

Polypharmacy Project

Shelby Powell, BSN Student, Kelsey Crider, BSN Student

N322 Introduction to Pharmacology

Lakeview College of Nursing

Pamela Armstrong AP-C, MSN, RN

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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 related to lifelong morbid obesity.

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. His baseline weight is 380 pounds. He recently underwent gastric bypass surgery. He has lost 12 pounds in the last 2 weeks.

Economics: Zeb brings home \$650/week when the work is good. During the winter months he is often laid off for short periods due to the weather. He does not get paid when he is laid off and the layoffs do not last long enough to draw unemployment. His wife works part-time and brings home \$400/week. All three children are young, and none are in school. Baby-sitting costs \$150/child/week.

Insurance: Zeb has health insurance that has a \$5,000 deductible per person or \$10,000 deductible per family. Medication costs are included in the deductible amounts. The insurance plan does cover his medication costs with a 50% co-pay. He cannot afford all the co-pays for his medications, so he says he

"ration" his medications to make them last more than one month. He says he can make most of them last up to 8 weeks per prescription.

Allergies: IV contrast dye, Penicillin

Diet: High protein post gastric bypass diet - not to exceed 1,000 calories a day

## POLYPHARMACY

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Medical diagnosis: NAFLD, hypertension, GERD, morbid obesity, heart failure, osteoarthritis

Current medications include the following:

Vitamin E 800 IU by mouth every day

Centrum Adults Chewable Multivitamin one tablet by mouth twice a day

Rosuvastatin 20 mg by mouth daily

Lotensin 20 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

Ibuprofen 800 mg by mouth every eight hours as needed

Calcium 600 mg by mouth three times a day

<b>Drug #1</b>  Vitamin E	<b>Drug Name (Generic):</b> Alpha-tocopherol, Vitamin E cream, Vitamin E Gel, Vitamin E Liquid, Vitamin E Oil, and Vitamin E Ointment (Drugs.com)  <b>Drug Name (Trade):</b> Gordons- Vite E, Vitamin E Beauty, Vitec, Aqua- E, Aquasol E, Pure dl- Alpha (Drugs.com)  <b>Drug Class:</b> Vitamins (drugs.com)
<b>How is the medication taken: (include dose, route, and frequency)</b>	The Patient is to take 800 international units of Vitamin E once daily.
<b>Specific Directions not included above:</b>	<b>The client should avoid taking any other vitamins or mineral supplements or nutritional products without consulting their physician prior (Drugs). Vitamin E can cause blurred vision, diarrhea, dizziness, headaches, nausea, stomach cramps, and tiredness or weakness that isn't normal for the client (drugs). If you miss a dose, continue with the next scheduled dose. Do not double up (Drugs). Do not use clove, dandelion, evening primrose, garlic, ginger, ginkgo, horse chestnut, ginseng, poplar, red clover, saw palmetto, turmeric, willow, capsicum, angelica (dong quai), or danshen because these herbal supplements can cause unwanted blood clotting (drugs).</b>
<b>Does this medication interact with any other medication(s) on this list? (see rubric for further</b>	<b>When Vitamin E is taken with Aspirin, it can cause the person to bleed easier. The Patient should monitor bleeding and bruising. Side effects of the two drugs mixing is</b>

<p><b>instruction)</b></p>	<p><b>dizziness, light headedness, red or black tarry stool, coughing or producing red or black coffee ground consistency vomit, and headaches or weakness (drugs). Do not use Vitamin E without medical advice if you are taking clopidogrel (Plavix), Warfarin (coumadin, Jantoven), aspirin, alteplase, dipyridamole, or ticlopidine this can cause excessive bleeding as they are used to prevent blood clots (Drugs). If taking orlistat (alli, or Xenical) Vitamin E should not be taken 2 hours before or after this medication (Drugs).</b></p>
<p><b>Lifestyle interactions:</b> <b>(Daily tobacco use, alcohol, drugs, etc. )</b></p>	<p><b>According to the Mayo Clinic, Vitamin E taken orally can potentially raise the risk of prostate cancer. They also have research that suggests there could be an increased risk of death in people who have a history of heart attack or stroke if they take vitamin E. The Mayo clinic also states that Vitamin E used in vapes and electronic cigarettes can cause lung injury.</b></p>
<p><b>Does any of the client's past medical history contradict the use of this medication?</b></p>	<p><b>Vitamin E is used to help treat Non Alcoholic Fatty liver disease.</b></p>
<p><b>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</b></p>	<p><b>The client is taking Vitamin E because of his bypass surgery.</b></p>

