

Polypharmacy Project

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N322 Introduction to Pharmacology

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### **Polypharmacy Case 1**

Background: Caroline is a 78-year-old female that resides at home with her daughter who is her primary caregiver. No one else lives with them. Caroline requires extensive assistance from her daughter in completing all of her activities of daily living, as she cannot follow simple commands to complete the steps of her activities of daily living. She also is experiencing extensive communicative difficulties resulting in the majority of her communication being word salad. She expresses anger often and was recently discharged from the local psychiatric hospital related to her physically combative behaviors during care. Caroline has a history of smoking – but quit about ten years ago. She has a history of drinking socially, and currently drinks one glass of wine a day at lunch. Caroline and her daughter have no other family in the area.

Insurance: Caroline has prescription medication insurance only. She does not have insurance for medical visits.

Allergies: Penicillin's & Peanuts

Diet: Mechanical Soft with thin liquids related to difficulty chewing

Medical diagnosis: Alzheimer's with behavioral disturbance, COPD, hyperlipidemia, and chronic kidney disease

Current medications include the following:

Zyprexa 7.5 mg by mouth one time a day

Donepezil 10 mg by mouth at HS

## POLYPHARMACY

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Colace 200 mg by mouth one time a day

Haloperidol 2 mg IM every 4-hour PRN

Atrovent HFA take 2 inhalations four times a day.

ProAir HFA take 2 puffs via inhalation four times a daily PRN.

Namenda 5 mg by mouth twice a day

Ibuprofen 400 mg by mouth every 6 hours PRN.

Lipitor 30 mg by mouth once daily

MiraLAX 17 gm mixed in 8 ounces of juice or water by mouth once a day.

<b>Drug #1</b>	<p><b>Drug Name (Generic):</b> olanzapine</p> <p><b>Drug Name (Trade):</b> Zyprexa</p> <p><b>Drug Class:</b> Thienobenzodiazepine derivative; Antipsychotic</p>
<b>How is the medication taken: (include dose, route, and frequency)</b>	7.5 mg by mouth one time a day.
<b>Specific Directions not included above:</b>	"For oral disintegrating tablets, open the sachet and peel back the foil. Do not push the tablet through the foil. Immediately upon opening, remove the tablet with dry, gloved hands. Place the tablet on the client's tongue. It can be swallowed after it dissolves and can be given with or without liquid" (Jones & Bartlett, 2022, p.991).
<b>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</b>	A moderate interaction can occur when administering olanzapine and haloperidol together due to their use as neuroleptic agents. When distributing these two medications together, use them with caution and be knowledgeable of possible adverse effects, including excessive sedation, slurred speech, agitation, convulsions, coma, uncontrollable movements, orthostatic hypotension, and extrapyramidal symptoms. Extrapyramidal symptoms include parkinsonism, akathisia, dystonic reactions, neuroleptic malignant syndrome, and tardive dyskinesia. They

recommend that only one antipsychotic should be taken at a time unless the provider determines that the benefit of administering both medications outweighs the risk (Drugs.com, 2023).

A moderate interaction can occur when administering olanzapine and ipratropium together, resulting in the recommendation to avoid the use of these two medications together. Additive anticholinergic effects can occur when the use of topical and inhaled anticholinergic agents occur together; this includes blurred vision, heat intolerance, fever, dry mouth, tachycardia, urinary retention, constipation, mydriasis, increased intraocular pressure, and glaucoma (onset/exacerbation) (Drugs.com, 2023).

A moderate interaction can occur when administering olanzapine and albuterol, resulting in the recommendation to seek medical assistance if the client experiences dizziness, lightheadedness, fainting, palpitation, irregular heart rhythm, shortness of breath, and syncope. Caution of use due to possible QT prolongation is advised in clients with a history of cardiac arrhythmias or a genetic history of long QT syndrome, and performing ECG monitoring may be necessary (Drugs.com, 2023).

A moderate interaction can occur when olanzapine and donepezil are administered together

	<p>due to opposing effects because olanzapine may interrupt the effectiveness of the drug therapy provided by donepezil. Adverse effects may occur, including drowsiness, confusion, and mental impairment. It is discouraged to administer these medications together in clients diagnosed with Alzheimer's disease or Dementia due to the possible heightened sensitivity leading to an adverse effect to their treatment, including extreme cognitive impairment and delirium. Caution is advised when discontinuing these medications due to possible withdrawal or seizures. Advise clients to consult the provider for a plan to discontinue medications (Drugs.com, 2023).</p>
<p><b>Lifestyle interactions:</b> <b>(Daily tobacco use, alcohol, drugs, etc. )</b></p>	<p>Avoidance of Alcohol and tobacco during the use of olanzapine therapy is necessary because the interaction with alcohol use could result in potentiated orthostatic hypotension, dizziness, drowsiness, difficulty concentrating, or CNS disturbances. The interaction with smoking could potentially result in decreased blood olanzapine levels (Jones &amp; Bartlett, 2022).</p>
<p><b>Does any of the client's past medical history contradict the use of this medication?</b></p>	<p>It is suggested that olanzapine should not be used for elderly clients diagnosed with dementia-related psychosis because the drug increases the risk of death in these clients due to CV or infection-related death. Smoking may decrease blood olanzapine levels, and nursing staff</p>

