

Polypharmacy Project

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N322 Introduction to Pharmacology

Lakeview College of Nursing

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Background: Karen is a 40-year-old female that presents to the emergency department with complaints of severe abdominal pain with an onset of 7 days ago. Karen states that the pain started seven days ago and has gradually increased over the past week. She is currently rating the pain at 10/10. She states that she started taking her ibuprofen to assist in alleviating the pain, but it is no longer helping at all. She states that when her pain started getting worse she started developing nausea, and has vomited times two this morning. Her emesis was blood tinged. Other significant assessments include abdominal tenderness and reports of increased symptoms of GERD over the last month. Karen had a pituitary tumor surgical excision 1 month ago and has an extensive past medical history.

Insurance: Karen has sufficient medical insurance

Allergies: NSAIDS

Diet: No added salt & low concentrated sweets

Medical diagnosis: Cushing's, gastroesophageal reflux disease, recurrent constipation, hypertension, depression, type 2 diabetes mellitus

Current medications include the following:

Hydrocortisone 15 mg every am and 5 mg in the afternoon

Metoprolol tartrate 25 mg by mouth twice a day

Spironolactone-hydrochlorothiazide 50 mg/ 50 mg take 1 tablet by mouth daily

Prozac 20 mg by mouth twice a day

Saxagliptin 5 mg once daily by mouth

Atorvastatin 10 mg by mouth daily

Ranitidine 150 mg orally every 12 hours

Miralax 17 gram by mouth daily

Bismuth subsalicylate 525 mg (30ML) by mouth every 6 hours PRN

Ibuprofen 400 mg by mouth every 6 hours PRN

Drug #1	<p>Drug Name (Generic): hydrocortisone</p> <p>Drug Name (Trade): Cortef (Jones & Bartlett, 2021)</p> <p>Drug Class: Therapeutic Class: anti-inflammatories (steroidal) (Jones & Bartlett, 2021)</p> <p>Pharmacological Class: corticosteroids (Jones & Bartlett, 2021)</p>
How is the medication taken: (include dose, route, and frequency)	15 mg every morning and 5 mg in the afternoon
Specific Directions not included above:	Take with food or milk to avoid stomach upset. (medline.com)
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	<p>Ibuprofen: risk of side effects in the gastrointestinal tract such as inflammation, bleeding, ulceration, and rarely, perforation (Jones & Bartlett, 2021).</p> <p>Saxagliptin: may interfere with blood glucose control and reduce the effectiveness of saxagliptin (Jones & Bartlett, 2021).</p> <p>Miralax: May increase the risk of dehydration and hypokalemia (Jones & Bartlett, 2021).</p>
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	N/A
Does any of the client's past medical history contradict the use of this medication?	No medical history contradicts the use of this drug. This drug should be used cautiously because of the clients type two diabetes and hypertension (rxlist.com, 2019)

<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>Replacement therapy in adrenal insufficiency (Jones & Bartlett, 2021).</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. Do not suddenly stop taking this medication (Jones & Bartlett, 2021). 2. Instruct the client to inform the health care professional promptly if severe abdominal pain or tarry stools occur. The client should also report unusual swelling, weight gain, tiredness, bone pain, bruising, non healing sores, visual disturbances, or behavior changes (Jones & Bartlett, 2021).
<p>How much would medication cost per month if paying out of pocket?</p>	<p>\$150.04 (UpToDate, 2022)</p>

<p>Drug #2</p>	<p>Drug Name (Generic): metoprolol tartrate</p> <p>Drug Name (Trade): Lopressor(Jones & Bartlett, 2021)</p> <p>Drug Class: Therapeutic Class: antianginals, antihypertensives (Jones & Bartlett, 2021)</p> <p>Pharmacological Class: beta blockers (Jones & Bartlett, 2021)</p>
<p>How is the medication taken: (include dose, route, and frequency)</p>	<p>25 mg by mouth twice a day</p>

