

Cardiac Care Unit Curriculum

Transitional Year Program
Madigan Healthcare System

Description of Rotation or Educational Experience

Cardiovascular diseases represent a great proportion of the diseases of adults in the United States and the leading cause of death in both men and women in the United States. Care of these diseases in their acute presentations is a necessary skill for physicians to learn.

One four week cardiac care unit rotation is required for transitional year residents. During this rotation, residents are responsible for the care of their assigned cardiac patients in the inpatient setting. They will be a member of a cardiology inpatient team that provides specialty inpatient care and cardiology consults to other specialties.

Transitional year residents will receive a scheduled day off at least one day per week of the rotation. They will be expected to care for their assigned patients under the supervision of a more senior resident and staff physician. They are expected to gather essential data on assigned patients, develop a management plan, and present this plan to the senior resident and staff physician. Residents will attend all planned education events during the rotation.

Rotation Goals

- During the Cardiac Care Unit rotation, residents are expected to be able to demonstrate and apply an evidence-based medicine approach to patients presenting with cardiovascular disease that reflects an integration of basic science and clinical knowledge. Residents are also expected to improve their communication skills with patients, patients' families, and colleagues.
- Residents will gain an understanding of common inpatient cardiovascular diseases and their management.
- Residents are expected to gain an understanding of which cardiovascular patients require specialty consultation.

Patient Care

Goal

Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents are expected to:

Competencies

- Gather accurate and essential information in the performance of history and physical examinations based on chief complaints.
- Make informed decisions about diagnostic and therapeutic interventions based on patient information, preferences, up-to-date scientific evidence, and clinical judgment.
- Use informed decision making to develop and carry out patient management plans.

Objectives

- The resident will demonstrate the ability to consistently gather essential, accurate, and relevant physical and personal patient information as it relates to a patient's cardiac condition, as measured by a staff chart review and end-of-rotation global competency evaluation.
- The resident will develop a prioritized differential diagnoses for common complaints and presentations, and develop a therapeutic plan based on findings and guidelines, as measured by a staff chart review, end-of-rotation global competency evaluation, and an end of year Comprehensive Assessment of a Simulated Patient Encounter (CASPE).

- The resident will appropriately interpret laboratory, radiologic and other diagnostic test results for their patients, as measured by a staff chart review and end-of-rotation global competency evaluation.

Medical Knowledge

Goal

Residents must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to inpatient cardiology.

Residents are expected to:

Competencies

- Demonstrate an investigatory and analytic thinking approach to clinical situations.
- Know and apply the clinical science pertinent to inpatient medicine.

Objectives

- The resident will demonstrate sufficient investigatory skills necessary to develop appropriate assessments and plans for common inpatient cardiovascular diagnoses, complaints, and findings, as measured by an end-of-rotation global competency evaluation.

Practice- Based Learning and Improvement

Goal

Residents must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life long learning. Residents are expected to develop skills and habits to be able to:

Competencies

- Identify strengths, deficiencies, and limits in one's knowledge and expertise.
- Locate, appraise and assimilate evidence from scientific studies related to their patients' health problems.

Objectives

- The resident will respond welcomingly and productively to feedback from all members of the health care team (faculty, peers, students, nurses, patients, and other health workers), as measured by an end-of-rotation global competency evaluation.
- The resident will acquire, appraise, and apply evidence from scientific studies related to their patient's health problems, as measured by a longitudinal Evidence-Based Practice Curriculum.

Systems Based Practice

Goal

Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care. Residents are expected to:

Competencies

- Understand interaction of their practices with the large health care system.
- Advocate for quality patient care and optimal patient care systems.

Objectives

- The resident will incorporate a team approach into their care of patients by actively participating in multidisciplinary management with ancillary services, coordinating care with other health care professionals as needed, and striving to provide leadership in management of complex care plans, as measured by an end-of-rotation global competency evaluation and a multi-rater (360 degree) evaluation.

