Polypharmacy Project

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N322 Introduction to Pharmacology

Lakeview College of Nursing

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PLEASE INSERT YOUR CLIENT SCENARIO HERE – THIS WILL BE PAGE TWO OF THE DOCUMENT

Background: Zeb is a 30-year-old male with multiple health conditions. He has a wife and 3 children at home. He is alert and oriented and is employed as a construction worker in New York City. Zeb does not drink alcohol but does enjoy a cigar once a day after work. He recently underwent gastric banding.
Insurance: Zeb has health insurance; however, he is having difficulty covering his medical expenses due to work being slow.
Allergies: NSAIDs, IV contrast dye, Penicillin
Diet: Low carb and low-fat diet – not to exceed 1,000 calories a day
Medical diagnosis: NAFLD, hypertension, GERD, morbid obesity, heart failure
Current medications include the following:
Vitamin E 800 iu by mouth every day
Centrum Adults Chewable Multivitamin one tablet by mouth twice a day
Garlic Powder tablet 300 mg three times a day
Lotensin 5 mg by mouth twice a day
Hydrochlorothiazide 25 mg by mouth twice a day
Omeprazole 20 mg by mouth once a day
Norco 5/325 by mouth twice a day
Aspirin 81 mg by mouth one time a day
Acetaminophen 500 mg by mouth every four hours as needed
Calcium 600 mg by mouth three times a day

Drug #1 **Drug Class:** Fat soluble vitamin	**Drug Name (Generic):** Vitamin E **Drug Name (Trade):** Aquasol E or Tocopherol
How is the medication taken: (include dose, route, and frequency)	800 iu tablet by mouth once daily
Specific Directions not included above:	Take vitamin E with or after eating food (Skidmore-Roth, 2020).
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	Vitamin E interacts with aspirin because it is an anticoagulant and can increase the action of aspirin (Skidmore-Roth, 2020).
Lifestyle interactions: **(Daily tobacco use, alcohol, drugs, etc.)**	There are no known lifestyle interactions that need modification.
Does any of the client's past medical history contradict the use of this medication?	None of the client's past medical history contradicts the use of this medication
What is the indication for use of this medication	Non-alcoholic Fatty Liver Disease (NAFLD) is the indication for use of this medication

based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)	(Skidmore-Roth, 2020).
What would you teach the client about taking this medication?	Instruct the client to take vitamin E with food, instruct client to omit the daily dose if missed, and instruct patient to avoid vitamin supplements unless prescribed by primary care provider (Skidmore-Roth, 2020).
How much would medication cost per month if paying out of pocket?	$4.18 a month for 30 tablets (Medical Security Card Company LLC, 2019).

Drug #2 **Drug Class:** Vitamin	**Drug Name (Generic):** Multivitamin **Drug Name (Trade):** Centrum
How is the medication taken: (include dose, route, and frequency)	Chew 1 tablet by mouth twice a day
Specific Directions not included above:	Take medication with food to prevent GI upset but can be taken without (RxList, n.d.).
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	Centrum multivitamin interacts with calcium as calcium can reduce the serum concentration the multivitamin and can decrease the absorption of iron, which is included in Centrum (RxList, n.d.). Centrum multivitamin interacts with hydrochlorothiazide as hydrochlorothiazide can enhance the multivitamins hypercalcemic effect (RxList, n.d.). Centrum multivitamin interacts with omeprazole as omeprazole may reduce the serum concentration of the multivitamin and can decrease the absorption rate of iron that is included in Centrum (RxList, n.d.).
Lifestyle interactions: **(Daily tobacco use, alcohol, drugs, etc.)**	There are no known lifestyle interactions that need modification.
Does any of the client's past medical history	None of the client's past medical history contradicts the use of this medication

contradict the use of this medication?	
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)	An indication for use for Centrum is inadequate vitamin, mineral, and nutrient absorption related to this patient's past medical history of morbid obesity and recent past surgical history of gastric banding, which can impair absorption of needed nutrients, vitamins, and minerals from ingested food (RxList, n.d.).
What would you teach the client about taking this medication?	Instruct client to take Centrum chewable multivitamin with food if they experience an upset stomach and instruct the client to chew well before swallowing. Also instruct the client to not take two doses at the same time or any extra doses (RxList, n.d.).
How much would medication cost per month if paying out of pocket?	$4.21 a month for 60 tablets (Medical Security Card Company LLC, 2019).

