

RESIDENT SUPERVISION POLICY

Department of Medicine

I. Purpose

The purpose of this policy is to establish standards for independent health care practitioners engaged in the supervision and teaching of Department of Medicine residents and to establish guidelines for resident responsibilities for Department of Medicine residents.

II. Scope

This policy applies to all independent health care practitioners engaged in the supervision and teaching of residents enrolled in the internal medicine, preliminary medicine, medicine-pediatrics, internal medicine-emergency medicine and all subspecialty fellows post-graduate medical education program at University of Maryland Medical Center (UMMC). This policy, unless otherwise stated, is applicable to resident supervision at all training sites.

III. Responsibility

It is the responsibility of graduate medical education program directors and attending physicians who supervise and teach residents at UMMC and other training sites as well as residents to comply with this policy.

IV. Definitions

Attending Physician - refers to a member of the medical staff with School of Medicine or School of Dentistry faculty appointments.

Direct supervision -refers to supervision provided by an attending physician or more advanced resident who is physically present and available to the resident being supervised.

Program Director- refers to a member of the active Medical Staff responsible for overseeing the program and its compliance with ACGME or equivalent institutional and program requirements.

Resident- refers to an unlicensed or licensed intern, resident, or fellow enrolled in a University of Maryland Medical System/ School of Medicine post-graduate education program, including subspecialty programs, and which are accredited by the Accreditation Council for Graduate Medical Education (ACGME) or an equivalent accreditation process approved by the University of Maryland Medical System/School of Medicine.

V. General Guidelines

1. The Program Director, with the assistance of attending physicians, assures that residents are appropriately supervised. Residents are permitted to take on progressively greater responsibility throughout the course of a residency, consistent with individual growth in clinical experience, judgment, knowledge, and technical skill. Residents are supervised by attending physicians so that the residents assume progressively increasing responsibility according to their level of education, ability, and experience.
2. Resident supervision will be monitored and ultimately enforced by the governing board of the University of Maryland Medical Center through the quality process, peer review, credentialing, and privileging, or the resident disciplinary process.

VI. General Program Responsibilities

1. The general responsibilities for each PGY level, including supervisory responsibilities, medical/surgical procedures or orders that require direct supervision or countersignature, in

emergency and non-emergency situations, are contained in Appendix A.

2. The Program Director, with the assistance of attending physicians, will assess resident's competence as the basis for determining the minimum level of supervision required for different activities. The objective criteria used to evaluate the resident's progressive ability, and which will be consistently applied, is contained in evaluation forms; program director review of resident competency / feedback form; procedure logs; Competency-based curriculum and objectives. This assessment includes the evaluation of the resident's technical, patient management, and communication skills and capacity to perform as required. The Program Director communicates the assessment of the resident's competence to the resident and supervising attending physician at least annually and when significant progress or deficiencies are noted.
3. On-call schedules for attending physicians shall provide for supervision that is readily available to a resident on duty 24 hours per day, 7 days per week. Under circumstances, as determined by the program, in which urgent judgments by highly experienced physicians are typically required, attending physicians must be immediately available on site at all times. Under other circumstances, attending physicians can provide adequate supervision off site as long as their physical presence within a reasonable time can be assured in case of need. The Program Director assures that a schedule with the name and contact number of the responsible attending physician is available at all times to program residents.
4. Standard indications and principles to guide residents in determining need for communication with the attending physician in other circumstances are defined in Appendix A.
5. All patients seen by a resident on an outpatient basis must be seen by, discussed with, or reviewed by the responsible attending physician.
6. The general responsibilities of attending physicians for supervision of residents are contained in Section VII of this policy.
7. The program defines how to monitor and improve compliance with its supervision policies and competency assessments, using such methods as chart audits, quality audits, procedure logs, resident feedback, attending physician feedback, risk management reports and quality improvement reports

VII. General Attending Physician Responsibilities

These responsibilities are detailed in Appendix A and the Resident Policy Manual (Appendix E – selected pages).

1. An attending physician is responsible for and actively involved in the care provided to each patient, both inpatient and outpatient.
2. An attending physician directs the care of each patient and provides the appropriate level of supervision for a resident based on the nature of the patient's condition, the likelihood of major changes in the management plan, the complexity of care, and level of education, ability, experience, and judgment of the resident being supervised.
3. The attending physician, in consultation with the program director, accords a resident progressive responsibility for the care of the patient based on the resident's clinical experience, judgment, knowledge, technical skill, and capacity to function.
4. The attending physician advises the program director if he/she believes a change in the level of the resident's responsibility and supervision should be considered. The overriding consideration must be the safe and effective care of the patient that is the personal responsibility of the attending physician.
5. The attending physician fosters an environment that encourages questions and requests

for support or supervision from the resident, and encourages the resident to call or inform the attending physician of significant or serious patient conditions or significant changes in patient condition.

