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| 04bxy_yn[1] | Guided Practice: Beginning and Ending a MRI Exam |

### Exercise

#### To complete Guided Practice:

* Log into the **ACE 1 Central** environment via Citrix.
* Use the Radiant Technologist Classroom Information Sheet
* Enter your User ID and password from:
* Login Department: Type in **306** and click continue, then ok to get to the Tech Work list report settings

Be sure you are logged into your primary department.

* If prompted at login, set your default reports by selecting the reports (shown below) on the left side bar by checking the “Default” box on the bottom left, then click RUN:

For the following reports follow the directives below

* Tech Work List: Select the **AWH MRI Imaging Work List** on the left pane
* Protocol Work List: Select the **AWH MRI TO PROTOCOL** on the left pane
* Snapboard: Cancel out of this option.

Your home workspace is called the Technologist Work List. You do have a patient on your screen.

1. Your screen is split in two sections with patients names and data displayed
2. The left portion is called the Technologist Worklist (TWL) – these are patients that are scheduled or checked-in, and the right side is called the Scheduled Orders Report (SOR)- Patients that are yet to be checked in
3. There is a list of exams on the left side of your screen.
4. What patient(s) by first name have an appointment in your department today?
5. What is their appointment time? \_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Therefore, what does this list show? (circle one):

* Exams that have already been scheduled
* Exams that have NOT yet been scheduled

1. Using the screenshot below, what is the status of your patient(s) appointment?

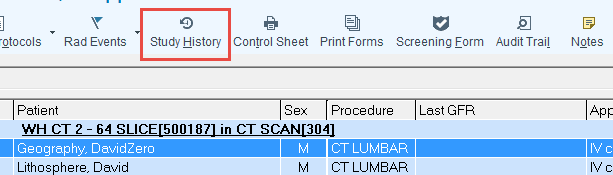
Study Status Icons:

 = Scheduled

Arrived

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|  | Section A: It is the start of your shift as a technologist. Before any patients arrive, you want to get an idea of what types of exams you’ll be responsible for performing today. You’ll be checking your schedule and investigating some patients’ histories. |

1. You are curious about this patient’s imaging history and want to check whether they had images for comparison in the past.
2. With your **Lydia** patient’s appointment selected, click  in the activity toolbar. If you get a Welcome prompt, click Let’s Go.



If the **Patient Lookup** window appears, you clicked the wrong  button. Buttons on the main toolbar at the top of your Epic screen allow you to search for any patient. Buttons immediately on the activity toolbar in a work list or report apply to the patient selected on the report. Make certain you clicked Study History on the Technologist Work List activity toolbar. If you are prompted to select a default report, select the Study History Template (135712) place a check in the  in the upper right corner and click **RUN**.

1. Using **Study History**, find the following information about your patient:
   * 1. Other than their current appointment, has your patient had an image taken of this body part? \_\_\_\_\_
     2. Close out of Study History
2. You review the details of the protocol in the Protocol Summary report in the lower half of your screen. You want to update the IV Gauge information.
   1. With the exam selected, click the Update Protocol icon in the toolbar.
   2. The protocol smartform opens. Deselect 18 GA and change the IV Gauge to 20.
   3. Remove the Prep Area Instructions information.
   4. Click Finalize in the bottom right to save the updated protocol.
   5. Back on the Tech Work List, review the updated protocol information within the protocol summary in the lower half of your screen

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|  | You are ready to retrieve your patient from reception and escort them to the exam room. |

1. Select your Lydia patient’s appointment from the tech work list and click the  icon in the toolbar. A workspace opens called Technologist Navigator – Begin Exam.
2. Scrolling down you notice that Lydia had ear surgery in 2018 and when asked she indicated she has a cochlear implant. The training environment is unable to copy implant records forward for Lydia, so we will need to re-enter the information about her implant.
   * + Within the Implants section of the screening form, click the  button and enter the following information about the implant.
     + Implant Name: Cochlear Implant
     + Status: Implanted
     + Laterality: Left
     + Area: Ear
     + Implanted Date: 2/12/2018
     + Serial Number: C124RE
     + MRI Safety Status: MRI Conditional
     + Comments: Safe for 1.5T scanner; <http://mrisafety.com/TMDL_view.php?editid1=7484>
     + If you would like to check out the site used for safety verification, copy and paste the web address from your comments box into your browser.
     + Click Accept.
     + You have verified that Lydia is safe to undergo this MRI exam, so you mark Proceed.
     + You will Update the Form Status by clicking the Complete button.
     + In the Form message box, click Continue.
     + You are returned to the tech navigator.
3. IV Insertion: Click the Time Out/LDA topic. Click the Add LDA button. The LDA Avatar opens. You notice Lydia has an active LDA documented in her chart but upon physical inspection, it is not present. You will need to discontinue the previous LDA and document a new one inserted for today’s exam.
   1. Click the  icon on the Avatar. Click the Pencil icon to edit the properties. Scroll down to update the removal information.
      1. Removal Date: T for today.
      2. Removal Time: N for now.
      3. Click the piece of paper icon to the right of the Date or Time and enter a comment of “Removed previously. Not physically present.”
      4. Click Accept.
   2. Document the insertion of a Peripheral IV through which you will administer contrast.
      1. Click Add LDA button.
      2. Select Peripheral IV selection box.
      3. Hover over the Avatar to select the area in which you inserted the IV. Alternatively, you can click the SKIP button to open the form.
      4. Gauge: 20 GA
      5. Length 1”.
      6. Site: Left antecubital area. If you clicked the area on the Avatar, you can skip this step.
      7. Please indicate that you inserted this catheter by entering your name in the Inserted by field. Click Accept to save your information.
4. Update Lydia’s allergies to now include an environmental Latex allergy which produces hives at a medium severity. Click Accept to save this entry and verify the Latex allergy shows in the storyboard.
5. Click Mark As Begun in the toolbar to indicate your pre-exam documentation is completed.
   1. in the Tech Work List from  to .