	<p>should urge the client not to regain smoking habits. Alcohol use may cause an adverse reaction by increasing CNS effects when used together with this drug, and orthostatic hypotension is an increased possibility. Clients should be advised to stop drinking alcoholic beverages while they are utilizing this drug regimen (Jones &amp; Bartlett, 2022).</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>The client is currently taking this medication to assist in the treatment of her diagnosis of Alzheimer's with behavioral disturbances. This medication is in the antipsychotic therapeutic class and is commonly used to provide a therapeutic effect in the diagnosis of psychiatric illnesses like schizophrenia and bipolar disorder. This medication is being utilized to address the client's current behavioral disturbances associated with the diagnosis of Alzheimer's disease, including the client's anger outbursts and becoming physically combative during provided care.</p>
<p><b>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</b></p>	<p>1. Educate the client and the client's caregiver to seek immediate medical attention if the client experiences extreme sleepiness, difficulty breathing, excessively slowed breathing, dizziness, lightheadedness, suicidal thoughts or actions, or if the client becomes unresponsive (Jones &amp; Bartlett, 2022).</p>

	2. Educate the client to avoid extreme heat because the medication can impair the client's body's ability to regulate the body temperature correctly and can result in the loss of the body's ability to reduce its temperature (Jones & Bartlett, 2022).
<b>How much would medication cost per month if paying out of pocket?</b>	A 30-day supply of olanzapine 7.5 mg cost range per dose is \$0.65 - \$1.35 and \$19.45-\$40.50 monthly for 30 tablets with no insurance utilized. A 30-day supply of Zyprexa 7.5 mg cost range is \$20.49 per tablet, resulting in a cost of \$614.76 for a monthly prescription with no insurance utilized (Drugs.com, 2023).

<b>Drug #2</b>	<p><b>Drug Name (Generic):</b> donepezil hydrochloride</p> <p><b>Drug Name (Trade):</b> Aricept</p> <p><b>Drug Class:</b> Acetylcholinesterase inhibitor; Antidementia</p>
<b>How is the medication taken: (include dose, route, and frequency)</b>	10 mg by mouth at HS.
<b>Specific Directions not included above:</b>	“Immediate-release tablets should not be chewed, crushed, or split. Administer once-daily

	dose at bedtime” (Jones & Bartlett, 2022, p.407).
<b>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</b>	<p>A moderate interaction can occur when donepezil and olanzapine are administered together due to opposing effects because olanzapine may interrupt the effectiveness of the drug therapy provided by donepezil. Adverse effects may occur, including drowsiness, confusion, and mental impairment. It is discouraged to administer these medications together in clients diagnosed with Alzheimer’s disease or Dementia due to the possible heightened sensitivity leading to an adverse effect to their treatment, including extreme cognitive impairment and delirium. Caution is advised when discontinuing these medications due to possible withdrawal or seizures. Advise clients to consult the provider for a plan to discontinue medications (Drugs.com, 2023).</p> <p>A moderate interaction can occur when donepezil and haloperidol are administered together and can cause haloperidol to reduce the effectiveness of donepezil. Side effects include significant mental status changes, cognitive impairment, delirium, drowsiness, confusion, and mental impairment. It is discouraged to administer these medications together in clients diagnosed with Alzheimer’s disease or Dementia due to the possible heightened sensitivity leading to an adverse effect to their treatment, including extreme cognitive impairment and</p>

	<p>delirium. Caution is advised when discontinuing these medications due to possible withdrawal or seizures. Advise clients to consult the provider for a plan to discontinue medications (Drugs.com, 2023).</p> <p>A moderate interaction can occur when administering donepezil and albuterol due to the vagotonic effect on the sinoatrial and atrioventricular nodes. Side effects include bradycardia, atrioventricular block, syncope, dizziness, lightheadedness, fainting, shortness of breath, chest pain, and slow or irregular heartbeat. Advising the client to be cautious is a priority due to possible QT prolongation (Drugs.com, 2023).</p> <p>A moderate interaction can occur when administering donepezil and ibuprofen together due to an increase in the secretion of gastric acid due to cholinergic activity, and this increases the risks of experiencing a gastrointestinal bleed when utilizing this medication combination (Drugs.com, 2023).</p>
<p><b>Lifestyle interactions:</b> <b>(Daily tobacco use, alcohol, drugs, etc. )</b></p>	<p>No lifestyle interactions are listed concerning this medication. The client should still be provided the necessary education for alcohol and tobacco use due to the client’s history of being a previous smoker and currently drinking one glass of wine a day at lunch.</p>

<b>Does any of the client's past medical history contradict the use of this medication?</b>	The client's past or recent medical history does not contradict the use of this medication.
<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>	The client is currently taking this medication to assist in the treatment of her diagnosis of Alzheimer's with behavioral disturbances. This medication is in the antedementia therapeutic class and is commonly used to provide a therapeutic effect in the diagnosis of Alzheimer's disease and dementia. This medication is being utilized to address the client's current diagnosis of Alzheimer's disease and its ability to assist in the improvement of concentration and improving the client's cognition (Jones & Bartlett, 2022).
<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. Educate the client and her family that donepezil has the ability to be taken with or without food (Jones &amp; Bartlett, 2022).</li><li>2. Educate the client and her family until she is aware of how the medication affects her CNS abilities to avoid hazardous activities, including driving, and encourage the client to remain cautious of her ability to safely perform ADLs to assist with fall prevention (Jones &amp; Bartlett, 2022).</li></ol>

<p><b>How much would medication cost per month if paying out of pocket?</b></p>	<p>A 30-day supply of donepezil hydrochloride 10 mg daily cost range is \$0.48-\$2.25 and \$14.29-\$67.56 monthly for 30 tablets with no insurance utilized. A 30-day supply of Aricept 10 mg cost range is \$18.08 per tablet, resulting in a cost of \$542.42 for a monthly prescription with no insurance utilized (Drugs.com, 2023).</p>
<p><b>Drug #3</b></p>	<p><b>Drug Name (Generic):</b> docusate sodium</p> <p><b>Drug Name (Trade):</b> Colace</p> <p><b>Drug Class:</b> Laxative; Surfactant</p>
<p><b>How is the medication taken: (include dose, route, and frequency)</b></p>	<p>200 mg by mouth one time a day.</p>
<p><b>Specific Directions not included above:</b></p>	<p>The client should refrain from the use of docusate if the client is currently using mineral oil unless the client's provider has approved the use of the medication. Use as prescribed by the provider. Drink plenty of liquids while utilizing this medication. Unless prescribed by the provider, refrain from using docusate longer than one week (Drugs.com, 2023).</p>
<p><b>Does this medication interact with any other medication(s) on this list? (see rubric for further</b></p>	<p>No medication interactions with this client's other prescribed medications concerning</p>

