

Polypharmacy Project

Marianna Kalembasa, BSN Student

Justin Munoz, BSN Student

Lindsey Burnett, BSN Student

N322 Introduction to Pharmacology

Lakeview College of Nursing

Brittany Lawson MSN, RN, CMAC

7/20/2022

Polypharmacy Case - Amy

Background: Amy is an 87-year-old female that lives in an assisted living facility. Part of the living arrangements in the facility is a pharmacy service that delivers their meds in pre-filled medication packages (accu-pacs) every week. These packages are labeled with the date and time of administration. (see example picture attached). Amy is expected to take her medications independently. She has no family nearby to assist her. She is followed by her primary care physician as well as an endocrinologist, whom she currently visits monthly as her diabetes is not well controlled. Amy does not have a driver's license, and is experiencing significant difficulty with her vision r/t diabetic retinopathy. Amy drinks approximately 3 glasses of wine a day. Amy does have a history of smoking cigarettes (26 pack years). She quit 10 years ago, and smoke 1 pack per day for 26 years). She denies illicit drug use.

Insurance: Amy has good health insurance that covers the cost of her prescription medications with little co-pay.

Allergies: Sulfa

Diet: Controlled carbohydrates

Medical diagnosis: Type II Diabetes, diabetic retinopathy, diabetic neuropathy, osteoporosis, depression

Current medications include the following:

Aspirin 81 mg by mouth two times a day

Calcium 500 mg by mouth two times a day

Celexa 40 mg by mouth daily

Docusate Sodium 100 mg by mouth two times a day

Glyburide 10 mg by mouth one time a day

Levemir 15 units by subcutaneous injection daily at bedtime

Novolog per sliding scale by subcutaneous injection before meals and at bedtime (AC & HS)

POLYPHARMACY

70-139 = 0 units

140-180= 2 units

181-240 = 3 units

241-300 = 4 units

301-350 = 6 units

351 - 400 = 8 units

Ranibizumab 0.5 mg via intravitreal injection (given at doctor's office) once a month

Duloxetine 60 mg by mouth every day

Ibuprofen 400 mg by mouth every six hours as needed



Fritz, T. (2004). Accupac image. Retrieved May 12, 2020 from <http://www.modelhealthcare.com/>

Drug #1	Drug Name (Generic): Acetylsalicylic acid Drug Name (Trade): Aspirin Drug Class: NSAIDs
How is the medication taken: (include dose, route, and frequency)	81 mg by mouth two times a day
Specific Directions not included above:	Drink a full glass of water with each dose Swallow the tablet whole Do not break, crush, or chew tablet
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	Yes this medicine should not be taken with ibuprofen without talking to your provider first.
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	Patients consume 3 glasses of wine daily, this should be avoided while taking aspirin to decrease risk of ulcers.

Does any of the client's past medical history contradict the use of this medication?	No
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)	To relieve pain in osteoporosis.
What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	1. Advise adult patients taking low-dose aspirin not to also take ibuprofen or naproxen because these drugs may reduce the cardioprotective and stroke preventive effects of aspirin. 2. Advise patients to avoid alcohol while taking aspirin to decrease risk of ulcers.
How much would medication cost per month if paying out of pocket?	\$3.20

Drug #2	Drug Name (Generic): Calcium Gluconate Drug Name (Trade): Calcium
----------------	--

	Drug Class: Antacid
How is the medication taken: (include dose, route, and frequency)	500 mg by mouth two times a day
Specific Directions not included above:	Take medication by mouth with food Swallow the tablet whole Do not break, crush, or chew tablet
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	No medications on this list interact with calcium.
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	Patient consumes 3 glasses of wine daily. Avoid excessive consumption of alcoholic beverages as it may decrease calcium absorption.
Does any of the client's past medical history contradict the use of this medication?	No
What is the indication for use of this medication based on the client's past medical history? (If unable	Patient is taking calcium due to osteoporosis.

to determine an indication based on past medical history, please list potential indications for use of the medication in general)	
What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	<p>1.Urge patient to ask prescriber before taking OTC drugs because of risk interactions.</p> <p>2.Instruct patients to avoid taking calcium within 2 hours of another oral drug because of risk of interactions.</p>
How much would medication cost per month if paying out of pocket?	\$3.94
Drug #3	<p>Drug Name (Generic):Citalopram</p> <p>Drug Name (Trade): Celexa</p> <p>Drug Class: Antidepressants, SSRIs</p>
How is the medication taken: (include dose, route, and frequency)	40 mg by mouth daily
Specific Directions not included above:	<p>Take once a day</p> <p>Can be taken at any time of day, but needs to be taken at the same time every day</p> <p>If you have troubles sleeping, it's best to take in the morning</p> <p>Can be taken with or without food</p>

