INTRODUCTION

All residents at all levels of the training program are supervised by a faculty neurosurgeon. Faculty schedules are structured to provide residents with continuous supervision and consultation. Faculty and residents are educated to recognize the signs of fatigue and adopt and apply policies to prevent and counteract the potential negative effects.

Inpatients:

All patients on the neurosurgical service are admitted under the care of a specific faculty neurosurgeon. Patients who do not have a pre-assigned neurosurgeon will be admitted by the neurosurgeon on call. All elective cases are generally admitted to the inpatient service by the neurosurgical faculty.

Outpatients:

At the University and Primary Children’s hospital, the outpatient clinics are staffed by the neurosurgical faculty. Patients seen by the residents on an unscheduled basis are discussed with the appropriate faculty member.

Procedures:

For procedures in the operating room, the neurosurgical faculty will always be present within the building where the operating room is located and within the operating room for the critical portion of all cases. For the majority of cases the faculty neurosurgeon is scrubbed as either primary surgeon or the first assistant. Minor procedures being done in the intensive care or on the ward will be supervised by an attending or senior resident as needed depending on the resident’s level of training and experience with the procedure.

The following information from the University of Utah Hospitals and Clinics Graduate Medical Education Housestaff Policies and Procedures Manual on Resident Supervision (Section 8.1, Review Date: September 2012) as modified are adopted by the Department of Neurosurgery to provide more specific details.
POLICY FOR SUPERVISION OF NEUROSURGERY RESIDENTS
AT THE UNIVERSITY OF UTAH AFFILIATED HOSPITALS
Salt Lake City, Utah

Attending Physician
The attending physician is responsible for and must be personally involved in the care provided to individual patients in inpatient and outpatient settings as well as long-term care and community settings. When a resident is involved in the care of the patient, the responsible attending physician must continue to maintain a personal involvement in the care of the patient. The attending must provide an appropriate level of supervision. Determination of this level of supervision is a function of the experience and demonstrated competence of the resident and of the complexity of the patient's health care needs. The procedures through which the attending physician provides and documents appropriate supervision is outlined below in section 5.

Resident
The residents, as individuals, must be aware of their limitations and not attempt to provide clinical services or do procedures for which they are not trained. They must know the graduated level of responsibility described for their level of training and not practice outside of that scope of service. Each resident is responsible for communicating significant patient care issues to the attending physician. Such communication must be documented in the record. Failure to function within graduated levels of responsibility or to communicate significant patient care issues to the responsible attending physician may result in the removal of the resident from patient care activities.

I. PROCEDURES:

a. Resident Supervision by the attending physician.
   i. Attending physicians are responsible for the care provided to each patient, and they must be familiar with each patient for whom they are responsible. Fulfillment of such responsibility requires personal involvement with each patient and each resident who is providing care as part of the training experience. Each patient will be assigned an attending physician whose name will be clearly identified in the patient's record. It is recognized that other attending physicians may, at times, be delegated responsibility for the care of a patient and provide supervision instead of, or in addition to, the assigned practitioner. It is the responsibility of the attending physician to be sure the residents involved in the care of the patient are informed of such delegation and can readily access an attending physician at all times. Such a delegation will be documented in the patient's record. The attending physician is expected to fulfill this responsibility, at a minimum, in the following manner:

   ii. The attending physician will direct the care of the patient and provide the appropriate level of supervision based on the nature of the patient's condition, the likelihood of major changes in the management plan, the complexity of care, and the experience and judgment of the resident being supervised. Medical, surgical or mental health services must be rendered under the supervision of the attending physician or be personally furnished by the attending physician. Documentation of this supervision will be by progress notes entered into the record by the attending physician or reflected within the resident's progress note at a frequency appropriate to the patient's condition. The medical record must reflect the degree of involvement of the attending physician, either by staff physician progress note, or the resident's description of attending involvement. The resident note shall include the name of the attending physician with whom the case was discussed as well as a summary of that
discussion. The attending may choose to countersign and add an addendum to the resident note detailing his/her involvement and supervision. Pathology and radiology reports must be verified by an attending physician. Attending physicians will be responsible for following the admitting procedures required by the institutions at which they are admitting patients in association with resident physicians.

