RESIDENT ROTATIONS - IR DAILY DUTIES

1. DAY BEFORE REQUIREMENTS
    a. The days' work begins the day before.
    b. Senior resident assigns the next days' cases (if no senior resident available, this will default to the DOD).
        i. Residents should scrub in on 3-4 basic or 1-2 advanced cases daily.
        ii. R1-3's may assist R4-5's in cases.
        iii. Residents should be assigned to one room for the entire day. They are responsible for all patients in that room for the day, including pre-, intra-, and post-procedure care.
    c. Review the assigned cases and ensure workups are complete.
        i. Work-up includes a focused history and physical, peri-procedural laboratories and medication orders, check for consent issues, arranging admission if indicated. (see Pre-procedural IR guidelines on the Geisel Radiology / IR site)
        ii. Work-up for ICU and inpatients includes getting the consent.
        iii. Know your patients, know the procedure. Review questions with the attending.
        iv. *Essential information includes:*
            1. Indication for intervention (diagnosis, signs and symptoms)
            2. Adequate documentation of the indication (prior imaging)
            3. Laboratories (i.e., Creatinine, Potassium, PT/INR, Platelets, etc., depending on procedure)
            4. If you cannot find required patient information in notes, please check the scanned documents ("Media" tab in EDH), or the "care everywhere" tab; and if not there, please call the referring provider and/or the Primary Care Provider to fax the patient's current medical history, PMH/PSH, medication list, and recent laboratories.
            5. Know the basic steps of the procedure (see IR handbooks, i.e. Kandarpa)
            6. Know the anatomy involved.
            7. Review prior imaging
    d. Inpatients are assigned to residents for rounding the next day by the senior resident
2. MORNINGS ROUNDING
    a. The IR residents will round as a group at approximately 6 AM.
    b. R1-R3 residents will be assigned inpatients the evening before by the senior resident. These residents are expected to have reviewed their assigned inpatients in EDH prior to rounding as a group.
        i. This should include a review of the patients' hemodynamic and overall status, pertinent laboratories, drainage catheter output, nursing notes, etc. (See 'Guidelines for Morning Presentation')
        ii. R1-R3 residents should be able to give a concise review of the patients on rounds.
    c. The team should plan to be back in the IR suite at 6:30 AM. This gives times for preparing the daily progress notes prior to the need to consent patients (see below).
3. PATIENT CONSENTING
    a. Patients arrive at 0630 and will be prepared for procedural consent by 07:00.
    b. The residents are expected to be available in the IR area by 06:45 to perform the consent and pre-procedure physical exam.
    c. Please ensure you understand the procedure and have read the workup of the patient you are consenting, so you can provide an informed consent.
    d. If unfamiliar with risks of a particular procedure, check handbook and/or ask the attending.
    e. Ensure that for all patients consented:
        i. Pre-procedural work is to be finished by 07:15 AM

ii. Procedural check-list should be complete in EDH
iii. History and physical update should be in EDH
iv. Procedural orders (medicationss) are entered

f. Informed consent obtained. Including:
i. *Introduce yourself*
ii. *Ensure the patient's understanding of the procedure aligns with our plan.*
iii. *Review the major steps of the procedure*
iv. *Describe analgesia/sedation plan*
v. *Discuss risks and benefits: major complication and outcome success rates*
vi. *Inform them of approximate length of procedure and recovery.*
vii. *When did they last eat/drink anything*
viii. *Determine code status*
ix. *Sign, date, and time consent*

4. IR MORNING CASE REVIEW CONFERENCE
   a. Morning conference begins at 0715, where we discuss all of the day's cases and inpatients. Your presence is mandatory.
   b. Be ready to present your patients for the day (assignments allocated the evening prior). If any issues come up during the conference which require further investigation, the resident on that case should address them whenever possible.
   c. Be prepared to present the inpatients you are following (rounding must be completed before returning to IR to consent in am).
   d. Please see presentation guidelines for morning conference on the Geisel Radiology / IR website.
5. FIRST CASES
   a. The day's first cases will be in the rooms, and ready to go by 8:00.
   b. After conference, investigate the status of your first case. Address any issues.
   c. If there is time, review room set up with the technologist. Make sure you can move the table so that image intensifier can cover the entry and target areas, and that you can adjust the angle of the fluoro for obliques.
   d. Plan to be in the room, scrubbed, and ready before the attending enters.
   e. Prepare the tray for the procedure by mentally going through the case, making sure equipment for each step is available.
6. POST PROCEDURE CARE
   a. After your case is complete, write appropriate orders (IR Discharge Order Sets – Vascular and Non-Vascular)
   b. For all percutaneous punctures, "please check access site for bleed/hematoma q 15 ' x 4 then q 30' x 2. In case of bleeding, apply direct pressure and notify IR."
   c. For chest tube placement, write, "chest tube to -20cm suction"
   d. For drains, write "drain care" orders regarding output recording and flush instructions
   e. Nursing care and discharge instructions
   f. All outpatients require a discharge order. All inpatients require a transfer back to floor order.
   g. A brief operative note or a full procedure note must be entered within 30-minutes of case completion per the Joint Commission.
7. BETWEEN CASE EXPECTATIONS:
   a. Please answer the phone if the scheduler is on another line or away.
      i. This is an expectation of all the staff.
      ii. However, it is not necessary to investigate ongoing management issues from scratch, if there may be someone familiar with the situation or process. Saying, "please hold" and referring is often the time-efficient solution.
   b. Throughout the day, if there is time before "your" case starts, the work priority is:

