

Polypharmacy Project

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N322 Introduction to Pharmacology

Lakeview College of Nursing

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Background: Nancy is 66-year-old female disabled 6 years ago with advanced chronic lung disease. She was employed most of her life as a factory worker dying and cutting leather for a footwear company. She also worked the last 10 years as a housekeeper in a small hospital. She wears CPAP at night with 3LPM of Oxygen and 2-4 LPM of oxygen while awake with humidity. She is cared for by her spouse and she uses a cane as needed as well as bifocal glasses. She and her spouse have two adult children who visit often and as needed with each living an hour away from the couple.

Height: 5'8" **Weight:** 218 pounds

Allergies: Penicillin

Insurance: Medicare and Supplementary Blue Cross Blue Shield

Diet: 2000 calorie ADA Cardiac low Na+ no caffeine

Medical Diagnosis: End-stage Interstitial Pneumonitis, Atrial Fibrillation, Insulin Dependent Diabetes Mellitus Type II.

Social History: She is married x 45 years to Bob who smoked for 25 years in the home. Nancy "never had the lungs for smoking" but does enjoy 2-3 mixed drinks several nights a week. They attend church regularly and are for the most part at peace with her terminal diagnosis.

Current Medications Include the Following:

Humalog Insulin Pen for sliding scale coverage.

Morphine sulfate Instant release 5mg po every 6 hours PRN

Morphine sulfate Extended release 30mg every 12 hours

Glucophage 500mg 2 tablets po BID

Prednisone 40mg po BID

Coumadin 7.5mg every Monday Wednesday Friday and 5mg every other day of the week.

POLYPHARMACY

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Digoxin 0.25mg every am hold if pulse less than 60BPM

Guaifenesin 600mg 2 tablets every 12 hours

Cyclobenzaprine 10mg po TID and 20mg every hs

Xanax 0.5mg po every 6 hours PRN

Drug #1	<p>Drug Name (Generic): morphine sulfate</p> <p>Drug Name (Trade): MorphaBond ER</p> <p>Drug Class: Opioid (Drugs.com, 2024)</p>
How is the medication taken: (include dose, route, and frequency)	The patient is prescribed 30 mg every twelve hours. Extended-release tablets are to be taken by mouth. The patient will take two tablets a day.
Specific Directions not included above:	Medication should be taken with food or milk to minimize adverse effects; extended-release tablets are not to be chewed or crushed; this form of Morphine is not interchangeable (Jones & Bartlett, 2022).
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	<p>This medication has an increased risk of serotonin syndrome if taken with Cyclobenzaprine (Jones & Bartlett, 2022).</p> <p>Morphine ER and Morphine Sulfate used with Glucophage may, according to Drugs.com (2024), increase the effect of Glucophage, leading to lactic acidosis, which is life-threatening.</p> <p>Using Xanax with Morphine can lead to serious side effects, including respiratory distress, coma, or death.</p>
Lifestyle interactions:	Alcohol use is contraindicated with this medication as it can cause abnormally high blood levels of Morphine, which can cause an overdose, CNS and respiratory depression, and

(Daily tobacco use, alcohol, drugs, etc.)	hypotension (Jones & Bartlett, 2022).
Does any of the client’s past medical history contradict the use of this medication?	<p>The patient’s chronic lung disease is cause for concern while taking this medication. An adverse reaction of Morphine is respiratory distress, which is common with lung infections.</p> <p>The patient may get potentially fatal side effects such as respiratory failure with her lung infection (Jones & Bartlett, 2022).</p>
What is the indication for use of this medication based on the client’s past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)	To relieve pain severe enough to require opioid treatment. The patient is disabled and diagnosed with End-Stage Interstitial Pneumonitis. According to the Cleveland Clinic (2022), interstitial lung disease can cause chest discomfort, and the damage is extensive and irreversible.
What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	<ol style="list-style-type: none"> 1. Do not break, chew, or crush tablets to avoid possible toxicity (Jones & Bartlett, 2022). 2. According to the patient’s history of alcohol use, please be aware that drinking alcohol with this medication can cause respiratory depression and hypotension (Jones & Bartlett, 2022).
How much would medication cost per month if paying out of pocket?	\$188.03-Walgreens with coupon (WebMD, 2024)

