#### Scenario: Error and Apology 1

Background: 40 year old female with abdominal pain for 2 months presents to the radiology department for a CT of the abdomen and pelvis with IV contrast. The CT technologist begins to administer the IV contrast and the patient begins to complain of hives and shortness of breath. The CT technologist immediately calls the radiology resident to evaluate the patient and stops the contrast infusion. The 2nd year radiology resident arrives to the scanner to find the patient covered in hives, wheezing , with a pluse of 110 bpm, and a blood pressure of 80/50. The resident gives the patient oxygen by nasal cannula. Given that the patient is hypotensive and the bronchospasm is getting worse the resident decides to give IV epinephrine. The resident starts to slowly inject 1mL of epinephrine into the patient's IV, as the resident is doing this the 4th year resident comes in a realizes that the resident drew up the epinephrine that was 1:1000, not the appropriate IV concentration of 1:10,000. The 4th year resident tells the 2nd year resident to stop injecting. The 2nd year resident has only injected 0.2mL of the 1:1000 epinephrine. Despite only a small amount of the wrong concentration of epinephrine being given the patient goes into cardiac arrest and a code is called. The code team comes and stabilizes the patient, subsequently taking her to the ICU. The patient is now on a ventilator and receiving pressors, but her vital signs have stabilized.

Enactment: You are the second year radiology resident and you have to go talk to the patient's husband, who is in the waiting room, and tell him what has happened.

Notes for Acting Patient: Your wife has come in to the hospital for an outpatient imaging exam (CT scan), you are expecting her to have a CT scan that takes 20 minutes but instead you have been in the waiting room for about an hour. A second year resident comes to tell you that there has been a complication and your wife is in the ICU. You are shocked because this was supposed to be a simple outpatient test and now your wife is on a ventilator in the ICU. You are clearly upset but remember to take it your anger down a notch each time you feel like the doctor addresses your questions and is empathetic.

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# Scenario: Breast Imaging 1

Background: 45 year old female presents for a diagnostic mammogram and ultrasound for a palpable mass in her left breast. Mammogram and ultrasound show a 2cm spiculated mass in the upper outer quadrant and left axillary adenoapathy highly suggestive of breast cancer.

Enactment: You are the breast imaging radiologist and you have to discuss the findings of the imaging study with the patient as well as tell her she needs a ultrasound guided core biopsy of the mass and FNA of the axillary lymph node.

Notes for Acting Patient: You are a 45 year old female with 3 children under the age of 10 years old. The radiologist tells you that you have a mass in your left breast and left axillary adenopathy. The radiologist also tells you that you need a biopsy of the mass and an FNA of the lymph node. You are scared and worried you have cancer and automatically think of you 3 children and what happens if you die from this.

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# Scenario: Telephone Skills 1

Background: You are an MSK radiologist. Your practice recently got Powerscribe for dictating and there have been some problems with reports getting lost and IT is working on it, but the problem is still occurring from time to time.

Enactment: You are an MSK radiologist reading MR in the reading room. The phone rings and your answer to find an angry orthopedic surgeon on the other end. The orthopedic surgeon is angry because he send his patient for an MR of the left knee 2 weeks ago and there is still no report in the system. The orthopedic surgeon is very angry as the patient is a VIP and the orthopedic surgeon says he is going to take his business to a completing radiology practice since your practice is incompetent.

Notes for Acting Patient: You are an orthopedic surgeon who sent your VIP patient to have an MR of their left knee 2 weeks ago. There is still no report in the system and the patient is very angry. The lack of report is delaying the patient's possible surgery. You find this situation unacceptable and you are considering taking your business to another radiology practice because of this incident. Important to remember that you should become less angry if the resident apologizes and offers to read and dictate the report for you ASAP.

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## Scenario: Pediatric Radiology 1

Background: A 6 year old patient is brought to the ER by his mother because he has been having right lower quadrant pain and loss of appetite for 2 days. Today he developed nausea and vomiting which prompted his mother to bring him into the ER. You are the pediatric radiologist on call and the pediatric ER physician calls you to perform an ultrasound on this patient to look for suspected appendicitis. You perform the abdominal ultrasound and you find a non-compressible appendix measuring 9mm in diameter consistent with acute appendicitis. The mother is in the room with her son as you are scanning and is asking what is wrong with her son and what you are seeing on the ultrasound.

Enactment: You need to give the mother of the patient the results of the ultrasound and discuss them with her.

Notes for Acting Patient: You are the mother of a 6 year old child who has abdominal pain, loss of appetite, and nausea/vomiting. You brought your son to the ER and he has just had an ultrasound of his abdomen. The ER physician told you that it is probably constipation and that you can take your child home after the ultrasound is done. No one told you what the ultrasound is looking for or that it could be serious (i.e. require surgery). The radiologist tells you it is appendicitis and you are very concerned. You ask what appendicitis is and how it is treated. When you find out he needs surgery you are very upset because he is just a little boy and you are worried about him having surgery.

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### Scenario: Cancel/Change Procedure 1

Background: A 60 year old female has a screening mammogram at an outside facility which shows new calcifications in her left breast. The patient has magnifications views at the outside facility and the radiologist there recommends a stereotactic biopsy of the calcifications. The patient presents to your facility for a stereotactic biopsy. You consent the patient and the patient is placed on the stereotactic biopsy table and a scout image is obtained. You look at the scout image and the calcifications are all clearly layering consistent with benign milk of calcium. On re-review of the magnification images some of the calcifications were layering at that time. As the radiologist you cancel the biopsy because the calcifications are clearly benign.

Enactment: You as the radiologist need to explain to the patient that you are canceling the stereotactic biopsy recommended by the outside radiologist because the calcifications are benign and do not require biopsy.

Notes for Acting Patient: You are confused about why the radiologist at the other facility was worried about the calcifications and through they needed biopsy and now you are telling her they are benign and do not need a biopsy. You wonder how you do you know which radiologist is correct? You are upset that you care getting conflicting information from the two radiologists and want to know how this happened.

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### Scenario: Radiation Risk 1

Background: 22 year old male presents to the ER with new abdominal pain, fever, and nausea and vomiting. The patient is found to have an elevated white count and the ER physician suspects possible Crohn's disease with an abscess. The ER physician orders an ultrasound which is normal. The ER physician orders a CT scan to look for signs of Crohn's disease or an abscess given the negative ultrasound and his high clinical suspicion. The patient read about CT scans and too much radiation on the internet and expresses concern about having CT scan to the CT technologist and asks to speak to the radiologist. You are the radiologist on call and the CT technologist comes to you and tells you the patient would like to speak with you about getting a CT scans.

Enactment: You have to discuss the risks associated with having a CT scan with the patient, answer his questions and come up with an appropriate plan

Notes for Acting Patient: You are concerned about having a CT scan after reading about the risks of radiation from CT scan on the internet. You want to know if there are any alternatives to a CT scans to diagnosis your current condition. You also want to know what the real risks of having a CT scan is. You should become more amenable to the study once the actual risk has been explained to you.

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