Roles, Responsibilities and Patient Care Activities of Residents

Cardiothoracic Surgery
Integrate Thoracic Residency

University of Washington
Harborview Medical Center
Seattle Children’s Hospital
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Definitions

Resident:
A physician who is engaged in a graduate training program in medicine (which includes all specialties, e.g., internal medicine, surgery, psychiatry, radiology, nuclear medicine, etc.), and who participates in patient care under the direction of attending physicians (or licensed independent practitioners) as approved by each review committee. Note: The term “resident” includes all residents and fellows including individuals in their first year of training (PGY1), often referred to as “interns,” and individuals in approved subspecialty graduate medical education programs who historically have also been referred to as “fellows.”

PGY-1 (Junior Residents)
PGY-1 residents are primarily responsible for the care of patients under the guidance and supervision of the attending physician and more senior residents. They should generally be the point of first contact when questions or concerns arise about the care of their patients. However, when questions or concerns persist, supervising residents and/or the attending physician should be contacted in a timely fashion. PGY-1 residents are initially directly supervised and when merited will progress to being indirectly supervised with direct supervision immediately available (see definitions above) by an attending or senior resident when appropriate.

PGY-2,3 (Intermediate Residents)
Intermediate residents may be directly or indirectly supervised by an attending physician or senior resident but will provide all services under supervision. They may supervise PGY-1 residents and/or medical students; however, the attending physician is ultimately responsible for the care of the patient.

PGY-4,5,6 (Senior Residents)
Senior residents may be directly or indirectly supervised. They may provide direct patient care, supervisory care or consultative services, with progressive graded responsibilities as merited. They must provide all services ultimately under the supervision of an attending physician. Senior residents should serve in a supervisory role of medical students, junior and intermediate residents in recognition of their progress towards independence, as appropriate to the needs of each patient and the skills of the senior resident; however, the attending physician is ultimately responsible for the care of the patient.

As part of their training program, residents are given graded and progressive responsibility according to the individual resident’s clinical experience, judgment, knowledge, and technical skill. Each resident must know the limits of his/her scope of authority and the circumstances under which he/she is permitted to act with
conditional independence. Residents are responsible for asking for help from the supervising physician (or other appropriate licensed practitioner) for the service they are rotating on when they are uncertain of diagnosis, how to perform a diagnostic or therapeutic procedure, or how to implement an appropriate plan of care.

**Attending of Record (Attending):** An identifiable, appropriately-credentialed and privileged attending physician *(or licensed independent practitioner as approved by each Review Committee)* who is ultimately responsible for the management of the individual patient and for the supervision of residents involved in the care of the patient. The attending delegates portions of care to residents based on the needs of the patient and the skills of the residents.

**Supervision**
To ensure oversight of resident supervision and graded authority and responsibility, the following levels of supervision are recognized:

1. **Direct Supervision:**

   The supervising physician is physically present with the resident and patient. Direct supervision (physically present) may be provided by individuals who have been credentialed by the program to do a particular procedure or manage a particular clinical scenario and include more senior residents (PGY-2 residents and above who have met the competency requirements for the particular task at hand), fellows, and attending surgeons. Each resident is educated to know the limits of their scope of authority, and the circumstances under which they are permitted to act with conditional independence. Attending physicians with whom our department has a clearly defined relationship include the context of supervising faculty on a given rotation, such as: Anesthesiologist Intensivists in the ICU rotations, Harborview Emergency Department Physicians, and Hospitalists. They are appropriately credentialed and may directly supervise all residents (PGY 1-5). When needed (as outlined below) or requested by the resident, the supervising physician must be physically present at the start of non-emergent tasks. For emergency situations, direct supervision should be available within approximately 15-30 minutes.

2. **Indirect Supervision:**

   a) *With direct supervision immediately available* – the supervising physician is physically within the hospital or other site of patient care and is immediately available to provide Direct Supervision. During routine daily working hours this supervision is generally available by a surgical faculty member of the group immediately responsible for that patient.