- The resident will identify, reflect on, and learn from critical incidents such as near misses and preventable medical errors, as measured by presenting and participating in resident My Mistake and My Reflection Portfolio projects during the transitional year.

Professionalism

Goal

Residents must demonstrate a commitment to carrying out professional responsibilities, sensitivity to a diverse patient population, and an adherence to ethical principles. Residents are expected to demonstrate:

Competencies

- Compassion, integrity, and respect for others.
- Accountability to patients, society, and the profession.

Objectives

- The resident will respond promptly to a requesting physician's need for consultation and perform consultations in a collegial, professional, and non-confrontational manner, as measured by a multi-rater (360 degree) evaluation.
- The resident will document clinical information truthfully and demonstrate empathy and compassion to all patients, as measured by an end-of-rotation global competency evaluation and multi-rater (360 degree) evaluation.
- The resident will demonstrate personal accountability to their medical education and profession by attending all required conferences, lectures, and discussions, as measured by a lecture attendance log and end-of-rotation global competency evaluation.

Interpersonal and Communication Skills

Goal

Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and teaming with patients, their families, and professional associates. Residents are expected to:

Competencies

- Use effective listening skills, elicit information using effective questioning, and provide information using effective verbal and writing skills.
- Maintain comprehensive, timely, and legible medical records.

Objectives

- The resident will demonstrate effective communication with residents, staff, and consulting physicians using appropriate medical terminology, communicating effectively during patient sign-out, and using "if-then" statements for critical tasks to be completed, as measured by a multi-rater (360 degree) evaluation and end-of-rotation global competency evaluation.
- The resident will provide accurate, complete, and timely written communication in the medical record that is congruent with medical standards, as measured by a multi-rater (360 degree) evaluation and end-of-rotation global competency evaluation.

Teaching Methods

1. Supervised Direct Patient Care
 - a. Each patient encounter with all of the patient-specific research and teaching is viewed as the most important learning opportunity for the resident.
2. Small Group Discussions
 - a. Teaching Rounds: The attending physician will lead patient related teaching rounds for at least 4.5 hours per week. These sessions will incorporate bedside teaching and can be combined with patient management rounds at the attending's discretion. These typically occur 5 days each week but can be limited to 3 days each week at the

attending's discretion. Teaching rounds may include "field trips" to the echocardiography lab and the cath lab.

- b. Cardiology/Cardiothoracic Surgery Combined Conference (aka Cath Conference): This one hour conference occurs weekly. All patients being considered for surgical revascularization or other surgical intervention are discussed in this session.
3. Didactic Sessions
 - a. A cardiology attending will lead didactic and hands-on sessions on the following topics at a minimum:
 1. ECG interpretation
 2. Acute Coronary Syndromes
 3. Post-procedure puncture site care
 4. Cardiac Devices (Pacemakers/Defibrillators)
 5. Chest pain management/Risk stratification
 6. Cardiac stress testing (Indications/Contraindications/Risks)

Assessment Method (residents)