<b>history, please list potential indications for use of the medication in general)</b>	
<b>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</b>	<ol style="list-style-type: none"> <li>1. Vitamin E can increase bleeding risk.</li> <li>2. Don't take different forms and take vitamin at the same time everyday to void overdosing.</li> </ol>
<b>How much would medication cost per month if paying out of pocket?</b>	Walmart has a bottle of Vitamin E that is 100 liquid gel capsules. They are 400 IU, which means he would need two capsules to meet his 800 IU prescription. This bottle is \$4.88 and will last a month and a half.

<b>Drug #2</b>  Centrum Adults Chewable Multivitamin	<b>Drug Name (Generic): Vitamins</b>  <b>Drug Name (Trade): Calcifol, Vitafol, Cyfolex, Centrum, Encora, One A Day Energy (Drugs)</b>  <b>Drug Class: Vitamins and minerals (Drugs)</b>
<b>How is the medication taken: (include dose, route, and frequency)</b>	The patient should take one tablet by mouth twice daily.
<b>Specific Directions not included above:</b>	Centrum can be taken with or without food. Take with food if you experience an upset stomach (Drugs). If Centrum is taken on a regular basis, take it as soon as you think about it. Do not take two dose to make up for a missed dose (Drugs).

<p><b>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</b></p>	<p><b>There is no direct reaction to any medications the client is taking.</b></p>
<p><b>Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc. )</b></p>	<p><b>Excessive alcohol use can have a negative absorption effect of the vitamins and minerals (Clean, 2022). Multivitamins that contain high amounts of Vitamin A and beta-carotene should be avoided by people who smoke or have a history of smoking. These vitamins can cause lung cancer in people with a history or current use of smoking (National Institute of Health). The patient has past use of smoking cigars which could potentially place him as a risk for developing lung cancer if taking this medication.</b></p>
<p><b>Does any of the client's past medical history contradict the use of this medication?</b></p>	<p><b>There is no indication of a past medical history that contradict this medication.</b></p>
<p><b>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)</b></p>	<p><b>Client is taking Centrum for gastric bypass surgery for additional support.</b></p>
<p><b>What would you teach the client about taking this</b></p>	<p><b>1. Take with a full glass of water.</b></p>

medication? You must prioritize 2 (see rubric)	2. Take 2 hours before or after, calcium, dairy, antacids, teas or coffee.
How much would medication cost per month if paying out of pocket?	You can get a bottle of 100 gummies for \$10.76 before taxes at Walmart. This would last just over 3 months.
<b>Drug #3</b> Rosuvastatin	<b>Drug Name (Generic): rosuvastatin calcium</b> <b>Drug Name (Trade): Crestor, Ezallor Sprinkle</b> <b>Drug Class: HMG-CoA reductase inhibitor; Antilipemic</b>
How is the medication taken: (include dose, route, and frequency)	The patient should take 20 mg by mouth daily.
Specific Directions not included above:	Rosuvastatin should be taken 2 hours before or after calcium for maximum absorption (drugs).
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	Rosuvastatin interacts with calcium. These two should be taken at least 2 hours apart for complete absorption (Drugs).
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc. )	Rosuvastatin has no lifestyle interactions.
Does any of the client's past medical history contradict the use of this medication?	There is no contradicting past medical history.