iii. For patients admitted to an inpatient team, the attending physician must meet the patient early in the course of care (within 24 hours of admission including weekends and holidays). This supervision must be personally documented in a progress note no later than the day after admission. The attending physician's progress note will include findings and concurrence with the resident's initial diagnosis and treatment plan as well as any modifications or additions. The progress note must be properly signed, dated, and timed. Attending physicians are expected to be personally involved in the ongoing care of the patients assigned to them in a manner consistent with the clinical needs of the patient and the graduated level of responsibility of the trainee.

iv. Discharge from Inpatient Status. The attending physician, in consultation with the resident, ensures that the discharge of the patient from an inpatient service is appropriate and based on the specific circumstances of the patient's diagnoses and therapeutic regimen; this may include physical activity, medications, diet, functional status and follow-up plans. Evidence of this assurance must be documented by the attending physician countersignature of the discharge summary.

v. Transfer from One Inpatient Service to Another, or Transfer to a Different Level of Care. The attending physician, in consultation with the resident, ensures that the transfer of the patient from one inpatient service to another or transfer to a different level of care is appropriate and based on the specific circumstances of the patient's diagnoses and condition. The attending physician from the transferring service must be involved in the decision to transfer the patient. The attending physician from the receiving service must treat the patient as a new admission and write an independent note or an addendum to the resident's transfer acceptance note.

vi. Intensive Care Units (ICU), including Medical, Cardiac and Surgical ICUs. For patients admitted to, or transferred into an ICU the attending physician must physically meet, examine, and evaluate the patient as soon as possible, but no later than 24 hours after admission or transfer, including weekends and holidays.

vii. Night Float Admissions. For patients admitted to an inpatient service of the medical center, a "night float" resident occasionally provides care before the patient is transferred to an inpatient ward team. In these cases, the supervising practitioner must physically meet and examine the patient within 24 hours of admission by the night float to the inpatient service, irrespective of the time the ward team assumes responsibility for the patient. In addition, the supervising practitioner for the night float must be clearly designated by local policy.

viii. Out Patient Clinic. An attending physician must be physically present in the clinic area during clinic hours. All patients to the clinic for which the attending physician is responsible should be supervised by the attending physician. This supervision must be documented in the chart via a progress note by the attending physician or the resident's note and include the name of the attending physician and the nature of the discussion. New
patients should be supervised as dictated by graduated level of responsibility outlined for each discipline. The supervision for new patients should be documented by either independent attending physician note or an addendum to the resident note. Unless otherwise specified in the graduated levels of responsibility, new patients must be seen by and evaluated by the attending physician at the time of the patient visit. Return patients should be seen by or discussed with the attending physician at such a frequency as to ensure that the course of treatment is effective and appropriate. This supervision must be documented in the record via a note by the attending physician or the resident's note that indicates the nature of the discussion with the attending physician. The medical record should reflect the degree of involvement of the attending physician, either by staff physician progress note or the resident's description of attending involvement. The attending may choose to countersign and add an addendum to the resident note detailing his/her involvement. All notes must be signed, dated, and timed by the resident. The Attending's co-signature of the resident's note is an acceptable method for the attending physician to document resident supervision.

ix. The attending physician is responsible for official consultations on each specialty team. When trainees are involved in consultation services, the attending physician will be responsible for supervision of these residents. The supervision of residents performing consultation will be determined by the graduated levels of responsibility for the resident. Unless otherwise stated in the graduated levels of responsibility, the attending physician must meet with each patient who received consultation by a resident and perform this personal evaluation in a timely manner based on the patient's condition. The patients seen in consultation by residents must be discussed and/or reviewed with the attending physician supervising the consultation within 24 hours of initial consultation by the resident. The attending physician must document this official consultation supervision by writing a personal progress note or by writing his/her concurrence with the resident consultation note by the close next working day. The attending may choose to countersign and add an addendum to the resident note detailing his/her involvement.