VIII. **Resident Responsibilities and Requirements**

These responsibilities are detailed in Appendix A and the Resident Policy Manual.

1. The resident must be aware of his/her level of training, his/her specific clinical experience, judgment, knowledge, and technical skill, and any associated limitations. The resident must not independently perform procedures or treatments, or management plans that he/she is unauthorized to perform or lacks the skill and training to perform.
2. The resident is responsible for communicating to the attending physician any significant issues regarding patient care.

DEFINITIONS of terms used in Appendices

A resident is defined at the following level of training based on:

<u>PGY-1</u>	first 12 months of training
<u>PGY-2</u>	13 th through the 24 th month of training
<u>PGY-3</u>	25 th through 36 th month of training
<u>PGY-4</u>	37 th through 48 th month of training
<u>PGY-5</u>	49 th through 60 th month of training
<u>Fellow</u>	A subspecialty resident who is focused within a given subspecialty area within Internal Medicine and has prior formal training in general medicine.

Non-compliance with responsibilities or performance problems are generally discovered and addressed in one of several ways:

1. Isolated problems with specific individuals may be addressed by the attending physician or resident noting the problem. The problem and corrective actions are documented by the attending or resident noting the problem and are submitted to the program director.
2. Each resident has a faculty mentor who meets with his/her advisee a minimum of twice a year to review evaluations and provide career counseling. The mentor may be invoked to provide counseling to his/her mentee.
3. The program director reviews all resident evaluations. A committee comprised of the program director/associate director, key faculty and chief resident meets semi-annually to discuss the progress of each resident. Any identified problems are discussed and remediation plans are implemented.
4. Tracking forms that evaluate resident performance, are supplied by the American Board of Internal Medicine These forms are completed and sent back to the Board at the end of each academic year.
5. Annual and summary evaluations are completed on each resident in accordance with UMMC requirements.

In order to be promoted to senior resident status by the end of the PGY-1 year, the resident must have demonstrated the ability to independently make appropriate management decisions. Written evaluations must reflect satisfactory performance in patient care and in professionalism.

APPENDIX A

Policy for the Supervision of Residents Department of Medicine

1. **Purpose:**

The purpose of this policy is to define the supervision of resident physicians and fellows provided by attending physicians in the Department of Medicine.

2. **Scope:**

This policy applies to all patient care provided by fellows and resident physicians.

3. **Responsibility:**

It is the responsibility of every attending physician, fellow and resident physician in the Department of Medicine to adhere to this policy.

4. **Procedure:**

4.1 Diagnostic and therapeutic procedures are supervised in the following manner in each fellowship. More details can be found in the individual supervision policies for each fellowship program.

4.1.1 **Cardiology:** Cardiology fellows beginning in their first fellowship year are permitted to perform the following procedures without direct supervision: placement of jugular and subclavian central venous lines, Swan-Ganz balloon catheters, radial arterial lines, and temporary pacemaker wires. Fellows are also permitted to perform treadmill, bicycle and pharmacologic stress test, echocardiograms, and fluoroscopic visualization of the heart without direct supervision. Fellows are also permitted to initiate thrombolytic therapy in a setting of acute myocardial infarction without attending permission. Fellows may assist staff attendings, under direct supervision, in the following procedures: right and left heart catheterization, coronary angioplasty and supported angioplasty, mitral and aortic balloon valvuloplasty. Training in all of these procedures is begun during the first year. Fellows are instructed in these procedures during their first few months of fellowship, and performance is documented by written evaluation every six to twelve months. Training in electrophysiology including permanent pacemaker and defibrillator implants, electrophysiology studies and catheter ablations begin in the second year.

4.1.2 **Electrophysiology:** Electrophysiology fellows at the beginning of their fellowship are permitted to perform the following procedures without direct supervision: placement of jugular and subclavian central venous lines, Swan-Ganz balloon catheters, radial arterial lines, and temporary pacemaker wires.. Fellows are also permitted to perform treadmill, bicycle and pharmacologic stress test, echocardiograms, and fluoroscopic visualization of the heart without direct supervision. Fellows are also permitted to initiate thrombolytic therapy in a setting of acute myocardial infarction without attending permission. Once the fellow obtains competency, they are allowed to interrogate and reprogram pacemakers and ICDs, as long as any reprogramming is reviewed by an attending. Fellows assist attendings under direct supervision in the implantation of pacemakers, ICDs and loop recorders, performance of electrophysiologic studies, and ablation procedures. Training in these procedures occurs throughout the fellowship training period.