Drug #3 **Drug Class:** Herbal supplement	**Drug Name (Generic):** Garlic **Drug Name (Trade):** Allium sativum
How is the medication taken: (include dose, route, and frequency)	300mg tablet taken by mouth three times a day
Specific Directions not included above:	No special directions for this medication.
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	Garlic interacts with aspirin as garlic itself already increases anticoagulant/antiplatelet affects, which results in increased affects when taken in combination with aspirin and puts the patient as risk for bleeding (Frandsen & Smith Pennington, 2020).
Lifestyle interactions: **(Daily tobacco use, alcohol, drugs, etc.)**	There are no known lifestyle interactions that need modification.
Does any of the client's past medical history contradict the use of this medication?	None of the client's past medical history contradicts the use of this medication
What is the indication for use of this medication based on the clients past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the	Hypertension is the indication for use based on the clients past medical history (Drugs.com, n.d.).

medication in general)	
What would you teach the client about taking this medication?	Instruct the patient to not use different forms of Garlic at the same time as taking a garlic supplement without medical advice, Instruct client to initiate bleeding precautions and preventions as garlic can increase anticoagulation effects, Instruct client to store at room temperature aware from moisture, heat, and light, Instruct client to omit the daily dose if missed (Drugs.com, n.d.).
How much would medication cost per month if paying out of pocket?	$5.00 a month for 90 tablets (Medical Security Card Company LLC, 2019).

Drug #4 **Drug Class:** Antihypertensive/Angiotensin-converting	**Drug Name (Generic):** Benazepril **Drug Name (Trade):** Lotensin

enzyme inhibitor	
How is the medication taken: (include dose, route, and frequency)	5 mg by mouth twice a day
Specific Directions not included above:	No specific directions not included above.
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	Benazepril interacts with aspirin and can increase antihypertensive affects and decrease renal function (Jones & Bartlett, 2020). Benazepril interacts with hydrochlorothiazide as it can cause excessive hypotension and puts patient at risk for hyperkalemia (Skidmore-Roth, 2020).
Lifestyle interactions: **(Daily tobacco use, alcohol, drugs, etc.)**	Tobacco use can cause hypertension. The patient smokes one cigar a day. Patient is also morbidly obese which can cause hypertension (Capriotti, 2020).
Does any of the client's past medical history contradict the use of this medication?	None of the client's past medical history contradicts the use of this medication
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the	Hypertension and Heart Failure are the indications for use of this medication (Skidmore-Roth, 2020).

medication in general)	
What would you teach the client about taking this medication?	Instruct patient to not stop taking the medication abruptly, instruct patient to avoid salt substitutes, instruct patient to monitor their blood pressure and do not take if systolic blood pressure less than 60, Monitor for and notify your primary care provider is a persistent cough develops (Skidmore-Roth, 2020).
How much would medication cost per month if paying out of pocket?	$9.00 a month for 60 pills (Medical Security Card Company LLC, 2019).

Drug #5 **Drug Class:** Thiazide diuretic	**Drug Name (Generic):** Hydrochlorothiazide **Drug Name (Trade):** Microzide
How is the medication taken: (include dose, route,	25mg by mouth twice a day

and frequency)	
Specific Directions not included above:	Take in the morning and early evening to avoid interference with sleep (Jones & Bartlett, 2020).
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	Hydrochlorothiazide interacts with benazepril it can cause excessive hypotension and puts patient at risk for hyperkalemia (Skidmore-Roth, 2020). Centrum multivitamin interacts with hydrochlorothiazide as hydrochlorothiazide can enhance the multivitamins hypercalcemic effect (RxList, n.d.). Hydrochlorothiazide interacts with aspirin because it decreases the thiazide affect and increases the risk of renal failure (Jones & Bartlett, 2020). Hydrochlorothiazide interacts with hydrocodone-acetaminophen as it can cause orthostatic hypotension (Jones & Bartlett, 2020). Hydrochlorothiazide interacts with calcium as it can increase the serum calcium level. Calcium carbonate interacts with hydrochlorothiazide as it can increase the possibility for hypercalcemia (Jones & Bartlett, 2020).
Lifestyle interactions:	There are no known lifestyle interactions that need modification.

