

HEADACHE	Case #1	Case #2	Case #3
Self-Care Candidate	YES	NO	YES
Completion Code	OPCHA19	OPCHA22	OPCHA31
Patient Overview	Name: Erin Thompson Age: 34 years Gender: Female Occupation: Middle school teacher	Name: Daniel Ryder Age: 56 years Gender: Male Occupation: Accountant	Name: Amanda Keller Age: 42 Gender: Female Occupation: High school English teacher Status: Not pregnant; not breastfeeding
ANSWER KEY	<p>This history is most consistent with a tension-type headache, with a possible sinus component given mild pressure but no infection symptoms.</p> <p>Patient is an appropriate candidate for self-care.</p> <p>OTC choices likely appropriate:</p> <ul style="list-style-type: none"> • Ibuprofen (patient reports good prior effectiveness) • Naproxen • Acetaminophen (less effective for this patient) <p>No red flags requiring referral.</p>	<p>This patient is NOT an appropriate candidate for self-care, this is a medical emergency. Recommend immediate evaluation (ER).</p> <p>Red Flags:</p> <ul style="list-style-type: none"> • Sudden onset, severe headache • 'First or worst' headache • Unilateral severe pain with neurologic symptoms (blurred vision, balance issues) • No prior similar headaches <p>Pharmacist Response: "Because of the severity and sudden onset of your headache, along with the changes in your vision and dizziness, it's important that you get medical care right away. These symptoms can indicate something serious, and an over-the-counter medication is not the safest option. I recommend going to the emergency department immediately. Would you like me to help arrange transportation?"</p>	<p>This presentation is consistent with a sinus headache secondary to congestion, without signs of:</p> <ul style="list-style-type: none"> • bacterial sinusitis • migraine • cluster headache • neurologic red flags • severe sinus disease <p>Patient is appropriate for self-care.</p> <p>Potential effective OTC options include:</p> <ul style="list-style-type: none"> • Analgesics: ibuprofen or acetaminophen • Decongestants: pseudoephedrine OR phenylephrine (pseudoephedrine preferred for efficacy) • Intranasal corticosteroid optimization: consistent fluticasone use • Adjuncts: saline spray/rinse, humidifier
(I)ntroduction	Hi, I've had this nagging headache all afternoon. Can you help me find something over the counter for it?	I've had this horrible headache since this morning. It's getting worse, and I need something over the counter that'll help me get through the night.	Hi, I think I have a sinus headache and I was hoping you could help me pick something over the counter.
(G)oals	I just want something that will help me finish the rest of the day and be functional.	I just want something that'll help me get rid of this really bad headache.	I want something that'll help me relieve the headache pain and reduce my sinus pressure and congestion.
(S)ymptoms	It's mostly a dull pressure behind my forehead and eyes. I would rate the pain at about a 4 out of 10.	I have severe, sharp, right-sided headache.	I have a dull headache behind my forehead and cheekbones. I also have facial pressure, nasal congestion, and a runny nose.
(C)haracteristics	It's not sharp or throbbing. Just a constant, dull pressure. No fever or stiff neck.	I would describe the pain like a lightning bolt on the right side of my head. I would rate the pain as 8 out of 10. I feel a little nauseous and have had intermittent blurred vision in my right eye. Just today, I began	The pain is dull, pressure-like. I would rate it as 4 or 5 out of 10. I feel stuffed up. The pain and pressure fluctuate but are not severe.

		feeling dizzy and a couple of times seemed off-balance.	
Other Symptoms	I don't have nausea, vision changes, or anything like that.	I have not vomited and do not have a fever.	I don't have fever, dizziness, visual changes, vomiting, or tooth pain.
(H)istory	Yeah, I get these every once in a while, usually on long school days. This headache is pretty much the same as usual.	I don't usually get headaches, and nothing like this. I have not fallen, hit my head, or head any other trauma.	I have had sinus headaches in the past, especially during seasonal changes and this feels typical. I have not had any recent falls or hit my head. I also do not feel as if I have a sinus infection.
(O)nset	It started around late morning today, maybe 11 am or so, and got worse as the day went on.	It began suddenly around 10:00 am today.	It started two days ago, gradually worsened yesterday, but has stayed about the same today.
(L)ocation	Right across my forehead and kind of behind my eyes.	Just on the right side of my head, on the side near my temple. The pain does not radiate to my forehead, eyes, or jaw.	It is my forehead, bridge of nose, and under both eyes that seem to be affected. The pain does not radiate to my jaw or ears.
(A)ggravating	Bright lights in my classroom, staring at my laptop, and leaning forward.	Bright lights and standing up quickly.	It is worse when bending forward. Also both going outside into the cold air or being in a dry room seems to make it worse.
(R)emitting	Taking a break outside helps a little. Drinking water helps sometimes.	So far only sitting quietly in a dark room has helped slightly. I tried resting and drinking water, but they did not significantly improve pain.	Warm shower with steam helps as well as using a saline rinse. Rest and drinking plenty of water seems to help a little bit.
(M)edications	I take cetirizine every day for allergies, a multivitamin, and I have an albuterol inhaler if I need it but I rarely do.	I do not take any prescription medications. Also, I have not yet taken any over-the-counter pain medicine today.	There have been no recent medication changes. I take cetirizine 10 mg every morning, fluticasone nasal spray where I use 1 spray per nostril daily. I use it most days, but have been inconsistent lately. I will occasionally use ibuprofen for menstrual cramps, but it has been at least 2 months since I have had to use it.
(A)llergies	I do not have any drug allergies.	I do not have any drug allergies.	I do not have any drug allergies.
(C)onditions	Just allergies and asthma, but my asthma is mild and only flares up occasionally.	I have high blood pressure, but have been managing it for the past year with diet and exercise.	I have seasonal allergic rhinitis and a deviated septum that was diagnosed 4 years ago. I have thankfully never had migraines, asthma, high blood pressure or any other serious chronic illness.
(C)affeine	I drink one or two 6 ounce cups of coffee each day.	I drink two 6 ounce cups of coffee each day.	I drink an 8 ounce cup of coffee from Starbucks almost every day.
(A)lcohol	I drink two 12 ounce bottles of beer on the weekend.	No, I do not drink alcohol.	I drink a 4 ounce glass of red wine every Friday for happy hour.
(T)obacco	I do not smoke or use nicotine products.	No, I do not smoke or use nicotine products.	I do not smoke or use any type of nicotine product.

FEVER	Case #1	Case #2	Case #3
Self-Care Candidate	YES	NO	YES
Completion Code	OPCFV17	OPCFV20	OPCFV36
Patient Overview	Name: Mark Rosenburg Age: 29 years Gender: Male Occupation: HVAC repair	Child: Emily Riddel Age: 8 months Gender: Female Brought in by: Mother (Maria)	Child: Theo Moulder Age: 4 years (38 lbs, 17.3 kg) Gender: Male Brought in by: Mother (Alicia)
ANSWER KEY	<p>Mark is appropriate for OTC treatment because:</p> <ul style="list-style-type: none"> • Age 29 – adult dosing appropriate • Fever < 103°F • Symptoms < 48 hours • No red flags: <ul style="list-style-type: none"> ○ No stiff neck ○ No altered mental status ○ No severe dehydration ○ No localized serious infection signs • No concerning comorbidities • Not taking interacting medications • No pregnancy or breastfeeding concerns • No hepatic disease or excessive alcohol use • Able to maintain oral intake <p>Potential Recommendation Choices Option 1: Acetaminophen</p> <ul style="list-style-type: none"> • 500–1000 mg every 6 hours PRN (max 3,000 mg/day for self-care) <p>Option 2: Ibuprofen</p> <ul style="list-style-type: none"> • 200–400 mg every 6 hours PRN <p>Why Both Are Acceptable</p> <ul style="list-style-type: none"> • No GI risk → NSAIDs okay • No hepatic risk → acetaminophen okay • No medication or disease contraindications <p>Patient preference can guide selection</p>	<p>Emily is not eligible for self-care because:</p> <ul style="list-style-type: none"> • Fever > 24 hours in a child < 2 years → requires medical evaluation • Fever ≥ 102°F in an infant is concerning • Decreased urine output suggests possible dehydration • Combined fever + cough might signal infection needing provider evaluation • Increased irritability and poor feeding <p>Any one of these would justify referral; together, they clearly indicate the need for medical evaluation.</p>	<p>Theo is eligible for self-care because:</p> <ul style="list-style-type: none"> • Age > 2 years • Fever < 102°F • Fever duration < 24 hours • No red flags: <ul style="list-style-type: none"> ○ No neck stiffness ○ No dehydration ○ No difficulty breathing ○ No severe sore throa • Normal fluid intake • No interacting medications • No chronic disease contraindications to acetaminophen or ibuprofen <p>He is an ideal candidate for OTC antipyretic therapy.</p> <p>Option 1 – Acetaminophen</p> <ul style="list-style-type: none"> • Dose: 10–15 mg/kg/dose • For 17.3 kg → 173–260 mg per dose, every 4–6 hours as needed • Max daily dose: 1,298 mg/day (75 mg/kg/day) <p>Option 2 – Ibuprofen</p> <ul style="list-style-type: none"> • Dose: 5–10 mg/kg/dose • For 17.3 kg → 87–173 mg per dose, every 6–8 hours as needed • Max daily dose: 692 mg/day (40 mg/kg/day)
(I)ntroduction	Hey. I think I have a fever and I want something over the counter to bring it down.	My daughter Emily has a fever, and I want something over the counter to bring it down.	Hi, my son Theo has a fever and need something over the counter to treat it.
(G)oals	I want something to help me feel better and be more functional at work.	I want something to reduce the fever and help her feel better.	I want something to reduce the fever and help him feel better.
(S)ymptoms	Mostly a fever. I've also had a mild headache and I feel kind of achy and tired.	Her fever has been pretty high. It was 102.5°F (39.2°C) this morning when I checked rectally. She's been coughing a little and seems more fussy than usual. She has also been eating less too.	When I checked this morning with an oral thermometer, he had a fever of 100.9°F (38.3°C). He feels warm and looks worn out.
(C)haracteristics	I feel really warm and uncomfortable. My temperature at home using an oral thermometer was 101.8°F (38.8°C).	Emily feels very warm and is fussier than usual. She is crying more and is sometimes hard to console. The fever does not seem to be going away on its own. Also, today she	He says his throat is a little scratchy. He is tired but still playing some. The fever seems to

	Not the worst fever I've ever had, but annoying.	has only had two wet diapers so far which is less than normal.	come and go. He is still drinking well.
Other Symptoms	No, I don't have a rash, stiff neck, shortness of breath, or chest pain.	She has not had any episodes of vomiting or diarrhea.	He has not had any episodes of vomiting or diarrhea. He also does not have a rash, wheezing, stiff neck, or severe pain.
(H)istory	I have similar episodes once or twice a year with viral colds.	Not this bad. She has had mild fevers after vaccines, but nothing like this. She is usually very healthy.	Only mild colds in the past. Nothing serious.
(O)nset	It started Last night, maybe 14 hours ago. It does not seem to be getting worse.	The fever started yesterday morning, so about 28 hours ago. Her cough started about the same time. The fever got a bit worse today.	Just this morning, maybe six hours ago.
(L)ocation	It's just a general fever. The headache is sort of in the front of my head.	It is a general fever, so all over.	The fever is just overall warm. The sore throat is in the middle when he swallows.
(A)ggravating	Moving around a lot while I work. Also, I slept badly last night.	She gets more upset when lying down, and wakes easily from naps, and seems uncomfortable.	Running around seems to make him hotter. Cold drinks bother his throat.
(R)emitting	I took a cool shower and that helped for a little while. Haven't taken any meds yet.	I gave her a lukewarm bath yesterday and that helped for maybe 20 minutes. I have not given her any medicine.	Warm tea helped for a little bit. I have not given him any medicine.
(M)edications	Just a multivitamin every morning. And I take cetirizine when my allergies act up. That's it.	Just her daily vitamin D drops. No Tylenol or anything else yet.	I give him a childrens multivitamin every day. No other medicines today.
(A)llergies	I am not aware of having any drug allergies.	Nope, none.	No, none that we know of.
(C)onditions	None, I am usually very healthy. For example, I do not have any history of chronic liver disease, kidney disease, or GI ulcers.	No, she was full term and is usually healthy. She is up to date on her vaccines.	No, he is pretty healthy. He has never had febrile seizures, and has no history of asthma, heart disease, kidney disease, or liver problems. All his vaccines are up to date.
(C)affeine	I drink about two 6 ounce cups of coffee a day.	N/A	N/A
(A)lcohol	Maybe one or two beers on the weekend. Nothing recently though.	N/A	N/A
(T)obacco	I do not smoke or use nicotine products.	N/A	N/A