Specific Directions not included above:	Take an apical pulse before administering (Jones & Bartlett, 2021).
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	Fluoxetine: May increase the risk of bleeding and increase the effects of metoprolol (Drugs.com, 2022). Ibuprofen: May reduce the effects of metoprolol (Drugs.com, 2022).
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	N/A
Does any of the client's past medical history contradict the use of this medication?	Diabetes mellitus type II: Can cause hypoglycemia (Jones & Bartlett, 2021).
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 client has a history of hypertension (Jones & Bartlett, 2021).
What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	<ol style="list-style-type: none"> 1. Do not abruptly stop taking medication. Abrupt withdrawal may precipitate life-threatening arrhythmias, hypertension, or myocardial ischemia (Jones & Bartlett, 2021). 2. Notify health care professionals if slow pulse, difficulty breathing, wheezing, cold hands and feet, dizziness, light-headedness, confusion, depression, rash, fever, sore throat, unusual bleeding, or bruising occurs (Jones & Bartlett, 2021).

How much would medication cost per month if paying out of pocket?	\$15.50 (UpToDate, 2022)
Drug #3	<p>Drug Name (Generic): spironolactone-hydrochlorothiazide</p> <p>Drug Name (Trade): Aldactazide (Drugs.com, 2022)</p> <p>Drug Class: Therapeutic: Diuretic (Jones & Bartlett, 2021)</p> <p>Pharmacological: Potassium-sparing diuretic, Thiazide combo (Jones & Bartlett, 2021)</p>
How is the medication taken: (include dose, route, and frequency)	50 mg/ 50 mg take 1 tablet by mouth daily
Specific Directions not included above:	Take in the morning with meals or milk (Jones & Bartlett, 2021).
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	<p>Miralax: Can cause dehydration and electrolyte imbalances (Drugs.com, 2022).</p> <p>Ibuprofen use can decrease the antihypertensive effect of spironolactone (Drugs.com, 2022).</p> <p>Ibuprofen use can decrease the diuretic effect of hydrochlorothiazide and increase the risk of renal failure (Jones & Bartlett, 2021).</p> <p>Hydrocortisone can increase electrolyte depletion (Jones & Bartlett, 2021).</p> <p>Fluoxetine can cause hyponatremia (Drugs.com, 2022).</p> <p>Saxagliptin effects may be reduced (Drugs.com, 2022).</p> <p>Bismuth subsulcitate can impair tubular secretion of canrenone (Drugs.com, 2022).</p>
Lifestyle interactions:	N/A

(Daily tobacco use, alcohol, drugs, etc.)	
Does any of the client's past medical history contradict the use of this medication?	Diabetes can contradict the clients medication (Drugs.com, 2022)
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 client is taking this medication for the client's medical history of hypertension (Jones & Bartlett, 2021).
What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	<ol style="list-style-type: none"> 1. Take blood pressure regularly and report blood pressure over 140/90 mmHg (Jones & Bartlett, 2021). 2. Take the medication with meals or milk and in the morning (Jones & Bartlett, 2021).
How much would medication cost per month if paying out of pocket?	\$186.93 (UpToDate, 2022)
Drug #4	Drug Name (Generic): fluoxetine Drug Name (Trade): Prozac Drug Class: Selective serotonin reuptake inhibitors (SSRIs)
How is the medication taken: (include dose, route, and frequency)	Prozac 20 mg by mouth twice a day
Specific Directions not included above:	Prozac is taken in the morning, and is swallowed whole (Drugs.com, 2022).

<p>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</p>	<p>Miralax</p> <ul style="list-style-type: none"> • An irregular heart rhythm is a rare side effect of fluoxetine, and is at higher risk in patients with low magnesium and potassium. Laxative medications such as Miralax may lower blood levels of magnesium and potassium (Drugs.com, 2022). <p>Bismuth subsalicylate</p> <ul style="list-style-type: none"> • Bismuth subsalicylate and fluoxetine interact to increase the risk of bleeding (Drugs.com, 2022). <p>hydrochlorothiazide/spironolactone</p> <ul style="list-style-type: none"> • Both fluoxetine and spironolactone have the potential adverse effect of causing hyponatremia (Drugs.com, 2022). <p>Metoprolol tartrate</p> <ul style="list-style-type: none"> • Fluoxetine may increase the body's sensitivity to metoprolol tartrate, potentially leading to adverse effects such as abnormal heart rhythm, shortness of breath, and dizziness (Drugs.com, 2022). <p>Ibuprofen</p> <ul style="list-style-type: none"> • Ibuprofen and fluoxetine interact to increase the risk of bleeding (Drugs.com, 2022).
<p>Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)</p>	<p>The patient's alcohol consumption may increase nervous side effects of fluoxetine, including dizziness, drowsiness, and difficulty with concentration (Drugs.com, 2022).</p>

