

Polypharmacy Project

Bethany Waugh, BSN Student, Student Name, BSN Student

N322 Introduction to Pharmacology

Lakeview College of Nursing

Pamela Armstrong AP-C, MSN, RN

Date Due

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

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 as secretary. She smokes a pack of cigarettes a day (30-year pack history) and is trying to stop smoking by using nicotine vapes. Kathryn is a Type I diabetic diagnosed at age 4. Her last A1c was 7.8. This was done over 8 months ago.

Economics: Kathryn lost her job when her company was sold. She lost her insurance at the same time. She is actively looking for a job. She is drawing 250/week in unemployment benefits.

Insurance: She cannot afford Cobra benefits. She is too young to qualify for Medicare and may qualify for Medicaid at this time, but she has not applied stating she does not want 'charity'. She is very concerned about affording her medications. Currently she cannot afford to go to her provider for any visits as she has to pay out of pocket.

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 prior to each meal (TID) SUBQ

Levimir 25 units daily SQ

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

Drug #1	Drug Name (Generic): Parenteral Insulin Drug Name (Trade): Novolin Drug Class: Hormone
How is the medication taken: (include dose, route, and frequency)	10 units prior to each meal (TID) SUBQ
Specific Directions not included above:	
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	
Does any of the client's past medical history contradict the use of this medication?	
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the	

medication in general)	
What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	1. 2.
How much would medication cost per month if paying out of pocket?	

Drug #2	Drug Name (Generic): Long-acting Insulin Drug Name (Trade): Levemir Drug Class: Hormone
How is the medication taken: (include dose, route, and frequency)	25 units daily, SQ
Specific Directions not included above:	
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	

<p>Does any of the client's past medical history contradict the use of this medication?</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>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</p>	<ol style="list-style-type: none"> 1. 2.
<p>How much would medication cost per month if paying out of pocket?</p>	
<p>Drug #3</p>	<p>Drug Name (Generic): Gabapentin</p> <p>Drug Name (Trade): Gralise, Neurontin</p> <p>Drug Class:</p> <p>Pharmacologic: 1-amino-methyl cyclohexaneacetic acid</p> <p>Therapeutic: Anticonvulsant6</p>

How is the medication taken: (include dose, route, and frequency)	400 mg TID PQ
Specific Directions not included above:	
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	Aluminum and magnesium contain antacids: decreased gabapentin bioavailability CNS Depressants: Increased CNS depression Hydrocodone: Decreased by hydrocodone exposure Morphine, Oxycodone: Increased risk of decreased awareness, respiratory depression, and severe sleepiness
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	Avoid alcohol; alcohol increases the risk of CNS and respiratory depression which can become severe.
Does any of the client's past medical history contradict the use of this medication?	
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the	

medication in general)	
What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	<ol style="list-style-type: none"> 1. 2.
How much would medication cost per month if paying out of pocket?	
Drug #4	<p>Drug Name (Generic): Acetylsalicylic acid</p> <p>Drug Name (Trade): Aspirin</p> <p>Drug Class:</p> <p>Pharmacologic: Salicylate</p> <p>Therapeutic: NSAID (anti-inflammatory, anti-platelet, antipyretic, non opioid analgesic)</p>
How is the medication taken: (include dose, route, and frequency)	81 mg by mouth once a day
Specific Directions not included above:	
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	<p>ACE Inhibitors, beta-blockers: decreased hypertensive effect</p> <p>Acetazolamide: Possibly acetazolamide toxicity</p> <p>Ammonium Chloride and other urine acidifiers: May increase level of aspirin with</p>

possibility of aspirin toxicity

Antacids, urine alkalinizers: Decreased aspirin effectiveness

Anticoagulants, Antiplatelets: Increased risk of bleeding; prolonged bleeding time

Corticosteroids: Increased excretion and decreased blood level of aspirin

Digoxin: Increased risk of digitalis toxicity

Diuretics: Possibly decreased diuretic effectiveness, especially in patients with renal impairment

Heparin: Increased risk of bleeding

Ibuprofen, Naproxen: Possibly reduced cardioprotective and stroke preventive effects of aspirin

Methotrexate: Increased blood level and decreased excretion of methotrexate, causing toxicity

Oral antidiabetic agents: Possibly enhanced hypoglycemic effects

Other NSAIDs: Possibly decreased blood NSAID level and increased risk of adverse drug effects

Selective serotonin reuptake inhibitors (SSRIs): Increased risk of upper gastrointestinal

	bleeding Uricosuric agents: Decreased uricosuric effect Valproic acid: Possibly increased valproic acid level and incidence of adverse reactions
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	Do not use alcohol, it increases the risk of ulcers
Does any of the client's past medical history contradict the use of this medication?	Doesn't work with oral diabetes meds; look into that
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)	
What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	1. 2.
How much would medication cost per month if paying out of pocket?	
Drug # 5	Drug Name (Generic): Olmesartan medoxomil

	Drug Name (Trade): Benicar HCT Drug Class: Antihypertensive
How is the medication taken: (include dose, route, and frequency)	20/25 mg PO Daily
Specific Directions not included above:	
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	
Does any of the client's past medical history contradict the use of this medication?	
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)	

What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	1. 2.
How much would medication cost per month if paying out of pocket?	
Drug # 6	Drug Name (Generic): Escitalopram Drug Name (Trade): Lexapro Drug Class:
How is the medication taken: (include dose, route, and frequency)	20 mg by mouth once daily
Specific Directions not included above:	
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	
Does any of the client's past medical history contradict the use of this medication?	