x. Emergency Department. An emergency department attending physician must be physically present in the emergency department. Each new patient to the emergency department must be seen by or discussed with an attending physician. The attending physician, in consultation with the resident, ensures that the discharge of the patient from the emergency department is appropriate.

xi. Emergency Room Consultations. Emergency room consultations by residents may be supervised by a specialty attending physician or the emergency room attending physician. All emergency room consultations by residents should involve the attending physician supervising the resident's discipline specific specialty consultation activities for which the consultation was requested. After discussion of the case with the discipline specific attending physician, the resident may receive direct supervision in the emergency room from the emergency room attending physician. In such cases where the emergency room attending physician is the principal provider of care for the patient's emergency room visit, the specialty specific attending physician does not need to meet directly with the patient. However, the specialty specific attending physician's supervision of the consultation should be documented in the medical record by co-signature of the consultation note or be reflected in the resident physician consultation note.
xii. Assure all Do Not Resuscitate (DNR) orders are appropriate and assure the supportive documentation for DNR orders are in the patient's medical record. All DNR orders must be signed or countersigned by the attending physician.

b. Assignment and Availability of attending physicians.

i. Within the scope of the training program, all residents, without exception, will function under the supervision of attending physicians. A responsible attending physician must be immediately available to the resident in person or by telephone and able to be present within a reasonable period of time (generally considered to be within 30 minutes of contact), if needed. Each discipline will publish, and make available "call schedules" indicating the responsible attending physician(s) to be contacted.

ii. In order to ensure patient safety and quality patient care while providing the opportunity for maximizing the educational experience of the resident in the ambulatory setting, it is expected that an appropriately privileged attending physician will be available for supervision during clinic hours. Patients followed in more than one clinic will have an identifiable attending physician for each clinic. Attending physicians are responsible for ensuring the coordination of care that is provided to patients.

iii. Facilities must ensure that their training programs provide appropriate supervision for all residents as well as a duty hour schedule and a work environment that are consistent with proper patient care, the educational needs of residents, and all applicable program requirements.

c. Graduated Levels of Responsibility.

i. The neurosurgery training program is structured to encourage and permit residents to assume increasing levels of responsibility commensurate with their individual progress in experience, skill, knowledge, and judgment.

ii. As part of their training program, residents should be given progressive responsibility for the care of the patient. The determination of a resident's ability to provide care to patients without a supervisor present or to act in a teaching capacity will be based on documented evaluation of the resident's clinical experience, judgment, knowledge, and technical skill. Ultimately, it is the decision of the attending physician as to which activities the resident will be allowed to perform within the context of the assigned levels of responsibility. In general, however, residents are allowed to order laboratory studies, radiology studies, pharmaceuticals, and therapeutic procedures as part of their assigned levels of responsibility. In addition, residents are allowed to certify and re-certify certain treatment plans (e.g., Physical Therapy, Speech Therapy) as part of their assigned levels of responsibility. These activities are considered part of the normal course of patient care and require no additional documentation on the part of the supervising practitioner over and above standard setting--specific documentation requirements. The overriding consideration must be the safe and effective care of the patient that is the personal responsibility of the attending physician.
iii. The Residency Program Director will define the levels of responsibilities for each year of training by preparing a description of the types of clinical activities residents may perform and those for which residents may act in a teaching capacity. The documentation of the assignment of graduated levels of responsibility will be made available to other staff as appropriate. These guidelines will include the knowledge, attitudes, and skills which will be evaluated and must be present for a resident to advance in the training program, assume increased responsibilities (such as the supervision of lower level trainees), and be promoted at the time of the annual review.

