

TASK 1 – MEDICATION LIST - REVIEW, RECORD, & MODIFY (JULIE)

Julie, a 62-year old female, has come to your clinic today for a follow-up on her hypertension, which you diagnosed six months ago. During that visit, Julie also mentioned taking 20 mg Lipitor. In that Julie is a relatively new patient to your practice, you are concerned that her medication list is not up-to-date. Your first task is to review the medications that Julie is currently taking to ensure that it is complete and correct.

After locating the medication list and reviewing it, you ask Julie to verify if she is still taking 20 mg Lipitor. However, this time Julie has the bottle with her and she notices that it states 40 mg. Your second task is to correct this in her record.

After making the Lipitor correction, you ask Julie if she is taking any other medications. She reports that she is taking *Centrum Silver for Women, ibuprofen* for regular aches and pain, and *Claritin* for allergies. Your third task is to enter these drugs in her medication list.

- 1. Navigate to Julie's full medication list and verbally state the name and strength of the first medication on Julie's medication list.
- 2. Navigate to a place where you can update drug information and change the *Atorvastatin* dosage from 20 mg to 40 mg, using as much information as necessary from Table 1, and then verbally state when you believe you have successfully completed this step.
- 3. Navigate to a place where you can add a medication to her medication list and add *Centrum Silver for Women*, *ibuprofen*, and *Claritin* using as much information as necessary from Table 2. Verbally state when you believe you have successfully completed this task.



Table 1. Drug Information	
Drug Name	Lipitor
Generic Name	Atorvastatin
Strength	40 mg
Dose	Once daily at night
Duration	30 days
Form	Tablets
Route	Oral
Dispense Amount	30
Brand Necessary	No
Refills	2 refills

Hypercholesterolemia

Table 2. Drug Information	
Drug Name	Centrum Silver for Women
Generic Name	Multivitamin
Dose	Once daily
Duration	Perpetual
Form	Tablets
Route	Oral
Brand Necessary	No No
Reason	Protective; Vitamin D
Generic Name	Ibuprofen
Strength	200 mg
Dose	2 tablets PRN
Duration	
Form	Tablets
Route	Oral
Brand Necessary	No
Reason	Joint pain
Drug Name	Claritin
Generic Name	Loratadine
Strength	10 mg
Dose	One tablet daily
Duration	
Form	Tablets
Route	Oral
Brand Necessary	No
Reason	Seasonal Allergies

Reason



TASK 2 - CPOE LAB ORDERS - REVIEW & RECORD (RORY)

Three months ago, Rory is a 48-year old male, came in for a yearly physical exam. His lipid panel indicated severe hyperlipidemia, and you prescribed atorvastatin. You have had Rory come in regularly to check-up on his hyperlipidemia and review the lipid panel results with him.

One week ago, Rory came back for a check-up. He presented with diabetes symptoms and an elevated blood glucose level. Your first task is to review the most recent lipid panel results. After determining that his cholesterol levels were decreasing, you turn your attention to the diabetes symptoms that you suspect to be type II diabetes. Your second task is to order a routine fasting glucose test, a routine urine micro albumin, and a routine HbA1c.

- 1. Navigate to Rory's lab results and verbally state the LDL cholesterol level found on Rory's most recent lipid panel.
- 2. Navigate to a place where you can order tests, order a routine fasting glucose test, a routine urine micro albumin, and a routine HbA1c by using as much information in Table 1 as possible. Verbally state when you believe you have successfully completed this task.

Table 1. Test Orders	
Test Name	Fasting glucose
Urgency	Routine
Reason	Type II Diabetes
Test Name	Urine micro albumin
Urgency	Routine
Reason	Type II Diabetes
Test Name	HbA1c
Urgency	Routine
Reason	Type II Diabetes



TASK 3 – CPOE RADIOLOGY - RECORD & REVIEW (KAREN)

You have been seeing Karen, a 56-year old female, for over 6 weeks for her non-traumatic low back pain. Her annual exam is coming up next week, and you recommended that she have a mammogram in preparation for her upcoming visit with you. The mammogram results are ready, and your first task is to review it. The mammogram appears normal, so you wait a week until Karen arrives for her yearly exam to share the results with her.