Drug #2	Drug Name (Generic): metformin Drug Name (Trade): Glucophage Drug Class: Non-sulfonylureas (Drugs.com, 2024)
How is the medication taken: (include dose, route, and frequency)	The patient is prescribed two 500mg tablets to be taken by mouth two times a day.
Specific Directions not included above:	“Glucophage is used together with diet and exercise to improve blood sugar control (Drugs.com, 2024).”
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	<p>Glucophage and Humalog insulin can cause low blood sugar (Drugs.com, 2024).</p> <p>Morphine ER and Morphine Sulfate used with Glucophage may, according to Drugs.com (2024), increase the effect of Glucophage, leading to lactic acidosis, which is life-threatening (Drugs.com, 2024).</p> <p>Digoxin used with Glucophage may, according to Drugs.com (2024), increase the effect of Glucophage, leading to lactic acidosis, which is life-threatening, including symptoms such as weakness, bradycardia, and fainting (Drugs.com, 2024).</p> <p>Prednisone use with Glucophage may increase blood glucose, which “interferes with blood glucose control and effectiveness of Metformin” (Drugs.com, 2024).</p> <p>Warfarin with Glucophage may lower Warfarin’s effects on the body’s clot-slowng and</p>

	<p>prevention process (Drugs.com, 2024).</p> <p>Humalog insulin and Glucophage can cause low blood sugar (Drugs.com, 2024).</p> <p>Morphine Sulfate used with Glucophage may increase the effect of Glucophage, leading to lactic acidosis, which is life-threatening (Drugs.com, 2024).</p>
<p>Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)</p>	<p>According to Drugs.com (2024), a patient should avoid drinking alcohol with the medication due to the combination of lowering blood sugar and increasing the patient’s risk of lactic acidosis.</p>
<p>Does any of the client’s past medical history contradict the use of this medication?</p>	<p>Nancy has no pertinent medical history that would 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>Nancy has a medical diagnosis of Insulin Dependent Diabetes Mellitus Type II. Glucophage is used with insulin, which Nancy prescribes when “treatment is needed to increase insulin sensitivity in insulin-resistant conditions such as diabetes” (Herman et al., 2022, p. 1).</p>
<p>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</p>	<p>1. Watch for low blood sugar. Low blood sugar, known as hypoglycemia, has symptoms to watch out for, including: “headache, dizziness, drowsiness, nervousness, confusion, tremors,</p>

	<p>nausea, hunger, weakness, perspiration, palpitations, and rapid heartbeat (Drugs.com, 2024).</p> <p>2. With frequent X-rays likely due to End-Stage Interstitial Pneumonitis and dyes being injected, please consult an ordering physician because you may need to stop Glucophage temporarily. Yale School of Medicine (2024) states, "Contrast dye can increase chances of metformin causing lactic acidosis in patients with decreased renal function."</p>
How much would medication cost per month if paying out of pocket?	\$3.00-Meijer Pharmacy with coupon (GoodRx, 2024)
Drug #3	<p>Drug Name (Generic): warfarin sodium</p> <p>Drug Name (Trade): Coumadin</p> <p>Drug Class: Coumarin derivative & Anticoagulant (Jones & Bartlett, 2022)</p>
How is the medication taken: (include dose, route, and frequency)	The patient is prescribed 7.5mg by mouth every Monday Wednesday and Friday, and 5mg by mouth every other day of the week.
Specific Directions not included above:	<p>Avoid foods high in Vitamin K (Kaplan, 2021).</p> <p>Do Not interchange brands; different potencies will not be equivalent (Kaplan, 2021).</p> <p>Not to be taken with herbs before provider approval (Kaplan, 2021).</p> <p>Wear a medical ID tag indicating the use of the drug (Kaplan, 2021).</p>