d. Supervision of Procedures

i. Diagnostic or therapeutic procedures require a high level of expertise in their performance and interpretation. Although gaining experience in performing such procedures is an integral part of the education of the resident, such procedures may be performed only by residents with the required knowledge, skill, and judgment and under an appropriate level of supervision by attending physicians. Examples include operative procedures performed in the operating suite, angiograms, endoscopy, bronchoscopy, and any other procedures where there is the need for informed consent. Attending physicians will be responsible for authorizing the performance of such procedures, and such procedures should only be performed with the explicit approval of the attending physician. NOTE: Excluded from the requirements of this section are procedures that, although invasive by nature, are considered elements of routine and standard patient care. Examples are the placing of intravenous and arterial lines, thoracentesis, paracentesis, lumbar puncture, routine radiologic studies, wound debridement, and drainage of superficial abscesses.

ii. Attending physicians will provide appropriate supervision for the patient's evaluation, management decisions and procedures. For elective or scheduled procedures, the attending physician must evaluate the patient and write a pre-procedural note or addendum to the resident's pre-procedure note describing the findings, diagnosis, plan for treatment, and/or choice of specific procedure to be performed. This pre-procedural evaluation and note may be done up to 30 days in advance of the surgical procedure. All applicable JCAHO standards concerning documentation must be done. A pre-procedure note may also serve as the admission note if it is written within 1 calendar day of admission by the attending physician with responsibility for continuing care of the inpatient, and if the notes meet criteria for both admission and pre-operative notes. Other services involved in the patient's operative care (e.g., Anesthesiology) must write their own pre-procedure notes (such as for the administration of anesthesia) as required by JCAHO, but such documentation does not replace the pre-operative documentation required by the surgery attending physician.

iii. During the performance of such procedures, an attending physician will provide an appropriate level of supervision. Determination of this level of supervision is generally left to the discretion of the attending physician within the context of the previously described levels of responsibility assigned to the individual resident involved. This determination is a function of the experience and competence of the resident and of the complexity of the specific case.
e. **Emergency Situation.** An "emergency" is defined as a situation where immediate care is necessary to preserve the life of, or to prevent serious impairment of the health of a patient. In such situations, any resident, assisted by other clinical personnel as available, shall be permitted to do everything possible to save the life of a patient or to save a patient from serious harm. The appropriate attending physician will be contacted and apprised of the situation as soon as possible. The resident will document the nature of that discussion in the patient's record.

f. **Evaluation of Residents and Supervisors.**

   i. Each resident is formally evaluated by the faculty biannually or at the end of each rotation. The evaluations are done online at https://www.e-value.net/ using evaluation forms which are based on the six competencies as outlined by the ACGME/Neurosurgery RC. 360-style evaluations are performed biannually by nursing and operating room staff. An assessment of the residents’ strengths and weaknesses and recommendations for improvement is developed. These evaluation forms are reviewed by the Program Director and Chairman. The Program Director meets with each resident two to three times per year. These meetings are held to review 1) Resident Questions/Concerns 2) Faculty Evaluations of the Resident 3) Case Log Review 4) Academic Productivity 5) Resident Evaluation of Current Rotation 6) Resident Evaluation of the Program 7) Career Planning and 8) Plan/Action Items). These meetings also obtain resident feedback on the program including clinical rotations, research, faculty, teaching sessions, call, and anything else that is felt to be of concern. Minutes are kept for each meeting, provided to the resident, and added to the resident's file.

   ii. If a resident's performance or conduct is judged to be detrimental to the care of patient(s) at any time, action will be taken immediately to ensure the safety of the patient(s).

   iii. The residents are asked to evaluate the faculty using a standard online questionnaire at the end of each rotation. The evaluations are completed anonymously by residents, reviewed by the program director and department chair, and discussed with the individual faculty members. Correction of any serious problem is monitored by the program director and chairman.

g. **Monitoring Procedures**

   i. The goal of monitoring resident supervision is to foster a system--wide environment of peer learning and collaboration among managers, attending physicians and residents. The monitoring process involves the use of existing information, the production of a series of evaluative reports, the accompanying process of public review of key findings, and discussion of policy implications. Monitoring of the compliance with these procedures will be performed by the program director and as part of the scheduled internal program reviews.

   ii. The basic foundation for resident supervision ultimately resides in the integrity and good judgment of professionals (attending physicians and residents) working collaboratively in well--designed health care delivery systems.