



## SCOPE OF PRACTICE

**Neuroendovascular Surgery Fellowship  
Director of Program: Maxim Mokin, MD  
USF Health Morsani College of Medicine  
University of South Florida**

This document pertains to fellow rotations under the auspices of the Neuroendovascular Surgery Fellowship at Tampa General Hospital. 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.

The purpose of this policy is to ensure that fellows 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 fellow is assigned by the program director and faculty members to ensure effective oversight of resident supervision. Ultimately, the program director has responsibility, authority, and accountability of supervision of fellows and must evaluate each fellow's abilities based on specific criteria, guided by The Committee on Advanced Subspecialty Training (CAST).

Each fellow and faculty must inform each patient of their respective roles in patient care. Fellows must know the limits of his/her scope of authority and the circumstances under which he/she is permitted to act with conditional independence. A fellow should promptly call an attending physician when faced with critical situations or uncertainties in patient care. These situations include, but are not limited to, instances involving potential patient death, unexpected adverse outcomes, specific patient, or family requests, or when uncertain about the appropriate plan of care. Supervision may be provided by more senior fellows 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 Neuroendovascular Surgery Fellowship at the University of South Florida compliance guidelines.

Fellows should serve in a supervisory role to junior fellows and residents in recognition of their progress toward independence, based on the needs of each patient and the skills of the individual fellow.

Fellows and faculty can report concerns regarding inadequate supervision on the GME website or the hospital reporting system. Any reports will be protected from reprisal. This document is available on the GME website for all residents, faculty, other team members, and patients.

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

- 1) The supervising physician is physically present with the Resident during the key portions of the patient interaction.

- 2) The supervising physician and/or patient is not physically present with the Resident and the supervising physician is concurrently monitoring the patient care through appropriate telecommunication technology.

Indirect Supervision

- 2) The supervising physician is not providing physical or concurrent visual or audio supervision but is immediately available to the Resident for guidance and is available to provide appropriate direct supervision.

Oversight

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

The fellowship 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. In that the current fellowship is geared towards trainees who have completed their residency training, it is expected that the fellow will be able to perform all core neurosurgical procedures without supervision. However, it is expected that trainees will have different levels of exposure to neuroendovascular procedures in their residency and/or fellowship training and may advance in the various competencies underlying these procedures at different rates. Ultimately the overseeing attending is responsible for determining a fellow’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 to ensure the successful completion of the fellowship. All fellows need to maintain current ACLS training.

*Note: PGY-6 refers to Neurology and Radiology candidates who are in their initial fellowship year. PGY-7 refers to Neurosurgery fellows or advanced Neurology/Radiology fellows with additional relevant training. PGY-8 refers to senior fellows with substantial procedural and clinical experience in neuroendovascular surgery*

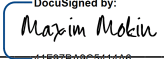
	Supervising Physician present (Direct)	Supervising Physician is not providing physical or concurrent visual or audio supervision but is immediately available (Indirect)	Supervising physician is available to provide a review of procedures/ encounters with feedback after care is delivered	
Designated Levels	1	2	3	See below for level of supervision required for each procedure.
<b>CORE PROCEDURES</b>				<b>PGY-6</b> <b>PGY-7</b> <b>PGY-8</b>
Evaluation of patients in the outpatient setting, including initial history and physical examination, formulation of a plan of therapy, and necessary orders for therapy and tests	1	2	3`	

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<b>CORE PROCEDURES (continued)</b>				<b>PGY-6</b> <b>PGY-7</b> <b>PGY-8</b>
Perform patient care and procedures in outpatient setting				1                  2                  3
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				1                  2                  3
Pre-operative evaluation and management, including history and physical examination, formulation of a plan of therapy, and specification of necessary tests				1                  2                  3
Pre-operative evaluation and management, including history and physical examination, formulation of a plan of therapy, and specification of necessary tests				1                  2                  3
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				1                  2                  3
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                  3
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                  3
Discharge of patients from hospitals				1                  2                  3
Treat and manage common medical conditions				1                  2                  3
Make referrals and request consultations				1                  2                  3
Provide consultations within the scope of his/her privileges				1                  2                  3