<p>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</p>	<p>Warfarin with Glucophage may lower Warfarin's effects on the body's clot-slowing and prevention process (Drugs.com, 2024)</p>
<p>Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)</p>	<p>Nancy has 2-3 mixed drinks during the week. The consumption of alcohol while taking Warfarin Sodium can cause an increased risk of hypoprothrombinemia, which can cause bleeding to last longer (Jones & Bartlett, 2022).</p> <p>Nancy is on a cardiac diet, which leafy greens are great for, but foods high in Vitamin K should be avoided with Warfarin (Jones & Bartlett, 2022).</p>
<p>Does any of the client's past medical history contradict the use of this medication?</p>	<p>Nancy has no pertinent medical history that would contradict the use of Warfarin Sodium.</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>Nancy has been diagnosed with Atrial Fibrillation. Warfarin Sodium is a therapeutic medication that prevents and treats thromboembolic complications associated with atrial fibrillation (Jones & Bartlett, 2022).</p>
<p>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</p>	<ol style="list-style-type: none"> 1. Do not drink alcohol while taking this medication (Jones & Bartlett, 2022). 2. Restricted mobility and the use of canes and bifocals raise safety concerns. You can reduce

	<p>the chance of falls by arranging furniture differently, taking up carpets, and adding rest areas.</p> <p>Call your doctor immediately if a fall or other accident occurs, which could result in bleeding (Jones & Bartlett, 2022).</p>
How much would medication cost per month if paying out of pocket?	<p>\$4.00 for a two-month supply of 7.5mg-Walmart (GoodRx, 2024)</p> <p>\$4.00 for a two-month supply of 5mg-Walmart (GoodRx, 2024)</p>
Drug #4	<p>Drug Name (Generic): cyclobenzaprine hydrochloride</p> <p>Drug Name (Trade): Amrix</p> <p>Drug Class: Tricyclic antidepressant-like agent (TCA) & Skeletal muscle relaxant</p> <p>(Jones & Bartlett, 2022)</p>
How is the medication taken: (include dose, route, and frequency)	<p>The patient is prescribed 10 mg tablet by mouth three times a day and a 20 mg tablet by mouth every night.</p>
Specific Directions not included above:	<p>Amrix is an extended-release capsule that should not be chewed, crushed, or opened (Jones & Bartlett, 2022)</p>
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	<p>This medication has an increased risk of serotonin syndrome if taken with Morphine Sulfate (Jones & Bartlett, 2022).</p>
Lifestyle interactions:	<p>Nancy's alcohol usage can add to central nervous system depression (Jones & Bartlett, 2022)</p>

(Daily tobacco use, alcohol, drugs, etc.)	
Does any of the client’s past medical history contradict the use of this medication?	Nancy has been diagnosed with Atrial Fibrillation. According to Cedars Sinai (2024), atrial fibrillation is the most common type of arrhythmia. Arrhythmias are contraindicated when taking Cyclobenzaprine (Jones & Bartlett, 2022).
What is the indication for use of this medication based on the client’s past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)	Nancy became disabled six years ago, and her mobility is challenged, so she uses a walker to assist in ambulation. Cyclobenzaprine is prescribed to relieve muscle spasms associated with musculoskeletal conditions (Jones & Bartlett, 2022).
What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	<ol style="list-style-type: none"> 1. Do not drink alcohol with this medication due to its CNS depression effects (Jones & Bartlett, 2022). 2. Please always ask for assistance with walking if you experience dizziness or weakness (Jones & Bartlett, 2022).
How much would medication cost per month if paying out of pocket?	\$4.08 Meijer Pharmacy with coupon (GoodRx, 2024) \$2.89 Meijer Pharmacy with coupon (GoodRx, 2024)
Drug # 5	Drug Name (Generic): guaifenesin Drug Name (Trade): Robitussin

