

Polypharmacy Project

Rancey Rouse & Jackson Powell, BSN Students

N322 Introduction to Pharmacology

Lakeview College of Nursing

Gina Brassard MSN, RN,

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### Polypharmacy Case 9

Patient: Kathryn is a 58 year old female that lives alone in a third story apartment. She has no family in the area for support. She recently lost her job.

Social history: Recently has lost her job and insurance. Smokes a pack of cigarettes per day but is trying to quit.

Medical history: Diabetes type 1, Diabetic neuropathy, hypertension, hyperlipidemia, depression, insomnia & gastroesophageal reflux disease

Allergies: Codeine & latex    Wt 175 pounds Ht 5 ft. 9 in

#### Medications:

Novolin R 10 units with each meal (TID) SUBQ

Novolog sliding scale SUBQ PRN

Gabapentin 400 mg TID PO

Aspirin 81 mg by mouth once a day

Benicar HCT 20mg/25mg PO Daily

Lexapro 20 mg by mouth once daily

Ambien CR 12.5 mg as needed at bedtime

Protonix 40 mg Daily PO

Conjugated g-estrogens (premarin) 0.625 mg daily PO

Atorvastatin 20mg PO Daily

<b>Drug #1</b>	<p><b>Drug Name (Generic): insulin regular</b></p> <p><b>Drug Name (Trade): Novolin R</b></p> <p><b>Drug Class: Insulin</b></p> <p>(Lippincott Williams &amp; Wilkins, 2022)</p>
<b>How is the medication taken: (include dose, route, and frequency)</b>	<b>10 units three times a day with each meal, subcutaneous</b>
<b>Specific Directions not included above:</b>	<b>Subcutaneous injection of Novolin R should be followed by a meal. Patients should wait 30 minutes after injection before starting their meal.</b>
<b>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</b>	<p><b>Escitalopram-increases risk of hypoglycemia</b></p> <p><b>Olmesartan/hydrochlorothiazide- increase risk of hypoglycemia</b></p> <p><b>Conjugated g-estrogen- can interfere with blood glucose control and reduce effectiveness of insulin regular.</b></p> <p><b>Aspirin- can increase risk of hypoglycemia</b></p> <p>(Drugs.com, 2023)</p>
<b>Lifestyle interactions:</b>	<b>Patient does not drink alcohol, but alcohol can increase risk of hypoglycemia.</b>

<b>(Daily tobacco use, alcohol, drugs, etc. )</b>	(Jones & Bartlett Learning, 2021)
<b>Does any of the client's past medical history contradict the use of this medication?</b>	<b>Do not use during episodes of hypoglycemia.</b> (Jones & Bartlett Learning, 2021)
<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>Patient has a history of diabetes type 1 which is the indication of use.</b>  <b>This drug is used to treat the symptoms of diabetes 1 and 2.</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><b>1. Know the signs and symptoms of hyperglycemia and hypoglycemia.</b></li> <li><b>2. Use a different injection site each time you give medication.</b> (Skidmore-Roth, 2020)</li> </ol>
<b>How much would medication cost per month if paying out of pocket?</b>	<b>\$135.94</b> (GoodRx, 2023)

<b>Drug #2</b>	<b>Drug Name (Generic): Insulin Aspart</b>  <b>Drug Name (Trade): Novolog</b>  <b>Drug Class: Insulin</b>  (Lippincott Williams & Wilkins, 2022)
<b>How is the medication taken: (include dose, route, and frequency)</b>	sliding scale, subcutaneous, PRN
<b>Specific Directions not included above:</b>	<b>Patient will measure their blood sugar and the sliding scale will determine the amount of insulin units that should be given.</b>
<b>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</b>	<b>Escitalopram-</b> can increase risk of hypoglycemia, or low blood sugar.  <b>Olmesartan-</b> increases risk of hypoglycemia  <b>Conjugated g-estrogen-</b> can interfere with blood glucose control and reduce effectiveness of insulin aspart.  <b>olmesartan/hydrochlorothiazide-</b> can interfere with glucose control and effectiveness of insulin aspart.