Does any of the client's past medical history contradict the use of this medication?	Patients with diabetes mellitus must be monitored for hypoglycemia, a potential adverse effect of fluoxetine (Comerford, 2021).
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 patient's medical diagnosis of depression indicates the use of SSRI medications such as fluoxetine (Comerford, 2021).
What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	<ol style="list-style-type: none"> 1. A rare but serious adverse effect of fluoxetine use is serotonin syndrome, a condition of excess serotonin that the patient must understand signs and symptoms of. Agitation, chills, high fever, and muscle rigidity are some of the symptoms of serotonin syndrome which the patient should understand how to recognize (Comerford, 2021). 2. As described earlier, fluoxetine may lower blood sugar levels in patients with diabetes, and therefore the patient should expect changes in blood glucose with regular fluoxetine use and should monitor blood glucose carefully (Comerford, 2021).
How much would medication cost per month if paying out of pocket?	\$1286.50 monthly (UpToDate, 2022)
Drug # 5	Drug Name (Generic): saxagliptin Drug Name (Trade): Onglyza

	Drug Class: dipeptidyl peptidase-4 (DPP-4) inhibitors
How is the medication taken: (include dose, route, and frequency)	Saxagliptin 5 mg once daily by mouth
Specific Directions not included above:	Saxagliptin may be taken once a day with or without food and the tablet should be swallowed whole (Drugs.com, 2022).
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	<p>Hydrocortisone</p> <ul style="list-style-type: none"> Hydrocortisone may reduce the effectiveness of saxagliptin in controlling blood glucose (Drugs.com, 2022). <p>Hydrochlorothiazide/spironolactone</p> <ul style="list-style-type: none"> Hydrochlorothiazide may reduce the effectiveness of saxagliptin in controlling blood glucose (Drugs.com, 2022).
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	Alcohol may drastically alter blood glucose levels, and both the amount of regularity of alcohol consumption may cause either hypoglycemia or hyperglycemia (Drugs.com, 2022).
Does any of the client's past medical history contradict the use of this medication?	None of this patient's 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	The patient's diabetes indicates saxagliptin to improve blood glucose control in type 2 diabetes alongside diet and exercise (Comerford, 2021).

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)	<ol style="list-style-type: none"> 1. As with many pharmaceutical methods of diabetes control, the primary education to promote effectiveness of the medication is reinforcing the idea that the medication itself only works effectively when used alongside diet and exercise, and does not replace lifestyle adjustment (Comerford, 2021). 2. As it alters blood glucose control, saxagliptin use must come with education related to signs and symptoms of altered blood glucose control, such as hypoglycemia and hyperglycemia. This includes education to carry glucose at all times in the event of hypoglycemia (Comerford, 2021).
How much would medication cost per month if paying out of pocket?	\$584.04 monthly (UpToDate, 2022)
Drug # 6	<p>Drug Name (Generic): atorvastatin</p> <p>Drug Name (Trade): Lipitor</p> <p>Drug Class: HMG-CoA reductase inhibitors (statins)</p>
How is the medication taken: (include dose, route, and frequency)	Atorvastatin 10 mg by mouth daily
Specific Directions not included above:	Atorvastatin should be taken with or without food, and must be stored away from moisture, heat, and light at room temperature (Drugs.com, 2022).