   - Off-Hours: All PGY-1’s will have Indirect Supervision with direct supervision immediately available provided by a more senior resident and the formal Surgical team hierarchy of graduated responsibility that is in place. If, in a very rare circumstance, the usual chain is not available, there is an in-house hospital-appointed faculty Hospitalist that is immediately available for back-up help and direct supervision at the bedside. In all cases, the senior surgical resident and surgical attending should be called immediately at the same time that a Hospitalist is
Cardiothoracic Surgery Supervision Policy: Thoracic Integrated Residency

called because this would represent a significant deviation from standard surgical communication.

b) with direct supervision available – the supervising physician is not physically present within the hospital or other site of patient care, but is immediately available by means of telephonic and/or electronic modalities and is available to come to the site of care in order to provide Direct Supervision.

- All resident levels (including PGY-1’s) will have Indirect Supervision with direct supervision available by a surgical faculty member of the group immediately responsible for that patient at all times.

3. Oversight – the supervising physician is available to provide review of procedures/encounters with feedback provided after care is delivered.

Clinical Responsibilities and Patient Care Activities

The clinical responsibilities for each resident are based on PGY-level, patient safety, resident education, severity and complexity of patient illness/condition and available support services. The specific role of each resident varies with their clinical rotation, experience, duration of clinical training, the patient’s illness and the clinical demands placed on the team. The following is a guide to the specific patient care responsibilities by year of clinical training. Residents must comply with the supervision standards of the service on which they are rotating unless otherwise specified by their program director.

Please note some residents may be engaged in one or more years of research training during their residency. Only years of clinical training are considered below.

Attending of Record

In the clinical learning environment, each patient must have an identifiable, appropriately-credentialed and privileged primary attending physician who is ultimately responsible for that patient’s care. The attending physician is responsible for assuring the quality of care provided and for addressing any problems that occur in the care of patients and thus must be available to provide direct supervision when appropriate for optimal care of the patient and/or as indicated by individual program policy. The availability of the attending to the resident is expected to be greater with less experienced residents and with increased acuity of the patient’s illness. The attending must notify all residents on his or her team of when he or she should be called regarding a patient’s status. In addition to situations the individual attending would like to be notified of, the attending should include in his or her notification to residents all situations that require attending notification per program or hospital policy. The primary attending physician may at times delegate supervisory responsibility to a consulting attending physician if a procedure is recommended by that consultant. For example, if an orthopedic surgeon is asked to consult on a patient on the medicine service and decides the patient needs a joint aspiration, the medicine attending may delegate supervisory responsibility to that orthopedic surgeon to supervise the medicine resident who may perform the joint aspiration. This information should be available to residents, faculty members, and patients.
The attending may specifically delegate portions of care to residents based on the needs of the patient and
the skills of the residents and in accordance with hospital and/or departmental policies. The attending may
also delegate partial responsibility for supervision of junior residents to senior residents assigned to the
service, but the attending must assure the competence of the senior resident before supervisory
responsibility is delegated. Over time, the senior resident is expected to assume an increasingly larger role
in patient care decision making. The attending remains responsible for assuring that appropriate
supervision is occurring and is ultimately responsible for the patient’s care. Residents and attendings should
inform patients of their respective roles in each patient’s care.

The attending and supervisory resident are expected to monitor competence of more junior residents
through direct observation, formal ward rounds and review of the medical records of patients under their
care.

Faculty supervision assignments should be of sufficient duration to assess the knowledge and skills of each
resident and delegate to him/her the appropriate level of patient care authority and responsibility.

A fellow may not supervise Chief Residents.

Supervision of invasive procedures

In a training program, as in any clinical practice, it is incumbent upon the physician to be aware of his/her
own limitations in managing a given patient and to consult a physician with more expertise when necessary.
When a resident requires supervision, this may be provided by a qualified member of the medical staff or by
a resident who is authorized to perform the procedure independently. In all cases, the attending physician is
ultimately responsible for the provision of care by residents. When there is any doubt about the need for
supervision, the attending should be contacted.

Physician tasks for which PGY-1 residents may be supervised indirectly, with direct supervision available
(supervising physician not physically present but available by phone/text/email discussion).