	<p><b>Aspirin- can increase risk of hypoglycemia</b></p> <p>(Drugs.com, 2023)</p>
<p><b>Lifestyle interactions:</b></p> <p><b>(Daily tobacco use, alcohol, drugs, etc. )</b></p>	<p><b>Patient does not drink alcohol however alcohol can increase the risk of hypoglycemia, which can affect ranges used in the sliding scale.</b></p> <p>(Jones &amp; Bartlett Learning, 2021)</p>
<p><b>Does any of the client's past medical history contradict the use of this medication?</b></p>	<p><b>Do not use during episodes of hypoglycemia.</b> (Jones &amp; Bartlett Learning, 2021)</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>Patient's history has type 1 diabetes which is the indication of use.</b></p> <p><b>This drug is used to treat the symptoms of diabetes 1 and 2.</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. How to check blood sugar and read a sliding scale to calculate the correct dose needed.</b></li> <li><b>2. Knowing the signs and symptoms of hypoglycemia and hyperglycemia.</b></li> </ol>

	(Skidmore-Roth, 2020)
<b>How much would medication cost per month if paying out of pocket?</b>	<b>\$59.85</b> (GoodRx, 2023)
<b>Drug #3</b>	<b>Drug Name (Generic): gabapentin</b>  <b>Drug Name (Trade): Neurontin, Gralise</b>  <b>Drug Class: Pharmacological class- 1-amino-methylcyclohexaneacetic acid.</b>  <b>Therapeutic-Anticonvulsant</b>  (Lippincott Williams & Wilkins, 2022)
<b>How is the medication taken: (include dose, route, and frequency)</b>	<b>400 mg, orally, three times a day</b>
<b>Specific Directions not included above:</b>	<b>Brands of gabapentin aren't interchangeable and do not exceed 12 hours between doses.</b>
<b>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</b>	<b>Zolpidem- increase side effects such as dizziness, drowsiness, confusion, and difficulty concentrating.</b>  <b>Escitalopram- can cause hyponatremia.</b>

	(Drugs.com, 2023)
<b>Lifestyle interactions:</b>  (Daily tobacco use, alcohol, drugs, etc. )	<b>Patient does not drink alcohol but alcohol has an interaction that increases risk of CNS and respiratory depression, which may become severe.</b>  (Jones & Bartlett Learning, 2021)
<b>Does any of the client's past medical history contradict the use of this medication?</b>	<b>Diabetes- could increase blood sugar levels</b> <b>Depression- could increase depression or cause suicidal thoughts</b> (Jones & Bartlett Learning, 2021)
<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>The patient has a history of diabetic neuropathy which is the indication of use.</b>  <b>Other indications of use for gabapentin include epilepsy, restless leg syndrome and fibromyalgia.</b>
<b>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</b>	<b>1. Using this drug can make you drowsy or slow breathing and can cause dangerous side effects or death. Ask doctor before using with other</b>  <b>2. Notify provider if having thoughts of suicide, stay alert to changes in mood or</b>

	<b>behavior.</b> (Skidmore-Roth, 2020)
<b>How much would medication cost per month if paying out of pocket?</b>	<b>\$6.74</b> (GoodRx, 2023)
<b>Drug #4</b>	<p><b>Drug Name (Generic): aspirin (acetylsalicylic acid, ASA)</b></p> <p><b>Drug Name (Trade): Aspirin-81, Aspirin, Bayer, Durlaza, Ecotrin, Empirin, Miniprin,</b></p> <p><b>Drug Class: pharmacological- salicylate. Therapeutic- NSAID (anti-inflammatory, antiplatelet, antipyretic, nonopioid analgesic)</b></p> <p>(Lippincott Williams &amp; Wilkins, 2022)</p>
<b>How is the medication taken: (include dose, route, and frequency)</b>	<b>81 mg once a day by mouth</b>
<b>Specific Directions not included above:</b>	<b>Take with food to avoid adverse effects. Swallow enteric- coated or extended-release whole and do not crush, chew or split.</b>
<b>Does this medication interact with any other medication(s) on this list? (see rubric for further</b>	<b>escitalopram- can cause hyponatremia, increase risk of bleeding</b> <b>olmesartan/ hydrochlorothiazide-can reduce effects of olmesartan in lowering blood</b>