<p>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</p>	<p>Atorvastatin does not interact with any listed medications (Drugs.com, 2022).</p>
<p>Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)</p>	<ul style="list-style-type: none"> ● Atorvastatin is strongly contraindicated with liver disease, and alcohol consumption places the patient at increased risk for liver disease (Drugs.com, 2022). ● Though not assessed for this patient, potential undisclosed consumption of grapefruit juice is strongly contraindicated, as it may raise atorvastatin levels to a hepatotoxic level (Drugs.com, 2022).
<p>Does any of the client's past medical history contradict the use of this medication?</p>	<p>Cushing's, gastroesophageal reflux disease, recurrent constipation, hypertension, depression, and type 2 diabetes mellitus do not contraindicate statin use (Drugs, 2022). Though statins are used to manage lipid levels and are often prescribed to manage lipid levels in patients with type 2 diabetes, they may also marginally elevate blood glucose levels, indicating caution with administration (Mayo Clinic, 2020).</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>Atorvastatin is most likely indicated for hypercholesterolemia related to lifestyle influences which also caused the patient's medical diagnosis of type 2 diabetes and hypertension. Hypercholesterolemia is not listed in the patient's medical history, however the primary indication for statin use is hypercholesterolemia (Comerford, 2021).</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. The medication's interaction with liver disease (and therefore alcohol use) is of primary concern, indicating importance on education related to the risk for liver disease alcohol consumption places the patient in (Drugs.com, 2022). 2. Statins encourage healthier cholesterol levels, but work most effectively alongside diet, exercise, and healthy cholesterol consumption (Comerford, 2021).
<p>How much would medication cost per month if paying out of pocket?</p>	<p>\$124.00 monthly (UpToDate, 2022)</p>
<p>Drug # 7</p>	<p>Drug Name (Generic): ranitidine Drug Name (Trade): Zantac Drug Class: Histamine-2 blocker/Antacid</p>
<p>How is the medication taken: (include dose, route, and frequency)</p>	<p>150 mg po every 12 hours</p>
<p>Specific Directions not included above:</p>	<p>Take 30-60 minutes prior to eating to avoid indigestion (Drugs.com, 2022)</p>
<p>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</p>	<ul style="list-style-type: none"> • Ibuprofen: An H-2 antagonist may alter the disposition of plasma when taking ibuprofen resulting in increased or decreased plasma concentrations. This is rare however (Drugs.com, 2022)
<p>Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)</p>	
<p>Does any of the client's past medical history contradict the use of this medication?</p>	<p>No (Drugs.com, 2022)</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>Gastroesophageal reflux disease</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. Ranitidine has been recalled by the FDA for containing a carcinogen so the patient should switch to another antacid (Drugs.com, 2022) 2. Do not take more than 2 tablets in 24 hours (Drugs.com, 2022)
<p>How much would medication cost per month if paying out of pocket?</p>	<p>\$25.00 monthly (UpToDate, 2022)</p>
<p>Drug # 8</p>	<p>Drug Name (Generic): polyethylene glycol 3350</p> <p>Drug Name (Trade): Miralax</p> <p>Drug Class: Laxative</p>
<p>How is the medication taken: (include dose, route, and frequency)</p>	<p>17 g by mouth daily</p>
<p>Specific Directions not included above:</p>	<p>Do not use with bowel obstruction, only use once per day, prolonged use will cause laxative-dependent bowel movements (Drugs.com, 2022)</p>
<p>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</p>	<ul style="list-style-type: none"> ● Hydrocortisone: May increase the risk of dehydration and hypokalemia. (Drugs.com, 2022) ● Spironolactone-hydrochlorothiazide: Can cause dehydration and electrolyte imbalances (Drugs.com, 2022)

	<ul style="list-style-type: none"> Fluoxetine: Increased risk for arrhythmias (Drugs.com, 2022)
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	Other medications/food should not be consumed within one hour of taking miralax (Drugs.com, 2022)
Does any of the client's past medical history contradict the use of this medication?	No (Drugs.com, 2022)
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)	Recurrent constipation
What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	<ol style="list-style-type: none"> Do not take within 1 hour of eating or taking medications (Drugs.com, 2022) Mix with 4-8 ounces of liquid (Drugs.com, 2022)
How much would medication cost per month if paying out of pocket?	\$18.74 (UpToDate, 2022)
Drug # 9	Drug Name (Generic): subsalicylate Drug Name (Trade): Pepto-Bismol Drug Class: Salicylates
How is the medication taken: (include dose, route, and frequency)	525 mg (30mL) by mouth every 6 hours as needed
Specific Directions not included above:	If diarrhea persists for more than 2 days call your primary care provider

Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	<ul style="list-style-type: none"> • Bismuth subsalicylate and fluoxetine interact to increase the risk of bleeding (Drugs.com, 2022) • Spironolactone-hydrochlorothiazide: may impair tubular secretion of canrenone (Drugs.com, 2022)
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	no
Does any of the client's past medical history contradict the use of this medication?	Yes, the patient is allergic to NSAIDs and aspirin is an NSAID and this medication should not be taken when allergic to aspirin
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 patient is on this medication for GERD
What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	<ol style="list-style-type: none"> 1. Stop taking this medication due to NSAID allergy (Drugs.com, 2022) 2. Help the patient find a suitable replacement for bismuth subsalicylate (Drugs.com, 2022)
How much would medication cost per month if paying out of pocket?	\$49.00 (UpToDate, 2022)
Drug # 10	Drug Name (Generic): ibuprofen Drug Name (Trade): Advil

	Drug Class: Nonsteroidal anti-inflammatory drug (NSAID)
How is the medication taken: (include dose, route, and frequency)	400 mg by mouth every 6 hours as needed
Specific Directions not included above:	Do not exceed 3,200 mg per day (Drugs.com, 2022)
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	<ul style="list-style-type: none"> ● Hydrocortisone: risk of side effects in the gastrointestinal tract such as inflammation, bleeding, ulceration, and rarely, perforation. (Drugs.com, 2022) ● Metoprolol: ibuprofen may reduce the effects of metoprolol. (Drugs.com, 2022) ● Spironolactone-hydrochlorothiazide: ibuprofen can decrease the antihypertensive effect, diuretic effect of hydrochlorothiazide and increase the risk of renal failure (Jones & Bartlett, 2021). ● Hydrocortisone can increase electrolyte depletion (Jones & Bartlett, 2021). ● Fluoxetine: Ibuprofen and fluoxetine interact to increase the risk of bleeding (Drugs.com, 2022). ● Ranitidine: An H-2 antagonist may alter the disposition of plasma when taking ibuprofen resulting in increased or decreased plasma concentrations. This is rare however (Drugs.com, 2022)
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	No

<p>Does any of the client’s past medical history contradict the use of this medication?</p>	<ul style="list-style-type: none"> ● This patient is allergic to NSAIDs and should not be taking ibuprofen ● Ibuprofen will irritate the stomach and should not be taken with GERD (Drugs.com, 2022) ● Ibuprofen should not be taken with high blood pressure, it could cause fluid retention (Drugs.com, 2022)
<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>This patient is taking ibuprofen to alleviate abdominal pain</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. Stop taking this medication immediately (Drugs.com, 2022) 2. Help the patient find a suitable replacement (Drugs.com, 2022)
<p>How much would medication cost per month if paying out of pocket?</p>	<p>\$20.00 (UpToDate, 2022)</p>

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

Multiple medications listed for this patient, such as saxagliptin and atorvastatin, encourage dietary change to promote effectiveness. Lifestyle changes are notably difficult for patients to adhere to, as the lifestyle choices attempting to be changed have likely been present for extended periods of time. Though not directly noted in the patient's history, alcohol consumption interacts with a substantial number of the listed medications, and addictive effects of alcohol may create difficulty for the patient to reduce or eliminate alcohol intake.

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

The patient's access to insurance hopefully makes an otherwise unaffordable medication regimen manageable. Multiple medications have overlapping times of administration, such as once daily morning indication for atorvastatin, Miralax, and saxagliptin. Multiple medications have every six hours and before eating times of administration as well. Though having so many medications with different administration times may make maintaining a medication routine difficult, the overlapping times of administration may assist in reducing the complication of a medication schedule.

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)

In relation to the changes the patient may make which would have the most substantial impact to help themselves, lifestyle adjustments related to diet, any potential tobacco use and potential alcohol consumption would go a long way in improving the safe administration of

prescribed medications. Dietary and lifestyle changes will assist in the management of all conditions the patient presents with, emphasizing lifestyle intervention as arguably the most essential component in the patient's treatment. In addition, conversations should be had related to creation of a regular routine to check blood sugar, including continuous blood sugar monitoring devices, and multiple medications the client takes have noted interaction with blood sugar levels. In contact with the prescriber, the current regimen of medication is likely inappropriate for the patient in relation to the many drug-drug interactions noted within the medication regimen. The client should be educated on the use of ibuprofen. The client reports allergy to Non-steroidal anti-inflammatory drugs so the client should be educated on not consuming ibuprofen.