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<b>CORE PROCEDURES (continued)</b>				<table border="1"> <thead> <tr> <th>PGY-6</th> <th>PGY-7</th> <th>PGY-8</th> </tr> </thead> </table>	PGY-6	PGY-7	PGY-8
PGY-6	PGY-7	PGY-8					
Management of patients in cardiac arrest or any life-threatening emergency (ACLS required)				<table border="1"> <tbody> <tr> <td>1,2</td> <td>2</td> <td>3</td> </tr> </tbody> </table>	1,2	2	3
1,2	2	3					
Evaluation and management of cerebrovascular disorders (e.g., stroke, aneurysms, AVMs)				<table border="1"> <tbody> <tr> <td>1</td> <td>2</td> <td>3</td> </tr> </tbody> </table>	1	2	3
1	2	3					
Interpretation of neuroimaging studies (CT, MRI, angiography)				<table border="1"> <tbody> <tr> <td>2,3</td> <td>2</td> <td>3</td> </tr> </tbody> </table>	2,3	2	3
2,3	2	3					
Management of intracranial hemorrhages				<table border="1"> <tbody> <tr> <td>1</td> <td>2</td> <td>3</td> </tr> </tbody> </table>	1	2	3
1	2	3					
Post-procedure patient management in neuro-ICU				<table border="1"> <tbody> <tr> <td>1</td> <td>2</td> <td>3</td> </tr> </tbody> </table>	1	2	3
1	2	3					
Management of neurovascular emergencies in the angio suite (e.g., vasospasm management, thrombectomy preparation)				<table border="1"> <tbody> <tr> <td>1</td> <td>2</td> <td>3</td> </tr> </tbody> </table>	1	2	3
1	2	3					
Catheter-based complication management (e.g., dissection, perforation)				<table border="1"> <tbody> <tr> <td>1</td> <td>2</td> <td>3</td> </tr> </tbody> </table>	1	2	3
1	2	3					
Endovascular management of vasospasm, thrombolysis, and clot retrieval techniques				<table border="1"> <tbody> <tr> <td>1</td> <td>2</td> <td>3</td> </tr> </tbody> </table>	1	2	3
1	2	3					
<b>SEDATION</b>				<table border="1"> <thead> <tr> <th>PGY-6</th> <th>PGY-7</th> <th>PGY-8</th> </tr> </thead> </table>	PGY-6	PGY-7	PGY-8
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Local anesthesia				<table border="1"> <tbody> <tr> <td>1</td> <td>2</td> <td>3</td> </tr> </tbody> </table>	1	2	3
1	2	3					
Conscious sedation (requires ACLS)				<table border="1"> <tbody> <tr> <td>1</td> <td>2</td> <td>3</td> </tr> </tbody> </table>	1	2	3
1	2	3					
<b>SUPPLEMENTARY PROCEDURES</b>				<table border="1"> <thead> <tr> <th>PGY-6</th> <th>PGY-7</th> <th>PGY-8</th> </tr> </thead> </table>	PGY-6	PGY-7	PGY-8
PGY-6	PGY-7	PGY-8					
Placement of intravenous and intra-arterial lines				<table border="1"> <tbody> <tr> <td>1</td> <td>2</td> <td>3</td> </tr> </tbody> </table>	1	2	3
1	2	3					
Placement and removal of nasogastric tubes and Foley catheters				<table border="1"> <tbody> <tr> <td>1</td> <td>2</td> <td>3</td> </tr> </tbody> </table>	1	2	3
1	2	3					
Arterial puncture for blood gases				<table border="1"> <tbody> <tr> <td>1</td> <td>2</td> <td>3</td> </tr> </tbody> </table>	1	2	3
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<b>SUPPLEMENTARY PROCEDURES (Continued)</b>				<b>PGY-6</b>	<b>PGY-7</b>	<b>PGY-8</b>
Carry-out of advanced vascular access procedures, including central venous catheterization and arterial cannulation				1	2	3
Thoracostomy				1	2	3
Endotracheal intubation, emergent				1	2	3
Tracheostomy, emergent				1	2	3
Ventilator management				1	2	3
Ultrasound-guided access for vascular procedures				1	2	3
Neurocritical care management protocols (e.g., intracranial pressure management, neuroprotection)				1	2	3
Angiographic interpretation and procedural planning				1	2	3
Collaboration in multi-disciplinary stroke team management				1	2	3
Fluoroscopy and radiation safety protocols specific to neurointerventional procedures				1	2	3
<b>OPERATIVE PROCEDURES</b>				<b>PGY-6</b>	<b>PGY-7</b>	<b>PGY-8</b>
<p>For surgical cases done in the operating room, 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 <i>minimum</i>, there must be indirect supervision with direct supervision available.</p> <p>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. <i>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.</i></p>				1,2	1,2,3	1,2,3

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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.				

DocuSigned by:  
  
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