(Daily tobacco use, alcohol, drugs, etc.)	
Does any of the client's past medical history contradict the use of this medication?	No past medical history contraindicates the use of this medication.
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)	Hypertension and Heart Failure are the indications for use of this medication (Jones & Bartlett, 2020).
What would you teach the client about taking this medication?	Instruct patient to take in the morning and early evening to avoid the urge to urinate during the night, advise patient to take with food or milk if an upset stomach occurs, instruct patient to perform daily weight at the same time and wearing the same clothing every day and use sunscreen for photosensitivity, instruct patient to eat a diet high in potassium, and instruct patient to move and change positions slowly to decrease effects of orthostatic hypotension (Jones & Bartlett, 2020).
How much would medication cost per month if paying out of pocket?	$4.07 a month for 60 pills (Medical Security Card Company LLC, 2019).

Drug #6 **Drug Class:** Antiulcer	**Drug Name (Generic):** Omeprazole **Drug Name (Trade):** Prilosec
How is the medication taken: (include dose, route, and frequency)	20mg by mouth once a day
Specific Directions not included above:	Take in the morning before breakfast (Jones & Bartlett, 2020).
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	Centrum multivitamin interacts with omeprazole as omeprazole may reduce the serum concentration of the multivitamin and can decrease the absorption rate of iron that is included in Centrum (RxList, n.d.).
Lifestyle interactions: **(Daily tobacco use, alcohol, drugs, etc.)**	There are no known lifestyle interactions that need modification.
Does any of the client's past medical history contradict the use of this medication?	No past medical history contraindicates the use of this medication.
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical	Gastroesophageal reflux disease is the indication for use of this medication (Jones & Bartlett, 2020).

history, please list potential indications for use of the medication in general)	
What would you teach the client about taking this medication?	Instruct patient to take in the morning prior to breakfast with 8oz of water, instruct patient not to chew, crush, or break the pill, instruct patient to avoid the use of alcohol, NSAIDs, and foods that may increase gastric secretions (Jones & Bartlett, 2020).
How much would medication cost per month if paying out of pocket?	$4.68 a month for 30 pills (Medical Security Card Company LLC, 2019).

Drug #7	**Drug Name (Generic):** Hydrocodone-acetaminophen

Drug Class: Opioid analgesic	**Drug Name (Trade):** Norco
How is the medication taken: (include dose, route, and frequency)	5/325mg taken by mouth two times a day
Specific Directions not included above:	Take with food to prevent GI upset (Skidmore-Roth, 2020).
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	Hydrochlorothiazide interacts with hydrocodone-acetaminophen as it can cause orthostatic hypotension (Jones & Bartlett, 2020). Hydrocode-acetaminophen interacts with acetaminophen as it can increase adverse renal affects and is hepatotoxicity as well as puts the patient at risk for acetaminophen toxicity (Frandsen & Smith Pennington, 2020).
Lifestyle interactions: **(Daily tobacco use, alcohol, drugs, etc.)**	There are no known lifestyle interactions that need modification.
Does any of the client's past medical history contradict the use of this medication?	Liver disease is a contraindication, which this patient has Non-alcoholic Fatty Liver Disease (Skidmore-Roth, 2020).
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical	The indication for use of hydrocodone-acetaminophen is to treat moderate to severe pain in association to recent gastric banding surgery (Skidmore-Roth, 2020).

history, please list potential indications for use of the medication in general)	
What would you teach the client about taking this medication?	Instruct patient to not stop taking abruptly after long term use, educate the patient on the potential for dependence and drug tolerance, Avoid driving or operating heavy machinery while taking, avoid the use of other medications containing acetaminophen, monitor for decreased respirations, do not break, crush, or chew the pill, decreased heart rate, swelling of the face, and drowsiness (Skidmore-Roth, 2020).
How much would medication cost per month if paying out of pocket?	$15.90 a month for 60 pills (Medical Security Card Company LLC, 2019).

