PGY-1 Expectations

Overview

This is directed at acquiring fundamental clinical skills as required by the American Board of Neurological Surgeons (ABNS) and the Residency Review Committee (RRC). The year is organized as follows:

- Neurosurgery: 6 months
- Neuro-Otology
- Surgical Trauma
- Neurology Clinic/EEG
- Critical Care
- Neurology – Stroke Service
- Neuro-Ophthalmology

Patient care:

1. Perform thorough history, physical, and neurological examinations with complete, accurate and timely documentation.
2. Understand indications for and interpret lab and imaging studies.
3. Learn to counsel patients appropriately for obtaining informed consent.
4. Learn basic operative skills such as tying, suturing, instrument and tissue handling.
5. Manage common post-operative complications.
6. Learn to provide exemplary patient care using a team approach

Medical Knowledge:

1. Complete ABNS basic clinical skills requirements via rotations in neurosurgery, general surgery, neurology, neuro-ophthalmology, critical care and orthopedics.
2. Pass USMLE step 3 examination.
3. Establish an effective self-study reading program including textbooks and literature.
4. Demonstrate a solid foundation of knowledge of anatomy, physiology, and pharmacology related to peri-operative surgical patients.
5. Develop a foundation for clinical problem solving and decision making.

Professionalism:

1. Demonstrate professional behavior at all times including appearance, promptness, and interactions with patients, family, staff, and healthcare providers.
2. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities.
3. Demonstrate integrity and a commitment to patients that supersedes self-interest.

Communication & Interpersonal skills:

1. Provide compassionate patient care as determined by patients, families, colleagues, and ancillary members of the health care team.
2. Work effectively as a member of a health care team.

3. Meet expectations on all 360 evaluations.

Systems-based practice:

1. Understand the practice of neurosurgery in a quaternary care hospital, including interactions with other health care organizations and how these elements of health care affect the university practice.
2. Advocate for quality patient care and assist patients in dealing with healthcare system complexities.
3. Practice cost-effective health care and resource allocation through evidence-based medical practice that does not compromise quality of care.
4. Maintain a learning portfolio.

Practice-based learning:

1. Learn information technology skills to access available patient-care and educational resources.
2. Demonstrate an ongoing ability to learn from errors.
3. Begin to locate, appraise, and assimilate evidence from scientific studies related to clinical neurosurgical practice and neuroscience research.

PGY-2 Expectations

Overview

The trainees are considered "junior residents" during their R2 and R3 years. These years are clinical in nature and represent the trainee's initial intense exposure to Neurosurgery. During the 24-month period, each resident will complete:

- 12 months clinical Neurosurgery at University of Iowa Hospitals and Clinics
- 6 months clinical Pediatric Neurosurgery at University of Iowa Hospitals and Clinics
- 6 months clinical Neurosurgery at the VA Medical Center

Patient care:

1. Perform thorough history, physical, and neurological examinations with complete, accurate and timely documentation.
2. Understand indications for and interpret lab and imaging studies.
3. Learn to counsel patients appropriately for obtaining informed consent for all neurosurgical procedures.
4. Learn operative skills needed to perform basic neurosurgical procedures (e.g. ventriculostomy, shunt, trauma craniotomy, lumbar discectomy, laminectomy).
5. Manage neurosurgical peri-operative complications.
6. Generate patient care plans under direction of chief residents and faculty.
7. Provide exemplary patient care as part of a neurosurgery team.

Medical Knowledge:

1. Pass ABNS written examination.
2. Establish an effective self-study reading program including textbooks and literature.
3. Demonstrate a solid foundation of knowledge of anatomy, physiology, and pharmacology related to peri-operative neurosurgical patients.
4. Develop a foundation for neurosurgical problem solving and decision making.

Professionalism:

1. Demonstrate professional behavior at all times including appearance, promptness, and interactions with patients, family, staff, and healthcare providers.
2. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities.
3. Demonstrate integrity and a commitment to patients that supersedes self-interest.