MUSC/SKEL INURY		Case #1	Case #2	Case #3
Self-Care Candidate		NO	YES	YES
Completion Code		OPCMS15	OPCMS24	OPCMS33
Patient Overview		Name: Jason Ramirez Age: 44 years Gender: Male Occupation: Warehouse worker (frequent lifting of heavy boxes)	Name: Mary Thompson Age: 62 years Gender: Female Occupation: Retired elementary school teacher	Name: Sarah Nguyen Age: 56 years Gender: Female Occupation: Accountant
ANSWER KEY		<p>Patient is NOT eligible for self-care treatment. Refer the patient to urgent care or their primary care provider today for a full musculoskeletal evaluation. This is necessary due to:</p> <ul style="list-style-type: none"> • High pain intensity • Significant movement limitation • Radiation of pain • Occupational, acute traumatic injury • Failure to improve in 24 hours <p>A clinician may need to perform:</p> <ul style="list-style-type: none"> • Physical exam • Straight leg raise test • Consider imaging (if red flags worsen) • Prescribe muscle relaxants, higher-strength NSAIDs, or other interventions 	<p>Patient IS eligible for self-care treatment.</p> <ul style="list-style-type: none"> • No signs of fracture or acute injury • No severe swelling or redness • No systemic symptoms (fever, chills) • No uncontrolled comorbidities • No previous intolerance to OTC analgesics • Pain severity moderate and stable <p>Mary presents with worsening osteoarthritis pain in her right knee. Pain is activity-related, chronic, non-inflammatory, and consistent with previously diagnosed OA. She has tried acetaminophen in low doses but is not using it optimally. She has never used topical NSAIDs, which are guideline-recommended first-line therapy for knee OA. Her health history and medication profile allow for topical NSAID use and cautious use of oral NSAIDs if needed.</p> <p>Voltaren (Diclofenac 1% Gel)</p> <ul style="list-style-type: none"> • Apply 2 grams to the affected knee • Up to four times daily 	<p>Patient IS eligible for self-care because:</p> <ul style="list-style-type: none"> • RA is clinically stable and managed by a rheumatologist • Pain is mild to moderate • No sudden or severe flare • No signs of infection (redness, warmth, fever) • No loss of function • No new joint deformity <p>This is an appropriate case for adjunctive OTC therapy.</p> <p>Pharmacist Assessment:</p> <ul style="list-style-type: none"> • Patient cannot use menthol or methyl salicylate counterirritants. • Oral NSAIDs are not preferred due to GERD and historical intolerance. • Pain severity and clinical stability are consistent with mild RA discomfort. • A topical analgesic with a different mechanism is preferred. <p>Capsaicin is appropriate because:</p> <ul style="list-style-type: none"> • It is safe for chronic musculoskeletal pain including RA. • It avoids salicylates and menthol. • Minimal systemic absorption → safe with methotrexate. • Recommended for hand arthritis as a non-prescription option.
(I)ntroduction		My lower back is killing me. I hurt it lifting a heavy box at work yesterday, and I was hoping to grab something over the counter.	I am having more knee pain lately and want something over the counter to help. It's making it harder to walk around the house.	My hands and wrists have been a little more sore than usual lately. I have rheumatoid arthritis, and I wanted something over the counter to help with the pain.
(G)oals		I want something that will help reduce the pain, and get me back to work so I can lift again.	I just want something that will help reduce the pain and increase my mobility.	I want something that will help reduce the pain and soreness in my hands and wrists.

(S)ymptoms	I have severe lower back pain that gets worse when I move, and a constant ache when I am resting.	The pain occurs in my right knee and is mostly a dull ache, but sometimes it's sharper when I stand up after sitting.	I have achy, burning joint pain in both wrists and hands. They are sore and stiff, especially in the morning, but my rheumatologist says my rheumatoid arthritis is well-managed overall.
(C)haracteristics	It's a sharp pain. I would rate the pain at 8 when I move, and around a 6 when I'm just sitting still. The pain radiates slightly into my left buttock but not past the knee. I have significant stiffness, difficulty bending and standing fully upright.	I have morning stiffness lasting about 10 to 15 minutes. I would rate the pain at 5 most of the time, and a 7 when I have been walking a lot. There is mild, intermittent swelling around my knee. However, my knee is not red and does not feel warm.	The pain is intermittent but worse with activity. There is also mild swelling in the knuckles. I would rate the pain at 4 out of 10.
Other Symptoms	I do not have numbness or tingling and no bowel or bladder changes.	I do not have an instability in the knee when walking and the pain does not radiate.	There is no redness or warmth. Also, I have no numbness or tingling in my hands.
(H)istory	I have not had any prior back injuries.	I have had arthritis in that knee for years. It usually acts up, but it's been worse for the last few weeks.	I have had rheumatoid arthritis for years. My rheumatologist says it's under good control. It just flares mildly now and then. I tried some menthol cream before, but I broke out in hives. And Bengay gave me a pretty bad rash.
(O)nset	The pain started 24 hours ago, immediately after lifting a 60 pound box at work.	I started noticing it again about three weeks ago. It just gradually got worse. I have not fallen or had any injury.	I started noticing it again about four days ago. It's been pretty steady since then. I have not had any recent illness or injury.
(L)ocation	The pain is coming from the lower left side of my back.	It only occurs in the right knee.	It occurs mostly in my wrists and the knuckles in both hands.
(A)ggravating	Bending forward, walking too much, and trying to stand straight seem to make it worse.	Things that make it worse include walking, standing too long, and going up stairs. The cold weather does not help either.	Things that make it worse include typing a lot on my computer at work, and colder weather. Carrying grocery bags also does not help.
(R)emitting	At first, I tried heat, and that made it worse. So, I tried ice which helped only a little. Lying flat seems to help the most. I have not taken any over the counter medications yet.	In the past I have tried acetaminophen 500 mg as needed, which used to work but seems less effective now. I have never tried topical agents. Resting, warm showers, and stretching sometimes help, but only a little.	Warm compresses and resting my hands make it feel a little better. Stretching helps also.
(M)edications	I take cetirizine 10 mg daily for allergies. I have an albuterol inhaler to use as needed for asthma, but have not needed it for several months.	I take lisinopril 10 mg daily, atorvastatin 20 mg daily, and a multivitamin every morning. I take Tylenol here and there, but it has not been cutting it lately.	I take methotrexate 2.5 mg once weekly, folic acid 1 mg daily, omeprazole 20 mg daily, and cetirizine 10 mg daily. For headaches and body pain I will occasionally take an extra-strength Tylenol tablet. I never take ibuprofen or naproxen due to severe stomach irritation in the past.
(A)llergies	I do not have any drug allergies.	No allergies that I know of	I have previously tried menthol-containing creams, but developed hives all over my

			body. I also reacted to Bengay which has methyl salicylate in it and that caused a red rash on my skin.
(C)onditions	I only have exercise-induced asthma and seasonal allergies.	I was diagnosed with osteoarthritis of the right knee 4 years ago. I also have high blood pressure and cholesterol which seem to be controlled with my medications.	I was diagnosed with rheumatoid arthritis many years ago. I also have mild heartburn and seasonal allergies. I do not have kidney disease, liver disease, heart failure, or any other uncontrolled chronic diseases.
(C)affeine	I usually drink around 3 or 4 cups of coffee a day, especially at work.	I drink one 6 ounce cup of coffee each day.	I drink 2 cups of coffee in the morning, and sometimes tea in the afternoon.
(A)lcohol	A few beers on the weekends, nothing during the week.	I drink 1 or 2 small glasses of wine most weeks.	I might have a glass or two of wine on the weekend.
(T)obacco	Yes. I smoke a half pack of cigarettes each day, and have done so for 10 years.	I do not smoke or use nicotine products.	I have never smoked or used nicotine products.

HEARTBURN			
	Case #1	Case #2	Case #3
Self-Care Candidate	YES	YES	NO
Completion Code	OPCHD13	OPCHD26	OPCHD39
Patient Overview	Name: Thomas Velasquez Age: 42 years Gender: Male Occupation: Facility Operations	Name: Gabriella Warez Age: 35 years Gender: Female Occupation: Bank Teller	Name: Daniel Holcomb Age: 47 Gender: Male Occupation: Police Detective
ANSWER KEY	<p>Patient IS eligible for self-care treatment because:</p> <ul style="list-style-type: none"> Heartburn occurs <2 days per week. Symptoms mild to moderate and consistent with simple heartburn. No alarm symptoms: <ul style="list-style-type: none"> No difficulty swallowing No painful swallowing No unexplained weight loss No GI bleeding No persistent vomiting No history of GERD diagnosis requiring medical supervision. No pregnancy or chronic disease contraindications. <p>Pharmacist's Assessment:</p> <ul style="list-style-type: none"> Symptoms are consistent with episodic, predictable heartburn triggered by food, alcohol, and timing of meals. Antacids worked but are short-acting. PPIs (e.g., omeprazole) are not needed because symptoms occur fewer than 2 days/week. A histamine-2 receptor antagonist (H2RA) such as famotidine provides longer relief than antacids, works within 30–60 minutes, and can be used preventatively before meals. <p>This makes famotidine the optimal choice.</p> <ul style="list-style-type: none"> Take 10–20 mg once for acute relief. May take 15–60 minutes before meals that usually cause heartburn. 	<p>The patient is appropriate for self-care because:</p> <ul style="list-style-type: none"> Symptoms occur ≤1 time per week. Symptoms are mild, infrequent, predictable, and meal-related. No alarming signs: <ul style="list-style-type: none"> No dysphagia No odynophagia No GI bleeding No unexplained weight loss No persistent vomiting No chronic conditions or medication interactions. No nighttime symptoms that wake the patient. <p>Pharmacist's Clinical Reasoning:</p> <ul style="list-style-type: none"> Why antacids are the best choice: <ul style="list-style-type: none"> Patient has infrequent, mild, short-lasting symptoms. Needs quick relief during occasional episodes. Antacids (calcium carbonate, magnesium hydroxide, or combination products) work within minutes and are ideal for episodic heartburn. Why PPIs are NOT appropriate: <ul style="list-style-type: none"> PPIs (omeprazole, esomeprazole, etc.) are for frequent heartburn (≥2 days/week). They take 1–4 days for full effect, so not useful for same-day relief. Over-treats patient's mild, intermittent symptoms. Patient lacks chronic or severe GERD features. Why famotidine (H2RA) is NOT preferred: <ul style="list-style-type: none"> H2 blockers are effective for predictable, moderate, or more frequent episodes. Patient's symptoms are too infrequent (<1 episode/week) to justify preventive H2RA use. H2RAs provide longer relief than antacids, but slower onset. 	<p>The patient is NOT eligible for OTC therapy because:</p> <ul style="list-style-type: none"> Worsening abdominal pain lasting >3 days <ul style="list-style-type: none"> Persistent, escalating pain is beyond OTC management. Possible GI bleeding <ul style="list-style-type: none"> Report of melena-like stool raises concern for upper GI bleed. Lack of response to antacids <ul style="list-style-type: none"> Suggests pain is not simple, episodic heartburn. Significant risk factors for peptic ulcer disease or gastritis: <ul style="list-style-type: none"> High NSAID use (ibuprofen 600 mg TID × 3 weeks) Heavy alcohol intake Smoking High caffeine intake Pain severity increasing despite self-care attempts <ul style="list-style-type: none"> Today 7/10 intensity. Radiation of pain to the back <ul style="list-style-type: none"> Concerning for ulcer or pancreatitis-like presentation. Nausea and decreased appetite <ul style="list-style-type: none"> Systemic digestive involvement, not simple heartburn. <p>Pharmacist's Assessment:</p> <ul style="list-style-type: none"> The pattern and severity of symptoms, NSAID use, alcohol consumption, smoking, and presence of melena strongly suggest possible peptic ulcer disease or upper GI bleeding, which cannot be treated with nonprescription medication. Recommendation: <ul style="list-style-type: none"> Immediate referral to urgent care or emergency evaluation, especially due to possible GI bleeding. Advise stopping NSAIDs immediately. <p>What the pharmacist should say: "Based on your symptoms and some of the details you've shared, especially the worsening pain, the lack of relief from antacids, and the dark stool, I am concerned that this could be more</p>