	Do not stop taking medicine abruptly, needs to be tapered off
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	Aspirin: Increased risk of bleeding ranging from ecchymoses to life-threatening hemorrhage. Ibuprofen: Increased risk of bleeding ranging from ecchymoses to life-threatening hemorrhage.
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	Patient drink 3 glasses of wine daily Avoid drinking alcohol while taking citalopram
Does any of the client's past medical history contradict the use of this medication?	No
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)	Patient taking due to depression.
What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	1. Inform a patient that citalopram's full effects may take up to 4 weeks.

	2. Caution patients not to stop medication abruptly because doing so may lead to serious adverse reactions.
How much would medication cost per month if paying out of pocket?	\$18.71
Drug #4	Drug Name (Generic): Docusate Sodium Drug Name (Trade): Colace Drug Class: Laxative, Stool Softener
How is the medication taken: (include dose, route, and frequency)	100 mg by mouth two times a day
Specific Directions not included above:	<ul style="list-style-type: none"> - Not to use medication if they experience symptoms such as abdominal pain, nausea, or vomiting. - Take medication with glass of water or milk - Encourage increase intake of fiber and 6-8oz of water daily - Notify provider about rectal bleeding, symptoms of electrolyte imbalances - dizziness, light-headedness, muscle cramping and any weakness; and unrelieved constipation.

Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	No
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	May cause dependence if excessive use or prolonged use of medication
Does any of the client's past medical history contradict the use of this medication?	No
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)	Indication of medication is to treat constipation
What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	<ol style="list-style-type: none"> 1. Prolonged or excessive use of medication may cause dependence 2. Must take medication with glass of water or milk
How much would medication cost per month if paying out of pocket?	Cost of Docusate Sodium: <ul style="list-style-type: none"> - Lowest: \$3 - Highest: \$13

Drug # 5	Drug Name (Generic):Glyburide Drug Name (Trade): DiaBeta, Euglucon (CAN), Glynase Drug Class: Antidiabetic
How is the medication taken: (include dose, route, and frequency)	10 mg by mouth one time a day
Specific Directions not included above:	<ul style="list-style-type: none"> - Take medication before the first meal of the day and not skip a meal during the day. - Avoid skipping doses or taking OTC drugs. - Report signs and symptoms of hypoglycemia (anxiety, confusion, dizziness, excessive sweating, confusion, dizziness, and nausea) - Monitor blood glucose level - Avoid alcohol because it increases risk of hypoglycemia
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	Patient has symptom of allergy but is tolerating medication - not a true allergy Aspirin - Increase risk of hypoglycemia Ibuprofen- increases the levels of glyburide by affecting hepatic enzyme metabolism. Celexa (Citalopram) - Increase risk of hypoglycemia

Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	- Avoid alcohol because it increases risk of hypoglycemia - High-Fat foods: Reduce bioavailability of non micronized glyburide
Does any of the client's past medical history contradict the use of this medication?	No
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)	Indication: control blood glucose level in type 2 Diabetes Mellitus
What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	1. Teach the patient to check blood glucose level 3x/day before each meal 2. Major adverse reaction is hypoglycemia
How much would medication cost per month if paying out of pocket?	Glyburide of 100 tablets supply: - High cost is \$74.08 - Low cost is \$29.00
Drug # 6	Drug Name (Generic): Levemir

	Drug Name (Trade): Insulin Detemir Drug Class: Long-Acting Insulin
How is the medication taken: (include dose, route, and frequency)	15 units by subcutaneous injection daily at bedtime
Specific Directions not included above:	<ul style="list-style-type: none"> - Do not mix other long-acting insulin with Detemir - It is only to be administered Subcutaneously and one time a day involving detemir before evening meal or at bedtime - Bedtime administration is the best time because of complete effects.
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	<ul style="list-style-type: none"> - Aspirin - Increase risk of hypoglycemia - Celexa (Citalopram) - Increase risk of hypoglycemia - Glyburide - Increase risk of hypoglycemia
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	<p>Excessive alcohol Consumption causes hypoglycemia.</p> <ul style="list-style-type: none"> - patient drinks 3 glasses of wine daily - recommended is 1 glass daily to reduce risk of hypoglycemia.
Does any of the client's past medical history contradict the use of this medication?	No