	Drug Class: Expectorant (Davis's Drug Guide.com, 2024)
How is the medication taken: (include dose, route, and frequency)	The patient is prescribed a 600 mg tablet orally every twelve hours.
Specific Directions not included above:	<p>Drink extra fluids to help loosen congestion and lubricate your throat (Drugs.com, 2024).</p> <p>This medication may impair thinking and reaction time (Drugs.com, 2024).</p> <p>Be careful when performing tasks that require alertness or caution (Drugs.com, 2024).</p>
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	Guaifenesin taken with Xanax may increase side effects such as dizziness, confusion, concentration interruption, and drowsiness if taken together (Drugs.com, 2024).
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	Alcohol can make you feel exaggerated symptoms of dizziness or drowsiness, so avoid alcohol while taking this medication (WebMD.com, 2024).
Does any of the client's past medical history contradict the use of this medication?	The client's history of diabetes is of concern while taking this medication due to it possibly containing sugar, alcohol, or aspartame (WebMD.com, 2024).
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	The patient, Nancy, has a chronic lung disease. Guaifenesin helps thin and loosen mucus in the lungs, making it easier to cough up mucus (WebMD, 2024).

medication in general)	
What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	<p>1. Monitor your blood sugar while taking this medication (Jones & Bartlett, 2022).</p> <p>2. Do not drink alcohol while taking this medication (Jones & Bartlett, 2022).</p>
How much would medication cost per month if paying out of pocket?	\$14.84-Walgreens (GoodRx, 2024)
Drug # 6	<p>Drug Name (Generic): alprazolam</p> <p>Drug Name (Trade): Xanax</p> <p>Drug Class: Benzodiazepine, Anxiolytic & Antipanic (Jones & Bartlett, 2023)</p>
How is the medication taken: (include dose, route, and frequency)	0.5 mg by mouth every 6 hours as needed.
Specific Directions not included above:	<p>Store at room temperature away from moisture, heat, and light (Drugs.com, 2024).</p> <p>Does not require food or drink for administration.</p> <p>Place the tablet directly on the tongue to dissolve (Jones & Bartlett, 2023).</p>
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	<p>Using Xanax with morphine can lead to serious side effects including respiratory distress, coma or death.</p> <p>Both medications cause central nervous system depression (Drugs.com, 2024).</p>

	<p>Xanax taken with Guaifenesin may increase side effects such as dizziness, confusion, concentration interruption and drowsiness if taken together (Drugs.com, 2024).</p> <p>Alprazolam used with Digoxin may increase blood levels and effects of digoxin (Drugs.com, 2024).</p>
<p>Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)</p>	<p>Avoid alcohol use as it can enhance central nervous system side effects and increase risk of significant sedation (Jones & Bartlett, 2023).</p>
<p>Does any of the client's past medical history contradict the use of this medication?</p>	<p>The patient has interstitial pneumonitis, chronic lung disease, takes an opioid, and drinks alcohol which all contraindicate the use of this medicine.</p> <p>Patients with impaired respiratory function may experience severe pulmonary dysfunction while taking this medication (Jones & Bartlett, 2023).</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>The potential indication for the use of this medication may correlate with the patient's atrial fibrillation and shortness of breath.</p> <p>This medication may assist in calming anxiety with increased heart rate and respiration.</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. To avoid drinking alcohol while taking this medication (Jones & Bartlett, 2023). 2. To warn not to stop abruptly if taking regularly due to the risk of withdrawal symptoms

	(Jones & Bartlett, 2023).
How much would medication cost per month if paying out of pocket?	\$16.65 per month supply of 0.5 mg (120 tablets) with coupon – Walmart (GoodRx, 2024)
Drug # 7	Drug Name (Generic): digoxin Drug Name (Trade): Lanoxin Drug Class: Cardiac Glycoside, Antiarrhythmic & Cardiotonic (Jones & Bartlett, 2023)
How is the medication taken: (include dose, route, and frequency)	0.25 mg by mouth every morning.
Specific Directions not included above:	Take it around the same time every morning (Drugs.com, 2024).
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	<p>Digoxin used with Glucophage may increase the effect of Glucophage leading to life-threatening lactic acidosis. (Drugs.com, 2024).</p> <p>Symptoms may include weakness, bradycardia, and fainting (Drugs.com, 2024).</p> <p>Digoxin used with alprazolam may increase blood levels and effects of digoxin (Drugs.com, 2024).</p> <p>Digoxin used with Prednisone “may cause irregular heartbeats, increased blood pressure, light "halos" around objects, green or yellow vision, fatigue, or fluid retention” (Drugs.com, 2024).</p>
Lifestyle interactions:	Should avoid alcohol use while taking medication.