<b>instruction)</b>	docusate.
<b>Lifestyle interactions:</b>  <b>(Daily tobacco use, alcohol, drugs, etc. )</b>	No lifestyle interactions concerning this medication are listed. The client should still be provided the necessary education for alcohol and tobacco use due to the client's history of being a previous smoker and currently drinking one glass of wine a day at lunch.
<b>Does any of the client's past medical history contradict the use of this medication?</b>	The client's past or recent medical history does not contradict the use of this medication.
<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>	Docusate is a stool softener that can assist in relieving constipation and stool irregularity. The client's medication regimen, diet, and lack of activity are contributing factors to constipation (Drugs.com, 2023).
<b>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</b>	1. Educate the client and family to contact emergency medical assistance if signs and symptoms of an allergic reaction occur, including hives or difficulty breathing and swelling of the tongue, lips, throat, or face (Drugs.com, 2023).

	2. Educate the client and family to stop using docusate immediately if any of the following occur: rectal bleeding, rash, use of stool softener persists after one week, or if the client is unable to obtain a bowel movement after the use of the medication (Drugs.com, 2023).
<b>How much would medication cost per month if paying out of pocket?</b>	A 30-day supply of docusate sodium 100 mg (two 100 mg tablets given once daily) costs \$0.18 per unit daily, resulting in a \$10.52 monthly cost for 60 tablets with no insurance utilized. A 30-day supply of Colace 100 mg (Two 100 mg tablets given once daily) cost range is \$0.44 per tablet, resulting in a cost of \$26.14 for a monthly prescription with no insurance utilized (Drugs.com, 2023).
<b>Drug #4</b>	<p><b>Drug Name (Generic):</b> haloperidol</p> <p><b>Drug Name (Trade):</b> Haldol</p> <p><b>Drug Class:</b> Butyrophenone derivative; Antipsychotic</p>
<b>How is the medication taken: (include dose, route, and frequency)</b>	2 mg IM every 4 hour PRN
<b>Specific Directions not included above:</b>	Administer injection into gluteal muscle using Z-track technique and a 21G needle (Jones & Bartlett, 2022). Alternate between the two gluteal muscles with continuous injections.

<p><b>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</b></p>	<p>A moderate interaction can occur when administering haloperidol and olanzapine (Zyprexa) together due to their use as neuroleptic agents. When distributing these two medications together, use them with caution and be knowledgeable of possible adverse effects, including excessive sedation, slurred speech, agitation, convulsions, coma, uncontrollable movements, orthostatic hypotension, and extrapyramidal symptoms. Extrapyramidal symptoms include parkinsonism, akathisia, dystonic reactions, neuroleptic malignant syndrome, and tardive dyskinesia. They recommend that only one antipsychotic should be taken at a time unless the provider determines that the benefit of administering both medications outweighs the risk (Drugs.com, 2023).</p> <p>A moderate interaction can occur when administering haloperidol and ProAir HFA (albuterol) together. Combining the two medications can increase the risk of an irregular heart rhythm that can potentially become life-threatening. Individuals with congenital long QT syndrome, other cardiac diseases, conduction abnormalities, or electrolyte disturbances are at a significant risk for the side effect (Drugs.com, 2023).</p> <p>A moderate interaction can occur when administering haloperidol and Atrovent HFA (ipratropium) together. Combining the two medications can increase side effects such as</p>
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	<p>drowsiness, blurred vision, dry mouth, heat sensitivity, flushing, difficulty sweating, abdominal cramps, constipation, tachycardia, confusion, memory problems, and glaucoma (Drugs.com, 2023). Serious side effects are uncommon with inhaled or topical preparation because the medication is limited and absorbed via the bloodstream. However, they can occasionally occur, especially in older adults. It is highly advisable to avoid hazardous machinery until you know how the medication affects you.</p> <p>A moderate interaction can occur when administering haloperidol and miralax (polyethylene glycol 3350) together. Haloperidol can induce an irregular heart rhythm and potentially become life-threatening. The risk is increased if you have decreased blood levels of magnesium or potassium, which usually occur with bowel cleansing medications (Drugs.com, 2023).</p>
<p><b>Lifestyle interactions:</b>  (Daily tobacco use, alcohol, drugs, etc. )</p>	<p>The client currently drinks one glass of wine a day, and in social settings. Alcohol use should be avoided when taking this medication to avoid increased adverse effects.</p>
<p><b>Does any of the client's past medical history contradict the use of this medication?</b></p>	<p>Haloperidol can greatly affect the client's chronic kidney disease and Alzheimer's disease.</p> <p>Haloperidol is mostly metabolized by the liver, but a small percentage is excreted in the urine</p>