<b>instruction)</b>	<p><b>pressure</b></p> <p><b>Insulin aspart- can increase risk of hypoglycemia</b></p> <p><b>Insulin regular- can increase risk of hypoglycemia</b></p> <p>(Drugs.com, 2023)</p>
<p><b>Lifestyle interactions:</b></p> <p><b>(Daily tobacco use, alcohol, drugs, etc. )</b></p>	<p><b>Alcohol interacts with this drug and can increase risk of bleeding, although the patient doesn't drink.</b> (Jones &amp; Bartlett Learning, 2021)</p>
<p><b>Does any of the client's past medical history contradict the use of this medication?</b></p>	<p><b>Aspirin can cause hypertension and should be considered with patients with hypertension.</b></p> <p>(Jones &amp; Bartlett Learning, 2021)</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>Patient could be taking this medication for pain.</b></p> <p><b>This drug can be indicated for use in preventing heart attacks and strokes.</b></p>
<p><b>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</b></p>	<p><b>1. Use bleeding precautions while taking this drug due to increased risk of bleeding.</b></p>

	<p>2. <b>Ask a doctor before using any cold, allergy or pain medication. Many over the counter medications contain aspirin or an NSAID, and can take too much of this drug.</b> (Skidmore-Roth, 2020)</p>
How much would medication cost per month if paying out of pocket?	\$8.93 (GoodRx, 2023)
<b>Drug # 5</b>	<p><b>Drug Name (Generic): olmesartan medoxomil and hydrochlorothiazide</b></p> <p><b>Drug Name (Trade): Benicar HCT</b></p> <p><b>Drug Class: angiotensin II receptor blocker antagonist and thiazide diuretic</b></p> <p>(Lippincott Williams &amp; Wilkins, 2022)</p>
How is the medication taken: (include dose, route, and frequency)	olmesartan-20 mg/HCT (hydrochlorothiazide)25 mg, orally, daily
Specific Directions not included above:	Take medication once daily by mouth with or without food. Take this medication at the same time every day and continue to take it even when you feel better.
Does this medication interact with any other medication(s) on this list? (see rubric for further	Aspirin- can reduce effects of olmesartan in lowering blood pressure

<p><b>instruction)</b></p>	<p><b>Insulin aspart- increases risk of hypoglycemia, and glucose control and can decrease effectiveness of insulin aspart.</b></p> <p><b>Insulin Regular-increases risk of hypoglycemia</b></p> <p><b>Zolpidem- can cause low blood pressure</b></p> <p><b>escitalopram- can cause hyponatremia</b></p> <p><b>pantoprazole- can increase risk of hypomagnesemia</b></p> <p>(Drugs.com, 2023)</p>
<p><b>Lifestyle interactions:</b></p> <p><b>(Daily tobacco use, alcohol, drugs, etc. )</b></p>	<p><b>Salt substitutes containing potassium have an interaction causing risk of hyperkalemia.</b></p> <p><b>Also drugs interact with alcohol with possible orthostatic hypertension although the patient does not drink.</b></p> <p>(Jones &amp; Bartlett Learning, 2021)</p>
<p><b>Does any of the client’s past medical history contradict the use of this medication?</b></p>	<p><b>This medication can cause hepatic impairment. This patient has a history of GERD so it would be important to monitor the patient's response to the medication, because it could increase the side effects of GERD. This medication can have an effect on blood glucose</b></p>

