Definitions

**Resident:**
A physician who is engaged in a graduate training program in surgery. **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.”

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

**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 (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 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.

**Department of Surgery Supervision**

The residency program has a back-up system available if/when clinical care needs exceed a residents’ ability. The hierarchal nature of surgical residency training is founded on a system of graduated responsibility with continuous resident and faculty supervision at all times. Therefore our system is inherently designed to be able to both monitor the need for and ensure the provision of back-up support systems when patient care responsibilities are unusually difficult or exceed the residents’ ability. As residents progress throughout the program they are allowed increasing independent responsibility for carrying out their own patient management decisions, within acceptable limits. The next senior level person (resident and faculty member) is always on-hand to step in and intervene. Our system is designed to continuously bump care up to the next level so that if patient care responsibilities are unusually difficult the whole system is automatically activated. At times senior residents or faculty may step in and take over. Additional resident manpower may need to be activated or faculty may even need to call in other faculty for support and back up. In addition to the systems available to monitor a residents’ ability and intervene with higher level help, the program seeks to also promote a culture where a resident is free to admit they need help. UW Medicine teaching hospitals have adopted the ‘Patients First’ motto and continuously work to align all practitioners to this focus. The UW residency program has had a ‘Patients First’ mission statement for many years. Our policy is that the old adage, “To call for help is weakness” is left back in the 20th century.

Fatigue can also be a factor influencing a residents’ ability to care for a patient. Should fatigue be noted, the resident schedule is adjusted appropriately in order to manage the potential negative effects of fatigue on patient care. Residents may be sent to a call room to nap for a few hours and their pager will be carried by a colleague or a resident may be sent home early. Back-up call schedules may also be invoked to ensure continuity of patient care in the event that a resident may be unable to perform his/her patient care duties.

To ensure oversight of resident supervision and graded responsibility, the program will use the following classification of supervision:

**Supervision Defined**

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

**A. Direct Supervision**

In 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.

B. Indirect Supervision
1. 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 called because this would represent a significant deviation from standard surgical communication.

2. 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 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.

C. Oversight
   The supervising physician is available to provide review of procedures/encounters with feedback provided after care is delivered.

PGY-1 residents will be supervised either directly or indirectly with direct supervision immediately available.

Clinical Responsibilities
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.

Attending of Record
Every patient in every hospital is the ultimate responsibility of a designated attending faculty member, therefore all patient care must be supervised by qualified faculty. Faculty schedules are structured to provide residents with continuous supervision and consultation. Residents are provided with clear communication regarding which faculty member has supervisory responsibility and the nature of that responsibility. Residents are also provided with rapid, reliable systems for communicating with supervising faculty including some or all of the following: pager numbers, email addresses, cell phone numbers and home phone numbers. Residents are required to formulate a plan and to review it with their seniors and attendings. However, the freedom to initiate patient management varies along a spectrum from the need for immediate life-saving measures for the injured patients who enter the HMC ER to the non-urgent patient with complex problems at other hospitals. Residents are licensed physicians in the State of Washington and have graded responsibility with each year of their residency. Resident schedules and duty hour assignments recognize that faculty and residents collectively have the responsibility for the safety and welfare of patients.

Education of a surgical resident requires graduated responsibility for decision making in patient care. The goal is to maximize the resident educational experience while maintaining a focus on patient safety and quality patient care. The attending faculty member who is ultimately responsible for the overall care of the patient monitors this progressive independence. In each case, the attending elicits a patient management plan from the resident before offering his own decision as to the proper course of action. This encourages the resident to take responsibility while ensuring the patient’s access to the attending experience and judgment. As residents progress throughout the program they are allowed increasing conditional independent responsibility for carrying out their own patient management decisions, within acceptable limits. Thus, the attending that is ultimately responsible for the patient’s care will adjust their degree of involvement in decision making and delegation of responsibility based on the perceived and proven skills and abilities of each individual resident.

While education of our surgical residents requires steadily increasing conditional independence to develop mature clinical judgment, the attending surgeon has both an ethical and legal responsibility for the overall care of the individual patient. Every patient on a surgical service will be assigned an attending surgeon, who will be clearly identified to the patient, the patient’s family, the nursing staff, and the residents. As part of our UW Medicine ‘Patients First’ program residents and faculty members inform patients of their respective roles in each patient’s care. The attending surgeon’s involvement in the patient’s care should be documented by regular progress notes in the hospital record, by discussions with the patients and family regarding therapeutic plans and risk of procedures, and by his/her presence and participation in any operative procedures in accordance with the most current Joint Commission and ACGME guidelines.