	<p>and has protein binding properties (Jones &amp; Bartlett, 2022). It can cause structural changes within the kidney and further damage the present abnormalities. Haloperidol should not be used to treat dementia-related psychosis in the elderly because it increases risk of death (Jones &amp; Bartlett, 2022).</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>Haloperidol is commonly used to treat nervous, emotional, and mental conditions such as schizophrenia and Tourette's disorder (Drugs.com, 2023). This medication is being utilized to address the client's current behavioral disturbances associated with the diagnosis of Alzheimer's disease, including the client's anger outbursts and becoming physically combative during provided care (Drugs.com, 2023). It should <b>not</b> be used to treat behavior issues in older clients who have dementia (Alzheimer's Society, 2021).</p>
<p><b>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</b></p>	<p>1. The emphasis on the increased mortality risk should be educated to the client and her caregiver. This medication should be used as a last resort for a client diagnosed with Alzheimer's disease (Alzheimer's Society, 2021). It should <b>not</b> be used to treat behavior issues in older clients who have dementia (Alzheimer's Society, 2021).</p> <p>2. Educate the client and her caregiver that alcohol consumption should be avoided with this</p>

	medication.
<b>How much would medication cost per month if paying out of pocket?</b>	Haloperidol injectable solutions cost \$19.66 per 10 mL (Drugs.com, 2023).  (The client was prescribed PRN, so the monthly cost is undetermined).
<b>Drug # 5</b>	<b>Drug Name (Generic):</b> ipratropium inhalation  <b>Drug Name (Trade):</b> Atrovent HFA  <b>Drug Class:</b> Anticholinergic bronchodilators
<b>How is the medication taken: (include dose, route, and frequency)</b>	2 inhalations four times a day
<b>Specific Directions not included above:</b>	Prior to first use of Atrovent HFA, prime the inhaler with 2 test sprays into the air, away from your face. Prime again whenever the inhaler has not been in use for longer than 3 days. You do not need to shake this inhaler before each use (Drugs.com, 2023).
<b>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</b>	A moderate interaction can occur when administering Atrovent HFA (ipratropium) and olanzapine (Zyprexa) together, resulting in the recommendation to avoid the use of these two medications together. Additive anticholinergic effects can occur when the use of topical and

	<p>inhaled anticholinergic agents occur together; this includes blurred vision, heat intolerance, fever, dry mouth, tachycardia, urinary retention, constipation, mydriasis, increased intraocular pressure, and glaucoma (onset/exacerbation) (Drugs.com, 2023).</p> <p>A moderate interaction can occur when administering Atrovent HFA (ipratropium) and haloperidol together. Combining the two medications can increase side effects such as drowsiness, blurred vision, dry mouth, heat sensitivity, flushing, difficulty sweating, abdominal cramps, constipation, tachycardia, confusion, memory problems, and glaucoma (Drugs.com, 2023). Serious side effects are uncommon with inhaled or topical preparation because the medication is limited and absorbed via the bloodstream. However, they can occasionally occur, especially in older adults. It is highly advisable to avoid hazardous machinery until you know how the medication affects you.</p>
<p><b>Lifestyle interactions:</b>  (Daily tobacco use, alcohol, drugs, etc. )</p>	<p>No lifestyle interactions are listed concerning this medication. The client should still be provided the necessary education for alcohol and tobacco use due to the client's history of being a previous smoker and currently drinking one glass of wine a day at lunch.</p>
<p><b>Does any of the client's past medical history</b></p>	<p>The client's past or recent medical history does not contradict the use of this medication.</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>	The client is currently taking this medication to assist in the treatment of her diagnosis of COPD. This medication is a bronchodilator that relaxes the airway muscles and increases airflow to the lungs. This medication is indicated as a maintenance (long-term) treatment.
<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. This medication is not a rescue medicine for bronchospasm attacks (Drugs.com, 2023). The client should only utilize fast-acting inhalation medications in the case of an attack.</li> <li>2. Advise the client to rinse their mouth after each inhaler treatment to minimize throat dryness and irritation (Jones &amp; Bartlett, 2022).</li> </ol>
<b>How much would medication cost per month if paying out of pocket?</b>	The Atrovent inhaler contains 200 metered actuations. The client needs 8 puffs a day which averages a use of 240 actuations a month. The client's prescription would require the utilization of two inhalers. A month's supply out of pocket cost is $\$492.10 \times 2 = \$984.20$
<b>Drug # 6</b>	<b>Drug Name (Generic):</b> albuterol sulfate

	<b>Drug Name (Trade):</b> ProAir HFA <b>Drug Class:</b> Adrenergic bronchodilators
<b>How is the medication taken: (include dose, route, and frequency)</b>	2 puffs via inhalation four times a day PRN
<b>Specific Directions not included above:</b>	Advise the client to wait at least 1 minute between inhalations, and shake ProAir HFA before each use (Jones & Bartlett, 2022).
<b>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</b>	A moderate interaction can occur when administering ProAir HFA (albuterol) and olanzapine (Zyprexa), resulting in the recommendation to seek medical assistance if the client experiences dizziness, lightheadedness, fainting, palpitation, irregular heart rhythm, shortness of breath, and syncope. Caution of use due to possible QT prolongation is advised in clients with a history of cardiac arrhythmias or a genetic history of long QT syndrome, and performing ECG monitoring may be necessary (Drugs.com, 2023).

A moderate interaction can occur when administering ProAir HFA (albuterol) and donepezil due to the vagotonic effect on the sinoatrial and atrioventricular nodes. Side effects include bradycardia, atrioventricular block, syncope, dizziness, lightheadedness, fainting, shortness of breath, chest pain, and slow or irregular heartbeat. Advising the client to be cautious is a priority due to possible QT prolongation (Drugs.com, 2023).

A moderate interaction can occur when administering ProAir HFA (albuterol) and haloperidol together. Combining the two medications can increase the risk of an irregular heart rhythm that can potentially become life-threatening. Individuals with congenital long QT syndrome, other cardiac diseases, conduction abnormalities, or electrolyte disturbances are at a significant risk for the side effect (Drugs.com, 2023).