<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>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</p>	<ol style="list-style-type: none"> 1. 2.
<p>How much would medication cost per month if paying out of pocket?</p>	
<p>Drug # 7</p>	<p>Drug Name (Generic): Zolpidem</p> <p>Drug Name (Trade): Ambien CR</p> <p>Drug Class:</p>
<p>How is the medication taken: (include dose, route, and frequency)</p>	<p>12.5 mg as needed at bedtime</p>
<p>Specific Directions not included above:</p>	
<p>Does this medication interact with any other medication(s) on this list? (see rubric for further</p>	

instruction)	
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	
Does any of the client's past medical history contradict the use of this medication?	
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)	
What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	1. 2.
How much would medication cost per month if paying out of pocket?	
Drug # 8	Drug Name (Generic): Pantoprazole Drug Name (Trade): Protonix Drug Class:
How is the medication taken: (include dose, route,	40 mg daily PO

<p>and frequency)</p>	
<p>Specific Directions not included above:</p>	
<p>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</p>	
<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>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>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</p>	<p>1. 2.</p>
<p>How much would medication cost per month if</p>	

paying out of pocket?	
Drug # 9	Drug Name (Generic): Conjugated g-estrogens Drug Name (Trade): Premarin Drug Class:
How is the medication taken: (include dose, route, and frequency)	0.625 mg daily PO
Specific Directions not included above:	
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	
Does any of the client's past medical history contradict the use of this medication?	
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical	

history, please list potential indications for use of the medication in general)	
What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	<ol style="list-style-type: none"> 1. 2.
How much would medication cost per month if paying out of pocket?	
Drug # 10	Drug Name (Generic): Atorvastatin Drug Name (Trade): Lipitor Drug Class:
How is the medication taken: (include dose, route, and frequency)	20 mg PO Daily
Specific Directions not included above:	
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	

Does any of the client's past medical history contradict the use of this medication?	
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)	
What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	1. 2.
How much would medication cost per month if paying out of pocket?	

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

She has no money, is depressed, and this is a lot of meds to afford/remember

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

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)

She needs to accept charity/help until she can get back on her feet

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

Look into insurances, Medicaid, and generic costs

Reflective Statement of Experience:

References

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? (before bed, before 	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

breakfast, 30 minutes before meals, etc..)				
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
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<p>Lifestyle interactions:</p> <ul style="list-style-type: none"> • What lifestyle factors counteract with the medications? <p>(tobacco user, ETOH use – 3 beers daily)</p>	<p>Student showed knowledge why lifestyle would counteract with medications</p>	<p>The student listed lifestyle interactions for some of the medications, but not all and/or the interactions listed were not priority or were incorrect. (For each medication, this question is worth half a point)</p>	<p>Student failed to answer question or the student listed lifestyle interactions for some of the medications, but not all and/or the interactions listed were not priority or were incorrect. (For each medication, this question is worth half a point)</p>	<p>___/5</p>
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? 	<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>
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 	<p>Student showed knowledge of medications and what conditions</p>	<p>The student provided appropriate indications for</p>	<p>Student failed to answer the question or The student</p>	<p>___/10</p>

<p>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>corresponds with medications</p>	<p>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>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>Criteria</p>	<p>Excellent 20 points</p>	<p>Acceptable 16-19 points</p>	<p>Unacceptable 0-15 points</p>	<p>Points Earned</p>
<p>What would you teach the client about taking this medication?</p> <ul style="list-style-type: none"> • What education is needed for the medication? (For each medication listed the student must prioritize two topics for client education) <p>(You must consider all component(s) of the medication list when answering this question... if there are potential interactions with other medication this may be a priority over general education for this one medication)</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>

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 regimen? <p>(Please consider all factors in the scenario and all information provided within your chart – including cost, insurance, frequency of administration, etc)</p>	<p>Student had knowledge on why a patient would have difficulty with medication regimen</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>
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 assist the client in maintaining the 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</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>

your chart – including cost, insurance, frequency of administration, etc.				
Criteria	Excellent 15 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? 	Student showed research on medication costs	The student provided accurate research for some of the medications, but failed to provided research for all medications (This question is worth one point for each medication, with the total cost being worth 5 points)	Student failed to answer the question OR The student provided accurate research for some of the medications, but failed to provided research for all medications (This question is worth one point for each medication, with the total cost being worth 5 points)	___/15
Criteria	Excellent 20 points	Acceptable 16-19 points	Unacceptable 0-15 points	Points Earned
<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 	The document included a title page, the rubric, the client scenario, a reference page which included five references that were cited within the document. APA formatting was consistent with the APA manual.	The document did not meet all of the criteria for formatting/ referencing. See "criteria" to the left for further breakdown.	The document did not meet all of the criteria for formatting/ referencing. See "criteria" to the left for further breakdown.	___/20

<p>missing or inaccurate portion per APA is worth one point)</p> <ul style="list-style-type: none"> • The student provided a rubric attached for grading (3 points) • The student included the provided client scenario on page two of the document (2 points) • The paper included a minimum of five references which were cited within the document (each reference with one citation is worth 5 points) 				
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>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>