The responsible attending surgeon must be aware of the relevant clinical details and diagnostic and therapeutic decisions being made for each individual patient on each day. Each service and each attending surgeon should establish with the resident team the degree of independent resident responsibility and those situations that require immediate notification and involvement of the attending. The details of this understanding will vary according to the nature and severity of the clinical problem as well as the accepted practice patterns in different hospitals. Although the attending surgeon may delegate certain routine tasks (e.g., management of postoperative analgesics, maintenance of peripheral intravenous access) to the resident team, the ultimate responsibility for the conduct of these procedures always rests with the attending surgeon. The attending surgeon must be available to their patients and to all residents on call 24 hours a day, seven days a week, when they have any hospitalized patients. When this is not possible, the attending surgeon much
explicitly transfer authority for their patients to another attending surgeon in the department and notify the responsible Chief or senior resident of this transfer of authority. If the responsible Chief or senior resident believes that a clinical situation requires notification and/or consultation with the attending surgeon, and if the attending surgeon of record is not immediately available to the resident, then the resident should contact the attending surgeon on emergency call for the hospital on that day. The on-call attending surgeon will then assume full responsibility for the patient until the attending of record is available.

The program functions to create a system where the appropriate level of supervision is in place for all residents who care for patients. Supervision may be exercised through a variety of methods. Some activities require the physical presence of the supervising faculty member. For many aspects of patient care, the supervising physician may be a more advanced resident or fellow. Other portions of care provided by the resident can be adequately supervised by the immediate availability of the supervising faculty member or resident physician, either in the institution, or by means of telephonic and/or electronic modalities. In some circumstances, supervision may include post-hoc review of resident delivered care with feedback as to the appropriateness of that care (e.g. getting an email from a faculty member about a clinic dictation).

Faculty members functioning as supervising physicians delegate portions of care to residents, based on the needs of the patient and the skills of the residents. Rotation assignments will be of sufficient duration to permit faculty to assess the knowledge and skills of each resident and delegate to him/her the appropriate level of patient care authority and responsibility. Similarly, senior residents or fellows may serve in a supervisory role of junior residents in recognition of their progress toward independence, based on the needs of each patient and the skills of the individual resident or fellow which are ultimately determined by the supervising faculty member.

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

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 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

*Interns will be evaluated for basic competency during the June/July Intern Competencies Orientation session.

1. Initial evaluation and management of patients in the urgent or emergent situation, including urgent consultations, trauma, and emergency department consultations.

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 certification is required for all incoming residents.)

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. *Interns will be evaluated for basic competency during the June/July Competencies Orientation session.*

   a. Excision of lesions of the skin and subcutaneous tissues (incl Hickman and Port removals)
   b. Placement and removal of nasogastric tubes
   c. Placement and removal of Foley catheters
   d. Arterial puncture for blood gases
   e. Bedside debridement
   f. 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. *Interns will be evaluated for basic competency at the Wound Closure Lab*

   a. Repair of surgical incisions of the skin and soft tissues
   b. Repair of skin and soft tissue lacerations

3. *Interns will be evaluated for basic competency at the Tube Thoracostomy Lab*

   a. Tube thoracostomy

4. *Interns will be evaluated for basic competency at the ATLS Course*

   a. Paracentesis

5. *Interns will be evaluated for basic competency during their ICU rotation*

   a. Arterial cannulation

6. *Interns will be evaluated for basic competency at the CVC Lab*

   a. Advanced vascular access procedures, including central venous catheterization and temporary dialysis access
<table>
<thead>
<tr>
<th>Procedures for Surgery to track in MedHub</th>
<th>Number of times trainee must successfully complete supervised procedure before eligible to perform without Direct Supervision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arterial cannulation</td>
<td>1</td>
</tr>
<tr>
<td>CVC placement</td>
<td>3</td>
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</tbody>
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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 Physician Should 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
• If a Direct Supervision person is called for any reason

All triggers should be documented with an event note.

**Resident Competence & Delegated Authority**
The privilege of progressive authority and responsibility, conditional independence, and a supervisory role in patient care delegated to each resident is assigned by the program director and faculty member. Each resident’s abilities will be based on specific criteria. The assessment criteria used will include: 360-degree evaluations, oral examinations, review of ISIS data from simulation exercises and tests, review of procedure, operative and case logs, patient survey data, review of resident portfolios and semi-annual review data, review of resident records both before residency appointment and following residency appointment, review of OSCE examination data (e.g. mock codes, ATLS), review of standardized oral examination data, written examination data. While objective criteria are important for assessing resident abilities, the program acknowledges that residency training includes the maturing of a relationship between the resident and attending whereby a bond of trust develops over time permitting conditional independence gradually handed over. This non-quantifiable subjective human relationship plays an equally or possibly even more important role to the combined objective, quantifiable measures.

**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 conference and the Annual Faculty Development Seminars on Surgical Education. One practice used by some in our program is the **SUPERB SAFETY** model:

- **Set Expectations**: set expectations on when they should be notified about changes in patient’s status.
- **Uncertainty is a time to contact**: tell resident to call when they are uncertain of a diagnosis, procedure or plan of care.
- **Planned Communication**: set a planned time for communication (i.e. each evening, on call nights)
- **Easily available**: Make explicit your contact information and availability for any questions or concerns.

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

**July 2013**