Drug #8	**Drug Name (Generic):** Aspirin

Drug Class: NSAID	**Drug Name (Trade):** Bayer
How is the medication taken: (include dose, route, and frequency)	81mg taken by mouth once a day
Specific Directions not included above:	Take with or after food and 8oz of water at the same time every day (Jones & Bartlett, 2020).
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	Benazepril interacts with aspirin and can increase antihypertensive affects and decrease renal function (Jones & Bartlett, 2020). Vitamin E interacts with aspirin because it is an anticoagulant and can increase the action of aspirin (Skidmore-Roth, 2020). Garlic interacts with aspirin as garlic itself already increases anticoagulant/antiplatelet affects, which results in increased affects when taken in combination with aspirin and puts the patient as risk for bleeding (Frandsen & Smith Pennington, 2020). Hydrochlorothiazide interacts with aspirin because it decreases the thiazide affect and increases the risk of renal failure (Jones & Bartlett, 2020). Calcium carbonate interacts with aspirin as it can decrease the level and therapeutic effects of the aspirin (Skidmore-Roth, 2020). Acetaminophen interacts with Aspirin as it can increase the risk for adverse renal reactions

	(Skidmore-Roth, 2020).
Lifestyle interactions: **(Daily tobacco use, alcohol, drugs, etc.)**	There are no known lifestyle interactions that need modification.
Does any of the client's past medical history contradict the use of this medication?	The patient has an allergy to NSAIDs which contraindicates the use of aspirin (Jones & Bartlett, 2020).
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)	The indication for use of Aspirin is to prevent blood clots from forming due to heart failure (Jones & Bartlett, 2020).
What would you teach the client about taking this medication?	Instruct client to take aspirin with a full glass of water and after or with meals to prevent stomach upset, advise patient taking low-dose aspirin to not take with ibuprofen because it can reduce the cardioprotective and clotting preventative effects, Report any symptoms of hepatotoxicity, renal toxicity, visual changes, and blood emesis or stools (Jones & Bartlett, 2020).

How much would medication cost per month if paying out of pocket?	$1.62 a month for 30 pills (Medical Security Card Company LLC, 2019).

Drug #9 **Drug Class:** Antipyretic/nonopioid analgesic	**Drug Name (Generic):** Acetaminophen **Drug Name (Trade):** Tylenol
How is the medication taken: (include dose, route, and frequency)	500mg by mouth every four hours as needed
Specific Directions not included above:	Take with food and full glass of water to prevent stomach upset (Jones & Bartlett, 2020).
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	Hydrocode-acetaminophen interacts with acetaminophen as it can increase adverse renal affects and is hepatotoxicity as well as puts the patient at risk for acetaminophen toxicity (Frandsen & Smith Pennington, 2020). Acetaminophen interacts with Aspirin as it can increase the risk for adverse renal reactions (Skidmore-Roth, 2020).
Lifestyle interactions: **(Daily tobacco use, alcohol, drugs, etc.)**	There are no known lifestyle interactions that need modification.
Does any of the client's past medical history	Acetaminophen is to be used cautiously in patients with liver and kidney impairment. This

contradict the use of this medication?	patient has Non-alcoholic Fatty Liver Disease (Skidmore-Roth, 2020).
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)	The indication for use of this medication is to treat moderate to severe pain in conjunction with opioid analgesics related to his recent gastric banding surgery (Jones & Bartlett, 2020).
What would you teach the client about taking this medication?	Take with a full glass of water and food in order to prevent stomach upset, advise patient to not exceed recommended dose and to avoid taking with other medications that contain acetaminophen due to hepatotoxicity risks, Monitor for acetaminophen overdose by signs of bleeding, easy bruising, and malaise (Jones & Bartlett, 2020).
How much would medication cost per month if paying out of pocket?	$4.32 a month for 180 pills (Medical Security Card Company LLC, 2019).

