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1. Technology Issues:
   -call IT help desk at 3-7717 (or via hospital operator)
   -for PACS issues, IT help desk will page the PACS admin on call (usually Ron Triche or Joel B.)…call back to check in as sometimes the IT help desk does not follow-up (if not, contact info for Ron & Joel is available on the pocketcard)
   -if having trouble reaching the appropriate IT person, call the admin on call or Kunal

Scheduled Cerner Downtime
What happens during scheduled Cerner downtimes:

- UIC undergoes regular Cerner downtimes for maintenance. These events are often scheduled on the second Wednesday of each month and will affect the night resident (typically 12-4 am), but could occur other times
as well. Downtimes are announced via the hospital listserv - keep an eye on your inbox for the announcements.

- Downtimes are scheduled when patient volumes tend to be low, however it can still be disruptive particularly on busy ER nights.

- Imaging orders placed during downtime (all modalities) do not have accession numbers, and therefore cannot be dictated in Powerscribe. **Results must be communicated in-person or by phone**

- Studies are performed by the tech as “Unspecified” and do not show up on the ER list. They are visible on the “All recent exams” list. **The only way to know when an ER or other urgent exam is done is for the tech to call you and tell you**

- Indications for studies are usually not visible, and you cannot open the chart to check because Cerner is down, so **indications must also be verified via phone**

- Orders placed by the ED are not visible in the Appbar, so you won’t be able to figure out what’s coming

- Accession numbers can only be added by radiology tech managers (night techs do not have privileges to do this), so accession numbers are not added until the next morning when staff comes in around 8am.

**What to do to survive downtime successfully:**

- **Communicate proactively with techs:** Most are aware of this issue and know to call you with each ER / urgent exam, however some of the newer techs may be unaware.
Touch base beforehand and let them know to call you with any study that needs to be read.

- **Dictate draft reports under a TEMP order:** In Powerscribe360, it is possible to enter a temporary accession number in the search bar (upper left corner of the main screen.) These “fake” accession numbers can be taken from the Unspecified study, if you wish, or you can just make up an imaginary number. For example – DR150000888. Once you enter the number, a menu will pop up asking if you wish to create a temporary order. Scroll to the bottom and select TEMPORARY. You can dictate your report this way and save it as a draft, instead of waiting until the morning to dictate everything when you are tired and trying to go home. Remember to type the patient’s name somewhere on the draft report so you know which study to attach it to later!

- **Communicate proactively with the ER and services:** You can wait until the ER calls you for reads, but probably best to call them every so often. Calling regularly with small batches of results is an efficient way to do this. You can also ask simultaneously for exam indications.

- **In the morning, copy or merge your reports into the proper accession number in PACS:** Contact a tech manager in the morning to provide accession numbers to the unspecified reports. Diana Gutierrez (director of XR)? 312-996-0258 or Tom Joseph (ext 3-2035) can help with this, to name a few.
Unscheduled PACS/Powerscribe Downtime
Faculty has worked to develop a protocol for what we need to do in the event of an unplanned (accidental) PACS or Powerscribe downtime as well. Please see below on protocol for how to troubleshoot, the idea is that this should be addressed by IT ASAP to avoid disruption in patient care.

PACS/POWERSCRIBE DOWNTIME DURING OFF HOURS

RESIDENT TO CALL  # 3-7717 (help desk) State “the powerscribe or PACS system is down. This is essential for patient care and needs to be labeled high priority. We need a callback within 15 minutes”

IS should keep resident on call informed of progress every 20min.

If no progress soon, Administrator on call needs to be contacted.

The administrator on-call can be found by going to the radiology website. Under the Faculty/Staff page, choose the dropdown menu “Schedules” and select Call Schedule. You will be prompted with your UIC login. Click on the month you need (Purple color) for the Administrator on call.