	<ul style="list-style-type: none"> • Rapid enough onset for episodic symptoms. • Supports both treatment and prevention of meal-triggered episodes. 	<ul style="list-style-type: none"> ○ Antacids align better with the patient's need for rapid, occasional relief. 	serious than simple indigestion. These are not symptoms we can safely treat with over-the-counter medications. I strongly recommend you seek medical care today for further evaluation.”
(I)ntroduction	Hi, I was wondering if you could help me pick something for heartburn. I get it occasionally and it's really bothering me today.	Hi, I am looking for something over the counter for acid reflux. I get it sometimes and I'm not sure what is the best thing to take.	Hi, I was hoping you could help me. My stomach has been hurting the past few days, and it is getting worse. I was wondering if there's something over the counter I can take.
(G)oals	I just want something that will help me treat and possibly prevent heartburn after I eat.	I want something to treat my heartburn, but only take it when I need it.	I want something that will help me treat and lessen the pain in my stomach.
(S)ymptoms	I get a burning feeling right here in my upper chest, especially after big meals or when I eat late at night. Sometimes food feels like it's coming back up, but it's not painful swallowing.	I get a burning feeling in my chest, and some sour burps after certain meals. I think it's acid reflux. It doesn't happen all the time.	It's a burning, aching pain right here in the middle of my upper stomach. Sometimes it gets sharp. I've also felt a little nauseous, tired, and have had less of an appetite.
(C)haracteristics	Mostly a burning sensation. It's uncomfortable but not super painful. Sometimes I have a slight sour taste in the throat. This feeling occurs mostly after eating heavy, spicy, or late meals.	It feels like a burning sensation, starting in the upper stomach and rising toward the chest. Occasionally, I also get a sour or acidic taste in the back of the throat.	Mostly burning and kind of dull, but today it's sharper and more constant. I would rate the pain today as 7 out of 10 but for the past few days it was only about a 4 or 5. I had one episode of dark, tarry-looking stool this morning, but that is probably due to something I ate.
Other Symptoms	I do not have a previous diagnosis of GERD, ulcers, or GI disease.	I do not have difficulty swallowing or chest pain unrelated to eating.	I do not have any other symptoms.
(H)istory	Yes, on and off for a couple of years. It usually happens once or twice a week, but not every day.	Yes, this happens on and off for about six months. But only once a week at most.	'Not like this. I've had mild indigestion here and there, but nothing this bad or this long lasting.
(O)nset	It started last night. I ate late and had some pizza and beer, which usually does it.	It started earlier today, about 2 hours after lunch.	It started about four days ago. It was mild at first, but every day it seems to get worse.
(L)ocation	I feel it right in my upper chest.	I feel it right behind my breastbone, and sometimes in the upper part of my stomach.	Right in the middle at the top of my stomach. Sometimes it feels like it goes through to my back.
(A)ggravating	It is made worse by large meals, spicy food, and when I eat late at night. Beer seems to make it worse too.	It is made worse by large meals, spicy foods, and soda. And also by eating too fast.	Coffee definitely makes it worse. And when my stomach is empty, it burns more.
(R)emitting	Standing up and drinking water helps a little. I have occasionally used calcium carbonate antacids, which help but do not last long.	Drinking water or just sitting upright can help it feel better. Sometimes I just wait for it to pass.	Eating a little sometimes helps for a short time. I tried Tums yesterday but it did not do anything to help.
(M)edications	I take a multivitamin daily, and Tums when I need them. No prescription medications.	I take a multivitamin daily. I have not used any heartburn meds yet.	Normally, just a multivitamin. However, for the past 3 weeks, I have been taking ibuprofen 600 mg three times a day, for a work related knee injury.

(A)llergies	I do not have any drug allergies.	I do not have any drug allergies.	I do not have any drug allergies.
(C)onditions	No conditions. No trouble swallowing or anything serious. I'm pretty healthy overall.	No chronic conditions, I'm pretty healthy.	I do not have any chronic health conditions. I'm usually very healthy overall.
(C)affeine	I drink 2 to 3 cups of coffee in the morning. If I drink it on an empty stomach, it sometimes triggers heartburn.	I drink 1 or 2 sodas a day, and a cup of coffee in the morning on weekends when I have more time.	Lately, I drink about 3 or 4 cups of coffee a day. Work's been really stressful.
(A)lcohol	I drink a bottle of beer maybe once or twice a week.	Only on weekends, when I have 1 or 2 mixed drinks.	Yeah, I probably drink 3 or 4 beers every night to unwind.
(T)obacco	I do not smoke or use nicotine products.	I do not smoke or use nicotine products.	I smoke a pack a day, and have been smoking for 5 years.

CONSTIPATION			
	Case #1	Case #2	Case #3
Self-Care Candidate	YES	NO	YES
Completion Code	OPCCN18	OPCCN28	OPCCN32
Patient Overview	Name: Judy Ellison Age: 72 years Gender: Female Occupation: Retired School Teacher	Name: Dan Ruiz Age: 58 years Gender: Male Occupation: Insurance Adjuster	Name: Emma Trainor Age: 4 years Gender: Female Weight: 17 kg (37.5 lb) Accompanied by: Mother (Ella) Allergies: NKDA Immunizations: Up-to-date
ANSWER KEY	<p>Patient IS appropriate for self-care because:</p> <ul style="list-style-type: none"> • Mild, uncomplicated constipation • Duration < 1 week • No alarm symptoms (blood, severe pain, vomiting, fever, acute weight loss) • Reasonable medication profile • Able to follow treatment instructions • No contraindications to common OTC constipation treatments <p>Pharmacist Rationale: PEG 3350 is the first-line treatment for constipation in older adults because:</p> <ul style="list-style-type: none"> • Safe and effective with minimal systemic absorption • Well tolerated compared to stimulant laxatives in elderly patients • Does not cause cramping typically seen with senna or bisacodyl • Appropriate for patients with diabetes, hypertension, and common chronic medications • Strong evidence supporting use in chronic and episodic constipation <p>Recommended Therapy: Polyethylene Glycol (PEG 3350) 17 g daily</p>	<p>Patient is NOT appropriate for OTC self-care.</p> <p>Patient is NOT appropriate for self-care due to multiple serious risk factors:</p> <ul style="list-style-type: none"> • Constipation lasting \geq 6 days with no relief from stimulant laxatives • Opioid-induced constipation (requires specific therapy; OTC products alone often inadequate) • Moderate abdominal pain, increasing • Nausea and decreased appetite • Possible bowel obstruction risk given duration, opioid use, and abdominal symptoms • High alcohol intake, increasing risk for dehydration and electrolyte imbalance • Failure of prior self-care attempts (senna ineffective) <p>Pharmacist Recommendation</p> <ul style="list-style-type: none"> • Advise urgent medical evaluation today (PCP or urgent care). • Explain concern for possible opioid-induced constipation with potential obstruction. • Recommend that the patient stop using senna until evaluated. • Encourage increased hydration while awaiting care (unless provider instructs otherwise). • Educate that the provider may prescribe: <ul style="list-style-type: none"> ○ peripheral mu-opioid receptor antagonist (PAMORA) such as methylnaltrexone or naloxegol, or ○ prescription-strength osmotic therapy or 	<p>Patient is appropriate for OTC management.</p> <p>Emma does NOT exhibit any exclusion criteria:</p> <ul style="list-style-type: none"> • No fever • No persistent vomiting or diarrhea • No severe abdominal pain • No constipation lasting >24–48 hours • No blood in stool • No signs of dehydration • No chronic GI disease <p>Pharmacist Assessment:</p> <ul style="list-style-type: none"> • Most likely cause: Dietary-induced intestinal gas from exposure to new foods and carbonated beverages. <p>Recommended Product: Simethicone (e.g., Mylicon, Little Remedies Gas Relief, Gas-X Infant Drops)</p> <ul style="list-style-type: none"> • Dose: 40 mg PO, up to 4 times daily, as needed • Appropriate for children >2 years • Can be mixed with water, formula, or juice <p>Rationale:</p> <ul style="list-style-type: none"> • Safe and well-tolerated in pediatric populations • Not systemically absorbed, so side effects are minimal • Works by reducing surface tension of gas bubbles \rightarrow easier expulsion • Fast onset of relief • Ideal first-line therapy for functional/diet-related intestinal gas

		<p>suppositories/enemas (in a clinical setting only)</p> <ul style="list-style-type: none"> • Do NOT initiate OTC PEG, magnesium citrate, bisacodyl, or mineral oil due to obstruction risk. • Do NOT recommend enemas without medical evaluation. 	
(I)ntroduction	Can you help me pick something over the counter for constipation?	Hey, can you help me find a good over the counter laxative? I need something strong. I have not been able to go.	Hi, excuse me. My little girl, Emma, has had a gassy stomach since yesterday. Do you have anything over the counter that might help?
(G)oals	I want something that will help me have regular bowel movements and that are easy to pass.	I want something that will help me have a bowel movement as soon as possible.	I want something that will help her pass gas so she does not feel bloated.
(S)ymptoms	I have not had a normal bowel movement in about 3 days. When I try, the stool is hard and difficult to pass.	I'm constipated. I haven't gone to the bathroom in almost a week. My stomach feels tight and painful.	She's been bloated and passing a lot of gas. She seems uncomfortable and fussy but still acting mostly normal.
(C)haracteristics	The stool is hard, dry, and requires straining to pass. My last bowel movement was 3 days ago and was only a small amount. I typically have a bowel movement every 1 or 2 days.	When I try to move my bowels, hardly anything or just little pebbles, and I have to strain a lot. I have moderate stomach pain I would describe as a cramping or squeezing feeling. It feels worse today, I am tired and feel nauseous and do not feel like eating.	I do not think she is having sharp pain, it is more like fullness. Her belly gets tight, but she's not doubled over or anything.
Other Symptoms	I do not have abdominal pain, nausea or vomiting, blood in the stool, fever, or unintended weight loss. I have had these symptoms before and they are currently not severe.	I have not vomited, and do not have a fever or black or tarry stools.	She does not have any other symptoms.
(H)istory	A few times over the years, but nothing too serious. I have no history of bowel obstruction, GI surgery, or inflammatory bowel disease.	I get constipated sometimes, but never this long. Usually a laxative fixes it. I took senna tablets a couple of times this week, which have worked for me in the past, but they have not done anything for me this time.	This has happened occasionally but it is usually when she tries new foods.
(O)nset	It started about three days ago.	It started about six days ago, and has been getting worse the last couple of days.	It started yesterday afternoon, after a birthday party.
(L)ocation	Just a bit of pressure in my lower belly, but not really pain.	Lower stomach. It cramps and feels bloated.	Kind of all over
(A)ggravating	Well, I have been less active lately because it has been cold. And I probably have not been eating enough fruits and veggies.	I had a tooth pulled 10 days ago, and I have been taking the pain pills they gave me. That hydrocodone stuff. I have also been less active due to my work schedule.	Eating or drinking too fast seems to make her complain more.