<p>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)</p>	<p>Lowers blood glucose levels for up to 24hrs</p>
<p>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</p>	<p>1. It is only to be administered Subcutaneously and one time a day involving detemir before evening meal or at bedtime</p> <p>2. Do not shake vial, gently roll vial between palms</p>
<p>How much would medication cost per month if paying out of pocket?</p>	<p>Cost of Levemir:</p> <ul style="list-style-type: none"> - High price is \$462.10 - Low price is \$334.00
<p>Drug # 7</p>	<p>Drug Name (Generic): Insulin aspart</p> <p>Drug Name (Trade): Novolog</p> <p>Drug Class: Antidiabetic, rapid-acting insulin</p>
<p>How is the medication taken: (include dose, route, and frequency)</p>	<p>Dose:</p> <p>70-139 = 0 units</p> <p>140-180= 2 units</p> <p>181-240 = 3 units</p>

	<p>241-300 = 4 units</p> <p>301-350 = 6 units</p> <p>351 - 400 = 8 units</p> <p>Route: Subcutaneous injection</p> <p>Frequency: As needed depending on blood glucose levels that are taken before meals and at bedtime.</p>
Specific Directions not included above:	<ul style="list-style-type: none"> ● Administer medication if glucose levels are above 140, before meals and before bed. ● Subcutaneous injection in the abdominal region, buttocks, thigh, or upper arm. ● It should be injected 5-10 minutes before a meal
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	No, Novolog does not interact with any other medications on this list.
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	<p>In the patient's past medical history it states that she drinks three glasses of wine daily.</p> <p>This puts the patient at increased risk for adverse effects.</p>
Does any of the client's past medical history contradict the use of this medication?	No.

<p>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)</p>	<p>The indication for use of this medication is the patient's past medical history of diabetes.</p>
<p>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</p>	<ol style="list-style-type: none"> 1. Before taking this medication check your blood glucose levels. 2. Use the sliding scale to determine how much novolog is needed depending on what the blood glucose level was.
<p>How much would medication cost per month if paying out of pocket?</p>	<p>Average price for 1 vial (100 units): \$306.37</p> <p>Average cost is the patient needs 8 units before every meal and before bedtime for the entire month: \$3063.70</p>
<p>Drug # 8</p>	<p>Drug Name (Generic): Ranibizumab</p> <p>Drug Name (Trade): Lucentis and susvimo</p> <p>Drug Class: Vascular endothelial growth factor inhibitor (Anti-VEGFs)</p>
<p>How is the medication taken: (include dose, route, and frequency)</p>	<p>Dose: 0.5mg</p> <p>Route: Intravitreal injection</p>

	Frequency: Once a Month
Specific Directions not included above:	Medication is given as an intravitreal injection at the patient's doctors office one a month.
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	No, this medication does not interact with any other medication on this list.
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	Limit alcohol, marijuana, and tobacco use when taking this medication. Using any of these substances when on Ranibizumab can increase the risk for dizziness.
Does any of the client's past medical history contradict the use of this medication?	Yes, the patient currently does not have a driver's license which could be due to her diabetic retinopathy and is unable to go get herself to the doctor for the injection appointment.
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 the use of this medication based on the client's past medical history is the history of diabetic retinopathy.

<p>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</p>	<ol style="list-style-type: none"> 1. It is important that each dose of the medication is received as scheduled by the doctor. If a dose is missed, contact your doctor immediately to reschedule. 2. Advise the patient to limit alcohol, marijuana, and tobacco to prevent adverse effects such as increased dizziness.
<p>How much would medication cost per month if paying out of pocket?</p>	<p>Average price per injection is: \$1,575</p>
<p>Drug # 9</p>	<p>Drug Name (Generic): Duloxetine hydrochloride</p> <p>Drug Name (Trade): Cymbalta, Drizalma Sprinkle</p> <p>Drug Class: Antidepressant, neuropathic and musculoskeletal pain reliever</p>
<p>How is the medication taken: (include dose, route, and frequency)</p>	<p>Dose: 60mg</p> <p>Route: Oral</p> <p>Frequency: Daily</p>
<p>Specific Directions not included above:</p>	<ul style="list-style-type: none"> • The capsule should be taken whole, not chewed, crushed, or sprinkled on food or liquid. • Do not stop medication abruptly. • Patients with diabetes should monitor their blood glucose levels more closely.