Drug #10 **Drug Class:** Antacid	**Drug Name (Generic):** Calcium Carbonate **Drug Name (Trade):** Titralac or Tums
How is the medication taken: (include dose, route, and frequency)	600mg by mouth three times a day
Specific Directions not included above:	Take 1 to 2 hours after meals (Jones & Bartlett, 2020).
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	Calcium carbonate interacts with hydrochlorothiazide as it can increase the possibility for hypercalcemia (Jones & Bartlett, 2020). Calcium carbonate interacts with aspirin as it can decrease the level and therapeutic effects of the aspirin (Skidmore-Roth, 2020). Centrum multivitamin interacts with calcium as calcium can reduce the serum concentration the multivitamin and can decrease the absorption of iron, which is included in Centrum (RxList, n.d.).
Lifestyle interactions: **(Daily tobacco use, alcohol, drugs, etc.)**	Patient smokes a cigar daily. Tobacco use can decrease the absorption of calcium (Jones & Bartlett, 2020).
Does any of the client's past medical history	No past medical history contraindicates the use of this medication.

contradict the use of this medication?	
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)	The indication of use for this medication is gastroesophageal reflux disease to provide antacid affects (Jones & Bartlett, 2020).
What would you teach the client about taking this medication?	Instruct patient to avoid excessive use of tobacco, alcohol, caffeine, and high fiber foods while taking calcium carbonate, Instruct patient to take calcium carbonate 1 to 2 hours after meals, Instruct client to remain in an upright position for at least an hour after taking an antacid as well as take separately from other medications (Jones & Bartlett, 2020).
How much would medication cost per month if paying out of pocket?	$3.88 a month for 90 pills (Medical Security Card Company LLC, 2019).

Is there anything about this medication regimen scenario that might indicate a potential difficulty in maintaining compliance with the orders as listed?

With this medication regimen scenario there is a potential difficulty in maintaining compliance because there are ten medications that are to be administered at different intervals throughout the day. The administration frequency is listed as every day, once a day, one time a day, twice a day, three times a day, and four hours as needed. This poses a threat of missed doses and potentially overdosing which could be life threatening. The wording for the instructions to take the medication one time a day is also confusing because it is worded in three different ways (every day, once a day, and one time a day). Vitamin E dosage amount is listed as “iu” which could pose an issue to not understanding how much to administer. Wording is especially important and should be written in a consistent pattern with terminology that is understandable.

Is there anything about this medication regimen scenario that might assist the client in maintaining the medication regimen as ordered?

With this medication regimen scenario, the patient's out of pocket cost might assist the client in being able to maintain the medication regimen as ordered. Although the patient is having difficulty covering his medical expenses due to his work being slow; the monthly out of pocket cost of $56.86 is significantly low. This could pose as potential for the client being able to afford the medications.

What suggestions might you make to the prescriber and/or client (or questions you might ask the prescriber) to help this client scenario? (think about decreasing the potential for interaction(s) through medication reduction, other potential medications, diet changes, lifestyle changes, etc)

The suggestions that I would make to the patient would be to maintain his current low carb and low-fat diet and include an exercise program of some sort that is within the limitations of his gastric banding surgery. Finding an activity that he enjoys would be most beneficial in helping him stay compliant with the activity that he has chosen. With diet and exercise he could work towards lowering his weight which could potentially help with his hypertension, Non-alcoholic fatty liver disease, and GERD. I would also suggest that he stop smoking because smoking is a serious health issue that increases risks of respiratory and wound complications, sepsis, and several other adverse issues after a person has had bariatric surgery. I would also want to inform the patient of the potential harm of buying over the counter medications without talking to his primary first because of the risk of contraindications between the

medications. In this scenario we have a lot of that happening. I would also want to suggest that the patient always provide a complete list of his medications to prevent polypharmacy from happening.