- TY residents will be evaluated on the six ACGME core competencies using these methods:
 1. Daily: All residents will be evaluated daily on their presentation of patients and management plans by residents and/or staff. Residents should ask the attending physician for direct feedback on their performance each day. Any deficiencies will be discussed with the resident early in the rotation to allow for corrections and improvement in performance
 2. Medical Charting: A staff member will evaluate the accuracy, clarity, and timely completion of medical records completed by transitional year interns. Any deficiencies will be discussed with the resident early in the rotation to allow for corrections and improvement in performance.
 3. Mid-Month Evaluation: On the first day of the rotation, residents will be assigned a mid-rotation evaluation date and time scheduled for two weeks after the start of the rotation with the designated staff. The staff will compile the feedback from the staff, residents, and support staff that worked with the resident and provide a summative performance evaluation verbally and in writing using the myevaluations system. During this meeting, the staff will provide a summary of the resident's strengths and areas needing improvement.
 4. 360 Degree Evaluations: Residents are required to hand out at least ten 360-degree evaluation cards each rotation. These may be given to patients, nurses, nursing assistants, social workers, administrative staff, fellow interns, residents, or staff. These cards assess resident professionalism and interpersonal & communication skills from multiple perspectives. Any deficiencies will be discussed with the resident and trended throughout the academic year. A pattern of poor evaluations will result in counseling by the program director and consideration of remedial or corrective action.
 5. Evidence-Based Practice (EBP) Curriculum: Residents will demonstrate the five steps of EBP by actively participating in a longitudinal EBP curriculum during the PGY-1 year. Components from this curriculum will be assigned by the program director throughout the year and may occur during this rotation. The full curriculum is available on the TY SharePoint site for review.
 6. My Reflection Portfolio Projects: Residents will reflect upon a specific event or learning point that was unique to the rotation or healthcare system. These projects will be assigned each quarter by the program director. The full curriculum is available on the TY SharePoint site for review.
 7. My Mistake Portfolio Projects: Residents will both present a medical mistake they made during the transitional year, and actively participate in discussions regarding other resident mistakes. These presentations occur during the last six months of the academic year. These projects will be done during noon TY resident meetings with their program director. The full curriculum is available on the TY SharePoint site for review.
 8. Comprehensive Assessment of a Simulated Patient Encounter (CASPE): Residents will complete a CASPE in the spring of each academic year to assess their competence in many of the learning objectives for this rotation.
 9. Procedure log: Residents will document ALL procedures in the myevaluations system and assign their faculty to evaluate their performance.

10. End of Rotation Global Competency Evaluation: Residents will receive an electronic evaluation of their performance through myevaluations at the end of each rotation. Faculty evaluate residents on the six ACGME core competencies. The minimum threshold for performance on this evaluation tool and corrective actions is outlined in the Transitional Year Program Handbook.
11. Lecture Attendance: TY residents are required to attend ALL planned educational events (i.e. lectures, conferences, journal clubs, etc...) attended by categorical interns and residents. Residents will track their lecture attendance, patient load, and top diagnoses each rotation using the attached sheet. At the end of each rotation, the resident and rotation attending must sign the bottom of the lecture attendance sheet, and the resident will place the signed copy in his or her portfolio binder. Residents will then transcribe their lectures into the "TY Lecture Attendance Sheet" they receive via myevaluations at the end of each rotation. Residents must document attendance at ALL lectures, didactics, morning reports, grand rounds, and conferences.

Assessment Method (Program Evaluation)

- Anonymous Resident Feedback: Residents will anonymously evaluate both the **rotation** and at least one **faculty** member using myevaluations after each rotation. Additional faculty evaluations can be requested by the resident if they worked with other faculty. Residents will also anonymously evaluate the TY program annually. Evaluations are used to improve the rotation and program.
- Attainment of Competence: The success of the rotation as an educational experience will also be judged on the resident's attainment of competence. Changes in the rotation will result from either new needs of the learners (an ongoing needs assessment by the program) or failure of residents to attain competence of the rotation specific objectives.

Level of Supervision

- TY residents will have direct in-house supervision by either an attending physician or an upper level resident at all times during the rotation.
- TY residents must discuss the following with the attending physician:
 - Patients who will be sent home without ever meeting the attending physician (these are consultations for admission that do not result in admission)
 - Consultation patients prior to completing documentation in the record or communicating with the requesting physician (excluding emergencies or consultations that result in transfer of the patients to this service)
- Residents will complete all inpatient medical records before leaving the hospital each day. The resident must identify the attending of record for the patient as well as the level of involvement of the attending at the time of admission and on daily progress notes (i.e. Patient discussed with attending Dr. __, or Patient discussed with and seen by attending Dr. __)
- All history and physicals must be signed by an attending physician within 24 hours.
- Residents must be directly supervised for all medical procedures by either attending or a more senior resident who is signed off for that procedure.