	<b>levels.</b> (Jones & Bartlett Learning, 2021)
<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>Patient has a history of hypertension which is the indication of use.</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><b>1. Take blood pressure at home and keep a record to bring to appointments.</b></li> <li><b>2. Avoid taking potassium supplements or salt substitutes as it can cause hyperkalemia with this medication</b> (Skidmore-Roth, 2020)</li> </ol>
<b>How much would medication cost per month if paying out of pocket?</b>	<b>\$38.55</b> (GoodRx, 2023)
<b>Drug # 6</b>	<b>Drug Name (Generic): escitalopram oxalate</b>  <b>Drug Name (Trade): Lexapro</b>  <b>Drug Class: antidepressant SSRI</b>  (Lippincott Williams & Wilkins, 2022)

<b>How is the medication taken: (include dose, route, and frequency)</b>	<b>20 mg by mouth once daily</b>
<b>Specific Directions not included above:</b>	<b>Administer drug in the morning or evening. Drug can take 1-4 weeks to notice improvement after therapy begins, continuing therapy as prescribed.</b>
<b>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</b>	<p><b>Aspirin-increased risk of bleeding, can cause hyponatremia</b></p> <p><b>Zolpidem- can increase drowsiness, dizziness, confusion and difficulty concentrating., be cautious of this</b></p> <p><b>Gabapentin- can cause hyponatremia</b></p> <p><b>Insulin Aspart- increased risk of hypoglycemia, or low blood sugar</b></p> <p><b>Olmесartan/hydrochlorothiazide- can cause hyponatremia (Drugs.com, 2023)</b></p>
<b>Lifestyle interactions:</b>  <b>(Daily tobacco use, alcohol, drugs, etc. )</b>	<p><b>Alcohol use can have increased cognitive and motor effects if used with this drug.</b></p> <p>(Jones &amp; Bartlett Learning, 2021)</p>
<b>Does any of the client's past medical history contradict the use of this medication?</b>	<b>Monitor with depression as this medication can worsen symptoms, and there is also and increased risk of bleeding.</b>

	(Jones & Bartlett Learning, 2021)
<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>Patient has a history of depression which could be the indication of use.</b>  <b>Other indications of use for this drug are obsessive compulsive disorder, panic disorder, and premenstrual dysphoric disorder.</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><b>1. Monitor for signs and symptoms of serotonin syndrome like agitation, chills, confusion, diaphoresis, diarrhea, fever, hyperactive reflexes and more.</b></li> <li><b>2. Warn that this drug increases the risk of bleeding while the patient is taking aspirin. Seek emergency care for serious or prolonged bleeding.</b> (Skidmore-Roth, 2020)</li> </ol>
<b>How much would medication cost per month if paying out of pocket?</b>	<b>\$4.48</b> (GoodRx, 2023)
<b>Drug # 7</b>	<b>Drug Name (Generic): zolpidem tartrate</b>  <b>Drug Name (Trade): Ambien, Ambien CR, Edluar, Zolpimist</b>

	<p><b>Drug Class: Hypnotic (pharmacological- imidazopyridine, controlled substance IV)</b></p> <p>(Lippincott Williams &amp; Wilkins, 2022)</p>
<p><b>How is the medication taken: (include dose, route, and frequency)</b></p>	<p><b>12.5 mg by mouth, PRN at bedtime</b></p>
<p><b>Specific Directions not included above:</b></p>	<p><b>Take at bedtime on an empty stomach for faster sleep and if only going to get 7-8 hours of sleep. Talk to the doctor about why you are taking 10mg.</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>Escitalopram- increases side effects like dizziness, drowsiness, confusion and difficulty concentrating</b></p> <p><b>Gabapentin-increased side effects like dizziness, drowsiness, confusion, and difficulty concentrating.</b></p> <p><b>Olmесartan/hydrochlorothiazide- can lower blood pressure</b></p> <p>(Drugs.com, 2023).</p>
<p><b>Lifestyle interactions:</b></p> <p><b>(Daily tobacco use, alcohol, drugs, etc. )</b></p>	<p><b>Avoid alcohol and marijuana use as they can both lead to increased dizziness when taking this medication.</b></p> <p>(Jones &amp; Bartlett Learning, 2021)</p>