The suggestions that I would make to the provider would be to change some of the medications to extended-release capsules if they are available so that the patient does not have the confusion of taking his medications at several different times throughout the day. Narrowing the administration times of medications would be beneficial in helping the patient stay compliant, prevention of missed doses and prevention of overdose. I would also suggest that the wording for the directions of taking the medications be worded in a consistent and understandable format to where the patient understands them. I would also suggest that the patient's list of medications be completely modified because of the contraindications between the medications and because of the patient's allergy towards certain medications. A few of these potential problems are as follows: The patient is allergic to NSAID's, but he is taking aspirin, which is an NSAID, Vitamin E has contraindications with aspirin, Centrum has contraindications with calcium, and hydrochlorothiazide, benazepril, and garlic has contraindications with aspirin. Plus many more contraindications throughout the patient's list of medications.

What would the patients monthly out of pocket expense for all 10 medications? (Total Cost for all 10 meds)?

$56.86 would be the patients monthly out of pocket expense for all 10 medications (Medical Security Card Company LLC, 2019).

Reflective Statement of Experience:

This assignment taught me a lot and gave me a better understanding of how exactly Polypharmacy can happen. People innocently do not realize the risks and harm that they can bestow upon themselves by buying over the counter medications and by not informing their primary care provider of other medications that they may have been prescribed. I must admit that before I decided to go into nursing, I also did not think about the interactions between medications and the potential harm that they could cause. This patient had a lot going on that posed a potential risk to his health with taking medications that he was allergic to and taking medications that were contraindicative of one another. He was allergic to NSAID's, but he was taking aspirin, which is an NSAID, he was taking acetaminophen and Norco which poses the risk for acetaminophen overdose, and he had contraindications between medications such as aspirin with hydrochlorothiazide. Polypharmacy happens mostly with the elderly, but it is a potential problem for any age. People see several doctors and they do not understand the importance of notifying each new doctor of all (prescribed and over the counter) medications that they have been taking. As a nurse it is my job and my responsibility to be an advocate for each patient that I have. If I notice contraindications or anything that is not correct with the medications that are prescribed for my patient, it is my responsibility to question those orders. The patient's health and safety are my number one priority.

References

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Drugs.com (n.d.) *Garlic*. Retrieved April 1, 2021, from https://www.drugs.com/mtm/garlic.html#:~:text=Garlic%20taken%20orally%20(by%20mouth,and%20in%20preventing%20tick%20bites.

Frandsen, G., Smith Pennington, S. (2020). *Abrams' clinical drug therapy: Rationales for nursing practice* (12th ed). Wolters Kluwer.

Jones and Bartlett Learning. (2020). *Nurse's drug handbook* (19th ed). Jones and Bartlett Publishers.

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RxList. (n.d.). *Centrum*. Retrieved on April 1st, 2021, from https://www.rxlist.com/fdb/drugs/167407/centrum_silver_women_oral-brand.htm

Skidmore-Roth, L. (2020). *Mosby's 2020 nursing drug reference* (33rd ed). Elsevier.

Grading Rubric

Criteria	Excellent 40 points	Acceptable 31-39 points	Unacceptable 0-30 points	Points Earned
Each drug should have a completed breakdown within the tables provided, which includes the following: • Drug class • Generic name • Trade name • How is the medication taken (include dose, route, frequency)	All key components were addressed within the paper and were accurate.	The student provided the required information for some of the medications, but not all and/or the answers provided were inaccurate. (Each individual component for each medication is worth one point)	The student failed to address a sufficient number of the listed components within the paper and/or the components were addressed but were inaccurate. (Each individual component for	___/40