2. Requesting Attending Reads:
Please note that the attending on-call is not always the person covering the service that day or the next day, which is typically
who you send your reports to (instead, there is a dedicated "on-call attending radiologist," found on the departmental website)

In general, attending reads should primarily be given by our attending directly to their attending, with the initial request coming directly from their attending. Neurosurgery will sometimes request final reads on cases that potentially could need anticoagulation (dissections and PEs usually), which can be appropriate and needs to be assessed on a case-by-case basis. When other services call with this request, make sure you obtain their attending's contact information so the final read can go from attending to attending.

Contact Information:
Attending (and other) pager/home/cell numbers are posted:
- on the wall in the call-room
- resident pocket-card
- UIC website: [http://tigger.uic.edu/htbin/codewrap/bin/com/uhrd/cgi-bin/index/index.php](http://tigger.uic.edu/htbin/codewrap/bin/com/uhrd/cgi-bin/index/index.php) Faculty/Staff Link -> On-Call Button (Bottom Left) -> Attending Radiology Contacts at the bottom of the page.
- Additional information on this page includes the following:
- On call Body, Neuro, Peds and NM attendings for the month
- On call US, IR, MRI, NM Techs and IR Nurse
- Can find pager #’s and emails for attendings and other hospital personnel on the employee intranet under “Oncall & Paging directory”

3. Interventional Radiology:
Rotation Guidelines:
• Updated by Dr. Bui 4/26/18: Residents will be responsible for doing consents for the rooms they are assigned to; not every room. The fellows are to consent the patients in their rooms. When the resident or fellow isn't available, then the next responsible person is the assigned attending. The residents' secondary responsibility is to be in the procedural rooms when they are done consenting their assigned room.

• Every procedure MUST have a supervising attending; make sure the attending is aware you are about to start a procedure before you start.

• When assigned to the IR rotation, the resident should be available after hours to assist with any on-call cases if necessary. Please have your cell or pager close by after hours.

**On-Call:**
For emergent interventional procedures at UIC, get the following information: clinical indication, lab values (CBC, coags, renal panel), requesting attending, resident contact numbers, and the consentability of the patient.

If after consultation with on-call fellow or attending the decision is made to call the team for a procedure, make note of the “PUNCTURE TIME” of the procedure and provide that to the IR tech and IR nurse. Always call both IR tech and nurse unless specifically told not to.

If general anesthesia is required (e.g. TIPS), attempt to contact the anesthesia on-call service to report the need for the procedure; however, if unable to adequately justify the need then notify the primary service to request the need (make them justify the emergent nature and have them set up GA).
**IR Fellow & Attending Coverage**
fellow & attending call schedule is tracked via Google calendar 
(login & password: uicmcircall) 
on-call attending will be listed in red at the top of the calendar 
***make sure that the "IR Fellow" green block is also clicked in the bottom left corner of the screen, sometimes this hides if the fellow is the first person to call. If one is listed, always call the fellow on call before the attending

**IR Tech Coverage**
The angio tech on call schedule: Primary Tech is for neuro interventional cases. The PV tech is for IR angio.

**IR Nurse Coverage**
See the Radiology nurse on call schedule. A nurse is required for all IR procedures to assist in administering moderate sedation.

**Pulling a Sheath**
You may be asked to pull a sheath on a patient who underwent angiography. Make sure the coagulation profile is acceptable before pulling the sheath. Consult with the IR attending on call and if the attending agrees, have the patient's nurse hold the IP phone while you are holding pressure and tell the secretary at the radiology front desk that you are going up to the floors. Sometimes, if it's during the late morning/early afternoon, the body attending might be kind enough to cover the ER list for you.

**Biopsy/Drain Requests**
These are usually not emergent and can wait for regular hours. If the service is insistent or persistent, escalate the request to the appropriate service.

**Vascular Access and Other Requests**

PICC lines are almost never emergent. There is NO on-call PICC team. Emergent dialysis catheters may be needed based on clinical indication (hyperkalemia, fluid overload, arrhythmia, etc). If in doubt, contact the on call IR attending. If a patient has a clotted AV fistula or graft and needs dialysis and doesn’t have an emergent indication, then can have patient come to IR at 0700 the next regular working day (M-F). Notify the service to: 1) instruct patient come to IR in room 2600 and to have patient be NPO and have a ride home (for sedation), 2) instruct them to place a radiology order for dialysis declot and 3) send email to on call attending and fellow on service.