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|  | You have completed Lydia’s exam and sent images to PACS. You escort the patient out of the department and must end his exam in Epic. |

1. With your patient’s appointment selected click the  icon in the toolbar.
2. The **Verify Orders** activity opens. Here is where you compare the exam that was actually performed to the exam ordered. Use the **Change Order** button in the toolbar to change the procedure before ending the exam. Go ahead and try this. Your exam was ordered as W Contrast, change it to a WWO contrast. Enter a change reason of “wrong exam ordered.”
3. Click Accept to complete the new order.
4. The Providers window opens. This order was entered from paper. I will need to contact the ordering provider to fax a new order with the correct procedure listed. I will select Transcribed from Paper for my order mode and click Accept to complete the order.

***Note: If the original order was entered electronically, we would enter Per Protocol With Signature as the order mode. This will send the new order electronically for the provider to sign in Epic In Basket. You can act on this order even though it has not yet been signed by the ordering provider.***

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|  | Use shortcuts : T = Today  N = Now T-1 = yesterday N-30 – 30 minutes ago. |

1. Back in the Verify Orders window, click the **Next Step** icon. The End Exam Navigator opens. We will now document staff information, IV removal and contrast information.

**Trainer Note:**

1. **Transcribed from paper – you will need to obtain a new paper order from the ordering provider’s office.**
2. **Change order cancels the original order and creates a new order but keeps the original accession number.**
3. Staff Info – enter the following information:
   * Begin Time – set this to 30 minutes ago.
   * End Time – set this to 5 minutes ago.
   * Support Staff – enter the name of one of your peers in this field.
   * Reading Priority – indicate the provider would like a STAT read for this exam.
4. You will enter your Tech Notes:
   * Click the Notes icon in the toolbar.
   * Reading Priority – indicate the provider would like a STAT read for this exam.

7. You will enter your Tech Notes:

* 1. Click the Notes section on the left side bar.
  2. Click “Add New Study Note” tab on the far right.
  3. Click the  icon in the Insert Smart Text field.
  4. Search for MRI ARH Note and click the star to mark it as your favorite.
  5. Click Accept to insert this template.
  6. Hit F2 to advance to the next wildcard (\*\*\*). You can use your discretion here to complete the note. Ensure all wildcards are replaced or deleted. For the drop downs, select an appropriate choice and click F2 on your keyboard to advance to the next.
  7. Click Accept to save the note.
  8. Click Close to complete the note.

8. LDA Removal – click the **Assess and Remove** hyperlink and enter the following information:

* + Site Assessment – No redness, swelling or pain.
  + Dressing Status – dry and intact.
  + Click Accept and Remove button.

9. Contrast/LDA – we will now document the contrast given to the patient:

* + Contrast/LDA > Select Modality and select MRI
  + Contrast type IV
  + Contrast name: Multihance
  + Amount Opened 20 mL
  + Amount given 18 mL
  + Expiration Date: y+1
  + Lot # 830021

1. Charge Capture: Lastly, we are going to charge the patient for the contrast.
   1. Add MR Multihance Godobenate Dimeglumine-Per mL
   2. Add Wasted MR Multihance Godobenate Dimeglumine-Per mL
   3. Change the quantity of each to match what was given and wasted in the step above.
2. Click the  icon in the toolbar to close and end the exam.
3. Back on the Tech Work List, note that your patient’s appointment has now dropped off the list.

