Review principles and content of **Communication/Patient Teaching**, including
- Instruction to patient about remaining still. Otherwise may need to repeat.
- Instruction to patient after scan with contrast, drink a large amount of water
- Patient satisfaction, importance of communication
- Remind patient of possible sweet taste and warm sensation when starting infusion of contrast

Review principles of **infection prevention**, including
- Handwashing before and after each procedure
- Handwashing, not alcohol-based sanitizer when patient has C. diff infection
- Disinfection of surfaces with bleach wipes after procedure with patient suspected to have C. diff

Review principles of basic **safety**, including
- Patient identifiers
- Protective equipment if must remain in room, lead apron
- Contrast reaction, stop contrast agent, follow protocol for allergic reaction
- Use of personal dosimeter to monitor dose personnel receive

Review the patient **screening process**, including
- Lab test to assess kidney function, serum creatinine and glomerular filtration rate (GSR)

Review correct actions in **patient conditions and situations** common in CT Tech settings, such as
- 10-year-old child patient, adjusting kV most important
- Reaction to contrast agent, identify symptoms and correct action
- Trauma radiography, work efficiently and prevent further injury

Review important aspects of **technical CT knowledge**, such as
- Angiocath and site recommended for 4 mL/sec contrast injection, 18 – 20 gauge angiocath in antecubital fossa
- Hounsfield scale, value of water = 0
- Adjustment of kV with a child
- Adjustment to increase intensity of x-ray photons, increase kVp
- Adjustments to improve image quality for CTA study of abdominal aorta, fast injection rate and reconstruct in thin slices
- Factors that determine attenuation of x-ray beam, tissue type and density
- Purpose of filtering the beam in CT scanners, allow maximum transmission with minimal dosage
- Purpose of oral contrast with CT of abdomen, differentiate bowel loops from abscess or tumor
- Purpose of detector in CT scanner, generate measurable signal from captured photons
- Purpose of patient holding breath, minimize motion artifact and avoid misregistration of slices
- Result of increasing the pitch, faster scan time
- Positioning to prevent artifact in scan of chest, arms over the head
- Function of reconstruction algorithms, process raw data to build image
- Using topogram for positioning patient, axial slices of lumbar spine
- Existing IV in hand, clamp of solution infusing, aspirate for blood return and if positive, begin contrast
- Venipuncture, first step: apply tourniquet first, then palpate the visible veins in the arm
- For patient who will have surgery, use water soluble oral contrast