**Thoras/Paras**

We generally do not perform these procedures while on call. In addition, we are not allowed to "mark the spot" where the clinical service could potentially use as a target for the procedure. We can, however, let them know whether there is or is not fluid based on a limited ultrasound they order. If they are insistent that one needs to be done (i.e. their attending is on the phone with you demanding it) please escalate to your attending physician and this should be handled on an attending-to-attending level.

**4. Ultrasound:**

**Departmental hours**
M-F 7am-11:30 pm, Sat & Sun 7am-3:30 pm.
After these hours the procedure is to submit a technologist call sheet (sheets are available at 2600, or can print off extra from rad website) to the clerk at 2600.

*technologist call sheet must be submitted every time an exam is approved after hours. For example, if you call in a tech for an approved, emergent US and then there is another emergent US ordered from the ED/Floors, you would still need to fill the form out.

**DVT ultrasounds**

Performed by the vascular surgery department, and have been for multiple years. Have the requesting service contact the surgery resident covering vascular if they are confused.

**Pregnant female ultrasounds**

**Performed by the OB department.** So if a pelvic exam is ordered, make sure a beta-HCG is back. If it is positive, the exam is performed in the OB department. If a pelvic ultrasound is to be performed, make sure a Foley catheter has been placed by the ER nurse. If for some reason the OB ultrasound service is not available (un-pageable), we are still not supposed to do them. The technologists are not familiar with what to look for and the attendings do not routinely read them. If there is pressure from an attending, let an attending-to-attending conversation take place and remove yourself from the situation.

**Complete abdominal ultrasounds from Peds ER**

Acceptable if the story justifies the examination. Often a limited study may be all that can be justified from their working diagnosis.

**Neonatal head ultrasound**
Attending pre-approval is no longer necessary, per Dr. Shamim.

**Breast US Protocol** (updated 5/31/17)

- After hours breast ultrasound is to evaluate for ABSCESSION ONLY. Any other issues (mass, nipple discharge etc) are nonemergent and the patient should be set up with an appointment for diagnostic mammogram and ultrasound during Mammography’s normal business hours (Mon-Fri 7:30-4:30)
- If there is concern for an abscess, surgery must be consulted first. The surgeons feel that most abscesses are clinically apparent and should not require ultrasound in the emergency setting.
- If surgery feels that the physical examination is not straightforward (there is suspicion for an abscess too deep to palpate), we can proceed with ultrasound. Ask if the patient can wait until the Breast Imaging Section is open (tell them to call 6-0267 at 7:30 am and the patient should be able to be seen immediately). If they cannot wait, there is no on-call breast sonographer, so the on-call general sonographer will need to be called in.
- A limited ultrasound ONLY will be performed to evaluate for abscess. Please let the ED physician know that the patient will need to return during business hours for diagnostic breast imaging (this would include ultrasound by a breast sonographer and possible diagnostic mammogram), as inflammatory breast cancer can present similarly to infection.
- Dr. L. Green has a PowerScribe template called “On Call Breast Ultrasound”, which should be used for the dictation
Ask the attending from the Core Section who you are reading out with if they are comfortable signing off on the case. If not, please inform the Breast Imaging attending who is on duty the following morning (or Monday morning if this takes place over the weekend) that there is a case you are sending them.

**Transvaginal US**
Performing Transvaginal US’s on patients who have never been sexually active **AND** are 18 years or older. (Performing transvag exams on under 18 year olds who are not active/non-emancipated minors is still not a good feasible idea).
Note: Transvaginal scanning can be performed on a woman (≥ 18 yo) who is not sexually active if the following conditions are met:

- Consent of patient (written consent needs to be in chart)
- Agreement of the ED physician and radiologist
- Patient’s clinical scenario warrants transvaginal scanning and the clinical question has not been answered by transabdominal scanning
- As always, there needs to be a female chaperone in the room
- If the question is answered by transabdominal technique, please call the ER, and discuss this, as transvaginal probe may not be necessary. These changes have been made in conjunction with the ER liaison.