<p><b>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)</b></p>	<p><b>Rosuvastatin and a balanced diet can help to treat Non Alcoholic Fatty Liver Disease.</b></p>
<p><b>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</b></p>	<ol style="list-style-type: none"> <li><b>1. Stay away from grapefruit juice.</b></li> <li><b>2. Take 2 hours before or after calcium supplement.</b></li> </ol>
<p><b>How much would medication cost per month if paying out of pocket?</b></p>	<p><b>The pharmacy at Walmart has a retail price of 30 count of tablets for 20mg tablets for \$36.87. There is a Good RX coupon that cuts the price down to \$15.95.</b></p>
<p><b>Drug #4</b>  Lotensin</p>	<p><b>Drug Name (Generic): Benazepril</b>  <b>Drug Name (Trade): Lotensin</b>  <b>Drug Class: Ace Inhibitor; Antihypertensive</b></p>
<p><b>How is the medication taken: (include dose, route, and frequency)</b></p>	<p>The patient should take 20 mg by mouth twice a day.</p>
<p><b>Specific Directions not included above:</b></p>	<p><b>Decrease potassium intake (Drugs).</b></p>
<p><b>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</b></p>	<p><b>Lotensin interacts with several other drugs in this list. It interacts with Aspirin, Norco, hydrochlorothiazide, calcium, and ibuprofen (Drugs). When Lotensin is mixed with aspirin, or ibuprofen, it can cause a reduction in the effects of the Lotensin and also</b></p>

	<p>cause low blood pressure when taken with hydrochlorothiazide or norco (drugs).</p> <p>Monitor blood pressure and kidney function when taken with aspirin (Drugs).</p>
<p><b>Lifestyle interactions:</b></p> <p>(Daily tobacco use, alcohol, drugs, etc. )</p>	<p>Do not take with Alcohol, monitor potassium intake do not smoke while taking Lotensin (Drugs).</p>
<p>Does any of the client's past medical history contradict the use of this medication?</p>	<p>Past medical history contradiction includes Fatty liver disease and heart failure (Drugs).</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>Lotensin is used to treat hypertension.</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"> <li>1. Store tightly closed at room temperature, away from heat and moisture (Drugs).</li> <li>2. Don't use salt substitutes containing potassium.</li> </ol>
<p>How much would medication cost per month if paying out of pocket?</p>	<p>The retail price at the Walmart pharmacy for 60 count 20mg tablets of the generic name Benazepril is \$7.00 monthly.</p>
<p><b>Drug # 5</b></p> <p>Hydrochlorothiazide</p>	<p><b>Drug Name (Generic):</b> hydrochlorothiazide</p> <p><b>Drug Name (Trade):</b> Microzide, Urozide (CAN)</p>

	<b>Drug Class: Diuretic</b>
<b>How is the medication taken: (include dose, route, and frequency)</b>	The patient should take 25 mg by mouth twice a day.
<b>Specific Directions not included above:</b>	<b>Don't take if you are unable to urinate (Drugs).</b>
<b>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</b>	<b>Hydrochlorothiazide interacts and lowers blood pressure that should be monitored when taken with Norco, aspirin, and Lotensin (Drugs). When taken with omeprazole can cause hypomagnesemia (Drugs). When taken with aspirin, monitor kidney function (Drugs). When taken with ibuprofen, it can reduce the effects of the hydrochlorothiazide has on lowering the blood pressure (Drugs).</b>
<b>Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc. )</b>	<b>Hydrochlorothiazide should not be taken with alcohol.</b>
<b>Does any of the client's past medical history contradict the use of this medication?</b>	<b>Monitor use if allergic to sulfa or penicillin.</b>
<b>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</b>	<b>He is taking as a diuretic to remove excess fluid due to heart failure and hypertension (Drugs).</b>

<b>medication in general)</b>	
<b>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</b>	<b>1. Monitor use if allergic to sulfa or penicillin.</b> <b>2. Monitor potassium levels can decrease them.</b>
<b>How much would medication cost per month if paying out of pocket?</b>	<b>The retail price for Hydrochlorothiazide 25mg 60 count is \$7.00 at the Walmart pharmacy.</b>
<b>Drug # 6</b>  Omeprazole	<b>Drug Name (Generic): omeprazole</b> <b>Drug Name (Trade): Losec (CAN), Prilosec</b> <b>Drug Class: Proton pump inhibitor</b>
<b>How is the medication taken: (include dose, route, and frequency)</b>	<b>The patient should take 20mg by mouth once a day.</b>
<b>Specific Directions not included above:</b>	<b>Administer on empty stomach at least 1 hour before meal (Drugs).</b>
<b>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</b>	<b>Omeprazole reacts with hydrochlorothiazide and causes hypomagnesemia (Drugs).</b> <b>Omeprazole has a mild reaction with aspirin that can decrease the aspirins oral bioavailability with other salicylates (Drugs).</b>
<b>Lifestyle interactions:</b>  <b>(Daily tobacco use, alcohol, drugs, etc. )</b>	<b>Omeprazole has no lifestyle interactions.</b>
<b>Does any of the client's past medical history</b>	<b>There is no past medical history that contradicts this medication.</b>