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

Without insurance, the estimated out of pocket expense for all 10 medications would be \$2,459.75.

Reflective Statement of Experience:

Although commonly noted when learning contraindications for medications, it's incredible how broadly lifestyle choices impact the potential for effective medication use. Similar lifestyle choices lead to GERD, diabetes mellitus, constipation, and hypertension. Even simple measures for pain relief, such as ibuprofen use, are strongly contraindicated due to the lifestyle choices which have led to GERD. Not only do the above conditions substantially limit which medications the patient can take without contraindication, but as each condition has its own medication or two for management, those medications then interact with each other to reduce effectiveness or safety of administration. The lifestyle choice of the patient may

contraindicate any medication, then the related conditions of the lifestyle choice may contraindicate any medication, then after that even the medications to treat the related conditions may contraindicate any medication. This polypharmacy assignment demonstrates the necessity of the nurse's role in patient communication, as lifestyle changes happen with a choice, and the only way the nurse may assist the patient in coming to that choice is with genuine, therapeutic communication. This polypharmacy assignment also demonstrates the role of the nurse as a patient advocate. All these medications appropriately relate to conditions the patient does have, but upon analysis the medication regimen for this patient is so full of interactions and contraindications that it is likely unsafe to administer. For example, the patient has an allergy to NSAIDs and has been given NSAIDs. A nurse advocating for a patient would make sure to communicate the patient's needs with the pharmacy to prevent the potential harm.

References

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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? 	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	Student failed to answer the questions and/or the answers were inaccurate. (For each medication this question is worth one point)	___/10

(before bed, before breakfast, 30 minutes before meals, etc..)		this question if worth one point)		
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>	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 listed this question is worth two points)	___/20

Criteria	Excellent 5 points	Acceptable 4 points		Unacceptable 0-3 points	Points Earned
Lifestyle interactions: <ul style="list-style-type: none"> 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 worth half a point)	___/5	
Criteria	Excellent 10 points	Average 8-9	Unacceptable 0-7 points	Points Earned	
<ul style="list-style-type: none"> 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	

<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</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>

when answering this question... if there are potential interactions with other medication this may be a priority over general education for this one medication)				
Criteria	Excellent 10 points	Acceptable 8-9 points	Unacceptable 0-7 points	Points Earned
<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 regiment? <p>(Please consider all factors in the scenario and all information provided within your chart – including cost, insurance, frequency of administration, etc)</p>	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	Student had knowledge on medication compliance	The student answered the question appropriately for some of the medications but	Student failed to answer the question OR The student answered the question appropriately for some of the medications but failed	___/10

<p>medication regimen as ordered?</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>		<p>failed to indicate all of the factors that are present that assist with compliance. (This question is worth one point for each medication)</p>	<p>to indicate all of the factors that are present that assist with compliance. (This question is worth one point for each medication)</p>	
Criteria	Excellent 10 points	Acceptable 8-9 points	Unacceptable 0 points	Points Earned
<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? 	<p>Student showed research on medication costs</p>	<p>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)</p>	<p>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)</p>	<p>___/15</p>
Criteria	Excellent 20 points	Acceptable 16-19 points	Unacceptable 0-15 points	Points Earned

<p>The student must appropriately format the paper and include all of the following:</p> <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 	<p>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.</p>	<p>The document did not meet all of the criteria for formatting/referencing. See “criteria” to the left for further breakdown.</p>	<p>The document did not meet all of the criteria for formatting/referencing. See “criteria” to the left for further breakdown.</p>	<p>___/20</p>
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<p>references which were cited within the document (each reference with one citation is worth 5 points)</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 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>
<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"> • 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 -A reflection on this student nurses role in this scenario as a client advocate/educator/caregiver 	<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 -insight into the project itself (a specific example within the project and its implications). -A basic understanding of polypharmacy -A reflection on this student nurses role in this scenario as a client advocate/educator/caregiver</p>	<p>Student failed to reflect on their project OR the student addressed only of the topics of reflection</p>	<p>___/10</p>
<p>Total Points</p>				<p>___/200</p>