When Karen arrives for her yearly exam, she also presents with a dry cough that has bothered her for the last two weeks. She denies postnasal drip, heartburn, shortness of breath, and fever, but you note crackles in her left lower lobe. She also has had pain in her lower back that radiates down her left leg below the knee, which occurred after she engaged in lifting some heavy furniture 3 months ago. The back and leg pain have persisted despite taking ibuprofen and using heating pads. Her cardiovascular and lung exam are normal. She has a positive straight leg test. Your second task is to order a routine chest x-ray (PA & L) to evaluate the cough. Your third task is to order is to order a routine lumbar spine MRI (without contrast) to evaluate the radiculopathy.

- Navigate to Karen's medical images and open the most recent screening mammogram and then verbally state when you believe you have successfully completed this step.
- 2. Navigate to where you can order imaging tests and order a *routine chest x-ray (AP & L)* using as much information as possible from Table 1 and then verbally state when you believe you have successfully completed this step.
- 3. Navigate to where you can order imaging tests and order a routine MRI (without contrast) of the lumbar spine by using as much information as possible from Table 1. Verbally state when you believe you have successfully completed this task.



Table 1. Imaging Orders	
Test Name	Chest x-ray
View/Location	AP & L
Urgency	Routine
Reason	Persistent cough
Test Name	MRI without contrast
View/Location	Lumbar Spine
Urgency	Routine
Reason	Screen for radiculopathy



TASK 4 - DDI CHECK: MEDICATION ORDER (TOM)

Two months ago, you met with Tom, a 39-year old male. During that appointment, you diagnosed him with major depression and prescribed *Prozac* (40 mg). A few weeks later, Tom fell off a ladder at home. He presents today with severe back and shoulder pain. X-ray images do not indicate any fractures. After consideration, you decide to prescribe tramadol to alleviate Tom's pain. You first task is to order this drug using the EHR system.

While entering the order for tramadol in the EHR, you get an alert from the EHR system about interactions between Prozac and tramadol. You feel that tramadol is the best choice, so your second task is to override the alert with the plan to monitor Tom and follow-up with him in a few days.

- 1. Navigate to the medication order form and prescribe *tramadol* using as much as the information from Table 1 as is required. Verbally state when you believe you have successfully completed this step.
- 2. Override the drug-drug interaction, noting that you plan to follow-up, and then finalize the *tramadol* prescription. Verbally state when you believe you have successfully completed this task.

Table 1. Drug Information		
Generic Name	tramadol	
Strength	25 mg	
Dose	2 tablets every 4 hours as needed	
Duration	2 weeks	
Form	Tablets	
Route	Oral	
Dispense Amount	48	
Brand Necessary	No	
Refills	No	
Reason	Back and shoulder pain	
Override Reason	Will monitor and follow-up	



TASK 5 - DAI CHECK: MEDICATION ORDER (JOHN)

John, a 35-year old male, presents with an abscess and surrounding cellulitis in his hand from a cut he sustained from a band saw last week. You diagnose, incise, and then drain the abscess. As part of the treatment plan, you plan to prescribe trimethoprim-sulfamethoxazole to treat the remaining cellulitis. Your first task is to prescribe trimethoprim-sulfamethoxazole using the EHR system.

After entering this information into the order form, you get a warning stating that there is a potential drug-allergy interaction between the trimethoprim-sulfamethoxazole and John's reported sulfa allergy. You feel that the trimethoprim-sulfamethoxazole is necessary, and given that John has tolerated trimethoprim-sulfamethoxazole in the past, you determine to move forward with the prescription anyway, but warn John to call you if there are any serious side effects. Your second task is to over-ride the warning with a note stating your follow-up intention and plan.