			each medication is worth one point)	
Criteria	**Excellent 10 points**	**Acceptable 8-10 points**	**Unacceptable 0 - 7 points**	**Points Earned**
Specific Directions not included above: • Is there any type of medication on the patient list that have specific directions? (before bed, before breakfast, 30 minutes before meals, etc..)	All key components were addressed within the paper.	The student did list some of the medications that required specific directions, however some of the medications included specific directions that were not addressed and/or were inaccurate. (For each medication this question if worth one point)	Student failed to answer the questions and/or the answers were inaccurate. (For each medication this question is worth one point)	___/10
Criteria	**Excellent 0 points**	**Acceptable 16-19**	**Unacceptable 0-15 points**	**Points Earned**
Does this medication have any potentially serious interactions with any other medication(s) on this list, and/or potential interactions that should be closely monitored due to co-administration? • Do any of the medications interact with each other? (Please note: if there is an	All medications reviewed and student explained medication interactions.	The student did list some of the potential interactions of the medication(s), but failed to address all potential interactions that are serious and/or need close monitoring. (for each medication listed this question is worth two points)	Student failed to answer question and/or The student did list some of the potential interactions of the medication(s), but failed to address all potential interactions that are serious and/or need close monitoring. (for each medication	___/20

interaction between two medication, you MUST list that interaction on BOTH medications to receive full credit. You may utilize the same verbiage/wording on each medication, we want to know you are thinking about it when considering each medication)			listed this question is worth two points)	

Criteria	Excellent 5 points	Acceptable 4 points	Unacceptable 0 -3 points	Points Earned
Lifestyle interactions: • What lifestyle factors counteract with the medications? (tobacco user, ETOH use – 3 beers daily)	Student showed knowledge why lifestyle would counteract with medications	The student listed lifestyle interactions for some of the medications, but not all and/or the interactions listed were not priority or were incorrect. (For each medication, this question is worth half a point)	Student failed to answer question or the student listed lifestyle interactions for some of the medications, but not all and/or the interactions listed were not priority or were incorrect. (For each medication, this question is	___/5

			worth half a point)	
Criteria	**Excellent 10 points**	**Average 8-9**	**Unacceptable 0-7 points**	**Points Earned**
• Does any of the client's past medical history contradict the use of this medication?	Student showed knowledge why the client's past medical history would contradict the use of the medication(s).	Student provided answers to the question(s), but failed to answer all the questions and/or the answers provided were inaccurate. (For each medication this question is worth one point)	Student failed to answer question or Student provided answers to the question(s), but failed to answer all the questions and/or the answers provided were inaccurate. (For each medication this question is worth one point)	___/10
Criteria	**Excellent 10 points**	**Acceptable 8-9 points**	**Unacceptable 0-7 points**	**Points Earned**
• What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical	Student showed knowledge of medications and what conditions corresponds with	The student provided appropriate indications for some of the medications, but failed to capture all of the appropriate indications for use. (For each medication this question is worth one point)	Student failed to answer the question or The student provided appropriate indications for some of the	___/10

history, please list potential indications for use of the medication in general)	medications		medications, but failed to capture all of the appropriate indications for use. (For each medication this question is worth one point)	
Criteria	**Excellent 20 points**	**Acceptable 16-19 points**	**Unacceptable 0-15 points**	**Points Earned**
What would you teach the client about taking this medication? • What education is needed for the medication? (For each medication listed the student must prioritize two topics for client education) (You must consider all component(s) of the medication list when answering this question… if there are potential interactions with other medication this may be a priority over general education for this one medication)	Student showed the importance of medication education, and appropriate prioritized client education for the scenario provided.	The student provided some appropriate education for the client, but failed to capture all of the appropriately prioritized education for the client. (Each topic of education is worth one point)	Student failed to answer the question OR The student provided some appropriate education for the client, but failed to capture all of the appropriately prioritized education for the client. (Each topic of education is worth one point)	___/20