<p>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</p>	<p>Yes, duloxetine hydrochloride can interact with aspirin and Ibuprofen. This can put the patient at an increased risk for GI bleed. Patients who use ibuprofen and duloxetine together are at increased risk for upper GI bleeds. If possible concurrent use should be discontinued, it not use caution and monitor closely.</p>
<p>Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)</p>	<p>In the patient's past medical history it states that she drinks three glasses of wine daily. This puts the patient at increased risk for hepatotoxicity.</p>
<p>Does any of the client's past medical history contradict the use of this medication?</p>	<p>No.</p>
<p>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)</p>	<p>The indications for the use of this medication is the patient's past medical history of depression, as well as the patient's medical history of diabetic neuropathy.</p>
<p>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</p>	<ol style="list-style-type: none"> 1. Swallow the capsule whole, do not crush, chew, break, or open it 2. Avoid taking duloxetine with herbal products specifically Tryptophan and St. John's wort.

How much would medication cost per month if paying out of pocket?	Average monthly supply costs: \$126.16
Drug # 10	Drug Name (Generic): Ibuprofen Drug Name (Trade): Advil, ect. Drug Class: NSAID, Anti-inflammatory
How is the medication taken: (include dose, route, and frequency)	Dose: 400mg Route: Oral Frequency: Q6 PRN
Specific Directions not included above:	It is recommended to take a full glass of water, milk, or food to reduce the chance of stomach irritation.
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	This medication interacts with aspirin, citalopram, duloxetine, and glyburide. <ul style="list-style-type: none"> ● Patients who take ibuprofen and aspirin are at risk for increased anticoagulation, they should use caution and be monitored closely. ● Patients who take ibuprofen and citalopram together increase the risk for upper GI bleeding. If possible concurrent use should be discontinued, it not use caution and monitor closely.

	<ul style="list-style-type: none"> ● Patients who use ibuprofen and duloxetine together are at increased risk for upper GI bleeds. If possible concurrent use should be discontinued, if not use caution and monitor closely. ● Ibuprofen can increase the levels of glyburide by affecting hepatic enzyme metabolism. Caution should be used when taking these medications concurrently.
<p>Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)</p>	<p>In the patient's past medical history it states that she drinks three glasses of wine daily. This puts the patient at increased risk for drowsiness, nausea, stomach ulcers, heart attacks, and stroke.</p>
<p>Does any of the client's past medical history contradict the use of this medication?</p>	<p>No.</p>
<p>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)</p>	<p>The patient has a diagnosis of osteoporosis and most likely taking ibuprofen to help manage the osteoporosis pain.</p>

What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	<ol style="list-style-type: none"> 1. Take at least 8 hours before or at least 2 hours after taking aspirin. 2. It is not recommended to take on an empty stomach, take with a full glass of water.
How much would medication cost per month if paying out of pocket?	Average cost per month if the patient takes 2 daily for a month: \$19.46

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

Amy lives in an assisted living facility where she is expected to take her medication independently. Considering her uncontrolled diabetes, Amy may not be able to take these medications independently. Amy may also have trouble seeing her medications because she has been experiencing some difficulties with her vision, which could lead her to take the wrong medication. Another factor is that Amy may be experiencing depression. She has no family to visit her, which may make her depressed. If Amy is depressed, it could cause her to be too tired or unwilling to comply with her medication regimen. We recommend that Amy be supervised and instructed on when it is time to take her medications to ensure compliance.

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

The polypharmacy scenario stated that the client living in the assisted living facility implements the use of Accu-packs in which the medication is stored has the time, day, and time it needs to be administered. This factor allows the medication regimen to be maintained with staff in the facility visually seeing the correct routes of administration, drug name, times, and names of the patient to whom the medication goes.

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)

Suggestions that the prescriber should consider is the patient's style. The patient admits to drinking 3 glasses of wine a night, alcohol can interact with many of the patient's medications putting her at an increased risk for GI bleeds, stroke, heart attack and more. In addition to the prescriber considering this the patient should also consider her alcohol intake. Ideally, the patient will be able to stop all alcohol consumption to prevent an interaction with medications. This may not be possible if the patient has an addiction. The prescriber should also consider the patient's ability to get around. Amy does not have her drivers license which may make it difficult

for her to attend her doctors appointments or go to the doctor once a month to get her ranibizumab injection. The prescriber may want to consider other options or look into transportation for Amy.