<b>contradict the use of this medication?</b>	
<b>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)</b>	<b>Omeprazole is taken to treat GERD (Drugs).</b>
<b>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</b>	<b>1. Do not crush or chew tablets (Drugs). 2. Take at least 60min before a meal (Drugs).</b>
<b>How much would medication cost per month if paying out of pocket?</b>	<b>The retail price for omeprazole 20mg 30 count is \$21.48 at the Walmart pharmacy (Walmart).</b>
<b>Drug # 7</b>  Norco	<b>Drug Name (Generic): hydrocodone/ acetaminophen (Drugs). Drug Name (Trade): Vicodin, Lortab, Norco, Co-Gesic (Drugs). Drug Class: opiate (narcotic) analgesics (Drugs).</b>
<b>How is the medication taken: (include dose, route, and frequency)</b>	The Patient should take 5/325mg by mouth twice a day.
<b>Specific Directions not included above:</b>	<b>Take only as directed. Do not operate heavy machinery. Take with food or milk to help prevent upset stomach (Drugs).</b>
<b>Does this medication interact with any other</b>	<b>Norco, specifically the hydrocodone reacts with Lotensin and decreases blood pressure</b>

<b>medication(s) on this list? (see rubric for further instruction)</b>	<b>(Drugs).</b> <b>The hydrocodone in Norco also reacts with hydrochlorothiazide causing a decrease in blood pressure that should be monitored (Drugs).</b>
<b>Lifestyle interactions:</b> <b>(Daily tobacco use, alcohol, drugs, etc. )</b>	<b>Norco should not be taken with alcohol (Drugs).</b>
<b>Does any of the client's past medical history contradict the use of this medication?</b>	<b>There is no contradiction for past medical history and this medication (Drugs).</b>
<b>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)</b>	<b>He is taking for pain management due to his gastric bypass surgery.</b>
<b>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</b>	<b>1. Avoid driving or operating heavy machinery due to drowsiness and dizziness (Drugs).</b> <b>2. Take with food or milk to help prevent upset stomach (Drugs).</b>
<b>How much would medication cost per month if paying out of pocket?</b>	<b>Walgreens has a Norco 5/325mg of Hydrocodone/Acetaminophen 60 count that retails for \$85.92 (Walgreens)however there is a Good RX coupon that takes the price to \$19.95(GoodRX).</b>
<b>Drug # 8</b>	<b>Drug Name (Generic): acetylsalicylic acid, ASA (Drugs).</b> <b>Drug Name (Trade): Aspir-81, Aspirin, Aspir-Low, Bayer, Durlaza, Ecotrin, Empirin,</b>

Aspirin	<p><b>Miniprin, Novasen (CAN), St. Joseph Children's, Supasa (CAN), Vazalore, Zorpin (Drugs).</b></p> <p><b>Drug Class: Salicylate; NSAID (Drugs).</b></p>
<p><b>How is the medication taken: (include dose, route, and frequency)</b></p>	<p>The patient should take 81 mg by mouth one time a day.</p>
<p><b>Specific Directions not included above:</b></p>	<p><b>Take with food to prevent upset stomach (Drugs).</b></p>
<p><b>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</b></p>	<p><b>When Aspirin combines with Vitamin E, it increases bleeding (Drugs).</b></p> <p><b>Aspirin and Lotensin interact and blood pressure and kidney function should be monitored (Drugs).</b></p> <p><b>Aspirin and hydrochlorothiazide interact and can increase chances for lower blood pressure and kidney function should be monitored (Drugs).</b></p> <p><b>When Ibuprofen is taken with aspirin it can decrease the effectiveness that aspirin has to help prevent strokes or heart attacks. It can also increase the risk of gastrointestinal ulcers and bleeding (Drugs).</b></p>
<p><b>Lifestyle interactions:</b> <b>(Daily tobacco use, alcohol, drugs, etc. )</b></p>	<p><b>Aspirin should not be taken with alcohol because it can increase stomach bleeding (Drugs). Caffeine intake should be monitored because it increases the maximum concentration of salicylate in the plasma (Drugs).</b></p>