(R)emitting	Drinking water yesterday helped a little. In the past, I tried drinking some prune juice, and while it helped, I hated the taste. I have not used any laxatives recently.	Not really. Warm drinks did not help. Senna tablets did not work either.	A warm towel and rubbing her tummy helped a little.
(M)edications	I take lisinopril 10 mg daily, metformin 500 mg twice daily, and simvastatin 20 mg every night. I also take a multivitamin and calcium carbonate 600 mg tablet every morning with breakfast.	The past 10 days I have been taking 2 or 3 tablets of hydrocodone 5 mg with acetaminophen everyday to help with my tooth pain. I regularly take lisinopril for blood pressure, sertraline for anxiety, magnesium supplements, and sometimes ibuprofen for headaches. No other prescription stuff.	She does not take any medications.
(A)llergies	I do not have any drug allergies.	I do not have any drug allergies.	No drug allergies that we know of.
(C)onditions	I have high blood pressure, type 2 diabetes, and high cholesterol.	Just high blood pressure, generalized anxiety disorder, and pre-diabetes, as well as the tooth extraction last week.	No chronic conditions, she is healthy.
(C)affeine	I drink 1 to 2 cups of coffee in the morning.	A lot. I drink five or six cups of strong coffee, and sometimes an energy drink too.	N/A
(A)lcohol	I do not drink any alcohol.	Lately my work has been more stressful, so I have been drinking four or five beers at night.	N/A
(T)obacco	I do not smoke or use nicotine products.	I smoke about a pack a day and have done so for the past 20 years.	N/A

CONSTIPATION			
	Case #1	Case #2	Case #3
Self-Care Candidate	NO	YES	YES
Completion Code	OPCDR16	OPCDR23	OPCDR38
Patient Overview	Child: Eric Hightower Age: 4 years Gender: Male Brought in by: Mother (Susan)	Name: Helen Porter Age: 72 years Gender: Female Living Situation: Lives independently	Name: Sarah Delgado Age: 32 years Gender: Female Occupation: Software Engineer
ANSWER KEY	<p>Patient is NOT appropriate for self-care because:</p> <ul style="list-style-type: none"> • Age < 6 years • Young age increases dehydration risk. • Signs of dehydration • Dry lips • Lethargy • Minimal urination (once in 12 hours) • High stool frequency (7–8/day) • Fever > 100.4°F in a child with diarrhea • Poor fluid intake and refusal of oral electrolyte solution • Symptoms present >48 hours and worsening. <p>Together, these indicate a need for medical evaluation. The child should NOT receive OTC antidiarrheals and must be referred to urgent care or a pediatrician IMMEDIATELY. The pharmacist should:</p> <ul style="list-style-type: none"> • Recommend no OTC diarrhea medications. • Encourage the mother to seek prompt medical evaluation today. • Advise continued attempts at oral rehydration solution in small, frequent sips until evaluated. 	<p>Patient IS eligible for self-care treatment because:</p> <ul style="list-style-type: none"> • Age alone is not an exclusion if stable and hydrated • Symptoms began <48 hours ago • No fever • No bloody stools • No severe dehydration or significant medical comorbidities • Not taking medications that cause or worsen diarrhea • Able to maintain hydration • No recent travel or suspected infectious outbreak <p>Pharmacist Recommendations</p> <ul style="list-style-type: none"> • Oral Rehydration <ul style="list-style-type: none"> ○ Encourage water, electrolyte beverages, broth, diluted juice ○ Avoid sugary drinks (may worsen diarrhea) • Diet <ul style="list-style-type: none"> ○ Follow BRAT-style or bland diet for 24–48 hours ○ Bananas, rice, applesauce, toast ○ Avoid dairy, fatty foods, caffeine (coffee), and alcohol temporarily • Medication <ul style="list-style-type: none"> ○ Loperamide (Imodium A-D) ○ 4 mg initially (2 tablets of 2 mg), then 2 mg after each loose stool ○ Maximum: 8 mg/day for OTC use ○ Use for no more than 48 hours 	<p>Patient IS eligible for self-care treatment because:</p> <ul style="list-style-type: none"> • Symptoms are mild, meal-triggered, and predictable • No fever, blood, mucus, or weight loss • No signs of dehydration • No red-flag symptoms (severe pain, pregnancy complications, travel-related diarrhea, recent antibiotics) • Good oral intake and hydration • Symptoms consistent with lactose intolerance and occasionally oligosaccharide intolerance (beans) <p>These factors strongly suggest a digestive enzyme deficiency, not infectious diarrhea.</p> <p>Recommended OTC Therapy: Digestive Enzyme Capsules</p> <ul style="list-style-type: none"> • Lactase Enzyme Capsules (e.g., Lactaid) <ul style="list-style-type: none"> ○ Best choice because: <ul style="list-style-type: none"> ▪ Symptoms are strongly associated with dairy consumption ▪ Predictable onset after eating lactose ▪ She responds to lactose-free milk ▪ No need for antidiarrheals (NOT indicated for enzyme deficiency) ○ Instructions: <ul style="list-style-type: none"> ▪ Take 1–3 capsules immediately before consuming dairy ▪ Adjust dose depending on the lactose content of meal ▪ Safe for daily and long-term use • Alpha-Galactosidase Enzyme (e.g., Beano) <ul style="list-style-type: none"> ○ Optional addition for bean-triggered symptoms. ○ Instructions: <ul style="list-style-type: none"> ▪ Take 1 tablet with the first bite of gas-producing foods (beans, vegetables such as broccoli) • Diet & Lifestyle Counseling <ul style="list-style-type: none"> ○ Advise the patient: <ul style="list-style-type: none"> ▪ Try substituting lactose-free dairy or plant-based milks

			<ul style="list-style-type: none"> ▪ Keep a short food–symptom diary ▪ Reduce large meals ▪ Avoid excessive caffeine from dairy-based lattes until enzyme therapy tested ▪ Hydrate appropriately
(I)ntroduction	Can you help me? I am looking for something over the counter for my son’s diarrhea. He is 4 years old.	I have had some diarrhea since yesterday, and I am looking for something over the counter to help stop it.	Hi, I’m hoping you can recommend something over the counter for diarrhea. I’ve been having issues on and off for the last couple of months.
(G)oals	I want something that will stop his diarrhea so he can have normal bowel movements.	I want to return to having normal bowel movements.	I want to avoid having loose bowel movements after some of my meals.
(S)ymptoms	Diarrhea. He is having about 7 or 8 loose stools every day. Also, he has been really tired and his lips look dry. He is not eating much. He is crying more than usual and has only urinated once in the past 12 hours.	Mostly just loose stools and a little cramping. No vomiting or anything like that.	Loose stools after meals, plus some gas and bloating. I also get mild cramping sometimes. I do not have a fever or vomiting.
(C)haracteristics	Very watery stools. No blood or mucus, just light brown water. His temperature this morning was 100.9°F (38.3°C).	They’re loose and watery, but no blood, no mucus. Just normal brownish liquid.	The stools are loose and watery, but no blood, no mucus. Just normal brownish liquid, nothing really alarming.
Other Symptoms	He does not have any other symptoms	I do not have any other symptoms.	I do not have any other symptoms.
(H)istory	No prior episodes of diarrhea this month. This is the first time it has lasted this long. We have not traveled anywhere lately. He is usually really healthy, although, I had a stomach bug last week so he might have caught it from me.	I rarely experience diarrhea. Maybe once or twice after eating something heavy. I have not used antibiotics or been sick lately.	It has been happening off and on for about two months. I have not been sick or taken any antibiotics recently.
(O)nset	It started 2 days ago, and has been getting worse.	It started yesterday morning. So not quite a full two days.	'My symptoms usually start about 30 minutes to an hour after eating. It happens regularly, but the symptoms are not worsening.
(L)ocation	He says his tummy hurts sometimes, but not constantly.	Just general cramping. Nothing sharp or focused in one area.	Just general cramping. Nothing sharp or focused in one area.
(A)ggravating	Every time he drinks juice or eats cheese it gets worse.	A greasy breakfast and my morning coffee definitely made me run to the bathroom.	Dairy foods like ice cream, lattes, and cheese pizza definitely trigger it. And sometimes beans or lentils.
(R)emitting	Small sips of water help, but he refuses the electrolyte drink I bought. Says he does not like the taste.	Eating lighter foods seems to help. Warm tea also helps with the cramps.	If I avoid dairy, it’s better. I used lactose free milk once and it helped. Smaller meals help too.
(M)edications	He takes a daily gummy multivitamin. Nothing else.	Everyday I take lisinopril, atorvastatin, and calcium with vitamin D. Sometimes I take Tums for heartburn.	Everyday I take my birth control pill, vitamin B12 complex, and sometimes ibuprofen for headaches.
(A)llergies	He does not have any drug allergies that we know of.	I do not have any drug allergies.	I do not have any drug allergies.

(C)onditions	He does not have any chronic health conditions.	I have high blood pressure, high cholesterol, and a little arthritis. Nothing else.	No medical conditions. I do not have GI disorders like irritable bowel syndrome, Crohn's, or celiac disease. I am pretty healthy.
(C)affeine	N/A	I drink 1 cup of coffee in the morning.	I usually drink a latte or 2 each day, using regular milk.
(A)lcohol	N/A	I drink a glass of wine once or twice a week, but not since this started.	I drink a glass of wine, maybe once or twice a week. However, the wine does not seem to affect my bowels.
(T)obacco	N/A	Not anymore. About 20 years ago, I quit smoking cigarettes.	No, I do not smoke or use any type of nicotine product.