Although it is a very uncommon adverse effect, ProAir HFA (albuterol) can produce an abnormal heart rhythm that could be dangerous and even fatal. Low blood levels of potassium or magnesium, which can happen from using laxative drugs or colon cleansing products excessively, enhance the risk. Polyethylene glycol 3350 (MiraLAX) should not be used for longer than what is advised on the product label or as directed by the physician. If, while taking these drugs, the patient has abrupt dizziness, lightheadedness, fainting, shortness of

	<p>breath, or palpitations in the heart, the patient should get medical help immediately (Drugs.com, 2023).</p>
<p><b>Lifestyle interactions:</b>  (Daily tobacco use, alcohol, drugs, etc. )</p>	<p>No lifestyle interactions are listed concerning this medication. The client should still be provided the necessary education for alcohol and tobacco use due to the client's history of being a previous smoker and currently drinking one glass of wine a day at lunch.</p>
<p><b>Does any of the client's past medical history contradict the use of this medication?</b></p>	<p>The client has a diagnosis of hyperlipidemia. This medication must be used cautiously in clients diagnosed with hypertension. Although the client was not diagnosed with hypertension, it is important to monitor her blood pressure and cholesterol because they frequently occur together. The client also has chronic kidney disease, and this medication is a beta2-adrenergic agonist excreted by the kidney (Drugs.com, 2023). Considering the client has kidney impairment, her risk for potential toxins is greater and renal function should be monitored.</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>The client is currently taking this medication to assist in the treatment of her diagnosis of COPD. This medication is a bronchodilator that relaxes the airway muscles and increases</p>

<b>history, please list potential indications for use of the medication in general)</b>	airflow to the lungs. This medication is indicated as a rescue inhaler for quick relief when the client is having difficulty breathing.
<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. Advise the client not to exceed prescribed dose or frequency without consulting their provider.</li> <li>2. Advise the client to rinse their mouth after each inhaler treatment to minimize throat dryness and irritation (Jones &amp; Bartlett, 2022)</li> </ol>
<b>How much would medication cost per month if paying out of pocket?</b>	<p>A ProAir inhaler costs \$87.00</p> <p>(The client was prescribed PRN, so the monthly cost is undetermined).</p>
<b>Drug # 7</b>	<p><b>Drug Name (Generic):</b> memantine</p> <p><b>Drug Name (Trade):</b> Namenda</p> <p><b>Drug Class:</b> Miscellaneous central nervous system agents</p>
<b>How is the medication taken: (include dose, route, and frequency)</b>	5 mg by mouth twice a day.

<b>Specific Directions not included above:</b>	Take the memantine dose at the same time each day. Take this medication precisely as prescribed by the physician. Take it as prescribed by the doctor; do not take it more frequently, in larger doses, or for longer than necessary. An insert providing patient information is included with this medication. Carefully read and adhere to the insert's directions. Should the patient have any questions, the patient can ask the doctor. This medication can be used with or without food. Put the extended-release pills in the mouth whole. Never eat, break, or crush them. The extended-release capsule can be opened, and the medication poured into a small amount of soft food, like applesauce, if the patient is unable to swallow the capsule. Mix this concoction thoroughly and ingest it without chewing (Drugs.com, 2023).
<b>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</b>	There were no interactions found with any of the other medications listed.
<b>Lifestyle interactions:</b>	The patient has a history of drinking socially, and currently drinks one glass of wine a day at lunch. She was also a previous smoker who quit ten years ago.

<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>	Given that Namenda's effects are amplified by the body's decreased rate of medication excretion, it is advised that individuals with chronic kidney disease use this medication with caution (Mayo Clinic, 2023).
<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>	The patient is presently using this drug to help treat her behavioral abnormalities associated with Alzheimer's disease. The indication for Namenda is to lessen the effects of brain chemicals that could be involved in the patient's Alzheimer's disease (Drugs.com, 2023). Memantine belongs to a group of drugs known as NMDA receptor antagonists. It functions by reducing aberrant brain activity. Memantine has the potential to either prevent or delay the loss of cognitive function in Alzheimer's patients (MedlinePlus, 2016).
<b>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</b>	<b>1.</b> Take this medication precisely as prescribed by the physician. Take it as prescribed by the doctor, and do not take it more frequently, in larger doses, or for longer than necessary. An insert providing patient information is included with this medication. Carefully read and adhere to the insert's directions. Should the patient have any questions, the patient should ask their doctor (Drugs.com, 2023).

	<p>2. Put the extended-release pills in the mouth whole. Never eat, break, or crush them.</p> <p>The extended-release capsule can be opened and the medication poured into a small amount of soft food, like applesauce, if the patient is unable to swallow the capsule. Mix this thoroughly and ingest it without chewing (Drugs.com, 2023).</p>
<p><b>How much would medication cost per month if paying out of pocket?</b></p>	<p>A 30 day supply of Namenda 5 mg cost is around \$150- \$300 monthly for 30 tablets with no insurance utilized (drugs.com, 2023).</p>
<p><b>Drug # 8</b></p>	<p><b>Drug Name (Generic):</b> ibuprofen</p> <p><b>Drug Name (Trade):</b> Advil</p> <p><b>Drug Class:</b> Nonsteroidal anti-inflammatory drugs</p>
<p><b>How is the medication taken: (include dose, route, and frequency)</b></p>	<p>400 mg by mouth every 6 hours PRN</p>
<p><b>Specific Directions not included above:</b></p>	<p>Unless the doctor instructs the patient otherwise, take this medication orally every 4 to 6 hours</p>