<b>Does any of the client's past medical history contradict the use of this medication?</b>	<b>No past medical history contradicts this med.</b>
<b>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)</b>	<b>Client is taking aspirin to help prevent stroke heart attack due to hypertension and heart failure (Drugs).</b>
<b>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</b>	<b>1. Take with a full glass of water (Drugs).</b> <b>2. Take at the same time everyday (Drugs).</b>
<b>How much would medication cost per month if paying out of pocket?</b>	<b>Walmart pharmacy has a 30count of 81mg tablets those retails for \$10.18 (Walmart). There is a Good RX coupon that brings it down to \$9.72 (Good RX).</b>
<b>Drug # 9</b>  Ibuprofen	<b>Drug Name (Generic): Ibuprofen (Drugs).</b>  <b>Drug Name (Trade): Acitprofen caplets, Advil, Advil Migraine, Caldolor, Children's Advil, Children's Motrin, Excedrin, Motrin (Drugs).</b>  <b>Drug Class: NSAID (Drugs).</b>
<b>How is the medication taken: (include dose, route, and frequency)</b>	The patient should take 800 mg by mouth every eight hours as needed.

<b>Specific Directions not included above:</b>	<b>Monitor use when taken with diuretic or anti-hypertension meds (Drugs).</b>
<b>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</b>	<b>When Ibuprofen is taken with aspirin, the effectiveness of the aspirin against stroke and heart attacks is decreased and risk for gastrointestinal bleeding and ulcers is increased (Drugs). When taken with hydrochlorothiazide, its effects are decreased, blood pressure is lowered and kidney function should be monitored (Drugs). Ibuprofen can also decrease the effects of Lotensin and lower blood pressure. Development of impaired kidney function can occur when both are paired with a diuretic (Drugs).</b>
<b>Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc. )</b>	<b>Ibuprofen should not be taken with alcohol.</b>
<b>Does any of the client's past medical history contradict the use of this medication?</b>	<b>No past medical history contradictions.</b>
<b>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)</b>	<b>Client is taking as needed for moderate pain.</b>
<b>What would you teach the client about taking this</b>	<b>1. Take with food or milk to prevent upset stomach (Drugs).</b>

medication? You must prioritize 2 (see rubric)	2. Only take as needed to reduce damage to kidney (Drugs)..
How much would medication cost per month if paying out of pocket?	Walgreens has 800mg 90 count tablets that retails for \$40.27(Walgreens). There is a Good RX coupon that brings it down to \$24.76 (GoodRX).
<b>Drug # 10</b>  Calcium	<b>Drug Name (Generic): Calcium gluconate, Calcium acetate, Calcium Carbonate, Calcium chloride, Calcium citrate, calcium lactate (Drugs).</b>  <b>Drug Name (Trade): Zingiber, Focalgin-B, B-Nexa (Drugs).</b>  <b>Drug Class: Vitamin and mineral combination (Drugs).</b>
<b>How is the medication taken: (include dose, route, and frequency)</b>	The patient should take 600mg by mouth three times a day.
<b>Specific Directions not included above:</b>	<b>Take two hours before or after consumption of high oxalic acid foods such as spinach or rhubarb, or high phytic acid foods such as bran or whole grains (Drugs). Take two hours before or after Rosuvastatin due to interference of absorption (Drugs).</b>
<b>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</b>	<b>When calcium is taken with hydrochlorothiazide it can increase blood calcium levels (Drugs). Calcium can decrease the effectiveness of aspirin (Drugs). Calcium interferes with the absorption rate when take with Rosuvastatin (Drugs). When calcium and Lotensin interact, it decreases oral bioavailability of the drug (Drugs).</b>
<b>Lifestyle interactions:</b>	<b>Calcium doesn't interact with tobacco, alcohol, or drugs (Drugs).</b>