(Daily tobacco use, alcohol, drugs, etc.)	Should avoid high-fiber foods (Drugs.com, 2024).
Does any of the client's past medical history contradict the use of this medication?	The patient's diagnoses of insulin-dependent diabetes mellitus type II are affected by the drug interaction of digoxin and alprazolam increasing blood levels (Drugs.com, 2024).
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)	The patient takes this medication to help control the ventricular response rate in chronic atrial fibrillation with rapid/gradual digitalization (Jones & Bartlett, 2023).
What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	<ol style="list-style-type: none"> 1. Do not take digoxin if you have ventricular fibrillation (Jones & Bartlett, 2023). 2. Educate on the presence of digoxin toxicity (Jones & Bartlett, 2023).
How much would medication cost per month if paying out of pocket?	\$9.00 per month supply of 0.25 mg (30 tablets) – Walmart (GoodRx, 2024)
Drug # 8	Drug Name (Generic): prednisone Drug Name (Trade): Rayos Drug Class: Glucocorticoid & Immunosuppressant (Jones & Bartlett, 2023).
How is the medication taken: (include dose, route, and frequency)	40 mg by mouth twice a day.
Specific Directions not included above:	Take medication with food or milk to reduce potential GI upset (Jones & Bartlett, 2023).

<p>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</p>	<p>Prednisone use with Glucophage may increase blood glucose which “interferes with blood glucose control and effectiveness of Metformin” (Drugs.com, 2024).</p> <p>Prednisone use with Digoxin “may cause irregular heartbeats, increased blood pressure, light "halos" around objects, green or yellow vision, fatigue, or fluid retention” (Drugs.com, 2024).</p> <p>Prednisone with Humalog insulin may disrupt blood glucose control and decrease effectiveness (Drugs.com, 2024).</p>
<p>Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)</p>	<p>Should avoid drinking alcohol while taking this medication (Drugs.com, 2024).</p>
<p>Does any of the client’s past medical history contradict the use of this medication?</p>	<p>Nothing in the patient’s medical history contradicts the use of Prednisone.</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>This medication is likely taken for end-stage interstitial pneumonitis, due to the ability of the medication to provide relief to the inflammation in the lung tissue (Mayo Clinic, n.d.).</p>
<p>What would you teach the client about taking this</p>	<p>1. Educate the patient on avoidance of alcohol use while on medication treatment due to</p>

medication? You must prioritize 2 (see rubric)	increased risk of GI bleeding and ulcers (Jones & Bartlett, 2023). 2. Educate to try and avoid people with contagious infections due to immunosuppressive effects (Jones & Bartlett, 2023).
How much would medication cost per month if paying out of pocket?	\$8.80 per month supply of 20 mg (60 tablets) with coupon – CVS Pharmacy (GoodRx, 2024)
Drug # 9	Drug Name (Generic): insulin lispro Drug Name (Trade): Humalog Drug Class: Insulin
How is the medication taken: (include dose, route, and frequency)	Administered by insulin pen subcutaneously for sliding scale coverage. <u>Blood Glucose level</u> 60-124 = No coverage 125-150 = 2 units 151-200 = 4 units 201-250 = 6 units 251-300 = 8 units 301-350 = 10 units 351-400 = 12 units
Specific Directions not included above:	Should be given within 15 minutes before or right after a meal (Drugs.com, 2024)