<p><b>Does any of the client's past medical history contradict the use of this medication?</b></p>	<p><b>This medication is contraindicated with depression and could make depression worse.</b> (Jones &amp; Bartlett Learning, 2021)</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>Patient has a history of insomnia which could be the indication of use.</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. Be aware this drug can cause extreme drowsiness, confusion, and feeling light headed.</b></li> <li><b>2. Complex sleep behaviors may occur while taking this medication such as sleep walking, sleep driving, and other activities while not fully awake.</b> (Skidmore-Roth, 2020)</li> </ol>
<p><b>How much would medication cost per month if paying out of pocket?</b></p>	<p><b>\$15.70</b> (GoodRx, 2023)</p>
<p><b>Drug # 8</b></p>	<p><b>Drug Name (Generic): pantoprazole sodium</b></p>

	<p><b>Drug Name (Trade): Protonix, Pantoloc (CAN)</b></p> <p><b>Drug Class: Pharmacologic-Proton Pump Inhibitors</b></p> <p><b>therapeutic-antiulcer</b></p> <p>(Lippincott Williams &amp; Wilkins, 2022)</p>
<p><b>How is the medication taken: (include dose, route, and frequency)</b></p>	<p><b>40mg, orally, daily</b></p>
<p><b>Specific Directions not included above:</b></p>	<p><b>Swallow the tablet whole and do not cut, crush or chew the tablet. Take medication as directed by the provider.</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>Atorvastatin- increase blood levels and effects of atorvastatin. Also can increase risk of side effects like liver damage and rhabdomyolysis.</b></p> <p><b>olmesartan/hydrochlorothiazide-can increase risk of hypomagnesemia (Drugs.com, 2023)</b></p>
<p><b>Lifestyle interactions:</b></p> <p><b>(Daily tobacco use, alcohol, drugs, etc. )</b></p>	<p><b>Tobacco</b></p> <p>(Jones &amp; Bartlett Learning, 2021)</p>
<p><b>Does any of the client's past medical history</b></p>	<p><b>There are no complications with patients past medical history (Jones &amp; Bartlett Learning,</b></p>

<b>contradict the use of this medication?</b>	2021)
<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><b>Patient has a history of GERD which could be an indication of use.</b></p> <p><b>Other indications of use for this drug would be healing of erosive esophagitis and treatment of hypersecretory conditions.</b></p>
<b>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</b>	<p><b>1.Notify prescriber immediately if experiencing a decreased amount of urine voided or if blood is present in urine. Also notify prescriber of new or worsening joint pain or rash on his arms or cheeks that gets worse in the sun.</b></p> <p><b>2.Notify all providers of use of this drug and do not take any OTC or herbal drugs without discussing with the prescriber. (Skidmore-Roth, 2020)</b></p>
<b>How much would medication cost per month if paying out of pocket?</b>	<b>\$4.01</b> (GoodRx, 2023)
<b>Drug # 9</b>	<p><b>Drug Name (Generic): conjugated g- estrogens</b></p> <p><b>Drug Name (Trade): Premarin, C.E.S (CAN)</b></p>

	<p><b>Drug Class: Pharmacological-estrogen.</b></p> <p><b>Therapeutic- hormone</b></p> <p>(Lippincott Williams &amp; Wilkins, 2022)</p>
<p><b>How is the medication taken: (include dose, route, and frequency)</b></p>	<p><b>0.625 mg orally, daily</b></p>
<p><b>Specific Directions not included above:</b></p>	<p><b>Take drug at the same time everyday</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>insulin regular- can interfere with blood glucose control and reduce effectiveness of insulin regular.</b></p> <p><b>Insulin aspart- can interfere with blood glucose control and reduce effectiveness of insulin aspart (Drugs.com, 2023).</b></p>
<p><b>Lifestyle interactions:</b></p> <p><b>(Daily tobacco use, alcohol, drugs, etc. )</b></p>	<p><b>Smoking- can increase risk of pulmonary embolism, stroke, thrombophlebitis, and transient ischemic attack. (Jones &amp; Bartlett Learning, 2021)</b></p>
<p><b>Does any of the client's past medical history</b></p>	<p><b>GERD- could increase side effects of GERD (Jones &amp; Bartlett Learning, 2021)</b></p>