- 4.1.3 Endocrinology: As part of the formal training in endocrinology under the supervision of attending physicians, fellows learn fine needle aspirations (FNA) of the thyroid gland. Medicine residents do not participate in these procedures. Exophthalmometry and orchidometry may be performed without attending supervision
- 4.1.4 Gastroenterology: All endoscopic procedures performed by fellows must be supervised by attendings in the Division of Gastroenterology. This includes upper endoscopy (EGD), colonoscopy, sigmoidoscopy, enteroscopy, esophageal dilation, and liver biopsy. Procedures completed by the fellow are documented by signed reports by the fellow and attending. Fellows are responsible for reviewing all pathology reports for patients on whom they have performed a procedure. Documentation of all procedures performed by the fellows is maintained in an endoscopy electronic database system. Each fellow maintains a personal log of procedures performed, findings and pathology results, which will be reviewed periodically by the program director. This procedure log will be saved in each fellow's file.
- 4.1.5 Hematology-Oncology: Fellows in the Division of Hematology-Oncology perform bone marrow aspirations and biopsies. Aspirates are performed via both the sternal and posterior iliac crest route while biopsies are limited to the iliac crest. Other procedures done by the fellows include thoracentesis with and without chemotherapeutic agents, paracentesis with or without chemotherapy, intravenous chemotherapy administration, lumbar puncture with or without administration of chemotherapy, chemotherapy - placement of central access line, lymph node aspirations and skin punch biopsies. The vast majority of these procedures are carried out by fellows already board eligible and/or certified in internal medicine and occasionally by residents under direct supervision by fellows and attendings. Documentation of training and competency in bone marrow aspiration and biopsy is done in the fellow's folder. Each fellow is supervised in the administration of IV chemotherapy by a trained chemotherapy nurse during the first half of the PGY-4 year and then is certified as competent to perform IV chemotherapy unsupervised. In the case of chemotherapy administration into the spinal fluid, pleural or peritoneal, all such procedures are directly supervised by the attending until the attending is sure that the fellow is confident and competent in the technique. All the procedures listed above are carried out in direct presence of the attending when done by the residents rotating through the inpatient service of the Cancer Center.
- 4.1.6 Geriatrics: Geriatrics fellows do not perform procedures other than those then those normally credentialed through the residency program, e.g., thoracentesis, paracentesis, pelvic examination.
- 4.1.7 Infectious Diseases: ID fellows do not perform procedures other than those then those normally credentialed through the residency program, e.g., thoracentesis, paracentesis, pelvic examination.
- 4.1.8 Interventional cardiology: Interventional cardiology fellows perform or assist in all procedures done in the cardiac catheterization laboratory. This includes diagnostic left and right heart catheterization, endomyocardial biopsy, therapeutic coronary interventions (including balloon angioplasty, intracoronary stent implant, rotational and directional atherectomy and thrombectomy), valvuloplasties, PFO closures insertion and operation of temporary transvenous pacemakers, therapeutic pericardiocentesis, intra-aortic balloon counterpulsation insertion, as well as diagnostic and therapeutic interventions in the peripheral vasculature. Every procedure is directly supervised by a faculty member who is experienced and credentialed in the procedure. The fellow's role in the procedure is determined by the supervising faculty member based on the fellow's experience and skill. Fellows maintain a detailed log of all procedures performed. A

competency based evaluation of each fellow with specific attention to procedural competence is completed quarterly by faculty and reviewed by the program director. Procedure logs are reviewed by the program director.

- 4.1.9 Nephrology: Fellows in nephrology are required, as a part of their certification, to perform the following procedures: urinalysis; percutaneous biopsy of native and transplanted kidneys; placement of temporary vascular access for hemodialysis; peritoneal dialysis; acute and chronic hemodialysis; and peritoneal dialysis. After observation and demonstration of clinical competence (see attached competency checklist), fellows may perform urinalysis independently. After observation and demonstration of clinical competence, fellows may perform the biopsy and vascular access procedures only in the presence of an attending physician. Biopsies and vascular access placement require the written consent of the patient. After observation and demonstration of competency in prescribing hemodialysis, peritoneal dialysis, and continuous renal replacement therapy, fellows may prescribe these therapies after discussing the orders with the attending physician. The procedures are documented by the attending, and fellows keep their electronic log with the patient ID, date, indication, result and any complication. Subsequent laboratory or pathology reports are sent directly to the fellow and attending for follow-up. On a monthly basis, the fellow's performance is documented by written evaluation and reviewed by the fellow. On a quarterly basis, the program director meets with the fellow to discuss his/her progress, including their procedural competence.
- 4.1.10 Pulmonary Medicine: The procedures performed by the fellows include fiber optic bronchoscopy, endotracheal intubation, thoracentesis and closed needle pleural biopsy, chest tube insertion, Swan-Ganz catheter placement, central and femoral line placement and arterial line insertion. All of the above listed procedures, with the exception of central and femoral line placement, thoracentesis and arterial line placement, require fellowship level of training. The latter three procedures require a resident level of training after proper instruction. A log is kept in which each procedure performed is entered and the names of the physicians performing the procedure is recorded. On a monthly basis, an evaluation of each fellow's performance is completed by the attending supervising that rotation and includes an evaluation of the fellow's procedural competence. The faculty review each fellow's clinical and procedural performance at the monthly divisional faculty meeting. The program directors reviews these results with the individual fellows as needed but at least semiannually. Records of the evaluations are maintained in the fellow's file. All fellowship level procedures listed above require the attending's presence with the exception of arterial line placement. If the attending is available, he/she supervises this procedure as well but it is not necessary.
- 4.1.11 Rheumatology: Procedures performed by the Division of Rheumatology include arthrocentesis, joint injection and injection of soft tissues. Both residents and fellows may perform these procedures after proper supervision and instruction by an attending physician. All procedures performed by residents are supervised by an attending with the following exception: aspiration of knees and first MTP joints may be performed in an unsupervised fashion by a resident after that resident has been instructed a minimum of three times and has documented clinical competence in the performance of those procedures. For fellows, the attending physician may not be present during the performance of any of the these procedures once a trainee has been instructed in the performance of that procedure, has performed the procedure a minimum of three times, and has documented clinical competence in the performance of the procedure. The Division of Rheumatology assumes responsibility for documenting the fellow's ability to perform these procedures. Documentation of the resident's competency in performing these procedures is coordinated with the Clinical Competency Committee of the Department of Medicine and the attending physician.

