SCOPE OF PRACTICE

Neurological Surgery
Director of Program: Mark Greenberg, MD
USF Health Morsani College of Medicine
University of South Florida

This document pertains to resident rotations under the auspices of the Neurological Surgery Residency Training Program at Tampa General Hospital, James A. Haley VA, Moffitt Cancer Center, Johns Hopkins All Children's, and Advent Health-Tampa. All Accreditation Council of Graduate Medical Education (ACGME), Joint Commission (JC), Agency for Health Care Administration (AHCA), and CMS guidelines pertaining to graduate medical education apply to this scope of practice.

PURPOSE AND POLICY

The purpose of this policy is to ensure that residents are provided adequate and appropriate levels of supervision during the course of the educational training experience and to ensure that patient care continues to be delivered in a safe manner. 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 members to ensure effective oversight of resident supervision.

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 under any conditions in which the resident feels they have reached their own limits, whether that means knowledge, capabilities, experience, or technical skills. Supervision may be provided by more senior residents in addition to attendings. However, all patient care must be provided under a credentialed and privileged attending physician. The attending physician is ultimately responsible for management of the individual patients and the supervision of the residents involved in the care of the patient. Supervision must be documented in the medical record in accordance with the Department of Neurosurgery and the University of South Florida compliance guidelines.

Neurosurgery residents train across five sites, and it is critical that supervising attendings at each site ensure residents are aware of, and in compliance with, the current safety practices at each specific training site.

LEVELS OF SUPERVISION

The program follows the ACGME classification of supervision as noted below. The supervising physician can refer to a faculty, fellow, or resident that who has been given supervisory privilege. These supervisory levels are used throughout the Scope of Practice document.

Direct Supervision The supervising physician is physically present with the resident and patient.

LEVELS OF SUPERVISION (continued)

Indirect Supervision 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.

Indirect Supervision 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 within 30 minutes, as needed.

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

RESIDENT ASSESSMENT AND EVALUATION

The residency program has a curriculum for providing knowledge and performance competence that includes direct procedural training, surgical training, and clinical training which is overseen by neurosurgical attendings. Due to the nature of the seven-year residency program, it is expected that residents will advance in the various competencies at different rates. Ultimately the overseeing attending is responsible for determining a resident's level of competence on a case-by-case basis, and the appropriate balance of oversight and autonomy specific to each patient care situation.

Annual decisions about competence are made by the program's clinical competency committee and Program Director to ensure a successful transition and preparation for the next PGY level. Residents will be evaluated based on the ACGME Neurological Surgery Milestones 2.0 on a semiannual basis, to give a general indication of personal abilities and achievements. However, these Milestones are meant to be used as a broad evaluation tool, and achievement of certain Milestones does not negate the necessity for oversight that is appropriate for the trainee and in the best interest of the patient. Residents should be able to identify and contact a responsible attending surgeon for a given patient at all times.

It is important that residents demonstrate an evolving level of knowledge, skill, judgement and autonomy over the course of their training, and attendings are encouraged to cultivate an environment that offers growth for trainees, while ensuring patient safety is the utmost priority. If at any time an attending determines that a resident is not performing, in a manner that is safe and consistent with expectations, that attending is responsible for following up with the program director to immediately relay any concerns and/or deficiencies. At that time, the Program Director may elect to adjust that resident's training and/or oversite as needed to ensure patient safety. Changes in oversite should be brought to the attention of any faculty who may be supervising that resident, so they are aware and can adjust their supervision as needed.

All neurosurgery rotations, including outpatient clinics, are considered sites in which a resident may be actively involved in advanced life support, as either the lead physician or a participant. As such, all residents are required to maintain current ACLS and BLS certifications.

	Supervising Physician present (Direct)	Supervising Physician in hospital and available for consultation (Indirect but direct supervision immediately available)	Supervising Physician out of hospital but available by phone or can come in (Indirect but direct supervision available)	The trainee may perform the procedure without supervising Attending/ resident (oversight)							
Designated Levels	1	2	3	4	See below for level of supervision required for each procedure and year of training						
Patient Management Competencies					**PGY-1***	**PGY-2**	**PGY-3**	**PGY-4**	**PGY-5**	**PGY-6**	**PGY-7**
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	2	3	3	3	4	4
Pre-operative evaluation and management, including history and physical examination, formulation of a plan of therapy, and specification of necessary tests					2	2	2	3	3	4	4
Evaluation and management of post-operative patients, including the conduct of monitoring, specifying necessary tests to be carried out, and preparing orders for medications, fluid therapy, and nutrition therapy					2	3	3	4	4	4	4
Transfer of patients between hospital units or hospitals					2	3	3	4	4	4	4
Discharge of patients from hospitals					2	3	3	4	4	4	4
Interpretation of laboratory results					2	3	3	4	4	4	4
Initial evaluation and management of patients in the urgent or emergent situations, including urgent consultations, trauma, and emergency department consultations					1,2*	2	2	3	3	4	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					1,2*	2	2	3	3	4	4