ALLERGIES	Case #1	Case #2	Case #3
Self-Care Candidate	YES	YES	NO
Completion Code	OPCAL11	OPCAL29	OPCAL34
Patient Overview	Name: Carlos Martínez Age: 41 years Gender: Male Occupation: University groundskeeper	Name: Mateo Sanchez Age: 16 years Gender: Male Occupation: High School Student	Name: Evelyn Peterson Age: 58 years Gender: Female Occupation: Accountant
ANSWER KEY	<p>Patient IS appropriate for self-care because:</p> <ul style="list-style-type: none"> • Symptoms align with mild seasonal allergic rhinitis. • No infection, no significant comorbidities. • No dangerous drug interactions or concerning medication history. • Although intranasal corticosteroids are typically first-line, he cannot use them due to recurrent epistaxis → makes oral antihistamines the safer primary option. • No red flags requiring referral. <p>Therapeutic Considerations</p> <ul style="list-style-type: none"> • Primary symptoms are sneezing, rhinorrhea, and itchy/watery eyes—best addressed by oral antihistamines. • He has no nasal congestion, so he does not need a decongestant. • Because he works outdoors all day, a once-daily non-sedating antihistamine is preferred. • Avoid intranasal corticosteroids due to history of nosebleeds. <p>Best Recommendation: Oral antihistamine WITHOUT decongestant</p> <ul style="list-style-type: none"> • Cetirizine 10 mg once daily —or— Loratadine 10 mg once daily —or— Fexofenadine 180 mg once daily • Rationale: <ul style="list-style-type: none"> ○ Treats sneezing, rhinorrhea, and itchy eyes. ○ Non-drowsy (loratadine, fexofenadine) or low-drowsy (cetirizine) options allow safe outdoor work. ○ Avoids decongestants, which aren't needed and may interact with caffeine or increase jitteriness. ○ Appropriate alternative since intranasal corticosteroids are contraindicated. 	<p>Patient IS appropriate for self-care because:</p> <ul style="list-style-type: none"> • His symptoms are consistent with uncomplicated seasonal allergies. He reports nasal congestion, rhinorrhea, sneezing, and mild ocular itching—all classic allergic rhinitis symptoms without signs of infection (e.g., fever, purulent discharge) or serious respiratory conditions. • There are no red flags requiring referral. He denies shortness of breath, wheezing, severe sinus pain, facial swelling, recurrent nosebleeds, or impaired vision. His symptoms have not abruptly worsened and do not indicate bacterial sinusitis or asthma exacerbation. • He has no chronic diseases or medical conditions that restrict OTC allergy treatment. Mateo has no history of asthma, recurrent epistaxis, nasal trauma, surgery, or other ENT conditions that would contraindicate intranasal corticosteroid use. • He is old enough to use intranasal corticosteroids safely. At 16 years old, he falls within the FDA-approved age range for common OTC nasal corticosteroids such as fluticasone and triamcinolone. • Current medications pose no interactions or risks. He is not taking any medications that would interact with recommended therapy. His occasional use of loratadine and ibuprofen does not limit intranasal steroid use. • His lifestyle and social history show no concerns. He does not use alcohol, nicotine, or drugs, and his caffeine intake is minimal—none of which affect the safety of nasal corticosteroids or saline rinses. 	<p>Patient is NOT appropriate for self-care because:</p> <ul style="list-style-type: none"> • Symptoms suggest possible acute bacterial sinusitis <ul style="list-style-type: none"> ○ Duration >10 days ○ Thick yellow discharge ○ Worsening facial pain ○ Persistent congestion despite OTC therapy • These features exceed uncomplicated seasonal allergic rhinitis. • OTC allergy treatments have already failed. She used loratadine daily for a week with no improvement. • Presence of moderate–severe facial pain. Facial tenderness and pressure require medical evaluation. • Underlying chronic conditions. She has hypertension and diabetes—conditions where uncontrolled infection may worsen overall health and require tailored treatment. • Alcohol intake and medication use require caution. Frequent alcohol use + need for systemic therapy is a potential consideration for a medical provider. • Final Judgment: A referral to a primary care provider is necessary. OTC allergy medications are unlikely to resolve these symptoms and may delay appropriate care. <p>Pharmacist Recommendation: REFER</p> <ul style="list-style-type: none"> • Immediate referral to a healthcare provider for evaluation of possible acute bacterial sinusitis. • Advise the patient: <ul style="list-style-type: none"> ○ Symptoms are not typical of allergies anymore. ○ She likely needs an examination and possibly prescription therapy (e.g., antibiotics if warranted).

		<ul style="list-style-type: none">• He is capable of using intranasal products correctly with counseling. He is attentive, communicative, and able to follow instructions, which supports safe self-administration of OTC therapies. <p>Pharmacist’s Recommendation: Intranasal Steroid + Saline Rinses</p> <ul style="list-style-type: none">• Intranasal corticosteroids are the most effective OTC option for allergic rhinitis. INS products provide the strongest reduction in nasal congestion, sneezing, rhinorrhea, nasal itching, and even ocular symptoms. They are superior to oral antihistamines for nasal congestion—Mateo’s most troublesome symptom.• Saline rinses do not control the allergic inflammatory process. While saline effectively removes allergens and improves nasal moisture, it does not reduce the inflammation underlying allergic rhinitis. Therefore, saline alone will not reliably relieve Mateo’s congestion or persistent symptoms.• Using saline before the steroid spray improves outcomes. Saline rinses can remove mucus and allergens, enhancing penetration and effectiveness of the intranasal steroid. This combination approach maximizes symptom relief.• Mateo’s symptoms are moderate and predominantly nasal, making a steroid spray ideal. His congestion and persistent rhinorrhea are best treated with a medication that targets nasal inflammation directly and continuously.• INS products are safe and appropriate for his age. Fluticasone and triamcinolone are approved for use in patients 12 years and older, and Mateo has no contraindications such as nasal trauma or frequent nosebleeds.• The therapy is non-sedating and will not interfere with school or sports. Unlike some oral allergy medications, nasal steroids do not cause drowsiness, making them suitable for a student-athlete.• Consistent daily use offers preventive benefit. INS therapy reduces symptom severity even	<ul style="list-style-type: none">○ She should seek care within 24 hours, especially given facial pain and symptom duration.• She may continue supportive care while awaiting evaluation:<ul style="list-style-type: none">○ Warm compresses○ Adequate hydration○ Saline nasal irrigation for comfort (if tolerated)• But no new OTC medication will adequately treat this condition.
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		<p>on high-pollen days, helping Mateo better tolerate outdoor soccer practices.</p> <p>Conclusion: While saline rinses are helpful as an adjunct, Mateo's symptom profile and the evidence supporting intranasal corticosteroids make the combined regimen the most effective, safe, and appropriate choice for managing his seasonal allergic rhinitis.</p>	
(I)ntroduction	Can you help me? My allergies are getting bad again. I need something over the counter to stop the sneezing, so I can get through my workday.	Hello, I would like to purchase this nasal saline rinse. My allergies are acting up again, and I think rinsing my nose will probably fix it this time.	Hi. My allergies are acting up again, and I want something over the counter to help. I am very congested, and I am getting a lot of pressure in my face. I have been using this loratadine, but I am no longer sure it is strong enough.
(G)oals	I want something that will stop my allergies but not make me sleepy so I can continue to work outside.	I want something that will stop my allergies, especially while I am outside playing sports.	I want something that will help relieve my nasal congestion, dry up my nose, and reduce the pain behind my cheeks.
(S)ymptoms	Mostly sneezing, my eyes get really itchy and watery, and my nose just runs like crazy. No fever, headache, sinus pressure, or anything like that.	My nose is super stuffed up, it runs all the time, I am sneezing a bunch, and my eyes get a little itchy and watery.	I have lots of congestion, thick yellow mucus, pressure in my forehead and cheeks. I also have a headache that will not go away. My nose also runs constantly
(C)haracteristics	It's just clear fluid. Feels like I am leaking from my nose and eyes all day.	It is clear and watery fluid leaking from my nose. I have to keep wiping it. My eyes are also a little red and itchy.	The nasal drainage started clear, but now it is yellow and thick. And the pressure behind my cheeks is really uncomfortable. I would rate the pain as a 7 out of 10. Today I have noticed feeling tired, and I have a cough and a mild sore throat from the drainage. On the other hand, I do not have shortness of breath, chest tightness, wheezing, vision changes, nausea or vomiting.
Other Symptoms	I do not have any other symptoms.	I do not have any other symptoms.	I do not have any other symptoms.
(H)istory	Yes, I get these symptoms every Spring. It is pretty much the same thing every year.	Yeah, every spring since like 7th grade, but it feels a little worse this year.	I get allergies every spring, but never like this. This time it has gotten worse instead of better over time.
(O)nset	It started about a week ago. I work outside every day, so once the pollen picks up, I feel it right away.	It started maybe a week and a half ago. As soon as the trees started blooming.	It started about two weeks ago. It felt like allergies at first, but then everything just kept getting worse. The congestion worsened around day 5, and the facial pressure started 3 days ago.
(L)ocation	The symptoms are mostly in my nose and both eyes.	The symptoms are mostly in my nose. Both of my eyes itch sometimes, but not as bad.	The symptoms are mainly in my nose, cheeks and forehead.

(A)ggravating	Mowing, trimming, and working around the bushes. All the stuff I do for my job. Being outside pretty much sets everything off.	Soccer practice. Just being outside makes it awful. And when the windows are open at home.	Leaning forward makes it hurt more. And the mornings are awful after lying down all night.
(R)emitting	If I wear a mask while mowing, it helps some. Showering after work calms things down for a bit. Oh, I should tell you that last season, I tried one of those allergy nose sprays, I think it was called fluticasone. It gave me nose bleeds really bad, so I do not want to mess with those sprays again.	Last year I tried taking cetirizine pills, but sometimes they made me sleepy during my morning classes. Hot showers help me breathe. I also put a humidifier in my room, and while it does not stop my allergies, it helps me sleep.	Hot showers help a little. I have taken loratadine daily for the last week, but it is not helping. Saline rinses helped early on, but not anymore.
(M)edications	No prescriptions. I take naproxen sometimes for soreness. I have used allergy pills in past years, but not yet this season. I take a vitamin C tablet now and then.	No prescriptions. I will take ibuprofen if I am sore from soccer. My soccer coach told me saline nasal rinse spray helps with allergies, so that is what I was going to try this year.	I take lisinopril 20 mg once daily, and metformin 500 mg twice daily. I have taken loratadine every morning this past week, and ibuprofen sometimes for the headache.
(A)llergies	No medicine allergies. I tested positive for pollen a few years back. No food allergies.	No medicine allergies. I tested positive for allergies to pollen a few years back.	I do not have any allergies to medications.
(C)onditions	I am generally in good health. However, I suffer from frequent nose bleeds due to a deviated septum.	Nope. I am pretty healthy. I have never had nosebleeds or anything like that.	I have high blood pressure and type 2 diabetes. No asthma or anything like that.
(C)affeine	I drink one big cup of coffee every morning before work.	I have a soda a couple of times a week. Sometimes a coffee drink with friends, but not a lot.	I usually drink 3 cups of coffee a day.
(A)lcohol	I will drink a beer or 2 on weekends, not during the week.	No, I do not drink any alcohol.	I will drink a couple of glasses of wine every night.
(T)obacco	No, I quit smoking about ten years ago. I do not vape or use anything else.	No, I do not smoke or chew tobacco. Some people on the team vape, but I do not.	I used to smoke cigarettes, but I quit over ten years ago.

INSOMNIA		Case #1	Case #2	Case #3
Self-Care Candidate	YES	NO	YES	
Completion Code	OPCIN19	OPCIN25	OPCIN37	
Patient Overview	Name: Margaret Halston Age: 75 years Gender: Female Living Situation: Lives independently	Name: Daniel Wright Age: 38 years Gender: Male Occupation: Assistant Marketing Director	Name: Amanda Carver Age: 38 years Gender: Female Occupation: Dental hygienist	
ANSWER KEY	<p>Patient IS appropriate for self-care because:</p> <ul style="list-style-type: none"> • Symptoms present for <3 months (short-term insomnia). • No red flags: <ul style="list-style-type: none"> ○ No untreated sleep apnea symptoms ○ No significant depression/anxiety ○ No substance use ○ No nocturia or pain disrupting sleep • No interacting medications. • Elderly, so antihistamines (diphenhydramine/doxylamine) are not appropriate due to anticholinergic risks. • Melatonin is safer and matches her sleep-initiation problem. <p>Treatment Goals:</p> <ul style="list-style-type: none"> • Reduce sleep latency to <30 minutes most nights. • Improve overall sleep quality and next-day functioning. • Minimize adverse effects and avoid medications unsafe in older adults. • Establish consistent sleep hygiene habits. • Short-term: Use melatonin to restore natural sleep patterns. • Long-term: Maintain sleep without reliance on daily sleep aids. <p>Recommendation: Oral Melatonin</p> <ul style="list-style-type: none"> • Safe for older adults compared to antihistamines. • Most effective for sleep-onset insomnia, which matches her symptoms. • Minimal drug interactions with her current regimen. • Symptoms appear related to circadian rhythm disruption after recent life changes. • Product recommendation: <ul style="list-style-type: none"> ○ Melatonin 1–3 mg, taken 30–60 minutes before bedtime. ○ Start with 1 mg and increase only if needed. 	<p>Patient is NOT appropriate for self-care because:</p> <ul style="list-style-type: none"> • Likely obstructive sleep apnea (OSA) <ul style="list-style-type: none"> ○ Loud snoring ○ Witnessed apneas ○ Daytime somnolence ○ Morning headaches ○ Obesity ○ Hypertension • Daytime sleepiness affects driving safety <ul style="list-style-type: none"> ○ Nodding off at red lights is a red flag • Underlying medical conditions are untreated <ul style="list-style-type: none"> ○ Unmanaged HTN may worsen OSA ○ Alcohol and tobacco use increase symptoms • OTC stimulants (e.g., caffeine tablets) are inappropriate <ul style="list-style-type: none"> ○ Mask symptoms ○ Increase BP ○ Delay needed diagnosis <p>Pharmacist Recommendation: “I do not recommend any OTC stimulant today.”</p> <ul style="list-style-type: none"> • Immediate medical referral <ul style="list-style-type: none"> ○ Advise urgent PCP visit or sleep specialist referral for possible sleep apnea. ○ Caution strongly about driving due to safety risks. • Counseling while awaiting evaluation <ul style="list-style-type: none"> ○ Avoid alcohol within 3 hours of bedtime ○ Take cetirizine in the morning if needed ○ Limit smoking and caffeine ○ Avoid driving when excessively tired 	<p>Patient IS appropriate for self-care because:</p> <ul style="list-style-type: none"> • No contraindicating health conditions • Symptoms < 3 months (short-term) • Clear precipitating factors (schedule change, stress) • No respiratory symptoms • No severe psychiatric red flags • Tried behavior changes but needs additional short-term support <p>Why Diphenhydramine Should NOT Be Recommended:</p> <ul style="list-style-type: none"> • Prior intolerance: She previously experienced marked next-day sedation (“hangover feeling”) that impaired functioning. • Diphenhydramine’s anticholinergic profile: Causes cognitive impairment, poor alertness, and slowed reaction times—even in young adults. • Produces prolonged sedation in some individuals due to slow metabolism: Increased risk of morning grogginess, making it a poor fit for her early-morning work schedule. • Patient refusal: She explicitly states she does not want to try it again. • Given her age and profile, doxylamine is the more appropriate sedating antihistamine. <p>Pharmacist Recommendation: Doxylamine</p> <ul style="list-style-type: none"> • Recommended product: <ul style="list-style-type: none"> ○ Doxylamine succinate 25 mg tablet ○ Take ½–1 tablet 30 minutes before bedtime ○ Use only when needed, not nightly • Why doxylamine is best for this patient: 	