<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>The indication for use is to treat signs and symptoms of menopause.</b>
<b>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</b>	<p><b>1. Instruct patients to perform monthly self breast examinations and to comply with all prescribed follow up examinations. Explain risks of estrogen therapy including increased risk of breast cancer, endometrial cancer, or ovarian cancer. Also increased risk for cardiovascular disease, dementia, and gallbladder disease.</b></p> <p><b>2. If you notice something that looks like a tablet in the stool, talk to the provider. (shouldn't happen and means that you aren't getting the full effect.) (Skidmore-Roth, 2020)</b></p>
<b>How much would medication cost per month if paying out of pocket?</b>	<b>\$195.31 (GoodRx, 2023)</b>
<b>Drug # 10</b>	<b>Drug Name (Generic): Atorvastatin calcium</b>

	<p><b>Drug Name (Trade): Lipitor</b></p> <p><b>Drug Class: Pharmacological- HMG-CoA reductase inhibitor</b></p> <p><b>Therapeutic- antihyperlipidemic</b></p> <p>(Lippincott Williams &amp; Wilkins, 2022)</p>
<p><b>How is the medication taken: (include dose, route, and frequency)</b></p>	<p><b>20 mg, orally, daily</b></p>
<p><b>Specific Directions not included above:</b></p>	<p><b>Take at the same time everyday. Take a missed dose as soon as possible, unless it's almost time for the next dose do not double the dose.</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>Pantoprazole-increase blood levels and effects of atorvastatin. Can increase risk of side effects like liver damage or rhabdomyolysis (Drugs.com, 2023).</b></p>
<p><b>Lifestyle interactions:</b> <b>(Daily tobacco use, alcohol, drugs, etc. )</b></p>	<p><b>Smoking interacts with this medication and the patient is trying to quit, smoking can decrease the effect of the drug. Also drinking grapefruit juice with this drug can increase the level and make side effects more likely. (Jones &amp; Bartlett Learning, 2021)</b></p>
<p><b>Does any of the client's past medical history</b></p>	<p><b>Diabetes- Atorvastatin calcium can increase the blood sugar (Jones &amp; Bartlett Learning,</b></p>

<b>contradict the use of this medication?</b>	2021)
<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>Patient has a history of hyperlipidemia which could be the indication of use.</b>  <b>Other indications of use would be to reduce the risk of heart attack and stroke.</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><b>1. Notify the provider immediately if present signs and symptoms of muscle pains, tenderness, or weakness with fatigue or fever.</b></li> <li><b>2. Monitor blood glucose levels closely. (Skidmore-Roth, 2020)</b></li> </ol>
<b>How much would medication cost per month if paying out of pocket?</b>	<b>\$4.95 (GoodRx, 2023)</b>

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

She has to take six medications by mouth once daily, one medication by mouth 3 times daily, one medication by mouth as needed at bedtime. Also, she has to self-administer 10 units of insulin 3 times a day subcutaneously with each meal, and then one insulin is used as needed per sliding scale. It could be difficult differing between which insulin she needs to use and when, and to remember to take her oral med 3 times a day because the others are only once. It would also be difficult to pay for all of these medications considering she just lost her job and has no insurance. The total price a month for all of these drugs is \$474.46, which is very costly. Also, having depression can have an impact on a patient's compliance with taking medications.

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

The patient could have a pill box that could assist with the daily meds and what to take each day. For the medication she takes 3 times a day she could have the other 2 pills separate in a different box to take them later in the day. She could also set alarms on her phone to remind her that it is time to take her medicine. An implanted blood glucose monitor would help her be aware of her glucose levels, but this is not likely for this patient with no insurance. The patient could put a sign in her house where she keeps her medications or somewhere she will see it often reminding her to take her medication. She definitely needs to find a way for insurance in order to manage her health and be able to afford her medications.