**5. Nuclear Medicine:**
For all emergent nuclear medicine requests gather the pertinent clinical information, which includes patient weight, respiratory status (intubated or not), IV access, history of pulmonary HTN
for VQs, CXR that is reasonable within 24 hrs, preferably 6-12 hrs (if you think over 50% of the lungs are compromised, the study will not be useful usually).

Page the technologist on call (listed on the departmental website), usually at the pager 3999. If you can't find a current sheet and the front desk can’t help you, page the lead-tech Tim (312) 249-1647.

VQ scans will not distinguish a new from chronic PE. We do offer SPECT/CT imaging as well, which can be helpful if you have questions about a suspicious defect. Tell the technologist you want SPECT/CT and they can contact the service for the appropriate order.

6. Neuroradiology

Rotation Guidelines:

- Please follow the sub-rotation schedule Dr. Saran coordinates for the year (ENT, MRI, CT)
- Dr. Michals distributes a neuroanatomy checklist that should be mastered by the end of the first rotation.

On-Call Lumbar Puncture Requests

Services must attempt the LP themselves; this includes the resident and attending, with both attempts documented in the chart.

If it is the weekend, neurology should be consulted prior to radiology, and their attending needs to also have made an attempt. Generally, these are supervised procedures and during off hours coordination with attending availability is necessary. On rare occasions, the resident will be allowed to do the LP
without the attending physician present, but this is only after the attending physician has approved the procedure and told to the resident to attempt it on his/her own. A power chart note is sufficient documentation and these procedures cannot be dictated/charged due to lack of sufficient attending involvement. If that patient is too large, and that is the reason for the request, we can provide a larger needle or it can be obtained from central supply, but the above must still happen prior to the radiology attempting placement. Body habitus does not bypass the need for the floor to attempt. Also please remember the patient needs to be able to lay prone and possibly decubitus. Intubated patients are not possible on the table.

**CT Perfusion**

CT Perfusion studies are occasionally requested by neurology or neurosurgery for stroke patients, and they are offered by the department at all times. Acute stroke patients who may undergo endovascular therapy can get a CTA & CT perfusion study without a GFR or with a low GFR. The technologists are all trained to do these and should know labs are not necessary. If the technologist claims they are unable to perform the test you should page the administrator on call or try to help with this. All residents have been trained in interpretation, but when uncomfortable escalate to the senior resident on call. If the senior has difficulty, the senior resident should escalate the case to the attending on call.

Dr. Saran has provided a flow sheet below and has a sample prelim report called “CTA/CTP Prelim Report”. Note this just a prelim template so you get the findings to the stroke time in a timely manner without having to do a full dictation. However, when you have time you are supposed to go back and dictate a
full CTA/CT perfusion report as usual. A slide on interpretation has been added to the resident pocket card.

7. Pediatrics:

**Intussusception Protocol**

There is an on-call pediatric attending list that is available online in the same area as the other on-call information. Prior to calling the attending you should ensure that the symptoms have not been going on for >24 hrs, the patient is nontoxic, they have a soft abdomen, no white count, and ideally an ultrasound demonstrating an intussusception. If some, but not all of these criteria are met, you need to inform the attending when you call.
them. Pediatric surgery should be available and have seen the patient.

8. **MSK:**

*Protocols* (updated 2/9/18):

1. Open the online worklist (appbar)
2. Modify the MSK/Body exam by selecting “Modify Order Details” from the toolbar.

3. This will open to the “Order Details” window. The resident will indicate the exam protocol in the “Special Instructions” field. Please place your initials and date before the protocol as indicated below.

When an order needs to be changed (new location [pelvis vs abdomen, long bone vs joint, etc], or addition of contrast):
4. The resident will contact the ordering physician and request that a new order be placed for correct exam (and add labs for GFR if needed).
   • make sure the physician does NOT cancel the original order bc patient will lose their appointment slot!
   • if just changing from w and w/o contrast to noncontrast, does not need intervention/ call
5. The resident will alert Lisette/ front desk of the order change so she can deal with the insurance.