<b>(Daily tobacco use, alcohol, drugs, etc. )</b>	
<b>Does any of the client's past medical history contradict the use of this medication?</b>	<b>There is no past medical history that contradicts the use of calcium.</b>
<b>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)</b>	<b>Client is taking calcium to help treat GERD.</b>
<b>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</b>	<b>1. Take 2 hours before or after other medicines.</b> <b>2. Take 2 hours before or after of high oxalic acid foods such as spinach or rhubarb, or high phytic acid foods such as bran or whole grains (Drugs).</b>
<b>How much would medication cost per month if paying out of pocket?</b>	<b>Walmart has a 500 count of 600mg Calcium tablets for \$9.88. this bottle will last around 5 months. There is also a smaller bottle of 100 count for \$4.88. This bottle would last just over 1 month (Walmart).</b>

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

Being able to afford the copay for his medications and taking them properly. As well as having multiple medications that have to be taken multiple times a day and keeping them all straight.

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

Setting alarms on when to take medications and utilizing a medication box.

**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)**

He can reduce his potassium intake. He can remove foods such as spinach, rhubarb, and salt substitutes. He can add more daily activity to his daily routine.

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

The patient's total monthly cost without the discounts is \$229.24 per month. The patient's total monthly cost with the discounts is \$131.38 per month.

**Reflective Statement of Experience:**

I have really learned a lot from this project. I didn't know that hydrochlorothiazide was reactive to so many other medications. I also didn't know that hydrochlorothiazide and omeprazole react and cause hypomagnesemia. Overall, I thought this was a great learning experience. -Shelby

I learned a lot while doing this project. There were quite a few medications that I did not know what they were or what they did in the body. I take Hydrochlorothiazide personally so that being one of his drugs were beneficial to me to learn more about the medication and how it worked. -Kelsey

**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"> <li>• Drug class</li> <li>• Generic name</li> <li>• Trade name</li> <li>• How is the medication taken (include dose, route, frequency)</li> </ul>	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"> <li>Is there any type of medication on the patient list that have specific directions?</li> </ul> <p>(before bed, before breakfast, 30 minutes before meals, etc..)</p>	<p>All key components were addressed within the paper.</p>	<p>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)</p>	<p>Student failed to answer the questions and/or the answers were inaccurate. (For each medication this question is worth one point)</p>	<p>___/10</p>
<p><b>Criteria</b></p>	<p><b>Excellent 0 points</b></p>	<p><b>Acceptable 16-19</b></p>	<p><b>Unacceptable 0-15 points</b></p>	<p><b>Points Earned</b></p>
<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"> <li>Do any of the medications interact with each other?</li> </ul> <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>

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Criteria	Excellent 5 points	Acceptable 4 points		Unacceptable 0-3 points	Points Earned
Lifestyle interactions: <ul style="list-style-type: none"> <li>What lifestyle factors counteract with the medications?</li> </ul> (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"> <li>Does any of the client’s past medical history contradict the use of this</li> </ul>	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	Student failed to answer question or Student provided answers to the question(s), but failed to answer all the questions	___/10	

medication?		were inaccurate. (For each medication this question is worth one point)	and/or the answers provided were inaccurate. (For each medication this question is worth one point)	
<b>Criteria</b>	<b>Excellent 10 points</b>	<b>Acceptable 8-9 points</b>	<b>Unacceptable 0-7 points</b>	<b>Points Earned</b>
<ul style="list-style-type: none"> <li>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)</li> </ul>	Student showed knowledge of medications and what conditions corresponds with medications	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 medications, but failed to capture all of the appropriate indications for use. (For each medication this question is worth one point)	___/10
<b>Criteria</b>	<b>Excellent 20 points</b>	<b>Acceptable 16-19 points</b>	<b>Unacceptable 0-15 points</b>	<b>Points Earned</b>
<p>What would you teach the client about taking this medication?</p> <ul style="list-style-type: none"> <li>What education is needed for the medication? (For each medication listed the student must prioritize two topics for client education)</li> </ul> <p>(You must consider all component(s) of the</p>	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