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

A suggestion to the client would be to consider exercising and becoming more active due to her BMI being overweight and having diabetes. Also maintaining a healthy diet could help with maintaining blood sugars and hyperlipidemia. The cessation of smoking is a very important topic for this client. Smoking does not have any benefits health wise but in this client especially with her medical conditions smoking is highly contraindicated. I would ask the doctor why the patient is taking 10 mg of zolpidem tartrate, because usually more than 10 mg is not suggested, especially in women. Also, I would ask why the patient is taking aspirin. The patient is taking gabapentin for pain, and aspirin has many side effects and interactions with other drugs. Aspirin can be used for preventing heart attacks or strokes but the patient does not have a history of this. Another discussion would be how long the patient has been taking zolpidem tartrate, and if she needs this medication. This drug is not supposed to be taken long-term. I would ask the doctor if the patient had tried taking the drug losartan before being prescribed olmesartan with hydrochlorothiazide.

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

\$474.46

**Reflective Statement of Experience:**

**Jackson-**

With this project I feel like I was able to get a better understanding of the different medications we had and how they each work. Now in class we learned about these medications and we have even been tested over them however by doing research on them it has given me an even better understanding of how they work. One of the most interesting things I learned from this was how much different medications could cost, I had no idea that drugs like Premarin and Novolin cost so much. Another thing that I picked up from this project was the different teachings for each medication. We only had to do two teachings for each medication but after doing the research there was a lot more that could have been included. It just goes to show how important it is for nurses to know how different medications can affect a patient and also how they can possibly prevent that.

**Rancey-**

This project provided an experience to compare a normal medication regimen with all the possible interactions. In class, we learn interactions as if they are something you should try to avoid. This project provided great insight on medications and how sometimes you have to choose between what could be worse. Like gabapentin can increase depression or thoughts of suicide but if the patient didnt take this 3 times a day, she would be in more chronic pain with the diabetic neuropathy and that could cause increased depression and suicide thoughts. This project also showed how expensive medications are, and without insurance and having medical problems it seems almost impossible to afford all the medications. It really showed how nurses must be a patient's advocate when providing care to those with multiple medications and making sure they understand why they are taking them, seeing if any

contraindicate each other, or if the patient is experiencing side effects from them. Also, how important a nurse's role in educating a patient on their prescribed medications for the proper use of taking them, interactions, and signs and symptoms of adverse effects.

### References

Drugs.com. (2023, February 12). Drugs.com - Prescription Drug Information. Retrieved February 17, 2023, from <https://www.drugs.com/>

GoodRx. (2023). GoodRx: Prescription Prices, Coupons & Pharmacy Information. Retrieved February 17, 2023, from <https://www.goodrx.com/>

Jones & Bartlett Learning. (2021). *2022 Nurse's Drug Handbook* (21st ed.). Jones & Bartlett Learning.

Lippincott Williams & Wilkins, L. W. (2022). *Nursing2023 Drug Handbook*. Lippincott Williams & Wilkins.

Skidmore-Roth, L. (2020). *Mosby's 2021 Nursing Drug Reference*. Elsevier - Health Sciences Division.

## N322 Polypharmacy Grading Rubric

Criteria	Excellent	Acceptable	Unacceptable	Points Earned
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	<b>40 points</b>	<b>31-39 points</b>	<b>0-30 points</b>	
<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
<b>Criteria</b>	<b>Excellent 10 points</b>	<b>Acceptable 8-10 points</b>	<b>Unacceptable 0 - 7 points</b>	<b>Points Earned</b>
<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?  (before bed, before breakfast, 30 minutes before meals, etc..)</li> </ul>	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
<b>Criteria</b>	<b>Excellent</b>	<b>Acceptable</b>	<b>Unacceptable</b>	<b>Points Earned</b>