			<ul style="list-style-type: none"> ○ Effective for sleep-onset insomnia ○ Sedation profile works well for younger adults without morning commitments that require sharp cognition ○ Longer duration than diphenhydramine, but patient has no history of sensitivity to it ○ No anticholinergic contraindications ○ Prior diphenhydramine intolerance rules out Benadryl-like products
(I)ntroduction	Hi there. Lately I am having trouble falling asleep, and was hoping you could recommend something to help me.	Hello. I have been feeling really tired during the day. Do you have anything over the counter that can help keep me awake? I am struggling to stay alert at work.	Hello. I have been having trouble falling asleep for the last few weeks. Is there something over the counter you can recommend?
(G)oals	I want something that will help me fall asleep but not make me groggy in the morning.	I want something that will help me stay awake and alert during the day without feeling jittery.	I want something that will help me fall asleep faster at night but does not make me feel hungover in the morning.
(S)ymptoms	I am having trouble falling asleep. I lie there for more than an hour most nights. Once I finally fall asleep, I do not wake until morning. My husband says I do not have breathing pauses, gasps, or snoring. I do not notice any leg twitching, burning feet, or nerve pain disturbing my sleep.	I feel extremely tired all day. I have even had trouble staying awake during meetings, and sometimes while driving. Over the past month, I have experienced morning headaches and dry mouth several times per week.	I just can not fall asleep. I lie there for over an hour before I drift off. My partner says I do not snore, gasp, or have breathing disturbances while I sleep. I do not experience any sort of nighttime pain.
(C)haracteristics	When I lay down at night, my mind seems busy and restless. I just can not seem to wind down. When I do fall sleep, it feels light, but not fragmented.	I mostly feel sleepiness and brain fog through out the day. I feel like I could fall asleep if I stop moving. I have had two episodes of nodding off briefly at red lights. My spouse told me that more recently, I have been snoring loudly and sometimes make gasping noises at night. I do not feel refreshed even after sleeping for 7 or 8 hours in bed.	I am having a problem getting asleep. I feel mentally wired and just toss and turn in the bed. However, once I am out, I sleep through the night. But in the morning I still feel not fully rested, likely due to not sleeping long enough.
Other Symptoms	I do not have any other symptoms.	I do not have any other symptoms.	I do not have any other symptoms.
(H)istory	No, I have never had problems falling asleep before. I also have no past history of depression, bipolar disorder, schizophrenia, or anxiety disorders.	No, I have never had problems before staying awake during the day. I usually go to bed around midnight and sleep to 6:30 am. I have recently gained some weight during a stressful time at work. My spouse says I have been snoring a lot more recently.	No, I have never had problems falling asleep before. I usually go to bed around 10:00 pm and sleep to 5:45 am. I have no past history of depression, anxiety, or had any panic episodes.
(O)nset	My insomnia symptoms started about 3 weeks ago, after returning from a long visit helping my daughter after surgery. It took me about a week to notice that this was becoming a persistant issue. It has been gradually	I started noticing it about two months ago. It seems to be getting worse.	My symptoms started a month ago, after I switched to a job that starts earlier in the morning. It has gotten worse and happens more often after stressful workdays.

	become more bothersome over the last few weeks.		
(L)ocation	No location in particular.	No location in particular.	No location in particular.
(A)ggravating	I do not know if this is making it worse, but I usually watch the news and read on my tablet in bed before trying to go to sleep.	Sitting still, especially in meetings or at my desk makes it worse. My 20 minute drive home after work also seems to trigger it. Heavy meals also seem to make it worse.	I am sure some of the things I do make it worse. I am feeling more stress at work since my new job has more responsibilities. Some evenings, I will workout in the gym with friends who are not available until 9 pm. I also look at my phone quite a bit before going to bed.
(R)emitting	I sleep better on days when I take a walk. And deep breathing helps sometimes.	I do not notice it as much in the morning. Coffee helps a little, but not much. I sometimes still get tired within an hour after drinking it.	About 2 weeks ago, I tried diphenhydramine. It worked, but it made me feel awful the next day. I was super groggy, like hungover. I had trouble concentrating at work, felt slow and just spaced out. I really do not want to take that again. So last week, I tried taking melatonin 3 mg everyday, but it did not help me fall asleep any faster.
(M)edications	I take lisinopril, levothyroxine, and a calcium with vitamin D pill.	I take cetirizine at night for allergies, and ibuprofen sometimes for headaches.	I take a birth control pill and a multivitamin every morning.
(A)llergies	No allergies to drugs.	No allergies to medications.	I do not have any allergies to drugs.
(C)onditions	I have high blood pressure and low thyroid, but my doctor says they are both under control.	I have had seasonal allergies since I was a kid. I apparently also have high blood pressure. They diagnosed me a few months back, but I never followed up or take any medicine for it. Otherwise, I am pretty healthy.	No, I do not have any chronic health conditions. I am usually very healthy.
(C)affeine	I drink a cup of coffee in the morning at 9 am, and again around midafternoon at 3 pm.	I drink 1 or 2 large cups of coffee in the morning, and another in the afternoon.	I drink 1 cup of coffee in the morning. I sometimes drink caffeinated energy drinks after busy workdays at 4 pm.
(A)lcohol	I will drink a glass of wine once or twice a week with my supper.	I will drink a few beers most nights. Usually close to bedtime.	I will have a couple glasses of wine on weekends, but not close to bedtime.
(T)obacco	No, I have never smoked or used tobacco.	Yes, I smoke about a half a pack of cigarettes every day.	No, I have never smoked cigarettes or vaped.

COUGH/COLD		Case #1	Case #2	Case #3
Self-Care Candidate	YES	NO	YES	
Completion Code	OPCCC17	OPCCC20	OPCCC37	
Patient Overview	Name: Michael Thompson Age: 46 years Gender: Male Occupation: Automotive Salesman	Name: Sarah Mitchell Age: 58 years Gender: Female Occupation: University Professor	Child: Jacob Ramirez Age: 7 years Gender: Male Brought in by: Mother (Isabella)	
ANSWER KEY	<p>Patient IS appropriate for self-care because:</p> <ul style="list-style-type: none"> • Duration: 4 days → appropriate for short-term self-care. • Patient denies having any of the following symptoms: <ul style="list-style-type: none"> ○ Fever > 100.4°F (38°C) ○ Shortness of breath / trouble breathing ○ Hemoptysis (coughing up blood) ○ Acute chest pain ○ Chronic pulmonary disease ○ Unintentional weight loss ○ Night sweats ○ Whooping cough symptoms ○ Cough lasting > 3 weeks ○ Sputum production <p>Pharmacist's Assessment</p> <ul style="list-style-type: none"> • Likely causes: <ul style="list-style-type: none"> ○ Post-viral irritation ○ Dry air/environmental triggers ○ Possibly mild upper airway irritation • Given nonproductive cough, lack of red flags, and patient preference for OTC therapy, appropriate options include: <ul style="list-style-type: none"> ○ Dextromethorphan (cough suppressant) ○ Demulcents (e.g., honey, throat lozenges) ○ Humidification to reduce throat irritation • Avoid: <ul style="list-style-type: none"> ○ Codeine-containing products (not necessary; controlled) ○ Expectorants (guaifenesin) because cough is nonproductive 	<p>Patient is NOT appropriate for self-care because:</p> <ul style="list-style-type: none"> • Fever of 101.8°F (38.8°C) measured this morning • Shortness of breath with exertion • Productive cough with colored sputum • Symptoms lasting >7 days with worsening trajectory • Age >55 years with diabetes, elevating infection risk • Appears tired, flushed, and mildly dyspneic at the pharmacy counter • Chest tightness <p>Conclusion: this patient is NOT appropriate for self-care and requires medical evaluation.</p> <p>Potential concerns include:</p> <ul style="list-style-type: none"> ○ Acute bacterial sinusitis ○ Community-acquired pneumonia ○ Lower respiratory tract infection ○ Worsening viral illness with complications ○ Dehydration ○ Potential drug–disease interactions <p>Pharmacist Assessment</p> <ul style="list-style-type: none"> • Symptoms exceed limits of self-care. • Warning signs (fever, dyspnea, productive cough with discoloration, worsening over 10 days) necessitate referral. • Chronic conditions (diabetes, hypertension) increase risk for complications. <p>Pharmacist Recommendations:</p> <ul style="list-style-type: none"> • Do NOT recommend OTC cough/cold medications due to red flags. • Advise patient to seek urgent same-day evaluation by a physician or urgent care. • If symptoms worsen (e.g., severe trouble breathing, chest pain), go to emergency care. 	<p>Patient IS appropriate for self-care because:</p> <ul style="list-style-type: none"> • He is alert, breathing normally, hydrated, and able to eat and drink well. • He does not have the following Red Flags: <ul style="list-style-type: none"> ○ Fever ≥100.4°F ○ Difficulty breathing ○ Barky cough ○ Chest pain ○ Ear pain ○ Dehydration ○ Symptoms >10–14 days ○ History of asthma or reactive airway issues <p>Pharmacist Assessment</p> <ul style="list-style-type: none"> • Jake is experiencing a mild viral upper respiratory infection (common cold). • Key symptoms: nasal congestion, runny nose, mild cough. • Because Jake is 7 years old, he is old enough to receive: <ul style="list-style-type: none"> ○ Oral decongestants, such as children's pseudoephedrine (per product labeling) ○ Acetaminophen for discomfort or if fever develops (avoid multi-ingredient products) ○ Dextromethorphan use is optional, and not first-line for mild pediatric cough. <p>Recommendation:</p> <ul style="list-style-type: none"> • Pediatric Decongestant (appropriate options for a 7-year-old): <ul style="list-style-type: none"> ○ Children's pseudoephedrine (e.g., Sudafed Children's) <ul style="list-style-type: none"> ▪ Helps reduce nasal congestion and improve nighttime breathing • Acetaminophen (Children's Tylenol) <ul style="list-style-type: none"> ○ Use only if: 	

