitions in patient care both at the staff and fellow level. Inpatient clinical rotations rotate in a way that mirrors the Internal Medicine Residency program to minimize the disruptions between fellows and rotating residents. Inpatient call schedules are available through the hospital intranet as well as through single central phone number which delineate all members of the health care team including the attending physicians and fellows currently responsible for each patient's care.

The hand over process occurs twice per day between the day fellow and the on-call night float fellow. An accurate patient list which describes patient location, name, diagnosis, daily changes, treatment plan and emergency contingencies is given to the team currently treating the patients. This transition is accompanied by verbal communication between the two parties. These transitions are supervised by the attending physicians who will also be involved with the patient care to ensure competence in communicating with team members in the hand-over process.

#### Verification of Procedural Competency

The Fellowship will follow SAUSHEC's Supervision Policy regarding support staff verification of fellow's procedural competence. The on-call staff attending is available 24/7 to answer support staff's questions regarding fellow's competency to perform procedures without direct supervision.