***The protocol you give should always correspond to the title of one of our protocols, listed on:
https://radiology.uic.edu/facultystaff/mrbodyprotocols.php

**Rectal Cancer:**
Include location of tumor on the protocol w/ the measurements.
Low rectum 0-5 cm
Mid 5-10 cm from anal verge
High 10-15 cm from anal verge

**MSK-US** (Updated by Dr. Mar, 3/22/18)
- Joint effusions, fluid collections, and masses can be scheduled on any attending day.
- Tendons, ligaments, and rheumatoid arthritis or anything else that doesn't fit in the above need to be scheduled on Dr. Mar’s days. Don't hesitate to clarify with her.
- If they have ordered it incorrectly as a procedure, but it appears they don't want one in the note (happens frequently) they will need to change the order.
- If unclear, please do not hesitate to ask your attending. if your attending of the day is unclear, please consult with Dr. Mar or Dr. Shamim.
Technical Issues & IV Contrast:

**Weight Limit for Tables** (according to the techs)
Angio table is 550 lbs.
MR scanner is 350 lbs.
CT scanner is between 400-425 lbs.
Nuc Med scanner is ~450 lbs

**Injectable Lines**
For CTAs or CTs per PE protocol, the patient needs to have at least a 20G IV in his/her forearm or AC or a purple Power PICC in place. Smaller IVs or those within the hand or wrist are not acceptable. For regular CTs with contrast, these rules do not apply. You will frequently receive calls about difficult sticks or patient’s that have terrible access and terrible veins, or lines in interesting places. Small IVs in peripheral spots are very likely to infiltrate or produce non-diagnostic studies. Various requests will be injections through triple lumen catheters, external jugular IVs, IVs in fingers/toes/hands, etc. Offer alternatives such as VQ if it is a PE rule out. If you are unsure call the attending and let them know.

**MRI Compatibility** – [mrisafety.com](http://mrisafety.com)
For MRIs and devices, look in the MRI safety book or MRI safety.com. Most patients have cards with the device number on it.
If the patient reports a history of lodged bullets, shrapnel, etc, get plain films of the region to ensure that the objects are not located in or adjacent to vital organs (i.e. the spinal canal, large vascular structures, brain, or eye).

**MRI and Aneurysm Clips**
No patient gets an MRI without record of the exact type of aneurysm clip. Even here at UIC, 99% of the clips are MRI compatible, but there is one type of clip that is NOT compatible, the "special." Nobody should instruct you to "just do the MRI because all clips at UIC are MRI compatible." They are not. You need documentation of the clip type for the MRI tech. If the clip is from before 2000, take extra special care to have proper information before sending someone into the scanner.

**Pregnant Patients**
- All MRI and CT exams ordered on pregnant patients need to be protocolled by the radiology resident.
- ***Gadolinium cannot be administered to a pregnant patient.***
- When performed, written consent must be in the chart prior to CT. Consent should be specific to the gestational age, as below:

3 periods of gestation:
1. Preimplantation: 0 - 9 days It's an all or nothing event. Either the embryo survives and does fine or dies.
2. Organogenesis: 10 days - 6 weeks. IUGR, which can be recovered. Mental retardation occurs secondary to radiation during 8-15 weeks. The other concern is microcephaly.
3. Fetal period: 6 weeks to term. IUGR, which is irreversible. Continued concern for microcephaly and/or mental retardation. At all times during gestation, the fetus is being placed at risk for future development of pediatric cancer, especially if exposed during the 3rd trimester.