	<p>Use a needle only once before discarding it in a “sharps” container.</p> <p>DO NOT share with another person.</p>
<p>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</p>	<p>Using Humalog insulin and Glucophage together can cause low blood sugar (Drugs.com, 2024).</p> <p>Humalog insulin with Prednisone may disrupt blood glucose control and decrease effectiveness (Drugs.com, 2024).</p>
<p>Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)</p>	<p>Should not drink an excessive amount of alcohol due to its effect on glucose levels. May cause hypo/hyperglycemia depending on the amount drank (Drugs.com, 2024).</p>
<p>Does any of the client’s past medical history contradict the use of this medication?</p>	<p>No past medical history contradicts the patient’s 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>The indication for use of this medication is the patient’s insulin-dependent diabetes mellitus type II. Humalog insulin keeps the patient’s glucose level in a normal range and under control.</p>
<p>What would you teach the client about taking this medication? You must prioritize 2 (see rubric)</p>	<ol style="list-style-type: none"> 1. DO NOT take if glucose level is <60, or within a normal range of 60-124 2. Limit to one alcoholic drink daily: 1 drink = 5oz wine, 12oz beer (Drugs.com, 2024).

How much would medication cost per month if paying out of pocket?	\$94.02 per 1 vial (3ml) 100 units/ml – Walmart (GoodRx, 2024)
Drug # 10	Drug Name (Generic): morphine sulfate Drug Name (Trade): Morphine Sulfate IR Drug Class: Opioid & Opioid Analgesic (Jones & Bartlett, 2023).
How is the medication taken: (include dose, route, and frequency)	5 mg by mouth every 6 hours as needed.
Specific Directions not included above:	Take medication with food or milk to help decrease potential GI upset (Jones & Bartlett, 2023).
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	<p>Using morphine sulfate with Xanax can lead to serious side effects including respiratory distress, coma, or death. Both medications cause central nervous system depression (Drugs.com, 2024).</p> <p>Morphine Sulfate used with Glucophage may increase the effect of Glucophage, leading to lactic acidosis, which is life-threatening (Drugs.com, 2024).</p>
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	Should not consume alcohol while taking this medication due to increased central nervous system respiratory depression, and hypotension (Jones & Bartlett, 2023).

Does any of the client's past medical history contradict the use of this medication?	The patient's chronic lung disease may contradict the use of this medication due to morphine sulfate's potential effects on respiratory depression (Drugs.com, 2024).
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)	The indication of use for this medication is to relieve acute pain with the patient's end-stage interstitial pneumonitis.
What would you teach the client about taking this medication? You must prioritize 2 (see rubric)	<ol style="list-style-type: none"> 1. Fatal side effects can occur if consuming alcohol with morphine (Drugs.com, 2024). 2. Only take as prescribed due to morphine's effect on breathing and addictive qualities (Drugs.com, 2024).
How much would medication cost per month if paying out of pocket?	\$12.00 per month supply – Walgreens (GoodRx, 2024)

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

This nursing student believes there may be some difficulty in maintaining compliance with the ordered medication regimen. Not only do many of the medications interact with each other, but they have specific instructions and education that must be addressed and

understood by the patient to be effective. The instructions of when to take the medications may be confusing to the patient, given that some are taken once a day in the morning, twice a day, three times a day, as needed, only on Monday/Wednesday/Friday, and on a sliding scale. Since the patient is in end-stage interstitial pneumonitis, she may not be very open to education, and more so want to keep enjoying the things she does such as drinking 2-3 mixed drinks several nights of the week. Alcohol use is contraindicated for multiple medications in her prescribed medication regimen and would most likely require the patient to cut back on their drinking. Drinking could be seen as a coping mechanism for the patient due to a chronic illness, which has a high possibility of leading to increased depression. It must also be considered that this would be another financial burden on the patient to be paid monthly, in addition to the presumed debt this patient has most likely acquired due to their medical history. (Kaleb)

This nursing student believes the client's being older could affect her understanding of her medication regimen. This nursing student believes having a patient stop drinking her 2-3 mixed drinks a few nights a week, which she enjoys, could be an issue for the patient to change abruptly. The patient has end-stage Interstitial Pneumonitis; dealing with her diagnosis could cause increased anxiety and depression for the patient, and drinking could help her cope. This nursing student believes this patient's mental health and coping skills should be evaluated frequently. (Courtney)

