

University of Utah School of Medicine
Graduate Medical Education
Neurosurgery Program
Technical Standards
Adopted February 15, 2006

I. Introduction

The University of Utah School of Medicine Graduate Medical Education Program in Neurosurgery complies with Section 504 of the 1973 Vocational Rehabilitation Act, as amended, and the Americans with Disabilities Act of 1990, in providing opportunities for qualified individuals with disabilities. At the same time, prospective candidates must be capable of meeting certain technical standards. The following technical standards specify those attributes the faculty considers to be essential in successfully completing residency and fellowship training and in practicing medicine safely and responsibly. These standards describe the essential functions that residents and fellows must demonstrate in the requirements of post-graduate medical education, and thus, are pre-requisites to entrance, continuation, and completion of training in the Neurosurgery Program. Requests for reasonable accommodation are evaluated on an individual basis. This policy applies to the Neurosurgery Residency Program and to all Department of Neurosurgery Fellowships.

II. Technical Standards

The resident or fellow must possess abilities and skills in five areas:

- a. Observation. The resident or fellow must be able to:
 - i. Observe a patient accurately at a reasonable distance and close at hand, noting non-verbal as well as verbal signals
 - ii. Visualize and discriminate findings on X-rays and other imaging studies
 - iii. Interpret digital or analog representations of physiologic phenomena, such as EKG's
 - iv. Acquire information from written documents, films, slides, videos, or other media
 - v. Observe and differentiate changes in body movement
 - vi. Observe anatomic structures
 - vii. Efficiently read written and illustrated materials
 - viii. Observe and detect the various signs and symptoms of the disease processes that will be encountered during the training program
 - ix. Possess visual acuity to be able to perform surgical procedures
- b. Communication. The resident or fellow must be able to:
 - i. Communicate effectively and sensitively with all patients
 - ii. Communicate effectively and efficiently with all members of the health care team in oral and written English

- iii. Communicate clearly with and observe patients and families in order to elicit information including a thorough history from patients, families, and other sources
- iv. Accurately describe changes in mood, activity, and posture
- v. Perceive verbal as well as non-verbal communications, and promptly respond to emotional communications (sadness, worry, agitation, confusion)
- vi. Communicate complex findings in appropriate terms to patients and their families
- vii. Adjust form and content of communications to the patient's functional level or mental state
- viii. Engage in a collaborative relationship with patients and families
- ix. Record observations and plans legibly, efficiently, and accurately
- x. Complete forms according to direction in a complete and timely fashion
- xi. Prepare and communicate precise but complete summaries of individual encounters
- xii. Possess sufficient hearing for required diagnostic functions (e.g., use of stethoscope to assess breath sounds, heart sounds, etc.)
- xiii. In emergency situations, understand and convey information for the safe and effective care of patients in a clear, unambiguous, and rapid fashion, including receiving and understanding input from multiple sources simultaneously or in rapid-fire sequence
- c. Motor. The resident or fellow must be able to:
 - i. Perform palpation, percussion, auscultation, and other diagnostic maneuvers
 - ii. Provide general care and emergency medical care such as airway management, placement of intravenous catheters, cardiopulmonary resuscitation, and application of pressure to control bleeding; such procedures include the ability to roll/move the patient as necessary
 - iii. Respond promptly to medical emergencies within the training facility, including emergencies in varied environments such as stairwells, elevators, parking lots and unpredictable environments created by disasters such as earthquakes, etc.
 - iv. Not hinder the ability of co-workers to provide prompt care
 - v. Perform basic diagnostic and therapeutic procedures (e.g. venepuncture, phlebotomy, intravenous line placement and administration of intravenous medicines, tying of knots, etc.) as well as more advanced procedures specific to neurosurgery.
- d. Cognitive. The resident or fellow must be able to:
 - i. Demonstrate clinical reasoning and problem solving
 - ii. Identify significant findings from history, physical exam, and laboratory data
 - iii. Perceive subtle cognitive and behavioral findings and perform a mental status evaluation
 - iv. Provide a reasoned explanation for likely diagnoses

- v. Construct an appropriate diagnostic plan
- vi. Prescribe appropriate medications and therapy
- vii. Recall and retain information
- viii. Deal with several tasks or problems simultaneously
- ix. Identify and communicate the limits of their knowledge to others
 - x. Incorporate new information from peers, teachers, and the medical literature in formulating diagnoses and plans
 - xi. Show good judgment in patient assessment, diagnostic, and therapeutic planning
- e. Social and Behavioral. The resident or fellow must be able to:
 - i. Maintain a professional demeanor
 - ii. Maintain appropriate professional and ethical conduct
 - iii. Be able to function at a high level in the face of long hours and a high stress environment including the ability to remain focused on a single task at operating table for at least several hours
 - iv. Develop empathic relationships with patients and families while establishing professional boundaries
 - v. Provide comfort and reassurance where appropriate
 - vi. Protect patient confidentiality and the confidentiality of written and electronic records
 - vii. Possess adequate endurance to tolerate physically taxing workloads
 - viii. Flexibly adapt to changing environments
 - ix. Function in the face of uncertainties inherent in the clinical problems of patients
 - x. Accept appropriate suggestions and criticisms and modify behavior
 - xi. Give and accept criticism appropriately and without prejudice