		<ul style="list-style-type: none"> • Supportive care the pharmacist can recommend while referring (safe adjuncts): <ul style="list-style-type: none"> ○ Hydration ○ Use of a humidifier ○ Acetaminophen for fever (appropriate dosing review) ○ Rest • But no active OTC cough/cold product should be recommended as a primary treatment. 	<ul style="list-style-type: none"> ▪ Throat discomfort returns ▪ Fever develops ▪ Helps with comfort and sleep • Non-pharmacologic additions: <ul style="list-style-type: none"> ○ Saline nasal spray or drops ○ Humidifier in the bedroom ○ Honey for cough (OK since >1 year old) ○ Hydration ○ Rest • Avoid: <ul style="list-style-type: none"> ○ Combination products ○ Oral cough suppressants unless needed ○ Products containing phenylephrine orally (limited effectiveness)
(I)ntroduction	Hello. I have had an annoying, dry cough for a few days, and it is keeping me up at night. I was hoping you could recommend something over the counter.	Hello. I need something over the counter for this terrible cough and cold I have. I can not seem to shake it.	Hi, this is my son Jake. He has been really congested and coughing a bit for a few days. I was hoping you could help us find something over the counter.
(G)oals	I want something that will stop my cough, especially at night so I can sleep.	I want something that will stop my cough and relieve my congestion and fever.	I want something that will relieve his cold symptoms.
(S)ymptoms	It is a dry cough, nothing comes up. My throat feels irritated, like there is a tickle in it. I do not have any other symptoms like fever, chills, shortness of breath, or wheezing. My nose is not running and my chest does not feel tight.	I have got this awful cough that brings up yellowish green mucus. My nose is all clogged, my throat is sore, and I feel exhausted. Off and on, I will get a headache or have a fever. I have noticed occasional chest tightness, but do not have any ear pain or upset stomach. If it helps to know, I do not have a history of asthma or COPD.	Mostly a stuffy, runny nose, and kind of a dry cough. His throat is a little scratchy in the mornings. He has also been more tired in the morning because of not sleeping well due to the congestion and coughing. He does not have a fever, wheezing, shortness of breath, ear pain or nausea.
(C)haracteristics	It mostly feels like irritation in the back of my throat, but nothing comes up when I cough. The cough is worse in the evening and early morning.	The mucus is really thick, clumpy and yellowish green. My breathing feels heavy, especially at night while I am lying down. The cough is also constant at night, and combined with the nasal congestion, is preventing me from getting to sleep. I get up in the morning and have the chills and feel really worn out. I took my temperature when I woke up this morning, and it was 101.8°F or 38.8°C.	The cough is not that bad, just dry. His nose is runny with clear mucus, but he is mainly just super congested. I checked his temperature today and it was 99.8°F (37.7°C).
Other Symptoms	I do not have any other symptoms.	I do not have any other symptoms.	They do not have any other symptoms.
(H)istory	I have had similar dry coughs during allergy season in past years. However, this time does not feel allergy related since I do not have itchy eyes, sneezing, or nasal drainage. If it helps to know, I do not have a history of	I have had colds before, but they are not usually this bad or last this long. This one seems to be getting worse.	He has had colds before, and this one is about the same.

	asthma, COPD, or chronic respiratory disease.		
(O)nset	My cough started about 4 days ago.	I have been sick for the past 9 days. At first, my symptoms seemed like a cold, but have since gotten worse over the last 3 days rather than improving.	It started suddenly 3 days ago, which was about the same time several of his classmates were sick at school. His symptoms have been about the same or only slightly improved during that time.
(L)ocation	The tickling sensation is localized to my throat.	The congestion is primarily in my nose and sinuses. Otherwise, it is in my throat and chest.	The symptoms are in his nose and throat.
(A)ggravating	Walking outside into the dry, cold air makes it worse, as does talking a lot.	Lying down or walking upstairs makes me cough more.	Dry air seems to make things worse, especially at night. Also, physical activity outdoor in the cold weather seems to increase his coughing slightly.
(R)emitting	It feels a little better if I drink warm tea. Drinking water alone does not seem to help.	Hot showers help a little. Acetaminophen knocks the fever down but not completely. Saline nasal rinses also help with the congestion for a little while. Drinking warm tea helps soothe my throat irritation.	The humidifier helps a little, and warm tea with honey calms his throat. I also tried using a saline spray rinse, which helped a little with his runny nose.
(M)edications	The only prescription medication I take is lisinopril 10 mg daily. I have taken that medicine for the past 3 years. I will also take ibuprofen sometimes for a headache.	I take metformin 1,000 mg twice a day, lisinopril 20 mg once daily, and atorvastatin 40 mg once daily. For my cold I have been using acetaminophen 500 mg every 6 hours for the past 3 days, and saline nasal spray rinses in the morning and evening. I tried Mucinex tablets 2 days ago, but it did nothing.	He takes a kids multivitamin everyday. I gave him a dose of acetaminophen yesterday because his throat was sore, but he has not had a fever today.
(A)llergies	No allergies to drugs. I have a ragweed allergy that flares up in the Spring and Fall, but it is not bothering me now.	I am allergic to amoxicillin. I had that for an ear infection when I was young, and I broke out in a rash all over my body, and had to go to the emergency room.	He does not have any allergies to medications.
(C)onditions	I have high blood pressure, but my doctor says it is under control.	I have type 2 diabetes, high blood pressure, and high cholesterol.	No, he is pretty healthy. No asthma or anything like that.
(C)affeine	I drink about 2 cups of coffee every morning.	I drink 1 caffeinated soda at lunch and 2 or 3 cups of coffee daily.	He drinks the occasional chocolate milk. No sodas or tea.
(A)lcohol	I will drink a couple beers on the weekend, nothing during the week.	I drink a glass of wine, 3 or 4 nights per week.	No, no exposure to alcohol.
(T)obacco	No, I have never smoked or used tobacco.	No, I have never smoked or used tobacco.	No, no exposure to tobacco smoke.

OPHTHALMIC			
	Case #1	Case #2	Case #3
Self-Care Candidate	YES	YES	NO
Completion Code	OPCOP16	OPCOP24	OPCOP37
Patient Overview	Name: Emily Carter Age: 34 years Gender: Female Occupation: Data Processor	Name: Margaret Lewis Age: 71 years Gender: Female Living Situation: Lives independently	Name: Daniel Rivera Age: 29 years Gender: Male Occupation: Loan Officer
ANSWER KEY	<p>Patient IS eligible for self-care for allergic conjunctivitis because they do NOT have any of the following Red Flags:</p> <ul style="list-style-type: none"> • Contact lens use • Severe eye pain • Blurry vision • Photosensitivity • Unilateral symptoms • Trauma • Purulent (yellow/green) discharge • Symptoms lasting >4 weeks without improvement • Fever or systemic symptoms <p>Pharmacist Recommendation:</p> <ul style="list-style-type: none"> • Given: <ul style="list-style-type: none"> ○ Bilateral itching ○ Seasonal recurrence ○ No contact lens use ○ No infection signs ○ Prior limited relief with artificial tears • First-line OTC Option <ul style="list-style-type: none"> ○ Ketotifen fumarate 0.035% ophthalmic solution <ul style="list-style-type: none"> ▪ Zaditor®, Alaway® — antihistamine + mast cell stabilizer ○ Dosing: <ul style="list-style-type: none"> ▪ 1 drop in each eye twice daily ▪ Works within minutes, with 8–12 hours of relief ○ Adjunctive measures: <ul style="list-style-type: none"> ▪ Artificial tears (preservative-free preferred) ▪ Cold compresses ▪ Allergen avoidance (close windows, use sunglasses outdoors, avoid rubbing eyes) ○ Avoid: <ul style="list-style-type: none"> ▪ Decongestant-only eye drops (e.g., tetrahydrozoline, naphazoline) due to rebound redness risk 	<p>Patient IS eligible for self-care for mild–moderate dry eye because they do NOT have any of the following Red Flags:</p> <ul style="list-style-type: none"> • Severe eye pain • Thick yellow/green discharge • Trauma or chemical exposure • Sudden vision loss • Photophobia • Unilateral symptoms • Recent eye surgery • Incorrect or contaminated contact lens use (she does not use contacts) <p>Pharmacist Recommendation:</p> <ul style="list-style-type: none"> • Artificial tears (lubricant eye drops) <ul style="list-style-type: none"> ○ Preservative-free preferred, especially for frequent use ○ Example ingredients: carboxymethylcellulose, glycerin, polyethylene glycol • Suggested regimen: <ul style="list-style-type: none"> ○ 1–2 drops in each eye up to 4 times daily ○ If using more than 4 times per day → switch to preservative-free single-use vials • Additional options if symptoms persist <ul style="list-style-type: none"> ○ Lubricating ointment at bedtime for nighttime dryness ○ Warm compresses to improve meibomian gland function • Non-Drug Recommendations <ul style="list-style-type: none"> ○ Limit extended screen time; practice 20–20–20 rule (every 20 min, look 20 ft away for 20 seconds) ○ Increase indoor humidity ○ Avoid direct air blowing toward the face (fans, vents) ○ Stay hydrated throughout the day ○ Consider consistent use of omega-3 supplements (if not contraindicated) 	<p>Patient is NOT eligible for self-care because they have the following Red Flags:</p> <ul style="list-style-type: none"> • Persistent purulent (thick yellow/green) discharge • Swelling of the eyelids • Matting/crusting of eyelashes • Bilateral symptoms that are worsening <p>These findings are highly consistent with bacterial conjunctivitis, which typically requires prescription antibiotic eye drops and cannot be self-treated.</p> <p>Pharmacist Plan:</p> <ul style="list-style-type: none"> • Immediate Plan <ul style="list-style-type: none"> ○ Refer patient to urgent care or primary care provider the same day for antibiotic eye drops. ○ Explain that no OTC medication treats bacterial conjunctivitis effectively. • Safe Symptomatic Relief (While Waiting for Appointment) <ul style="list-style-type: none"> ○ Warm compresses to loosen crusts ○ Use clean gauze/cotton pads; avoid reusing cloths ○ Wash hands frequently ○ Avoid touching/rubbing eyes ○ Stop use of eye makeup until resolved ○ Do not share towels, pillows, or linens • When to Seek Urgent Evaluation <ul style="list-style-type: none"> ○ Worsening pain ○ Light sensitivity ○ Vision changes ○ No improvement after 24–48 hours of antibiotic therapy (after starting Rx)
(I)ntroduction	Hello. My eyes have been super itchy and watery the last few days. Do you	Hello. My eyes have been feeling very dry and gritty lately. I was	Hello. My eyes have been red and swollen, and there is this yellow, crusty stuff coming out of them. I