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

This nursing student believes that the medication regimen would be difficult for the patient regardless due to her chronic illness and having to make lifestyle changes. Perhaps with her strong faith in being active in the church, the patient has already come to peace with her terminal illness and just wants to let it take its course. If the patient is open to education and wants to comply with the medication regimen as ordered, her husband and two adult children may be able to assist her with her needs. (Kaleb)

Despite a challenging health history, this patient has the potential to live a life that she can enjoy, offering quality and quantity. If used, this nursing student believes the patient having dual insurance coverage would benefit from the cost of her medications being decreased with coupons. This nursing student believes that having the assistance of her husband and children is also a benefit for the patient, as it aids travel and possibly her general mental health. (Courtney)

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)

This nursing student believes that it is very important to provide education on the medication regimen to the patient, her husband, and both adult children. This would greatly increase the patient's outcome of appropriately following the ordered medications, while also keeping routine updates on her by having family regularly checking in on compliance. It could also be recommended for the patient to

seek counseling or help with her alcohol consumption if she has difficulty cutting back on it. Some sort of counseling may also assist with any depressive thoughts the patient may be having in addition to her terminal illness. More education should be given on the risk of falls while taking warfarin, and signs and symptoms to watch for with digoxin toxicity. (Kaleb)

This nursing student believes the patient needs to be counseled on consuming alcohol with medications. Alcohol is something the patient enjoys and educating her on discontinuing it could be challenging. However, this nursing student is willing to prove the benefits and offer alternatives like Virgin Spirits. This nursing student would suggest a physician-to-physician consultation with the patient's pulmonologist to discuss the interaction with X-rays, if needed, with dye and the patient's order for Glucophage. This nursing student would like to educate the patient on falls and injuries. The patient is disabled, uses a cane and bifocals, and is taking Warfarin on a cardiac diet, which could include leafy greens, which should be avoided. (Courtney)

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

The total monthly out-of-pocket expense for all 10 medications is \$361.31. (Kaleb)

This nursing student calculated all ten out-of-pocket costs for all ten medications, totaling \$361.31. (Courtney)

Reflective Statement of Experience:

This student nurse found the polypharmacy project to be a very eye-opening experience, in seeing what some patients must deal with on a daily to monthly basis to follow and finance their medication regimen. It was exhausting trying to research specific drug uses, instructions, interactions, contraindications, and prices. As a patient taking these medications, I would also want to know everything there is to know about how my medications interact with each other, which is why patient education is a priority. Overall, I found this project to be very beneficial and a great way to learn about how a medication regimen can be more complicated than we realize.

(Kaleb)

This nursing student found the experience of completing this Polypharmacy project time-consuming. This nursing student was able to research the patients' lifestyles along with her limitations to provide the most beneficial information for the patient's well-being. The goal of this polypharmacy was to learn the hurdles patients honestly face when attempting to care for themselves and their health and to make those struggles as minimal as possible ultimately. This nursing student believes this was achieved for this patient with proper research. This nursing student believes that the professor's suggestion of early completion proved beneficial. (Courtney)

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N322 Polypharmacy Grading Rubric

Criteria	Excellent 40 points	Acceptable 31-39 points	Unacceptable 0-30 points	Points Earned
<p>Each drug should have a completed breakdown within the tables provided, which includes the following:</p> <ul style="list-style-type: none"> • Drug class • Generic name • Trade name • How is the medication taken (include dose, 	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	___/40

route, frequency)			inaccurate. (Each individual component for each medication is worth one point)	
Criteria	Excellent 10 points	Acceptable 8-10 points	Unacceptable 0 - 7 points	Points Earned
Specific Directions not included above: <ul style="list-style-type: none"> Is there any type of medication on the patient list that have specific directions? (before bed, before breakfast, 30 minutes before meals, etc..) 	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 if 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
Criteria	Excellent 0 points	Acceptable 16-19	Unacceptable 0-15 points	Points Earned
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? <ul style="list-style-type: none"> Do any of the medications interact with each other? (Please note: if there is an interaction between two medication, you MUST list that	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	___/20