A. Patient Management Competencies
   1. Evaluation and management of a patient admitted to hospital, including initial history
      and physical examination, formulation of a plan of therapy, and necessary orders for
      therapy and tests
   2. Pre-operative evaluation and management, including history and physical examination,
      formulation of a plan of therapy, and specification of necessary tests
   3. Evaluation and management of post-operative patients, including the conduct of
      monitoring, and orders for medications, testing, and other treatments
   4. Transfer of patients between hospital units or hospitals
   5. Discharge of patients from the hospital
   6. Interpretation of laboratory results

B. Procedural Competencies
   1. Performance of basic venous access procedures, including establishing intravenous
      access
   2. Placement and removal of nasogastric tubes and Foley catheters
   3. Arterial puncture for blood gases

Tasks for which PGY-1 residents should have direct supervision until basic competency is demonstrated
(Direct supervision (physically present) may be provided by individuals who have been credentialed by the
Cardiothoracic Surgery Supervision Policy: Thoracic Integrated Residency

program and include PGY-2 residents and above who have met the competency requirements for the particular task at hand, fellows, and attendings.) PGY-1's must maintain records of such demonstrations of competence.

A. Patient Management Competencies
   1. Initial evaluation and management of patients in the urgent or emergent situation, including urgent consultations, trauma, and emergency department consultations (ATLS required).
   2. Evaluation and management of critically-ill patients, either immediately post-operatively or in the intensive care unit, including the conduct of monitoring, and orders for medications, testing, and other treatments.
   3. Management of patients in cardiac or respiratory arrest (ACLS required)
   4. Evaluation and management of post-operative complications, including hypotension, hypertension, oliguria, anuria, cardiac arrhythmias, hypoxemia, change in respiratory rate, change in neurologic status, and compartment syndromes.

B. Procedural Competencies
   1. Advanced vascular access procedures, including central venous catheterization and temporary dialysis access (Demonstration of 3 successful CVC placements under direct supervision is required for basic competency sign-off).
   2. Arterial cannulation.
   3. Repair of surgical incisions of the skin and soft tissues.
   4. Repair of skin and soft tissue lacerations.
   5. Excision of lesions of the skin and subcutaneous tissues.
   6. Tube thoracostomy.
   7. Paracentesis.
   8. Endotracheal intubation.
   10. Transvenous pacemaker placement.
   11. Transcutaneous or open aortic balloon pump placement.
   12. Fiberoptic bronchoscopy.

C. Procedures Direct Supervision Is Always Required For
   1. Epicardial pacemaker placement.
   2. Surgical procedures performed in the operating room.
   3. All other invasive procedures not listed above.

D. Conscious Sedation
   • Direct supervision is required for the first three month of residency training with the ability to provide sedation independently after the resident has taken a sedation course approved by the medical center.

Once basic competency has been demonstrated, residents of any level may be supervised indirectly, with direct supervision available (supervising physician not physically present but available by phone/text/email discussion).

Emergency Procedures
It is recognized that in the provision of medical care, unanticipated and life-threatening events may occur. The resident may attempt any of the procedures normally requiring supervision in a case where death or irreversible loss of function in a patient is imminent, and an appropriate supervisory physician is not immediately available, and to wait for the availability of an appropriate supervisory physician would likely result in death or significant harm. The assistance of more qualified individuals should be requested as soon.
as practically possible. The appropriate supervising practitioner must be contacted and apprised of the situation as soon as possible.

**Supervision of Consults**
Residents performing consultations will communicate the name of their supervising attending to the services requesting consultation. Surgical consult patients are otherwise treated like on-service patients in terms of resident supervision and attending communication.

**Supervision of Hand-Offs**
Details are outlined in the Department of Surgery Hand-Off Policy.

**Circumstances in which Supervising Practitioner MUST Be Contacted**

The program has set the following guidelines about when to bump things up to the next level and call a more senior resident (or attending):

- Any change in patient status
- To relay patient updates during a shift (e.g. test results)
- To confirm patient management decisions (e.g. “This is what I did - just want you to know”)
- When you know you need help
- When you think you might need help or think you might need to let someone know: “If you wonder whether you should call the answer is always ‘yes’”.