Communication & Interpersonal skills:

1. Provide compassionate patient care as determined by patients, families, colleagues, and ancillary members of the health care team.
2. Work effectively as a member of a health care team.
3. Meet expectations on all 360 evaluations.

Systems-based practice:

1. Understand the practice of neurosurgery in a quaternary care hospital, including interactions with other health care organizations and how these elements of health care affect the university practice.
2. Advocate for quality patient care and assist patients in dealing with healthcare system complexities.
3. Practice cost-effective health care and resource allocation through evidence-based medical practice that does not compromise quality of care.
4. Maintain a learning portfolio.

Practice-based learning:

1. Learn information technology skills to access available patient-care and educational resources.
2. Demonstrate an ongoing ability to learn from errors.
3. Begin to locate, appraise, and assimilate evidence from scientific studies related to clinical neurosurgical practice and neuroscience research.

PGY-3 Expectations

Overview

The trainees are considered "junior residents" during their R2 and R3 years. These years are clinical in nature and represent the trainee's initial intense exposure to Neurosurgery. During the 24-month period, each resident will complete:

- 12 months clinical Neurosurgery at University of Iowa Hospitals and Clinics

- 6 months clinical Pediatric Neurosurgery at University of Iowa Hospitals and Clinics
- 6 months clinical Neurosurgery at the VA Medical Center

Patient care:

1. Perform thorough history, physical, and neurological examinations with complete, accurate and timely documentation.
2. Understand indications for and interpret lab and imaging studies.
3. Counsel patients appropriately for obtaining informed consent for all neurosurgical procedures.
4. Learn operative skills needed to perform more advanced neurosurgical procedures (e.g. ACDF, tumor craniotomy, lumbar instrumentation).
5. Generate and implement patient care plans under chief resident and/or faculty supervision.
6. Provide exemplary patient care as part of a neurosurgery team.

Medical Knowledge:

1. Pass ABNS written examination at above the 10th percentile.
2. Continue an effective self-study reading program including textbooks and literature.
3. Demonstrate advanced knowledge of anatomy, physiology, and pharmacology related to peri-operative neurosurgical patients.
4. Demonstrate complex and appropriate neurosurgical problem solving and decision making.

Professionalism:

1. Demonstrate professional behavior at all times including appearance, promptness, and interactions with patients, family, staff, and healthcare providers.
2. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities.
3. Demonstrate integrity and a commitment to patients that supersedes self-interest.

Communication & Interpersonal skills:

1. Provide compassionate patient care as determined by patients, families, colleagues, and ancillary members of the health care team.
2. Work effectively as a member of a health care team, including teaching of medical students, residents, and ancillary healthcare providers.
3. Meet expectations on all 360 evaluations.

Systems-based practice:

1. Understand the practice of neurosurgery in a quaternary care hospital, including interactions with other health care organizations and how these elements of health care affect the university practice.
2. Advocate for quality patient care and assist patients in dealing with healthcare system complexities.
3. Practice cost-effective health care and resource allocation through evidence-based medical practice that does not compromise quality of care.
4. Maintain a learning portfolio.

Practice-based learning:

1. Demonstrate advanced information technology skills to access available patient-care and educational resources.
2. Demonstrate an ongoing ability to learn from errors.
3. Locate, appraise, and assimilate evidence from scientific studies related to clinical neurosurgical practice and neuroscience research.

PGY-4 and PGY-5 Expectations

Overview

During this two-year period, the resident receives the research training critical to success in pursuing a career in academic Neurosurgery. These years allow trainees an opportunity to pursue research interests in an intensive, mentored environment. As a prelude to this training (during years R1 - R3), the resident will have met regularly with the Department Head to systematically explore neuroscience research opportunities from multiple disciplines. One of the objectives of this planning process is to identify a world-class laboratory that will provide the ideal training opportunity for each individual resident.