**IV Infiltration Staff Responsibilities** (can also be found in the “resident” website tab, pocket card, and posted in the call room)
• All patients with an IV infiltrate must be evaluated by a radiologist prior to patient leaving area
• Radiology tech or RN will submit occurrence report (resident can also enter if he/she chooses)
• Radiologist enters clinical note in Powerchart regarding infiltrate. Note to include: site and approximate volume of infiltrate; description of distal pulses; presence of normal sensation, strength, and movement in distal extremity (any numbness, tingling, or weakness); pain on scale of 1-10; treatment given (usually ice and elevation); follow up - was ordering service or ED notified?
• Outpatients: patient needs to be called back the following day. Email Cathy Rennau and Carmela Gonzalez with patient name and MRN. If following day is weekend/holiday, resident working the following day must call patient and assess pain and circulation and document in Powerchart. (use outpatient infiltrate follow-up form)

**Contrast Nephrotoxicity:**
Normal healthy (young) patients do not need a recent Bun/Cr prior to contrast administration. The main risk factors for renal dysfunction include: diabetes mellitus, renal disease or solitary kidney, sepsis/acute hypotension, dehydration or volume contraction, age>70 yrs, previous chemotherapy, organ transplant, vascular disease. Patients with an eGFR of >60 mL/min have an extremely low risk of CIN and generally do not require preventative measures or follow-up. Patients are more at risk for CIN when eGFR is <30.

**Basic Preventative Measures:**
1) Alternative exam (e.g., US, MR, or non-contrast CT), if this will adequately assess the clinical concern.
2) Hydration/IV fluids.
3) Ensure metformin has been discontinued the day of the exam and is not re-started until 48 hours after renal function has been rechecked as is back at baseline.
4) Discontinue other known nephrotoxic medications 48 hours before the exam.
5) NAC is of questionable (if any) benefit.

Exceptions to the above recommendations are sometimes made, but any deviation from institutional guidelines requires an attending to attending discussion with radiology resident documentation in power chart. Also, patient informed consent regarding the risks and potential need for dialysis obtained and documented in the chart, preferably by the ordering service since they are the ones who have decided the benefits of the exam outweigh the risks. Although, the service may have acquired the written informed consent, verification of its presence in the chart is the responsibility of the radiology resident on call.

**Repeat Contrast CT Exams within 24 Hours:**
Not typically advised, though the most recent ACR guidelines allow for additional contrast exams without repeating lab tests and advocate discussing risks v benefits with ordering physician on a case-by-case basis. Also, the patient should be consented, which should be reflected in the chart as mentioned above.

**Contrast Allergy:**
Contrast studies on pre-medicated patients with a history of serious reaction are best done when you're not alone in the department (ie-during regular business hours).

When the referring service calls to ask about how to pre-medicate prior to contrast administration or about contrast-
induced nephropathy in general, you can refer them to the hospital policy, which can be found on the intranet.

The policies for both pre-medication (Addendum 2) and treatment of contrast reactions (Addendum 3) are based on the ACR guidelines, which can be found in the pocket card

**Giving Gadolinium**

| Addendum 4. When a new eGFR should be obtained prior to GBCA-enhanced MRI in outpatients with risk factor(s) for compromised renal function |
|---|---|---|
| Prior eGFR level (ml/min/1.73m²) | When was the last eGFR before MRI? | When should new eGFR be obtained prior to MRI? |
| None available | Not applicable | Within 6 weeks |
| ≥ 60 | 6 months | New eGFR not needed |
| ≥ 60 | < 6 months (stable state*) | Within 2 weeks |
| ≥ 60 | < 6 months (possibly unstable state**) | Within 2 weeks |
| 30 – 59 | 2 weeks | Within 2 weeks |
| < 30 | 1 week | Within 1 week |
| On dialysis | Not applicable *** | New eGFR not needed*** |

*Patient does not have a known condition that might result in acute deterioration of renal function  
**Patient has a known condition that might result in acute deterioration of renal function. Such conditions include severe dehydration, febrile illness, sepsis, heart failure, recent hospitalization, advanced liver disease, abdominal surgery.