- Navigate to the medication order form, and prescribe trimethoprimsulfamethoxazole using as much as the information from Table 1 as is required. Verbally state when you believe you have successfully completed this step.
- Override the drug-allergy interaction with a comment stating that the
 patient has tolerated trimethoprim-sulfamethoxazole in the past, finalize
 the prescription order using as much information from Table 1 as required,
 and then verbally state when you believe that the order has been
 completed.

Table 1. Drug Information	
Drug Name	Bactrim
Generic Name	trimethoprim-sulfamethoxazole
Strength	160mg-800mg
Dose	1 tablet two times daily
Duration	10 days
Form	Tablets
Route	Oral
Dispense Amount	20
Brand Necessary	No
Refills	No
Reason	Cellulitis in hand
Override Reason	Has tolerated previously; will monitor and follow-up



TASK 6 - MED ALLERGY LIST: RECORD (HELEN)

Helen, a 46-year old female, is one of your established patients. Today she called to complain about the *codeine syrup* that you had prescribed for her *chronic nighttime cough* a few days ago. She reported that she started using the syrup after the initial exam, but since stopped using it due two days later due to the development of a skin rash. Since stopping treatment, she reported that the rash has diminished. Your task is to now document this problem as an allergy in her electronic chart.

1. Navigate to the full allergy list and add the following allergy to Helen's record using as much of the information in Table 1 as you can. Then verbally report when you believe that this allergy has been successfully recorded in the system.

Table 1. Allergy Information	
Allergen Type	Drug
Allergen	Codeine syrup
Severity	Moderate
Reactions/Comments	Skin rash
Onset	Adulthood
Onset Date	Two days ago



TASK 7 - MED ALLERGY LIST: REVIEW (WENDY)

Wendy, a 25-year old female, presents with a headache, dull facial pain on her left side, a low-grade fever, and thick nasal discharge. During the exam, she admits to having had these symptoms for the last ten days. After the evaluation, you determine that she has *acute sinusitis* and plan to prescribe Augmentin. You want to ensure that you do not prescribe anything that would cause an allergic reaction, so you decide to review her list of known allergies that might cause a problem.

1. Navigate to the full allergy list and verbally state whether Wendy has a penicillin allergy.



TASK 8 - MED ALLERGY LIST: MODIFY (LAURA)

Laura, a 44-year old female, presents with a swollen, red throat. You run a rapid-Strep test, which returns positive for *streptococcal group A antigen*. You believe that penicillin would be best for treatment. However, you note that her record states that she has a mild penicillin allergy. You discuss this allergy with Laura, and she states that she has had numerous penicillin-based drugs in the past few years without any issues. The inclusion of penicillin is likely a clerical error, so your task is to update her allergy list to reflect this.

1. Navigate to the full allergy list to modify the penicillin allergy to reflect that is no longer valid, and then verbally state when you believe that the record modification has been completed.

Table 1. Allergy Information		
Drug Name/Class	Penicillin class	
Allergy Status	Invalid/Clerical Error	



TASK 9 - ELECTRONIC PRESCRIBING (MARTHA)

Martha, a 16-year old female, has presented with many symptoms related to exercise-induced asthma. After reviewing the history of her symptoms and pulmonary function test results, you are strongly convinced that asthma is the correct diagnosis and prescribe *albuterol* for Martha. You goal is to enter the order for albuterol into the electronic prescribing function of your EHR system.

1. Navigate to the medication order form and prescribe albuterol using as much as the information from Table 1 as is required. Verbally state when you believe you have successfully completed this task.