Patient care:

1. Properly interpret all lab and neuroimaging studies.
2. Counsel patients appropriately for obtaining informed consent for complex neurosurgical procedures.
3. Learn operative skills needed to perform advanced neurosurgical procedures.
4. Begin to guide all aspects of patient management with faculty supervision.
5. Provide exemplary patient care as a leader of a neurosurgery team, with delegation of appropriate tasks to more junior residents.

Medical Knowledge:

1. Pass ABNS written examination for credit at above the 70th percentile by the PGY 5 year.
2. Demonstrate advanced knowledge of anatomy, physiology, and pharmacology related to peri-operative neurosurgical patients.
3. Demonstrate complex, efficient and appropriate neurosurgical problem solving and decision making.

Professionalism:

1. Demonstrate professional behavior at all times including appearance, promptness, and interactions with patients, family, staff, and healthcare providers.
2. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities.
3. Demonstrate integrity and a commitment to patients that supersedes self-interest.

Communication & Interpersonal skills:

1. Provide compassionate patient care as determined by patients, families, colleagues, and ancillary members of the health care team.
2. Work effectively as a leader of a health care team.
3. Meet expectations on all 360 evaluations.

Systems-based practice:

1. Understand the practice of neurosurgery in a quaternary care hospital, including interactions with other health care organizations and how these elements of health care affect the university practice.
2. Advocate for quality patient care and assist patients in dealing with healthcare system complexities.
3. Practice cost-effective health care and resource allocation through evidence-based medical practice that does not compromise quality of care.
4. Maintain a learning portfolio.

Practice-based learning:

1. Demonstrate advanced information technology skills to access available patient-care and educational resources.
2. Demonstrate an ongoing ability to learn from errors.
3. Demonstrate advanced knowledge of neurosurgical literature and apply this to clinical decision-making and patient management.
4. Fully integrate into a basic research laboratory and publish these results.

PGY-6 and PGY-7 Expectations

Overview

This year is structured to meet all the Chief Resident Year requirements of the ABNS and the RRC. The Chief Resident has major or primary responsibility for patient management with faculty supervision and spends each day in the Operating Room. Patients are provided a clear understanding that the Chief Resident will be involved in decisions conceding their diagnosis as well as any operative procedures and follow-up care. The Chief Resident is administratively responsible for the direct supervision of the junior residents on the clinical service and rotates call equally with the other Chief Resident.

Patient care:

1. Properly interpret all lab and neuroimaging studies.
2. Counsel patients appropriately for obtaining informed consent for complex neurosurgical procedures.
3. Refine operative skills needed to perform advanced neurosurgical procedures.
4. Guide all aspects of patient management with faculty supervision.
5. Provide exemplary patient care as a leader of a neurosurgery team, with delegation of appropriate tasks.
6. Effectively teach students, nurses, and colleagues the basics of neurosurgical patient care.

Medical Knowledge:

1. Demonstrate advanced knowledge of all aspects of inpatient and outpatient neurosurgical practice.
2. Demonstrate complex, efficient and appropriate neurosurgical problem solving and decision making.

Professionalism:

1. Demonstrate professional behavior at all times including appearance, promptness, and interactions with patients, family, staff, and healthcare providers.
2. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities.
3. Demonstrate integrity and a commitment to patients that supersedes self-interest.

Communication & Interpersonal skills:

1. Provide compassionate patient care as determined by patients, families, colleagues, and ancillary members of the health care team.
2. Work effectively as a leader of a health care team.
3. Meet expectations on all 360 evaluations.

Systems-based practice:

1. Lead the practice of neurosurgery in a quaternary care hospital.
2. Advocate for quality patient care and assist patients in dealing with healthcare system complexities.
3. Practice cost-effective health care and resource allocation through evidence-based medical practice that does not compromise quality of care.
4. Maintain a learning portfolio.

Practice-based learning:

1. Demonstrate advanced information technology skills to access available patient-care and educational resources.
2. Demonstrate an ongoing ability to learn from errors.
3. Demonstrate advanced knowledge of neurosurgical literature and apply this to clinical decision-making and patient management.
4. Effectively organize and conduct neurosurgical departmental and interdisciplinary conferences.