4.2 Inpatient Care: The Department of Medicine has 6 non-intensive care services: Med 1, 2, 3, 4 (general medicine) and 2 Med-ID services - and 3 intensive and subacute services: MICU, CCS and PCS at UMMC. At the VA, there are 4 general medicine services and 2 ICU services (MICU and CCU/telemetry). At Mercy, there are 4 general medicine services. Residents assigned to any of the ICU services are supervised directly by a fellow and attending in that subspecialty, e.g., cardiology or pulmonary-critical care. Residents assigned to any of the general medicine services are directly supervised by a general medicine or subspecialty attending. On all these services, an attending is assigned to that service at all times and is responsible for supervising all patient care and teaching residents and students. Attending rounds are held 7 days a week from 9 to 11 am on all services, with rounds in the intensive care units usually lasting 3 hours. All attendings are available by beeper or phone 24/7 to discuss patient care and management with the residents and fellows. In addition, a fellow is assigned to the cardiac and pulmonary critical care units and is available to supervise and teach residents and students. See policies for specific rotations for further details.

It is the responsibility of the attending physician to write an admission note and a daily progress note on each patient admitted to their service. All attendings participate in the Department's compliance program to ensure that supervision is appropriate and documented in the chart.

Residents are required to attain certification in procedures during inpatient and outpatient rotations. During the Acute Medicine lecture series residents take a pre-test on three key procedures (thorocentesis, lumbar puncture, central line placement) and then view a videotape reviewing the indications, methods and potential complications of doing the procedure. All interns participate in a cadaver lab during orientation week to learn and practice central line placement. Central line procedures are also reviewed during the Emergency Room rotation where residents have the opportunity to participate in additional cadaver labs. All the procedures noted below are completed during inpatient rotations over the three years of training. Procedures such as pelvic examinations are taught during the Women's Health components of the Ambulatory Block Rotations and in the resident's continuity clinic. Arthrocentesis is taught during the Rheumatology components of the Ambulatory Block Rotations and the Rheumatology elective. To be able to perform the procedure independently, residents are required to be supervised by a certified resident, fellow or attending for the specified number of procedures noted below and have their competency with that procedure noted in their Procedure Log Book. These procedures and the number required for performing the procedure independently include: BLS/ACLS, abdominal paracentesis (3), arterial line placement (3), arterial puncture for ABG (3), arthrocentesis (knee) (3), central line placement – femoral, IJ or subclavian (3 each), lumbar puncture (3), NG tube placement (3), thoracentesis (3), pelvic examination (3), venous blood drawing (3) and venous peripheral line insertion (3). In addition, residents must know the indications and procedure for I&D of an abscess and for PA catheters. For certification, documentation of competency is required for ACLS, drawing arterial and venous blood, PAP smear and placing a peripheral venous catheter. (See the Certification of Procedures Policy for more details).

4.3 Outpatient Care: Ambulatory Care for the Department of Medicine is located at University Health Center, the VA Primary Care Clinic, Mercy Family Health and the Waxter Center. Each practice is supervised by two general internal medicine attendings who are responsible for supervising patient care with the residents, and reviewing and signing all charts. Interns must present all cases throughout the year. Upper level residents must present all new patients and those requiring a preoperative assessment of risk. On-site supervision for fellows and residents is provided by faculty for all subspecialty clinics. See the Continuity Clinic Policy for more details.