	<p>with a full glass of water (8 ounces/240 milliliters). For at least ten minutes after taking this medication, avoid lying down. When taking this drug, if the patient has stomach distress, they can take it with food, milk, or an antacid (Drugs.com, 2023).</p>
<p><b>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</b></p>	<p>Since donepezil increases cholinergic activity, it may raise stomach acid output. Therefore, patients using donepezil, in addition to a nonsteroidal anti-inflammatory drug such as Advil, may theoretically be at higher risk for gastrointestinal bleeding. When using this combination, caution is advised (Drugs.com, 2023).</p>
<p><b>Lifestyle interactions:</b> <b>(Daily tobacco use, alcohol, drugs, etc. )</b></p>	<p>The patient has a history of drinking socially, and currently drinks one glass of wine a day at lunch. She was also a previous smoker who quit ten years ago.</p>
<p><b>Does any of the client's past medical history contradict the use of this medication?</b></p>	<p>It is best to steer clear of NSAIDs, such as ibuprofen, for individuals with Alzheimer's disease. In order to reduce side effects, these drugs should, if necessary, be used for the shortest amount of time and at the lowest effective dose. NSAIDs can exacerbate heart failure, lower blood pressure, damage the kidneys, and raise the risk of bleeding. They can also negatively impact a patient's mood and general well-being as a result of the side effects that can happen (Memory &amp; Aging Center, 2023). When taken as prescribed, NSAIDs, such as ibuprofen, are generally safe for infrequent usage; however, they should be avoided if the</p>

	<p>patient has a known reduced kidney function. Individuals with kidney disease should only use these drugs under a physician's supervision. NSAIDs may raise the risk of renal impairment that worsens over time or possibly abrupt renal failure (National Kidney Foundation, 2023).</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>In order to help address the discomfort associated with her medical conditions, the client is currently using this medicine. For worsening pain, ibuprofen is administered PRN.</p> <p>Nonsteroidal anti-inflammatory drugs, or NSAIDs, such as ibuprofen, are prescribed to treat mild to moderate pain and to reduce the symptoms of arthritis, including stiffness, inflammation, and joint discomfort. Ibuprofen can also be used to alleviate menstruation cramps and fever (Mayo Clinic, 2023).</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>1. The patient should steer clear of over-the-counter medications due to similar substances being found in many of these drugs. Overdosage could be an adverse effect (MedlinePlus, 2023).</li> <li>2. The patient could experience sleepiness, dizziness, vertigo, sleeplessness, nausea, GI distress, dyspepsia, diarrhea, or constipation. The patient should take the medication with food. The patient should know to use caution when it comes to driving or using dangerous</li> </ol>

	machinery (MedlinePlus, 2023).
<b>How much would medication cost per month if paying out of pocket?</b>	A 30 day supply of Ibuprofen 400 mg cost is around \$12.42 monthly for 30 tablets with no insurance utilized (Drugs.com, 2023). (The client was prescribed PRN, so the monthly cost is undetermined).
<b>Drug # 9</b>	<p><b>Drug Name (Generic):</b> atorvastatin</p> <p><b>Drug Name (Trade):</b> Lipitor</p> <p><b>Drug Class:</b> Statins</p>
<b>How is the medication taken: (include dose, route, and frequency)</b>	30 mg by mouth once daily
<b>Specific Directions not included above:</b>	Only take this medication as prescribed by a physician. Don't use it for longer than the doctor prescribed, don't use it more frequently, and don't use it in excess. The patient's diet may be modified by the doctor to include less fat, sugar, and cholesterol in addition to this medication. Observe the doctor's instructions on any special diet closely (Drugs.com, 2023).
<b>Does this medication interact with any other medication(s) on this list? (see rubric for further</b>	There were no interactions found with any of the other medications listed.

<b>instruction)</b>	
<b>Lifestyle interactions:</b>  <b>(Daily tobacco use, alcohol, drugs, etc. )</b>	The patient has a history of drinking socially, and currently drinks one glass of wine a day at lunch. She was also a previous smoker who quit ten years ago.
<b>Does any of the client's past medical history contradict the use of this medication?</b>	The client's past or recent medical history does not contradict the use of this medication.
<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>	In order to address the patient's hyperlipidemia (high cholesterol), the patient was prescribed Lipitor. Lipitor is a member of the HMG-CoA reductase inhibitor (statin) drug class. It functions by reducing the amount of cholesterol that the body produces, which lowers the risk of cholesterol accumulating on artery walls and obstructing blood flow to the heart, brain, and other organs (Drugs.com, 2023).
<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. While using Lipitor, report any unusual bleeding or bruises, exhaustion, yellowing of the skin or eyes, or weakness in the muscles to the provider immediately (NurseTogether, 2022).</li> <li>2. Inform the patient that eating is not necessary when taking atorvastatin. Chewing, crushing, dissolving, or dividing it is not advised (NurseTogether, 2022).</li> </ol>
<b>How much would medication cost per month if</b>	A 30 day supply of Lipitor 30 mg cost range is \$19.53 – \$20.71 monthly for 30 tablets with no

paying out of pocket?	insurance utilized.
<b>Drug # 10</b>	<p><b>Drug Name (Generic):</b> polyethylene glycol 3350</p> <p><b>Drug Name (Trade):</b> MiraLAX</p> <p><b>Drug Class:</b> Laxatives</p>
<b>How is the medication taken: (include dose, route, and frequency)</b>	17 gm mixed in 8 ounces of juice or water by mouth once a day
<b>Specific Directions not included above:</b>	<p>Use the medication cap on the bottle to measure your dosage when using MiraLAX powder. Dosage markings should be visible inside this cap. 4 to 8 ounces of a cold or hot liquid, such as water, juice, soda, coffee, or tea, should be mixed with the powder. Mix this well and serve immediately. Save nothing to be used later (National Institutes of Health, 2023).</p>
<b>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</b>	<p>Although it is a very uncommon adverse effect, haloperidol can produce an abnormal heart rhythm that could be dangerous and even fatal. Low blood levels of potassium or magnesium, which can happen from using laxative drugs or colon cleansing products excessively, enhance the risk. Polyethylene glycol 3350 (MiraLAX) should not be used for longer than what is advised on the product label or as directed by the physician. If, while taking these drugs, the</p>