<p>interaction on BOTH medications to receive full credit. You may utilize the same verbiage/wording on each medication, we want to know you are thinking about it when considering each medication)</p>			<p>listed this question is worth two points)</p>	
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Criteria	Excellent 5 points	Acceptable 4 points		Unacceptable 0 -3 points	Points Earned
<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? 	Student showed knowledge why the client's past medical history would contradict the use of the medication(s).	Student provided answers to the question(s), but failed to answer all the questions and/or the answers provided were inaccurate. (For each medication this question is worth one point)	Student failed to answer question or Student provided answers to the question(s), but failed to answer all the questions and/or the answers provided were inaccurate. (For each medication this question is worth one point)	___/10
Criteria	Excellent 10 points	Acceptable 8-9 points	Unacceptable 0-7 points	Points Earned
<ul style="list-style-type: none"> What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general) 	Student showed knowledge of medications and what conditions corresponds with medications	The student provided appropriate indications for some of the medications, but failed to capture all of the appropriate indications for use. (For each medication this question is worth one point)	Student failed to answer the question or The student provided appropriate indications for some of the medications, but failed to capture all of the appropriate indications for use. (For each medication this question is worth one point)	___/10
Criteria	Excellent 20 points	Acceptable 16-19 points	Unacceptable 0-15 points	Points Earned
<p>What would you teach the client about taking this medication?</p> <ul style="list-style-type: none"> What education is needed for the 	Student showed the importance of medication education, and appropriate prioritized client education for the scenario provided.	The student provided some appropriate education for the client, but failed to capture all of the appropriately prioritized	Student failed to answer the question OR The student provided some appropriate education for the client, but failed to capture all of the	___/20

<p>medication? (For each medication listed the student must prioritize two topics for client education) (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>education for the client. (Each topic of education is worth one point)</p>	<p>appropriately prioritized education for the client. (Each topic of education is worth one point)</p>	
<p>Criteria</p>	<p>Excellent 10 points</p>	<p>Acceptable 8-9 points</p>	<p>Unacceptable 0-7 points</p>	<p>Points Earned</p>
<p>Is there anything about this medication regimen/ scenario that might indicate a potential difficulty in maintaining compliance with the orders as listed?</p> <ul style="list-style-type: none"> Why would the patient have difficulty maintaining the medication regiment? <p>(Please consider all factors in the scenario and all information provided within your chart - including cost, insurance, frequency of</p>	<p>Student had knowledge on why a patient would have difficulty with medication regiment</p>	<p>The student indicated some potential reasons that the client may have difficulty, however the student failed to indicate a reason OR an appropriate reason for some of the medications (This question is worth one point for each medication)</p>	<p>Student failed to answer the question OR the student indicated some potential reasons that the client may have difficulty, however the student failed to indicate a reason OR an appropriate reason for some of the medications (This question is worth one point for each medication)</p>	<p>___/10</p>

administration, etc)				
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 your chart – including cost, insurance, frequency of administration, etc.</p>	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 assist with compliance. (This question is worth one point for each medication)	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)	___/10
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 missing or inaccurate portion per APA is worth one point) • The student provided a rubric attached for grading (3 points) • The student included the provided client scenario on page two of the document (2 points) • The paper included a minimum of five references which were cited within the document (each 	<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>

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>Elaborate on this, explaining why you feel it should be addressed, why it is priority and provide evidence behind your presentation.</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.	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.	The student failed to answer the question OR the student answered the question, however the students answer was dangerously inaccurate.	___/20
Criteria	Excellent 10 points	Acceptable 8-9 points	Unacceptable 0-7 points	Points Earned
<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 	The students provided reflection showed good insight into the project itself, polypharmacy, and the nurses role in client advocacy	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	Student failed to reflect on their project OR the student addressed only of the topics of reflection	___/10

implications) -A basic understanding of polypharmacy -A reflection on this student nurses role in this scenario as a client advocate/educator/caregiver		implications). -A basic understanding of polypharmacy -A reflection on this student nurses role in this scenario as a client advocate/educator/caregiver		
<p style="text-align: center;">Total Points</p>				<p style="text-align: right;"><u> </u>/200</p>