i. Check the board for any other patients who have arrived and may need consent/checklist completed,
ii. Check if there are any "add-on" cases which need work-up
    1. Add-ons should be worked up and then presented to an attending or associate provider to determine acuity
    2. Any add-ons or emergent cases should have a designation of urgency based on anesthesia triage category
    3. If a provider that calls regarding a case, the time and date should be recorded in the procedure note.
iii. Assist the toad with the next day's workups or troubleshooting.

8. PRE-PROCEDURE H&P:
    a. It is a Joint Commission requirement to have an H&P by a DH physician performed within 30 days of the procedure. The pre-procedure workups should address the following questions:
        i. What procedure is being asked of us?
        ii. What is the indication—general diagnosis and the specific signs, symptoms the procedure is to address
        iii. Is this the appropriate procedure for the patient's problem? (may warrant discussion with attending)
        iv. Based on IR protocols for sedation, anticoagulation, and antibiotics, is there anything in the patient's current or past medical/surgical history, including medications (i.e. Anticoagulants), labs, and recent imaging which would require further investigation, require accommodation, or be a contraindication to the procedure? If so, discuss with the attending as needed, and address this in the impression & plan section of the note.
        v. Please include a grade that provides a classification of the urgency in the event that triage becomes an issue:
            1. A: requires intervention within the hour.
            2. B: within 2 hr.
            3. C: within 6 hr,
            4. D: within 24 h,
            5. E: elective inpatient,
            6. F: elective outpatient, within 3 days.
        vi. Work ups for emergency department requests, or acute ICU referrals should include date and time that your received the call / request.
9. MODERATE CONSCIOUS SEDATION:
    a. If more than a simple needle puncture, patients may receive fentanyl with or without versed during the procedure.
    b. Sedation requirements restrict any food for 6 hours prior to procedure, and any clear liquids 2 hours prior to procedures for fentanyl + versed.
    c. If patients have eaten they may receive analgesia (i.e., fentanyl) only.
    d. Use of anxiolytics not requiring NPO status include Haldol, Ativan, Xanax, etc. should be discussed with the nursing staff.
    e. If fentanyl cannot be used due to allergy or some other reason, an alternative narcotic may be used (dilaudid, morphine, etc)
    f. Provision of moderate conscious sedation (i.e., versed and fentanyl) requires an ASA and Mallampati score as part of the pre-procedure physical exam.
        i. There are charts (in flip page file folder on the desk with the printer) delineating the categories for each. These must be included with the pre-procedure physical exam.
10. PROPHYLACTIC ANTIBIOTIC.

a. The complete list of procedures with recommended prophylactic antibiotics are listed in the "pre-procedural IR guidelines".

PGY 5 / 6 SPECIFIC ITEMS

1. ACTING DOD
    a. Over the course of the year, senior residents should work towards acting as the DOD.
    b. They should be screening add ons, be the go to person for the younger residents and associate providers to screen cases, and then present them to the attending DOD in a brief summary.
2. IR CLINIC
    a. PGY-5 / 6 residents are assigned a clinic based on the attending physician staffing that clinic.
    b. During that time you are excused from duties in IR.
    c. Attendings Clinics are:
        i. Dr. Robert Percarpio - Monday AM
        ii. Dr. Andrew Forauer – Monday PM
        iii. Dr. Eric Hoffer – Tuesday PM
        iv. Dr. John Gemery – Wednesday PM
        v. Dr. David Munger – Thursday PM
3. MULTIDISCIPLINARY CONFERENCES
    a. The assigned multidisciplinary conferences are also based on attending physician's clinic assigned.
    b. Vascular Surgery - Monday AM didactics, Tuesday 8am dialysis
    c. Gastrointestinal:
        i. Pancreatic, Rectal, and Gastrointestinal Tumor Board – Tuesday 6:45 AM
        ii. Liver Tumor Conference – Tuesday 12:00 PM
        iii. Gastrointestinal Case Conference – Wednesday 7:00 AM
    d. Genitourinary:
        i. Urology Case Conference – Thursday 7:00 AM
        ii. Genitourinary Tumor Board – Thursday 4:30 PM
4. Residents will get half day per week of academic time on presentation of a project topic or research plan.