	<p>patient has abrupt dizziness, lightheadedness, fainting, shortness of breath, or palpitations in the heart, the patient should get medical help right away (Drugs.com, 2023).</p> <p>Albuterol is associated with a very uncommon adverse effect of arrhythmia, although it can be extremely dangerous and even fatal. Low blood levels of potassium or magnesium, which can happen from using laxative drugs or colon cleansing products excessively, enhance the risk. Polyethylene glycol 3350 should not be used for longer than what is advised on the product label or as directed by the physician. If, while taking these drugs, the patient has abrupt dizziness, lightheadedness, fainting, shortness of breath, or palpitations in the heart, the patient should get medical help right away (Drugs.com, 2023).</p>
<p><b>Lifestyle interactions:</b> <b>(Daily tobacco use, alcohol, drugs, etc. )</b></p>	<p>The patient has a history of drinking socially, and currently drinks one glass of wine a day at lunch. She was also a previous smoker who quit ten years ago.</p>
<p><b>Does any of the client’s past medical history contradict the use of this medication?</b></p>	<p>The client’s past or recent medical history does not contradict the use of this medication.</p>
<p><b>What is the indication for use of this medication</b></p>	<p>Since the patient experiences hyperlipidemia and chronic kidney disease, constipation can</p>

<b>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>	occur as an adverse condition. One treatment for occasional constipation is MiraLAX. It functions by retaining water in the stool, which softens the stool and promotes more bowel motions. It's referred to as an osmotic laxative (Everyday Health, 2020).
<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. If a patient has an intestinal blockage or bowel obstruction, MiraLAX should not be administered. The patient may have harmful or maybe fatal adverse effects from MiraLAX if they have any of these disorders (Drugs.com, 2023).</li><li>2. If a patient has ulcerative colitis, irritable bowel syndrome, nausea or vomiting with severe stomach pain, or a sudden change in bowel habits that has lasted for two weeks or longer, they should notify their doctor before starting MiraLAX (Drugs.com, 2023).</li></ol>
<b>How much would medication cost per month if paying out of pocket?</b>	A 30 day supply of MiraLAX 17 gm cost is around \$40 monthly for a bottle with no insurance utilized.

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

Although the patient has a primary caregiver, a potential difficulty may pose with medication administration, given the client's current mental health status. The client is diagnosed with Alzheimer's and has been demonstrating combative behaviors. The client might have difficulty maintaining proper positioning or instructions to take her medication. The client is also exhibiting communicative difficulties. As a result, it can be challenging for the caregiver to decide when to administer certain PRN medications. The client was prescribed an Atrovent HFA inhaler (daily maintenance) medication that costs \$984.20 monthly without insurance utilization. (The client does have prescription insurance, but we do not know how much that is deducted from the out-of-pocket expenses). The costs for that medication alone can significantly affect the client's regimen compliance.

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

The medication regimen that is ordered for this client allows the client to take six out of the ten medications once a day which makes taking over half of the daily regimen at the same time for convenience reasons a possibility for this client. One medication is prescribed for twice a day and one of the two doses could be taken with the other six medications during their set time of

administration. One medication is prescribed four times daily and two of the four doses could be taken with the other two times medications are scheduled to be administered. The last three medications within the regimen are all PRN medications and coincide with the other seven medications as far as scheduling times that allow convenience for the client. The client's Alzheimer's diagnosis could create conflict with the client's ability to remember to take her medications if they are spread across the day at multiple times of administration. Strategically planning the times of day each medication is administered for each dose would allow the client to maintain a repetitive schedule and allow her to only take medications no more than four times a day for scheduled 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)**

One strategy that could be taken with this client is to get to know the client's learning habits. Teaching is reinforced when it is delivered in several ways. Asking the client about their preferred way of learning might be beneficial due to different clients having different learning preferences. The greatest strategy is usually one that is hands-on, where the patient gets to conduct a treatment under instruction. This could help the client and/or the care given understand how to administer or give the medication. By educating the client and the caregiver about the medications that are being administered it can help them understand why they are taking/giving the medication.

A couple of suggestions that could be made to the prescriber about the interactions between the medications would be to reduce the medication regimen to the priority medications. By reducing the regimen to the priority medications it could cut down on the potential interactions between medications which would make the medication administration easier on the caregiver. For example, since the client is already on a mechanical soft with thin liquids diet related to the client's difficulty chewing, the MiraLAX and/or the Colace might have the potential to be discontinued after monitoring the client.

Keeping a comprehensive inventory of the medications can also make managing them simpler. The medication's name, the physician who prescribed it, the dosage, and the frequency of administration should all be listed for the client. By storing the list securely at home where the client knows where it is, and printing a copy to carry in a wallet or purse can help the client remember the certain medication that they are taking.

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

The client's monthly cost for all medications combined without utilizing insurance for generic prescriptions would be a total of \$1357.07 - \$1591.95. The client's monthly cost for all medications combined without utilizing insurance for brand name prescriptions would be a total of \$2656.07 (Drugs.com, 2023).

Both of these totals are subject to change with the consideration of PRN medications being utilized more within a thirty-day time frame and with consideration of inflation affecting the cost of medications. This information was obtained from drugs.com and

provided a cost range for generic medications and a total monthly cost for brand-name medications based on collected information provided from multiple sources that contribute to the website.

As nursing students, we are required to learn multiple medications along with the specific adverse reactions, mechanisms of action, indications for use, drug interactions, nursing considerations, patient teaching, drug class, and information needed to administer the medication safely. We are not often provided the opportunity to research and distribute the cost-effectiveness of the medications we are required to distribute to our clients. This process of information gathering is interesting and humbling. We now have an understanding of how clients are affected by the prescriptions that they receive, how it affects them financially, and how utilizing insurance can be detrimental to how it affects the client financially.