	0 points	16-19	0-15 points	
<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>	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	Acceptable	Unacceptable	Points Earned
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	5 points	4 points		0 -3 points	
Lifestyle interactions:  ● What lifestyle factors counteract with the medications?  (tobacco user, ETOH use – 3 beers daily)	Student showed knowledge why lifestyle would counteract with medications	The student listed lifestyle interactions for some of the medications, but not all and/or the interactions listed were not priority or were incorrect. (For each medication, this question is worth half a point)	Student failed to answer question or the student listed lifestyle interactions for some of the medications, but not all and/or the interactions listed were not priority or were incorrect. (For each medication, this question is worth half a point)		___/5
<b>Criteria</b>	<b>Excellent</b> <b>10 points</b>	<b>Average</b> <b>8-9</b>	<b>Unacceptable</b> <b>0-7 points</b>		<b>Points Earned</b>

<ul style="list-style-type: none"> <li>● Does any of the client’s past medical history contradict the use of this medication?</li> </ul>	<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><b>Criteria</b></p>	<p><b>Excellent</b> <b>10 points</b></p>	<p><b>Acceptable</b> <b>8-9 points</b></p>	<p><b>Unacceptable</b> <b>0-7 points</b></p>	<p><b>Points Earned</b></p>
<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>	<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><b>Criteria</b></p>	<p><b>Excellent</b> <b>20 points</b></p>	<p><b>Acceptable</b> <b>16-19 points</b></p>	<p><b>Unacceptable</b> <b>0-15 points</b></p>	<p><b>Points Earned</b></p>
<p>What would you teach the client about taking this medication?</p> <ul style="list-style-type: none"> <li>● What education is</li> </ul>	<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</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</p>	<p>___/20</p>

<p>needed for the medication? (For each medication listed the student must prioritize two topics for client education)</p> <p>(You must consider all component(s) of the medication list when answering this question... if there are potential interactions with other medication this may be a priority over general education for this one medication)</p>		<p>client. (Each topic of education is worth one point)</p>	<p>appropriately prioritized education for the client. (Each topic of education is worth one point)</p>	
<p><b>Criteria</b></p>	<p><b>Excellent</b> <b>10 points</b></p>	<p><b>Acceptable</b> <b>8-9 points</b></p>	<p><b>Unacceptable</b> <b>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</li> </ul>	<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>regiment?  (Please consider all factors in the scenario and all information provided within your chart – including cost, insurance, frequency of administration, etc)</p>				
<p><b>Criteria</b></p>	<p><b>Excellent</b>  <b>10 points</b></p>	<p><b>Acceptable</b>  <b>8-9 points</b></p>	<p><b>Unacceptable</b>  <b>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 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>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 question is worth one point for each medication)</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 compliance. (This question is worth one point for each medication)</p>	<p>___/10</p>
<p><b>Criteria</b></p>	<p><b>Excellent</b>  <b>15 points</b></p>	<p><b>Acceptable</b>  <b>8-9 points</b></p>	<p><b>Unacceptable</b>  <b>0 points</b></p>	<p><b>Points Earned</b></p>
<ul style="list-style-type: none"> <li>● How much would</li> </ul>	<p>Student showed research on</p>	<p>The student provided accurate research for some of</p>	<p>Student failed to answer the question OR The student</p>	<p>___/15</p>

<p>this medication cost per month if the patient were to pay for them out of pocket? (best assessment based off of research)</p> <ul style="list-style-type: none"> <li>● What would the client’s monthly out of pocket expense for all 10 medications?</li> </ul>	<p>medication costs</p>	<p>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>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><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 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)</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 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>

<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>				
Criteria	Excellent 20 points	Acceptable 16-19 points	Unacceptable 0-15 points	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>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>Elaborate on this, explaining why you feel it should be addressed, why it is priority and provide evidence behind your presentation.</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:</li> </ul> <p>-insight into the project itself (a specific example within the project and its implications)</p> <p>-A basic understanding of polypharmacy</p> <p>-A reflection on this student nurses role in this scenario as a client advocate/educator/caregiver</p>	<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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