The program has also set the 'UW Attending Call Trigger' guidelines for circumstances and events in which residents must communicate with appropriate supervising faculty members. If the faculty member does not respond in a timely manner, the covering faculty on-call should be notified. The call triggers were developed by faculty consensus and are reviewed on a regular basis with both residents and faculty.

**Call your Attending if:**

- Any change in patient status
- Admission or Discharge AMA
- Pt transferred to ICU or Telemetry
- Significant neuro changes (cva, seizures)
- Intubation or institution of NIPV
- New vital sign instability or unstable arrhythmia
- Limb or life threatening event (i.e. loss of pulses, cardiac arrest, death)
- Chest tube output >250cc/hr
- Unplanned loss of a drain
- Device dysfunction (i.e. VAD, ECMO)
- Immunosuppression related issue
- Wound dehiscence/evisceration
- Need for blood transfusion
- Complex decision making requiring initiation of a therapy or procedure for Dx or Tx (e.g. IR, CT scan, abx, new hemodialysis, bronchoscopy)
- Medication/treatment error requiring intervention
- If nurse or other physician requests attending notification
Cardiothoracic Surgery Supervision Policy: Thoracic Integrated Residency

- If a Direct Supervision person is called for any reason

All triggers should be documented with an event note

**Resident Competence & Delegated Authority**

The training program uses a multifaceted assessment process to determine a fellow's progressive involvement and independence in providing patient care. Residents are observed directly by the attending staff throughout clinical training. Formal assessments are generally obtained from supervising physicians, residents and students on a monthly basis. Fellows are evaluated on their medical knowledge, technical skills, professional attitudes, behavior, and overall ability to manage the care of a patient. In addition, fellow performance is discussed at the Division Faculty meetings. Direct feedback regarding the fellow’s performance is provided regularly by the program director. Annually, the fellowship program director and the Division faculty determine if the trainee possess sufficient training and the qualifications necessary to be promoted to the next level.

Trainees are evaluated continuously by the attending staff. If, at any time, their performance is judged to be below expectations, the fellowship program director (or designee) will meet with the trainee to develop a remediation plan. If the trainee fails to follow that plan, or the intervention is not successful, the trainee may be dismissed from the program. If a trainee's clinical activities are restricted (e.g., they require a supervisor's presence during a procedure, when one would not normally be required for that level of training)

**Faculty Development and Resident Education around Supervision and Progressive Responsibility**

The residency program provides faculty development and resident education on best practices around supervision and the balance of supervision and autonomy in various forums including M&M conferences and the Annual Faculty Development Seminars on Surgical Education. One practice used by some in our program is the SUPERB SAFETY model:

Attendings should adhere to the SUPERB model when providing supervision. They should

1. **Set Expectations**: set expectations on when they should be notified about changes in patient’s status.
2. **Uncertainty is a time to contact**: tell resident to call when they are uncertain of a diagnosis, procedure or plan of care.
3. **Planned Communication**: set a planned time for communication (i.e. each evening, on call nights)
4. **Easily available**: Make explicit your contact information and availability for any questions or concerns.
5. **Reassure resident not to be afraid to call**: Tell the resident to call with questions or uncertainty.
6. **Balance supervision and autonomy**.

Residents should seek supervisor (attending or senior resident) input using the SAFETY acronym.

1. **Seek attending input early**
2. **Active clinical decisions:** Call the supervising resident or attending when you have a patient whose clinical status is changing and a new plan of care should be discussed. Be prepared to present the situation, the background, your assessment and your recommendation.

3. **Feel uncertain about clinical decisions:** Seek input from the supervising physician when you are uncertain about your clinical decisions. Be prepared to present the situation, the background, your assessment and your recommendation.

4. **End-of-life care or family/legal discussions:** Always call your attending when a patient may die or there is concern for a medical error or legal issue.

5. **Transitions of care:** Always call the attending when the patient becomes acutely ill and you are considering transfer to the intensive care unit (or have transferred the patient to the ICU if patient safety does not allow the call to happen prior to the ICU becoming involved).

6. **Help with system/hierarchy:** Call your supervisor if you are not able to advance the care of a patient because of system problems or unresponsiveness of consultants or other providers.

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