<p>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)</p>				
<p><b>Criteria</b></p>	<p><b>Excellent 10 points</b></p>	<p><b>Acceptable 8-9 points</b></p>	<p><b>Unacceptable 0-7 points</b></p>	<p><b>Points Earned</b></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"> <li>Why would the patient have difficulty maintaining the medication regiment?</li> </ul> <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><b>Criteria</b></p>	<p><b>Excellent 10 points</b></p>	<p><b>Acceptable 8-9 points</b></p>	<p><b>Unacceptable 0-7 points</b></p>	<p><b>Points Earned</b></p>
<p>Is there anything about this medication regimen/ scenario that might assist the client in maintaining the medication regimen as</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</p>	<p>Student failed to answer the question OR The student answered the question appropriately for some of the medications but failed to</p>	<p>___/10</p>

<p>ordered?</p> <ul style="list-style-type: none"> <li>• What factors are present to remain compliant?</li> </ul> <p>(Please consider all factors in the scenario and all information provided within your chart – including cost, insurance, frequency of administration, etc.</p>		<p>assist with compliance. (This question is worth one point for each medication)</p>	<p>indicate all of the factors that are present that assist with compliance. (This question is worth one point for each medication)</p>	
<p><b>Criteria</b></p>	<p><b>Excellent 15 points</b></p>	<p><b>Acceptable 8-9 points</b></p>	<p><b>Unacceptable 0 points</b></p>	<p><b>Points Earned</b></p>
<ul style="list-style-type: none"> <li>• 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)</li> <li>• What would the client's monthly out of pocket expense for all 10 medications?</li> </ul>	<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>
<p><b>Criteria</b></p>	<p><b>Excellent 20 points</b></p>	<p><b>Acceptable 16-19 points</b></p>	<p><b>Unacceptable 0-15 points</b></p>	<p><b>Points Earned</b></p>
<p>The student must appropriately format the paper and include all of the following:</p> <ul style="list-style-type: none"> <li>• Entire document must include</li> </ul>	<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</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>

<p>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)</p> <ul style="list-style-type: none"> <li>• The student provided a rubric attached for grading (3 points)</li> <li>• The student included the provided client scenario on page two of the document (2 points)</li> <li>• The paper included a minimum of five references which were cited within the document (each reference with one citation is worth 5 points)</li> </ul>	<p>APA manual.</p>			
<p><b>Criteria</b></p>	<p><b>Excellent 20 points</b></p>	<p><b>Acceptable 16-19 points</b></p>	<p><b>Unacceptable 0-15 points</b></p>	<p><b>Points Earned</b></p>
<p>What suggestions might you make to the prescriber and/or client (or questions</p>	<p>The student was able to identify one potential idea or question to present to the prescriber or client.</p>	<p>The student was able to identify one potential idea or question to present to the</p>	<p>The student failed to answer the question OR the student answered the question, however</p>	<p>____/20</p>

<p>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>This question showed evidence of good critical thinking.</p>	<p>prescriber or client, however there was a much higher priority question/suggestion/issue within the scenario that should have been addressed.</p>	<p>the students answer was dangerously inaccurate.</p>	
<p><b>Criteria</b></p>	<p><b>Excellent 10 points</b></p>	<p><b>Acceptable 8-9 points</b></p>	<p><b>Unacceptable 0-7 points</b></p>	<p><b>Points Earned</b></p>
<ul style="list-style-type: none"> <li>• Reflective statement of experience should include the following:                     <ul style="list-style-type: none"> <li>-insight into the project itself (a specific example within the project and its implications)</li> <li>-A basic understanding of polypharmacy</li> <li>-A reflection on this student nurses role in this scenario as a client advocate/educator/caregiver</li> </ul> </li> </ul>	<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"> <li>-insight into the project itself (a specific example within the project and its implications).</li> <li>-A basic understanding of polypharmacy</li> <li>-A reflection on this student nurses role in this scenario as a client advocate/educator/caregiver</li> </ul>	<p>Student failed to reflect on their project OR the student addressed only of the topics of reflection</p>	<p>___/10</p>

<b>Total Points</b>				<u>    </u> /200
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