**Reflective Statement of Experience:**

The process of researching each medication while analyzing the client's scenario to create a proper process of elimination for medication and medical diagnosis that may or may not interfere with the client's ability to maintain their proper baseline of health was a lengthy but rewarding process. Providing the proper care for each client is a nurse's primary goal to assist each of our clients through their healthcare journey, either to maintain their current baseline or to assist them in reaching their desired baseline. Because of the research process used during this project, I have a different outlook and understanding of how each client is affected differently by their health history, current disease process, and medication regimen. The cost portion of the medications without insurance was eye-

opening and, to be honest, very discouraging when you think about how many Americans face this financial struggle while attempting to choose medications that allow them to live healthy lives over the basic needs of living for themselves or their families to survive because of financial hardships. I am hopeful that this project will allow me to remember what I have learned through this project and to consider it as I actively assist my clients once I become a registered nurse. (Jessica Tillman)

The action of researching the client's scenario and the medicine regimen the client was on was very informative. A nurse's objectives are developed with an emphasis on issue prevention, solution, and recovery. Both short- and long-term goals are possible. In an acute care context, the majority of goals are short-term because the nurse's time is primarily focused on the client's urgent requirements and I think that this was the main goal of this project. This project gave me a new perspective on caring for elderly clients who are affected by various illness and health concerns. The interactions of the certain medications was surprising to me. An interaction between drugs can change how they function or have unintended negative effects which can worsen the illness or create a completely new issue. This project has taught me new things including, drug interactions, the cost of certain medication, lifestyle interaction that some people don't think about, and so much more. This project will help me in the future as a nurse based on how this scenario made me think and learn about new things. (Whisper Brown)

This project highlights several factors that contribute to the importance of polypharmacy and why it requires close collaboration among the healthcare team, client, and caregiver. Polypharmacy allows a client to be treated for various health issues simultaneously and must be appropriately monitored to minimize risks. Our client was being administered several medications that were contraindicated with other drugs and her medical history. As a nursing student, this demonstrates how one must be diligent with medication management and advocacy for their client. Another crucial aspect was the client's Alzheimer's diagnosis. It is challenging for the client and their caregiver to maintain the client's complex regimen.

Furthermore, this indicates why the healthcare team should offer insight and solutions specific to the client's situation and establish a supportive environment. Lastly, this project provided evidence on how the high cost of medication directly impacts a client's health. Many individuals discontinue use or ration their medication strictly because of costs. This can lead to worsening conditions and a reduced quality of life for the client. As future nurses, we must address these challenges to promote more affordable healthcare and provide clients with additional treatment resources (assistance programs, government-funded initiatives, etc.). (Vanessa Jackson)

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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>	All key components were addressed within the paper.	The student did list some of the medications that required specific directions, however some of the medications included specific directions that were not addressed and/or were inaccurate. (For each medication	Student failed to answer the questions and/or the answers were inaccurate. (For each medication this question is	___/10

<p>(before bed, before breakfast, 30 minutes before meals, etc..)</p>		<p>this question if worth one point)</p>	<p>worth one point)</p>	
<p><b>Criteria</b></p>	<p><b>Excellent</b> <b>0 points</b></p>	<p><b>Acceptable</b> <b>16-19</b></p>	<p><b>Unacceptable</b> <b>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</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>

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

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 medication?</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 were inaccurate. (For each medication this question is worth one point)	Student failed to answer question or Student provided answers to the question(s), but failed to answer all the questions and/or the answers provided were inaccurate. (For each medication this question is worth one point)	___/10
Criteria	Excellent 10 points	Acceptable 8-9 points	Unacceptable 0-7 points	Points Earned
<ul style="list-style-type: none"> <li>What is the indication for use of this medication based on the client's past medical history? (If unable to determine an</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	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	___/10

<p>indication based on past medical history, please list potential indications for use of the medication in general)</p>		<p>point)</p>	<p>question is worth one point)</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 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 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</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>

medication)				
<b>Criteria</b>	<b>Excellent 10 points</b>	<b>Acceptable 8-9 points</b>	<b>Unacceptable 0-7 points</b>	<b>Points Earned</b>
<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 regimen?</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>	Student had knowledge on why a patient would have difficulty with medication regimen	The student indicated some potential reasons that the client may have difficulty, however the student failed to indicate a reason OR an appropriate reason for some of the medications (This question is worth one point for each medication)	Student failed to answer the question OR the student indicated some potential reasons that the client may have difficulty, however the student failed to indicate a reason OR an appropriate reason for some of the medications (This question is worth one point for each medication)	___/10
<b>Criteria</b>	<b>Excellent 10 points</b>	<b>Acceptable 8-9 points</b>	<b>Unacceptable 0-7 points</b>	<b>Points Earned</b>
Is there anything about this medication regimen/ scenario that might assist the client in maintaining the medication regimen as	Student had knowledge on medication compliance	The student answered the question appropriately for some of the medications but failed to indicate all of the factors that are present that	Student failed to answer the question OR The student answered the question appropriately for some of the medications but failed to	___/10

<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</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 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</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>

medications?				
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"> <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> <li>● The student provided a rubric attached for grading (3 points)</li> <li>● The student included the provided client</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>

<p>scenario on page two of the document (2 points)</p> <ul style="list-style-type: none"> <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><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 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</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>and provide evidence behind your presentation.</p>				
Criteria	Excellent 10 points	Acceptable 8-9 points	Unacceptable 0-7 points	Points Earned
<ul style="list-style-type: none"> <li>● Reflective statement of experience should include the following:</li> <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>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>
<p><b>Total Points</b></p>				<p>___/200</p>