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

The highest total cost for all 10 medication for one month out of pocket is: \$5,359.35

Reflective Statement of Experience:

Lindsey: I found this project very helpful, especially in getting to know the different types of medications. As a result, I better understand the medications and their different classes and names. I also have a better understanding of the different types of interactions and contradictions of the different medications, especially when taking multiple medications. I also better understand what you should monitor when taking multiple medications.

Justin: The project helped me learn a lot and made me realize issues that can cause risks when taking medications as instructed. One part of the project scenario that stuck to me was how lifestyle habits like drinking alcohol, smoking cigarettes, or bad diets could put one at even higher risk for a significant adverse effect. Another part that stuck with me was the cost of some medication. One of the medications I had to research was Levemir, and within the U.S., the highest price for this insulin was \$462 for a 100 units Vial, while

the lowest price went to \$334. Meanwhile, outside of the U.S., like Canada, the cost for Levemir is almost \$40 per vial of 100 units. If this patient in the scenario did not have good or any health insurance, then who knows if they would've been able to afford the insulin they needed.

Marianna: I found that this project was very helpful in understanding how to perform a medication reconciliation and to get familiar with different types of medications. I did not realize all that could go into a medication reconciliation and how important it was to do especially if a patient is going to different prescribers. The prescribers may not be looking at the interactions between the medications they prescribe compared to the medications that another prescriber prescribed. This puts many patients at risk for adverse effects. I also learned about how expensive medications can be without insurance. If our patient did not have insurance it is likely she would not have been able to afford the medications she needs.

References

GoodRx(2022). GoodRx. <https://www.goodrx.com>

Jones & Bartlett Learning (2021). 2021 Nurses' Drug Handbook. Burlington, MA

Ranibizumab injection: MedlinePlus drug information. (n.d.). MedlinePlus - Health Information from the National Library of Medicine. <https://medlineplus.gov/druginfo/meds/a607044.html>

NovoLog® dosing. (n.d.). NovoLog® Official Physician Website | NovoLog® (insulin aspart) injection 100 U/mL. <https://www.novologpro.com/dosing.html>

Nazila Sharbaf Shoar; Kamron A. Fariba; Ranjit K. Padhy. Citalopram. National Library of Medicine. <https://www.ncbi.nlm.nih.gov/books/NBK482222/#:~:text=The%20primary%20FDA%2Dapproved%20clinical,flushing%2C%20and%20premenstrual%20dysphoric%20disorder.>

Drugs.com. (2022). *Drugs.com | Prescription Drug Information, Interactions & Side Effects.* <https://www.drugs.com/>

N322 Polypharmacy Grading Rubric

Criteria	Excellent 40 points	Acceptable 31-39 points	Unacceptable 0-30 points	Points Earned
<p>Each drug should have a completed breakdown within the tables provided, which includes the following:</p> <ul style="list-style-type: none"> ● 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 each medication is worth one point)	___/40
Criteria	Excellent 10 points	Acceptable 8-10 points	Unacceptable 0 - 7 points	Points Earned
<p>Specific Directions not included above:</p> <ul style="list-style-type: none"> ● Is there any type of medication on the patient list that have specific directions? <p>(before bed, before breakfast, 30 minutes before meals, etc..)</p>	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 is 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

<p>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?</p> <ul style="list-style-type: none"> Do any of the medications interact with each other? <p>(Please note: if there is an 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)</p>	<p>All medications reviewed and student explained medication interactions.</p>	<p>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)</p>	<p>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 listed this question is worth two points)</p>	<p>___/20</p>
--	--	---	--	---------------

Criteria	Excellent 5 points	Acceptable 4 points	Unacceptable 0 -3 points	Points Earned
----------	-----------------------	------------------------	-----------------------------	---------------

<p>Lifestyle interactions:</p> <ul style="list-style-type: none"> • What lifestyle factors counteract with the medications? <p>(tobacco user, ETOH use – 3 beers daily)</p>	<p>Student showed knowledge why lifestyle would counteract with medications</p>	<p>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)</p>	<p>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 worth half a point)</p>	<p>___/5</p>
<p>Criteria</p>	<p>Excellent 10 points</p>	<p>Average 8-9</p>	<p>Unacceptable 0-7 points</p>	<p>Points Earned</p>
<ul style="list-style-type: none"> • Does any of the client’s past medical history contradict the use of this medication? 	<p>Student showed knowledge why the client’s past medical history would contradict the use of the medication(s).</p>	<p>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)</p>	<p>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)</p>	<p>___/10</p>
<p>Criteria</p>	<p>Excellent 10 points</p>	<p>Acceptable 8-9 points</p>	<p>Unacceptable 0-7 points</p>	<p>Points Earned</p>