Educational Resources

- Madigan medical library: Online references are available <https://portal.wrmc.amedd.army.mil/mamc/erd/MEDLIB/> using resident laptops or any hospital computer.
- AMEDD virtual library: Online references are available at home using an AKO username and password at <https://medlinet.amedd.army.mil>.
- The MAMC Cardiology Curriculum Handbook (updated annually and provided at orientation)
- The MAMC ECG Workbook (updated annually and provided at orientation)
- The ACC/AHA Guidelines for Atrial Fibrillation, Congestive Heart Failure, and Acute Coronary Syndrome

Resident Documentation Responsibilities

- Orientation Checklist: Meet with the designated faculty on the first day of the rotation to review the goals and objectives and receive a rotation orientation. Complete the attached orientation checklist and return it to your program coordinator within three working days.
- Lecture Attendance Sheet: Complete the attached attendance sheet and transcribe into myevaluations using the guidance above.
- Monthly Procedure Log: Seek out procedure experience, log procedures electronically using the myevaluations site, and designate the supervising staff physician who will electronically evaluate your performance.
- Rotation and Faculty Evaluation by the Resident: Complete both the anonymous rotation and faculty evaluation forms that will be sent electronically through myevaluations.
- Duty Hour Sheet: Complete the myevaluations duty hour questionnaire and DMHRSi worksheet as outlined in the program handbook.

Rotation Schedule

- The exact schedule will be given during rotation orientation. The general duty week (excluding weekends) is described below:

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
0600-0730: Pre-round	0600-0730: Pre-round	0600-0730: Pre-round	0600-0730: Pre-round	0600-0730: Pre-round
0730-0900: Education rounds	0730-0900: Education rounds	0730-0900: Education rounds	0730-0800: Resident Rounds	0730-0900: Education rounds
0900-1200: Patient care	0900-1500: Patient care	0900-1500: Patient care	0800-0900: Cath conference	0900-1500: Patient care
1200-1300: Lecture			0900-1000: Education rounds	
1300-1500: Patient care			1000-1500 Patient care	
1500-1630: Check out rounds	1500-1630: Check out rounds	1500-1630: Check out rounds	1500-1630: Check out rounds	1500-1630: Check out rounds

Work Hours and Rotation Experience

- Total cardiology experience:
 - **220 – 240 hours per rotation**
- Total didactic and educational events: **25 – 35 hours per rotation**
- Average work hours per week: **70 – 75 hours per week**

Orientation Checklist
Cardiac Care Unit Rotation
Madigan Transitional Year Program

STAFF SECTION:

At the beginning of the rotation, the transitional year resident met with the designated attending to review the goals and objectives and received an orientation to the rotation. The checked items below were discussed.

- The resident was oriented to the location and protocols of the cath lab, cardiology clinic, wards and units where patients can be admitted during the rotation.
- The resident was introduced to residents and staff physicians who he or she will be working with during the rotation. Supervisory expectations were discussed, to include cardiac procedures/stress testing.
- The resident was oriented to the general layout of the hospital, wards, units, location of nursing support, ancillary support staff, staff physician offices, and location of necessary supplies and emergency equipment.
- The resident was shown the location for all planned educational events and rounds that will take place during the rotation.
- The goals and objectives of the cardiac care unit curriculum were discussed with the resident and all questions were answered about the rotation.
- I have chosen the days below that I plan to meet with the resident for mid-rotation feedback in two weeks, and end of the rotation feedback at the conclusion of the rotation. At that time, I will give the resident feedback and highlight positive areas and areas needing improvement. I will also complete the myevaluations electronic resident evaluation form.

- Mid-rotation feedback: Date- _____ Time- _____

- End of rotation feedback: Date- _____ Time- _____

Printed name of staff physician Signature of staff physician Date

RESIDENT SECTION:

I have received my orientation to the rotation and curriculum and know my date and time to meet with the designated staff for my mid-rotation and end of rotation feedback. I will return this completed form signed by the staff to the Transitional Year Program Coordinator to be reviewed by my Transitional Year Program Director NLT 3 working days after the start of the rotation. If I did not receive an orientation or scheduled meeting times due to fault that was not my own, I will report this to my program director within the 3 days.

Printed name of resident Signature of resident Date