If the patient has had no recent lab work, then you need to go by history. If s/he is under 60 years old, has no history of diabetes, hypertension or known kidney disease, or is not on renal-related medications, then contrast can be given. Otherwise, a BUN and Cr need to be obtained to calculate a GFR.  
If the GFR is greater than 60: use 0.05 mmole/ml Multihance per Kg with a limit of 20 ml.  
If the GFR is greater is between 30 & 60:
1. Determine if contrast is needed. If not, inform the service &
do a non-contrast study.
2. If contrast is needed, use 0.05 mmole/ml Multihance per Kg
with a limit of 20 ml.
If the GFR is < 30: no contrast should be used unless:
1. You have talked to the clinical service and your supervising
attending radiologist about the case.
2. They have obtained a nephrology consult and it is
documented in the chart.
3. The administration of contrast is necessary for diagnosis.
4. The patient has signed a consent form indicating the
risks/benefits/alternatives.
5. If dialysis is to be performed, it should be done less than 2
hours after administration.
6. Use half dose Multihance for contrast if needed.

We don't give gadolinium to pregnant patients. You will
occasionally be asked to consent pregnant patient’s for MRI.
Basically there is no proven fetal effect, although long-term
studies have not been completed.

**Gad Contrast & Breast-feeding** (updated 2/16/18)
ACR Recommendation
Because of the very small percentage of gadolinium-based
contrast medium that is excreted into the breast milk and
absorbed by the infant’s gut, we believe that the available data
suggest that it is safe for the mother and infant to continue
breast-feeding after receiving such an agent. Ultimately, an
informed decision to temporarily stop breast-feeding should be
left up to the mother after these facts are communicated. If the
mother remains concerned about any potential ill effects to the
infant, she may abstain from breast-feeding from the time of
contrast administration for a period of 12 to 24 hours. There is no value to stop breast feeding beyond 24 hours. The mother should be told to express and discard breast milk from both breasts after contrast administration until breast feeding resumes. In anticipation of this, she may wish to use a breast pump to obtain milk before the contrast-enhanced study to feed the infant during the 24-hour period following the examination.

**Miscellaneous**
- To sign in your pager for call, dial 136, then *9847, then 311, then enter your pager number, then hit #.
- The Café downstairs is open 24/7 and your meal FOB will work there.
- To see examples of what radiopaque instruments/sponges look like on PACS, perform the following: Go to ALL EXAMS, then under patient name enter INSTRUMENT INSTRUMENT, OR will be listed and you can scroll through the radiographs. Use these images for help, but certainly continue to use common sense if you see something out of the ordinary.

**Graduation Requirements**
- ABR Nucs I-131 Therapy (3 therapies < 30 mCi and 3 therapies > 30 mCi)...form can be found at [https://www.theabr.org/sites/all/themes/abr-media/pdf/ic_nrc_formab.pdf](https://www.theabr.org/sites/all/themes/abr-media/pdf/ic_nrc_formab.pdf)
  - if forget to log, search PACS “NM Radiopharm Therapy Oral” or “NM I131 Therapy for Thyroid Ca”
- must complete a minimum # of cases, easy to reach for all DR...however, procedures sometimes not flagged correctly
o see qualifying CPT with case logs below

<table>
<thead>
<tr>
<th>Case Log Categories</th>
<th>Required Minimum Number</th>
<th>CPT Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chest X-ray</td>
<td>1900</td>
<td>71045, 71046, 71047, 71048</td>
</tr>
<tr>
<td>CT Abd/Pel</td>
<td>600</td>
<td>72192, 72193, 72194, 74150, 74160, 74170, 74176, 74177, 74178</td>
</tr>
<tr>
<td>CTA/MRA</td>
<td>100</td>
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20604/20606/20611 - arthrocentesis w ultrasound guidance
32555 - thoracentesis w imaging guidance; 32557 - Introduction and removal procedures on the lungs and pleura
49083 - abdominal paracentesis
49405/49406/49407 - image-guided fluid collection drainage by catheter (e.g., abscess, hematoma, seroma, lymphocele, cyst); 49405 - percutaneous visceral (e.g., kidney, liver, spleen, lung/mediastinum), 49406 - percutaneous peritoneal or retroperitoneal, 49407 - transvaginal or transrectal peritoneal or retroperitoneal
77012 - CT guidance for needle placement (e.g., biopsy, aspiration, injection), radiological supervision and interpretation
76942 - US guidance for needle placement, w injections/aspirations of joints, trigger points, tendons or cysts