<ul style="list-style-type: none"> 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) 	<p>Student showed knowledge of medications and what conditions corresponds with medications</p>	<p>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)</p>	<p>Student failed to answer the question or 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)</p>	<p>___/10</p>
<p>Criteria</p>	<p>Excellent 20 points</p>	<p>Acceptable 16-19 points</p>	<p>Unacceptable 0-15 points</p>	<p>Points Earned</p>
<p>What would you teach the client about taking this medication?</p> <ul style="list-style-type: none"> What education is needed for the medication? (For each medication listed the student must prioritize two topics for client education) <p>(You must consider all component(s) of the medication list when answering this question... if there are potential</p>	<p>Student showed the importance of medication education, and appropriate prioritized client education for the scenario provided.</p>	<p>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)</p>	<p>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)</p>	<p>___/20</p>

<p>interactions with other medication this may be a priority over general education for this one medication)</p>				
<p>Criteria</p>	<p>Excellent 10 points</p>	<p>Acceptable 8-9 points</p>	<p>Unacceptable 0-7 points</p>	<p>Points Earned</p>
<p>Is there anything about this medication regimen/ scenario that might indicate a potential difficulty in maintaining compliance with the orders as listed?</p> <ul style="list-style-type: none"> Why would the patient have difficulty maintaining the medication regimen? <p>(Please consider all factors in the scenario and all information provided within your chart – including cost, insurance, frequency of administration, etc)</p>	<p>Student had knowledge on why a patient would have difficulty with medication regiment</p>	<p>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)</p>	<p>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)</p>	<p>___/10</p>
<p>Criteria</p>	<p>Excellent 10 points</p>	<p>Acceptable 8-9 points</p>	<p>Unacceptable 0-7 points</p>	<p>Points Earned</p>
<p>Is there anything about this medication regimen/ scenario that might assist the client in maintaining the medication regimen as ordered?</p>	<p>Student had knowledge on medication compliance</p>	<p>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</p>	<p>Student failed to answer the question OR 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</p>	<p>___/10</p>

<ul style="list-style-type: none"> What factors are present to remain compliant? <p>(Please consider all factors in the scenario and all information provided within your chart – including cost, insurance, frequency of administration, etc.</p>		question is worth one point for each medication)	compliance. (This question is worth one point for each medication)	
<p>Criteria</p>	<p>Excellent 10 points</p>	<p>Acceptable 8-9 points</p>	<p>Unacceptable 0 points</p>	<p>Points Earned</p>
<ul style="list-style-type: none"> 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
<p>Criteria</p>	<p>Excellent 20 points</p>	<p>Acceptable 16-19 points</p>	<p>Unacceptable 0-15 points</p>	<p>Points Earned</p>
The student must appropriately format the paper and include all of the following:	The document included a title page, the rubric, the client scenario, a reference page which included five references that were	The document did not meet all of the criteria for formatting/ referencing. See	The document did not meet all of the criteria for formatting/ referencing. See “criteria” to the left for further breakdown.	___/20

<ul style="list-style-type: none"> ● 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) 	<p>cited within the document. APA formatting was consistent with the APA manual.</p>	<p>“criteria” to the left for further breakdown.</p>		
<p>Criteria</p>	<p>Excellent</p>	<p>Acceptable</p>	<p>Unacceptable</p>	<p>Points</p>

	20 points	16-19 points	0-15 points	Earned
<p>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)</p> <p>Elaborate on this, explaining why you feel it should be addressed, why it is priority and provide evidence behind your presentation.</p>	<p>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.</p>	<p>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.</p>	<p>The student failed to answer the question OR the student answered the question, however the students answer was dangerously inaccurate.</p>	<p>___/20</p>
Criteria	Excellent 10 points	Acceptable 8-9 points	Unacceptable 0-7 points	Points Earned
<ul style="list-style-type: none"> Reflective statement of experience should include the following: <ul style="list-style-type: none"> -insight into the project itself (a specific example within the project and its implications) -A basic understanding of polypharmacy 	<p>The students provided reflection showed good insight into the project itself, polypharmacy, and the nurses role in client advocacy</p>	<p>The student provided a reflection, however the reflection lacked one of the following</p> <ul style="list-style-type: none"> -insight into the project itself (a specific example within the project and its implications). -A basic understanding of polypharmacy 	<p>Student failed to reflect on their project OR the student addressed only of the topics of reflection</p>	<p>___/10</p>

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