



## Resident Core Curriculum 1232 Senior Call

**Overview:** The specific goals include objectives required for every level of training with graduated levels of supervision and responsibility. Multiple modalities are incorporated into the on call residency, including, NICV CT and MRI, Neuroradiology MRI and Musculoskeletal MRI. Over time, the resident will become progressively more knowledgeable about normal radiographic anatomy and the radiological appearances of diseases. In addition, the resident will demonstrate a progressive increasingly understanding of disease entities, their clinical presentations, and current modes of treatment.

**General Goals:** The 1232 senior is in-house on the weekend, 08:00 – 20:00. The senior supports the procedures service, and reads MRI and NICV studies. They are the senior in the chain for the 1404 and 1590 resident. They are same day overnight backup, should the 1404 and 1590 night-float residents feel the work load becomes unmanageable.

### Resident Work Responsibilities (OVERALL BENCHMARKS/OBJECTIVES for Self-Evaluation)

1. Residents assigned to 1232 will be available for consultations by 1404 and 1590 residents, technologists, clinicians, and other health care providers.
2. Resident questions will be referred to the supervising faculty covering the on-call division of radiology that is in question.
3. Resident review of cases with the supervising faculty will be conducted as many times in the day as necessary to keep an efficient workflow.
4. All resident examinations will be dictated by the end of every working day.
5. Residents will check and sign his/her reports prior to final verification by supervising faculty.
6. Residents must be familiar with the operation of all imaging equipment.
7. Residents must acquire knowledge of radiation protection and ways to reduce radiation exposure to both patients and hospital personnel. The resident will be supervised to assure that safe practices are followed.
8. Residents will check examinations before the patient leaves the department if requested to do so by the supervising faculty.
9. Residents must become proficient at detecting abnormalities demonstrated by cross-sectional (both with and without contrast) examinations. They must become proficient with generating meaningful differential diagnoses.
10. Residents will become knowledgeable about the use of different radiographic contrast agents (including their indications, contraindications, dosages, and side effects).
11. Residents will acquire an understanding of the proper preparation of patients for examinations and procedures and, appropriate follow-up afterward. Inappropriate requests, including those with insufficient clinical information, will be clarified and discussed with the referring physician.
12. Residents will do in-depth reading and study, along with a review of teaching file cases, to become knowledgeable about normal anatomy and physiology, the radiologic appearances of diseases, and gain a general understanding of the disease entities, their



clinical presentations, and certain modes of treatment.

13. Residents will serve as a consultant to referring physicians regarding imaging.

#### **Supervising Faculty Responsibilities:**

1. Supervising faculty will be available at all times by phone, for any questions, or consultations needed by the resident.
2. Supervising faculty will be present during all image guided procedures. They will allow procedures to be performed in a timely manner that does not result in the resident unnecessarily staying after 8 PM, if avoidable.
3. Supervising faculty will provide the resident with constructive feedback in any problem areas encountered.
4. Supervising faculty will verify resident-generated reports in a timely manner and inform the resident of any major changes made.

#### **Educational Goals and Objectives:**

##### **Patient Care and Technical Skills:**

###### **PCTS1: Consultant**

- Demonstrate knowledge of ACR practice guidelines and technical standards
- Familiarity with available medical records and how to access them for the purposes of patient care
- Provide support for 1404 and 1590 residents

##### **Medical Knowledge:**

###### **MK1: Protocol Selection and Optimization of Images**

- Recommend the appropriate study based on the clinical scenario and understand the relative strengths of each modality
- Protocol all emergent/urgent MR studies during shift
- Protocol cases, in consultation with the attending, to assure that the examination is appropriate and of sufficient quality to address the clinical concerns of the patient and referring physician
- Demonstrate knowledge of indications for the examinations requested (when the reason for the examination is not clear, the resident will effectively communicate with the patient and referring physician until clarified)