Table 1. Drug Information	
Generic Name	Albuterol
Strength	216 mcg
Dose	2 puffs 15 minutes before exercise as needed
Form	Metered-dose inhaler
Route	Inhaler
Dispense Amount	1 inhaler (200 puffs)
Brand Necessary	No
Refills	2 refills
Reason	Exercise induced asthma



TASK 10 - MEDICATION ALLERGY (AMANDA)

Amanda, a 46-year old female, is one of your established patients and presented a week ago with what seemed to be an acute case of bronchitis. Today, she has returned to your office with what you determine to be *bacterial pneumonia*. Amanda also reports a very painful cough. You feel that you should prescribe an antibiotic and Tylenol #3 for her cough and pain. Before you prescribe these medications, your first task is to check her list of current medication allergies. On the medication allergy list, you see that she is allergic to both *sulfa* and *penicillin class drugs*. You ask her to confirm either medication allergy. She affirms the sulfa allergy but denies the penicillin allergy stating that she has never had a problem with them. You strongly believe penicillin's inclusion was due to a clerical error. Your second task is to update Amanda's record to indicate that the penicillin allergy is not valid.

Four days later, Amanda calls and states that she has been taking the Tylenol #3 as directed, but has developed a moderate skin rash after the first day. She reports ceasing to take the Tylenol yesterday and that the rash has diminished greatly. Your third task is to add Tylenol #3 to Amanda's medication allergy list.

- 1. Navigate to the full allergy list and verbally state whether Amanda has a sulfa or penicillin allergy.
- Navigate to the full allergy list to modify the penicillin allergy using the information in Table 1 to reflect that is no longer valid, and then verbally state when you believe that the record modification has been completed.
- 3. Navigate to the full allergy list and add the following allergy to Amanda's drug allergy list using as much of the information in Table 2 as you can. Verbally state when you believe you have successfully completed this task.



Table 1. Allergy Information	
Drug Name/Class	Penicillin class
Allergy Status Invalid/Clerical Error	

Table 2. Drug Allergy Information	
Allergen Type	Drug
Allergen	Tylenol #3
Severity	Moderate
Reactions/Comments	Skin rash
Onset	Adulthood
Onset Date	Two days ago



TASK 11 - CLINICAL DECISION SUPPORT: REMINDER (STEVEN)

You diagnosed Steven, a 58-year old male, with *type II diabetes* a little more than a year ago. For the first 6 months following the diagnosis, Steven made regular follow-up visits. After the initial 6 months, you did not hear from him again until today. Steven's appointment with you today is a follow-up to his recent hospitalization for abdominal pain. While meeting with Steven, you receive notice from the EHR system that Steven has not had an HbA1c test in more than 6 months. Your first task is to find this reminder in the EHR system, and your second task is to order the HbA1c test.

- 1. Navigate to the EHR module or screen with clinical reminders and locate the alert to order an HbA1c test for diabetic patients every 6 months and verbally indicate when you believe to have found it.
- 2. Navigate to a place where you can order tests, order a *routine HbA1c* by using as much information in Table 1 as possible. Verbally state when you believe you have successfully completed this task.

Table 1. Test Orders		
Test Name	HbA1c	
Urgency	Routine	
Reason	Type II Diabetes	



TASK 12 - CLINICAL DECISION SUPPORT: SYSTEM INFERENCE (ROGER)

Roger, a 65-year old male with coronary artery disease (CAD), presents today with knee and lower back pain. As you open his electronic record, you notice a system alert stating that Roger is not taking aspirin or other antiplatelet medication for his CAD. Your first task is to locate the system alert, and your second task is to prescribe aspirin for Roger.

- Navigate to the system notification recommending that Roger take aspirin
 or other antiplatelet medication and verbally indicate when you believe
 to have found it.
- Navigate to the medication order form and prescribe aspirin using as much as the information from Table 1 as is required. Verbally state when you believe you have successfully completed this task.

Table 1. Drug Information	
Generic Drug Name	Aspirin
Strength	81 mg
Dose	2 tablets daily
Duration	
Form	Tablets
Route	Oral
Brand Necessary	No
Reason	CAD