Criteria	Excellent 10 points	Acceptable 8-9 points	Unacceptable 0-7 points	Points Earned
Is there anything about this medication regimen/ scenario that might indicate a potential difficulty in maintaining compliance with the orders as listed? • Why would the patient have difficulty maintaining the medication regiment? (Please consider all factors in the scenario and all information provided within your chart – including cost, insurance, frequency of administration, etc)	Student had knowledge on why a patient would have difficulty with medication regiment	The student indicated some potential reasons that the client may have difficulty, however the student failed to indicate a reason OR an appropriate reason for some of the medications (This question is worth one point for each medication)	Student failed to answer the question OR the student indicated some potential reasons that the client may have difficulty, however the student failed to indicate a reason OR an appropriate reason for some of the medications (This question is worth one point for each medication)	___/10
Criteria	**Excellent 10 points**	**Acceptable 8-9 points**	**Unacceptable 0-7 points**	**Points Earned**
Is there anything about this medication regimen/ scenario that might assist the client in maintaining the medication regimen as ordered? • What factors are present to remain	Student had knowledge on medication compliance	The student answered the question appropriately for some of the medications but failed to indicate all of the factors that are present that assist with compliance. (This question is worth one point for each medication)	Student failed to answer the question OR The student answered the question appropriately for some of the	___/10

compliant? (Please consider all factors in the scenario and all information provided within your chart – including cost, insurance, frequency of administration, etc.			medications but failed to indicate all of the factors that are present that assist with compliance. (This question is worth one point for each medication)	
Criteria	**Excellent 10 points**	**Acceptable 8-9 points**	**Unacceptable 0 points**	**Points Earned**
• How much would this medication cost per month if the patient were to pay for them out of pocket? (best assessment based off of research) • What would the client's monthly out of pocket expense for all 10 medications?	Student showed research on medication costs	The student provided accurate research for some of the medications, but failed to provided research for all medications (This question is worth one point for each medication, with the total cost being worth 5 points)	Student failed to answer the question OR The student provided accurate research for some of the medications, but failed to provided research for all medications (This question is worth one point for each medication, with the total cost being worth 5 points)	___/15
Criteria	**Excellent 20 points**	**Acceptable 16-19 points**	**Unacceptable 0-15 points**	**Points Earned**

The student must appropriately format the paper and include all of the following: • Entire document must include appropriate citations, reference page, title page, page numbers, running head, all with appropriate formatting per APA (10 points – each missing or inaccurate portion per APA is worth one point) • The student provided a rubric attached for grading (3 points) • The student included the provided client scenario on page two of the document (2 points) • The paper included a minimum of five references which were cited within the document (each reference with one citation is worth 5 points)	The document included a title page, the rubric, the client scenario, a reference page which included five references that were cited within the document. APA formatting was consistent with the APA manual.	The document did not meet all of the criteria for formatting/ referencing. See "criteria" to the left for further breakdown.	The document did not meet all of the criteria for formatting/ referencing. See "criteria" to the left for further breakdown.	___/20
Criteria	**Excellent 20 points**	**Acceptable 16-19 points**	**Unacceptable 0-15 points**	**Points Earned**

What suggestions might you make to the prescriber and/or client (or questions you might ask the prescriber) to help this client scenario? (think about decreasing the potential for interaction(s) through medication reduction, other potential medications, diet changes, lifestyle changes, etc) Elaborate on this, explaining why you feel it should be addressed, why it is priority and provide evidence behind your presentation.	The student was able to identify one potential idea or question to present to the prescriber or client. This question showed evidence of good critical thinking.	The student was able to identify one potential idea or question to present to the prescriber or client, however there was a much higher priority question/suggestion/issue within the scenario that should have been addressed.	The student failed to answer the question OR the student answered the question, however the students answer was dangerously inaccurate.	**____/20**
Criteria	**Excellent 10 points**	**Acceptable 8-9 points**	**Unacceptable 0-7 points**	**Points Earned**
• Reflective statement of experience should include the following: -insight into the project itself (a specific example within the project and its implications) -A basic understanding of polypharmacy	The students provided reflection showed good insight into the project itself, polypharmacy, and the nurses role in client	The student provided a reflection, however the reflection lacked one of the following -insight into the project itself (a specific example within the project and its implications). -A basic understanding of	Student failed to reflect on their project OR the student addressed only of the topics of reflection	___/10

-A reflection on this student nurses role in this scenario as a client advocate/educator/caregiver	advocacy	polypharmacy -A reflection on this student nurses role in this scenario as a client advocate/educator/caregiver		
Total Points				**___/200**