###### **MK2: Interpretation of Examination**

- Advanced knowledge of the anatomy of the organs examined
- Familiarity with imaging findings of common acute and chronic thoracic, abdomen, pelvis exams/studies evaluated with CT and MRI. Identify pathology in order to interpret routine imaging studies with accuracy appropriate to the level of training when presenting to the attending
- Distinguish between normal and abnormal thoracic, abdomen, pelvis, neck anatomy appropriate to level of training when presenting to the attending
- Distinguish and provide a differential diagnosis for abnormalities encountered for CT



Pulmonary angiography, CT angiography, musculoskeletal MRI, and neuroradiology MRI

- Review all studies with the supervising faculty attending
- Read all Myelograms or fluoro-guided LPs done during shift. Determine if study is appropriate and if clinically feasible (coags, consent, 300 lb weight limit). Call in neuro-angio tech and perform procedure

**Systems-Based Practice:**

**SBP1: Quality Improvement (QI)**

- Become familiar with departmental procedures, contrast safety, and sedation required in the performance of examinations
- Make suggestions to improve methods and systems utilized in radiology whenever appropriate

**SBP2: Health Care Economics**

- Demonstrate knowledge of ACR appropriateness criteria and cost-effective imaging evaluations

**Practice-Based Learning and Improvement:**

**PBLI2: Self-Directed Learning**

- Identify, rectify and learn from personal errors
- Incorporate feedback into improved performance
- Demonstrate evidence of independent reading and learning through use of printed and electronic resources
- Follow up on abnormal or interesting cases through personal communication with the referring physician or patient medical records

**Professionalism:**

**PROF1: Professional Values and Ethics**

- Demonstrate respect for patients and all members of the healthcare team (technologists, nurses, and other healthcare workers)
- Respect patient confidentiality at all times
- Present oneself as a professional in appearance and communication
- Demonstrate a responsible work ethic in regard to work assignments
- Observe ethical principles when recommending further work-up
- Promptness and availability at work are required of every resident
- Dress appropriately for work

**Interpersonal and Communication Skills:**

**ICS1: Effective Communication with Patients, Families, and Care Givers**

- Appropriately obtain informed consent when needed
- Obtain consent for more complex procedures and answer all questions the patient may have
- Explain the nature of the examination or findings in an examination to patients and their families when needed

**ICS2: Effective Communication with Members of the Health Care Team**

- Communicate effectively with all members of the healthcare team
- Communicate effectively the results of studies to referring clinicians whenever needed (for emergent studies, this will be accomplished in a timely manner)
- Effectively convey the findings of examinations through accurate dictation of reports
- Provide preliminary reports to all referring clinicians if needed before the final review of cases (when there is a significant discrepancy between the preliminary reading and final reading, the resident will notify the referring clinician immediately)
- Provide preliminary, impression only interpretations of urgent /emergent after hours MRI studies or as requested by referring physician for inpatient afterhours MRI studies. The MSK or Neuro fellow should be contacted on all studies that the 1232 resident does not feel comfortable reading.
- Use appropriate language in communicating to clinicians through reports or consultations so proper management decisions can be made
- Thorough dictations will be made with indications, techniques, findings, and conclusions
- Produce concise reports that include all relevant information
- Dictate and correct reports in a timely fashion to avoid delay in patient disposition
- Competent in using PACS, voice recognition systems, and the patient information systems in the daily accomplishment of the workload and instruct others in their use

Comment [RM5CT1]: Stated above. 1232 should not routinely be in house overnight

**Monitoring and Assessment of Resident Performance**

The resident's progress will be monitored by the faculty on the service. Any deficiencies or substandard performance will be discussed privately with the resident by the Program Director. Residents are evaluated monthly by faculty. Resident performance is also evaluated through direct observation, case logs, multi-source professional evaluations, structured case discussion, review of patient outcomes, and other performance evaluation methods as determined.

Updated 6/25/2009; Revised 02/10/2010; Revised 6/27/2011; Revised 6/1/2015; Revised 5/4/2017