	Supervising Physician present (Direct)	Supervising Physician in hospital and available for consultation (Indirect but direct supervision immediately available)	Supervising Physician out of hospital but available by phone or can come in (Indirect but direct supervision available)	The trainee may perform the procedure without supervising Attending/ resident (oversight)						
Designated Levels	1	2	3	4	See below for level of supervision required for each procedure and year of training					
Patient Management Competencies (continued)					**PGY-1***	**PGY-2**	**PGY-3**	**PGY-4**	**PGY-5**	**PGY-6**	**PGY-7**
evaluation and management of critically-ill patients, either immediately postoperatively or in the intensive care unit (ICU), including monitoring, ventilator management, specification of necessary tests, and orders for medications, fluid therapy, and enteral/parenteral nutrition therapy					1,2*	2	2	3	3	4	4
management of patients in cardiac arrest (ACLS required)					1,2*	2	3	3	3	4	4
Procedural Competencies					**PGY-1**	**PGY-2**	**PGY-3**	**PGY-4**	**PGY-5**	**PGY-6**	**PGY-7**
carry-out of basic venous access procedures, including establishing intravenous access					1,2*	2	3	3	3	4	4
placement and removal of nasogastric tubes and Foley catheters					2	3	3	3	3	4	4
arterial puncture for blood gases					2	3	3	3	3	4	4
carry-out of advanced vascular access procedures, including central venous catheterization, temporary dialysis access, and arterial cannulation					2	2	3	3	3	4	4
repair of surgical incisions of the skin and soft tissues					1,2*	2	3	3	3	4	4
repair of skin and soft tissue lacerations					1,2*	2	3	3	3	4	4
excision of lesions of the skin and subcutaneous tissues					1,2*	2	3	3	3	4	4
tube thoracostomy					1,2*	2	3	3	3	4	4
paracentesis					1,2*	2	3	3	3	4	4

	Supervising Physician present (Direct)	Supervising Physician in hospital and available for consultation (Indirect but direct supervision immediately available)	Supervising Physician out of hospital but available by phone or can come in (Indirect but direct supervision available)	The trainee may perform the procedure without supervising Attending/ resident (oversight)	
Designated Levels	1	2	3	4	See below for level of supervision required for each procedure and year of training

Procedural Competencies (continued)	**PGY-1**	**PGY-2**	**PGY-3**	**PGY-4**	**PGY-5**	**PGY-6**	**PGY-7**
Advanced airway management (DC26) a) endotracheal intubation b) tracheostomy	1,2*	2	3	3	3	4	4
Arterial line placement (DC27) -	1	2	3	3	3	4	4
Cervical Spine Traction (DC23)	1	2	3	3	3	4	4
CVP Line Placement (DC25)	1	2	3	3	3	4	4
External Ventricular Drain (DC21)	1	2	3	3	3	4	4
ICP Monitor Placement (DC20)	1	2	3	3	3	4	4
VP Shunt Tap/Programming (DC22)	1	2	3	3	3	4	4

Operative Procedures

For surgical cases done in the operating room, all PGY-1 residents require direct observation for the full duration of the case. For PGY-2 through PGY-7, level of oversight will be determined by the attending surgeon on a case-by-case basis based on the specific procedure, acuity of the patient, and other critical factors. At a *minimum*, there must be indirect supervision with direct supervision available.

Attending surgeons must be present pre-operatively for key points as defined by the current safety practices of that specific site, *e.g.* marking the patient, safety 'time-out', multi-disciplinary huddle, etc. *The exception to this would be emergent situations in which the attending physician is indirectly supervising and is en-route for direct supervision, but has not yet arrived. In this instance, if it is determined that the patient requires immediate intervention prior to the attending physician's arrival the following should be clearly communicated between resident and physician: the patient's current status; the need for immediate intervention; and the surgical plan, including any critical point(s) that the resident should stop and wait for direct supervision.*

For instances where the attending surgeon will be providing indirect supervision throughout any portion of the case, the attending should clearly define for the resident the surgical plan and expectations, including the critical portions of the operation that the attending should be present to provide direct supervision.

	Supervising Physician present (Direct)	Supervising Physician in hospital and available for consultation (Indirect but direct supervision immediately available)	Supervising Physician out of hospital but available by phone or can come in (Indirect but direct supervision available)	The trainee may perform the procedure without supervising Attending/ resident (oversight)	
Designated Levels	1	2	3	4	See below for level of supervision required for each procedure and year of training
Operative Procedures (continued)					
Senior and Chief residents are expected to have a level of increasing autonomy that will generally require very little direct supervision, in order to prepare them for independent practice. However, it is still important that the critical portions of the case are clearly identified, and it is explicitly said whether or not the attending will be there for those portions of the case.					

***PGY-1 Residents (1,2*):** ACGME Neurological Surgery Review Committee provides specific guidelines for PGY-1 resident oversight, most recently updated in August of 2017 (https://www.acgme.org/Portals/0/PDFs/FAQ/160_NeurologicalSurgeryFAQs_2017-07-01.pdf?ver=2017-08-18-090725-277). Part of this includes direct supervision during the early months, until they have demonstrated the appropriate levels of competency for each area.

Senior and chief residents are expected to observe and evaluate PGY-1 residents until they determine (s)he may advance to provide care with direct care immediately available. Levels of supervision, whether direct or indirect with direct immediately available, should be clearly communicated with the PGY-1 residents by the attendings and Chiefs so they know they understand their limits and are able to work safely within those bounds.

Mark Greenberg

Mark Greenberg, MD
Program Director, Department of Neurosurgery

4/25/2019
Date