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|  | Section D: Colton is an inpatient with a MR Brain WWO Contrast ordered. You have time to perform this test now. You will need to schedule the MRI order before you can begin and end the exam. |

* Locate your Colton’s MR Brain WWO Contrast order in the schedule orders report on the right side of your screen.
* With Colton’s order selected, click the  button in the Schedule Orders Report toolbar.
* In the Questionnaire, click **Accept.**
* In the After Visit Type Entry popup regarding anesthesia, click OK.
* In the Choose Modality popup, select the WH MRI 1.5 modality.
* Be sure the Check In box is deselected. Colton is not in the department right now.
* If you are going to perform the exam right now, keep the Check In box selected.
* Click **Accept** to schedule the exam

Section E PROTOCOLING: Colton’s transport down to the department has been delayed a bit. Although Protocolling is typically performed on outpatient exams, we will take this opportunity to practice the protocolling workflow for Colton.

* Select Colton’s inpatient MRI exam from the left side of your screen and click the Update Protocols button in the toolbar.
* The Update Protocols screen opens with the upper half of the screen displaying patient information and the lower portion displaying the Protocol Smartform. Enter the following as the exam protocol:
  + Study: Routine
  + IV Contrast: Multihance
  + IV Required: 20 GA
  + GFR needed: No
  + Protocolled for site: AWH MRI
  + Finalize the protocol.
* Back on the Tech Work List, locate the Protocol Summary in the lower section of the screen.

Section F BEGIN EXAM: Colton has arrived in the department. You will now perform his exam and complete the exam in Epic.

* All inpatients and ED patients will require Check In. Select Colton’s exam and click the Check In icon in the toolbar.
* In the Verify Orders activity, click Accept in the lower right corner.
* In the Confirmation Messages popup, click Continue.
* Back on the Tech Work List, you will notice the status is updated to Checked In.

1. Click **Begin Exam** in the toolbar.
2. The Technologist Navigator – Begin Exam opens. Here you see the navigator topics to the right of the Storyboard.
3. You will see the MRI Screening Form hyperlink. We have confirmed that Colton is safe to undergo the MRI. We will skip this step for now. Click Dismiss.
4. Let us first check if Colton has any allergies. Click the Allergies topic.
5. You indicate Colton has no allergies, so you click **Mark As Reviewed**.
6. You can practice documenting insertion of an IV just like you did with David previously. Remember do indicate the location of the IV, size and GA of the IV and who inserted it.
7. You could enter undocumented implants via the Implants topic in the navigator.
8. Click **Mark As Begun** in the toolbar to signify the exam has begun.

Section G ENDING EXAM: Colton underwent his MRI without incident and is on his way back to his room. You will now end the exam in Epic.

1. With Colton’s exam selected click End Exam in the toolbar.
   1. Click the Notes icon in the toolbar.
   2. Click New Study Note
   3. Click the  icon in the Insert Smart Text field.
   4. Search for MRI ARH and click the star to mark it as your favorite.
   5. To see ONLY your favorites, click the Favorites Only box in the lower left corner.
   6. Click Accept to insert this template.
   7. Hit F2 to advance to the next wildcard (\*\*\*).
   8. Click Accept to save the note.
   9. Click Close to complete the note.
   10. If you entered a Peripheral IV at Begin Exam as practice, you will not document its removal. Click LDA Removal – click the Assess and Remove hyperlink and enter the following information:
   11. Site Assessment – No redness, swelling or pain.
   12. Dressing Status – dry and intact.
   13. Click Accept and Remove button.
   14. Within the Technologist Navigator, you will need to document that you administered contrast through an IV during the exam.
   15. Click Contrast/LDA topic.
   16. Click SELECT MODALITY and select MRI.
   17. Select MR IV Contrast Administration.
   18. Select Magnevist
   19. Amount Opened: 20 mL
   20. Amount Administered: 18 mL
   21. Expiration Date: Select a date into the future.
   22. Lot #: Enter any information in here.
   23. Scroll down and click Close to save your entry

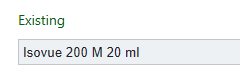
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23. Last, we need to charge for the contrast and supplies used for the exam. Use the screenshot below to enter the contrast charges.



**Helpful Hint**: If this contrast is something you use often, you can mark this (and wasted) as one of your favorites.

1. Click the star in front of the contrast.
2. The Add to Preference List box opens. Give your favorite a display name that you will remember such as the vial size and name of the contrast.
3. Click Accept.
4. This will display under existing for all exams you perform in this department.



1. To use this favorite contrast in the future:
   1. Click the link
   2. Under Accept Charges, update the amount.
   3. Click the Accept Charges button.

Now that you have all of your documentation complete, click Mark As Ended in the toolbar. This will return you to the Tech Work List where you will see Colton’s lumbar puncture appointment has fallen off.

**This completes your Beginning and Ending an MRI Exam Guided Practice Session. This is not all inclusive of a typical workflow; it only highlights the most common documentation for an imaging exam.**