	have something over the counter that can help?	hoping you could recommend something over the counter.	was hoping you could recommend something over the counter.
(G)goals	I want something that will make my eyes feel normal again.	I want something that will make my eyes feel normal again.	I want something that will make my eyes feel normal again
(S)ymptoms	My eyes are really itchy. They are a little red too, and they water a lot. No pain or anything like that. Also, I do not wear contact lenses, or have a history of glaucoma, eye trauma, or recent eye surgery.	My eyes feel dry all the time. I do not have any pain or light sensitivity. Also, I do not have any discharge from my eye, and they are not itchy, just dry.	Both of my eyes are red and puffy. There is thick, yellow-green gunk that keeps coming back even after I wipe it. When I wake up, my eyelids are stuck shut. My eyes do not hurt, and do not seem to be sensitive to light. Also, my vision seems normal.
(C)haracteristics	Just the itching and some tearing. No crusting or goopy stuff. My symptoms are not constant, they fluctuate through the day.	They feel dry and like there is sand in them. Sometimes they burn a little. My vision gets slightly blurry but it clears up when I blink.	The discharge from my eyes is definitely thick and pus-like. I have to clean them off every few hours. My eyes have a gritty feeling and seem to water a lot during the day. There is a mild burning, but not itching sensation.
Other Symptoms	I do not have any other symptoms.	I do not have any other symptoms.	I do not have any other symptoms.
(H)istory	Yeah, it usually happens every spring.	A little dryness occasionally, but it has gotten worse these past couple of weeks. Also, if it helps, I have no history of glaucoma, eye infections, or recent surgery, and I do not wear contact lenses.	I have never had anything like this before. However, there must be something going around, as my coworker's child had pink eye last week.
(O)nset	It started about 3 days ago, when the weather got warm and windy.	It started about 2 weeks ago. It has been getting more noticeable since then.	It started about 2 days ago. It started as an irritation, but the redness and discharge got way worse overnight.
(L)ocation	Both of my eyes are affected. I do not have eyelid swelling beyond some mild puffiness from rubbing.	Both of my eyes are affected.	Both of my eyes are affected, but the left one is worse.
(A)ggravating	Being outside definitely makes it worse. And when the windows are open at home.	The dryness worsens in the evening. I often notice it at night, where my routine is to turn on my ceiling fan, get into bed and read, watch TV, or use my tablet for an hour or two before going to sleep.	Being outside in the wind, and touching them definitely seems to make them more irritated.
(R)emitting	Cold compresses help a little, and staying indoors. I have tried artificial tears before, but they only helped a little bit.	Blinking or just closing my eyes helps a little. I tried a warm compress once and it felt good.	Using a warm washcloth helped get the crust off, but the discharge came back pretty quickly.
(M)edications	I take sertraline 50 mg daily and a birth control pill. I use ibuprofen sometimes. And I have some artificial tears at home.	I take Amlodipine 5 mg daily, atorvastatin 20 mg daily, and levothyroxine 0.1 mg daily. I also take a calcium and vitamin D supplement every day, and I will take acetaminophen regular strength tablets occasionally for arthritis.	I do not take any prescription medications. I use ibuprofen sometimes for headaches.

(A)llergies	No allergies to drugs.	I do not have any allergies to medications.	No allergies to medications.
(C)onditions	I have seasonal allergies to pollen that flares up in the Spring and Fall. I also have anxiety, but it is well-controlled. No other eye problems or anything like that.	I have high blood pressure, high cholesterol, and low thyroid but my doctor says everything is under control. I also have some arthritis, but no diabetes or autoimmune issues.	No chronic conditions. I am usually very healthy.
(C)affeine	I drink about 1 or 2 cups of coffee a day.	I drink 1 cup of coffee every morning and sometimes tea later in the afternoon.	I drink 2 or 3 energy drinks every day.
(A)lcohol	I usually only drink alcohol on weekends, maybe 1 or 2 mixed drinks.	I drink about 1 or 2 glasses of wine each week.	I usually only drink alcohol on weekends, maybe 1 or 2 beers.
(T)obacco	No, I have never smoked or used tobacco.	No. I quit smoking 20 years ago.	No, I have never smoked or used tobacco.

OTIC	Case #1	Case #2	Case #3
Self-Care Candidate	NO	YES	YES
Completion Code	OPCOT15	OPCOT20	OPCOT34
Patient Overview	Name: Jacob Rodriguez Age: 37 years Gender: Male Occupation: Auto Mechanic	Name: Maria Lopez Age: 46 years Gender: Female Occupation: Office administrator	Name: Daniel Paulson Age: 29 years Gender: Male Occupation: Lifeguard and graduate student
ANSWER KEY	<p>Patient is NOT eligible for self-care because they have the following Red Flags:</p> <ul style="list-style-type: none"> • Otorrhea (ear discharge) • Possible fever • Unilateral hearing reduction • Severe or worsening pain over 24 hrs • Possible middle-ear infection (acute otitis media) or otitis externa with complications • Light imbalance episode • History of frequent childhood ear infections <p>OTC analgesics (ibuprofen, acetaminophen) may provide temporary symptom relief, but no nonprescription ear drops are appropriate due to discharge (possible tympanic membrane perforation).</p> <p>Pharmacist Recommendation:</p> <ul style="list-style-type: none"> • Not appropriate for self-care. <ul style="list-style-type: none"> ○ Refer Jacob immediately to primary care provider today, OR urgent care • Rationale <ul style="list-style-type: none"> ○ Presence of discharge, fever, and unilateral hearing change suggests possible acute otitis media, otitis externa with severe inflammation, or tympanic membrane perforation—all requiring clinical evaluation. • Safe interim advice <ul style="list-style-type: none"> ○ Continue ibuprofen 200–400 mg every 6–8 hours PRN pain (max 1200 mg/day OTC). ○ Avoid inserting anything into the ear. ○ Avoid water exposure or swimming. ○ Do not use any OTC ear drops. 	<p>Patient IS eligible for self-care because they do NOT have the following Red Flags:</p> <ul style="list-style-type: none"> • Severe ear pain • Ear trauma • Drainage, blood, or pus • Fever • Sudden hearing loss • Ringing, dizziness, vertigo • Recent airplane travel or barotrauma • History of ear surgery • Jaw pain or dental issues <p>Pharmacist Assessment:</p> <ul style="list-style-type: none"> • No signs suggest infection or perforation. • Maria’s symptoms are most consistent with impacted cerumen. • Attempted self-cleaning with cotton swabs may have worsened the blockage. <p>Recommendation:</p> <ul style="list-style-type: none"> • Carbamide peroxide 6.5% otic solution (e.g., Debrox, Murine). <ul style="list-style-type: none"> ○ Use 5–10 drops in the affected ear. ○ Keep drops in place for several minutes (can use cotton at the outer ear to prevent leakage). ○ Use twice daily for up to 4 days. ○ Then gently rinse with warm water using a bulb syringe if directed by the product label. • Counseling Points <ul style="list-style-type: none"> ○ Do not insert cotton swabs or other objects into the ear. ○ Do not use drops if ear becomes painful or begins to drain. ○ Mild bubbling/crackling is normal. ○ Stop treatment and seek care if: <ul style="list-style-type: none"> ▪ Pain develops ▪ Ear drainage occurs ▪ Hearing worsens ▪ No improvement after 4 days • Non-pharmacological Advice 	<p>Patient IS eligible for self-care because they do NOT have the following Red Flags:</p> <ul style="list-style-type: none"> • Severe pain • Fever • Bloody or purulent ear discharge • Sudden hearing loss • Ear trauma • Recent ear procedure • Dizziness or vertigo • Diabetes or immune compromise <p>Pharmacist Assessment:</p> <ul style="list-style-type: none"> • Dan’s symptoms are consistent with water-clogged ears due to moisture retention, commonly called “swimmer’s ear.” • He shows no signs of bacterial acute otitis externa, which would require medical treatment. • He is a good candidate for OTC drying agents. <p>Recommendation:</p> <ul style="list-style-type: none"> • Isopropyl alcohol 95% + anhydrous glycerin 5% otic solution (e.g., Swim-Ear or store brand). <ul style="list-style-type: none"> ○ Instill 4–5 drops into the affected ear. ○ Keep the head tilted for at least 1 minute. ○ Use up to 3–4 times daily until symptoms resolve. ○ This dries the ear canal while preventing over-drying and irritation. • Counseling Points <ul style="list-style-type: none"> ○ This product is safe and indicated for water-clogged ears (not for infection). ○ A mild stinging sensation may occur but should be brief.

		<ul style="list-style-type: none"> ○ Avoid cotton swabs. ○ Consider routine softening drops once weekly if prone to buildup (optional). 	<ul style="list-style-type: none"> ○ Do NOT use if experiencing: <ul style="list-style-type: none"> ▪ Ear drainage ▪ Ear pain ▪ Perforated eardrum ▪ Ear tubes ○ Avoid sticking anything inside the ear canal (cotton swabs, pencils, hairpins). ○ Use earplugs or a swim cap when swimming to prevent recurrence. ● When to Seek Medical Care Refer to a provider if: <ul style="list-style-type: none"> ○ Symptoms worsen after 48–72 hours ○ Pain develops ○ Discharge appears ○ Hearing loss worsens ○ Fever occurs ● Optional Preventive Advice Since he swims frequently: <ul style="list-style-type: none"> ○ Use isopropyl alcohol/glycerin drops after swimming ○ Dry outer ears gently with a towel ○ Tilt each ear toward the floor to let water drain ○ Avoid using earbuds when ears feel wet
(I)ntroduction	Hello. I have had some ear pain since yesterday, and it is getting worse. I was hoping something like this would help.	Hello. My right ear feels clogged, and I am having a little trouble hearing out of it. Is there something you can recommend?	Hello. My left ear feels clogged after swimming yesterday. I think water got stuck in it, and it has not come out since. Is there something you can recommend to help get it out?
(G)oals	I want something that will relieve my ear pain.	I want something that will clean out my ear and help my hearing.	I want something that will get the water out of my ear
(S)ymptoms	It is a deep, throbbing pain in my left ear. I do not feel dizzy, but once this morning I was a little off balance.	My right ear seems clogged, has a full feeling, and sounds are muffled. On the other hand, I do not have pain, drainage, or ringing in that ear.	After swimming yesterday, I notice my ear feels full, and a little itchy. No real pain, just uncomfortable.
(C)haracteristics	It kind of feels like pressure. Hearing on my left also seems muffled. I woke this morning and noticed a yellowish discharge on my pillow. I took my temperature this morning because I thought I might have a fever, but it was only 100.0°F (37.8°C).	I can only describe it as clogged, blocked, and muffled.	I have muffled hearing, and a wet, water-trapped feeling. No drainage from the ear, or fever.
Other Symptoms	I do not have any other symptoms.	I do not have any other symptoms.	I do not have any other symptoms.
(H)istory	I had ear infections as a kid, but not really as an adult.	Maybe a long time ago. I think I had wax buildup as a kid, but not recently. I have not had any recent history of ear infections.	This has happened to me a few times before, usually after long swim sessions. If it helps, I do not have a history of ear infections, tubes, or other ear injuries.

(O)nset	It started about 24 hours ago.	The feeling started about 4 days ago, and has gradually become more bothersome.	The feeling started last night, a few hours after swimming.
(L)ocation	Only my left side is affected.	Only my right ear is affected.	Just my left ear is affected.
(A)ggravating	Chewing foods and pressing behind the ear makes it hurt. It also feels worse when I lie down on my left side.	Using my earbuds to listen to music makes it feel more blocked. And I tried using a cotton swab, but I think it just pushed the wax in deeper.	Using my earbuds to listen to music makes it feel more clogged. And lying down on my left side makes it feel a little worse.
(R)emitting	I tried taking some ibuprofen, but it only helped a little bit.	No, I have not tried anything yet.	I tilted my head and tried shaking it out, but that did not really work. A warm shower did not improve the symptoms either.
(M)edications	I take cetirizine 10 mg daily, and I took two ibuprofen tablets earlier today.	I take lisinopril 10 mg every day.	I take fexofenadine for allergies when I need it. No other medicines or drops.
(A)llergies	I am allergic to amoxicillin. I took it when I was young, and got a rash all over my body.	No, I do not have any allergies to medications.	No, I do not have any drug allergies.
(C)onditions	Just seasonal allergies. I am pretty healthy otherwise.	Just high blood pressure, but my doctor says it is well controlled.	Seasonal allergies is all. Otherwise, I am very healthy.
(C)affeine	I drink 2 cups of coffee every morning.	I drink 1 or 2 cups of coffee every morning.	I have an energy drink in the morning, and again in the afternoon.
(A)lcohol	I usually drink 3 or 4 beers on the weekend.	I usually drink 1 or 2 glasses of wine on the weekends.	I drink a couple of beers on the weekend.
(T)obacco	I vape every day. It helped me quit cigarettes a couple years ago.	No, I have never smoked or used other forms of nicotine.	No, I do not smoke, chew or vape.