

# Ontario Minor Ailments Program

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# Conflicts of Interest

- Presenter's Name: Kelly Grindrod
- I have the Relationships with commercial interests:
  - Advisory Board/Speakers Bureau – **None**
  - Funding (Grants/Honoraria) : **Public Health Agency of Canada, NSERC Promoscience, British Academy**
  - Research/Clinical Trials: **None**
  - Speaker/Consulting Fees: **Shoppers Drug Mart, Neighbourly Pharmacy, Canadian Pharmacists Association, Ontario Medical Association, Ontario Pharmacists Association, Ontario College of Family Physicians**
  - Other:
    - Current/past Employee of **None**
    - Investments: Investments in sponsor organization or entity with product in program
    - Patent in product
- Speaking Fees for current program:
  - I have received a speaker's fee from **the Canadian Society of Hospital Pharmacists** for this learning activity

# Conflicts of Interest

- Presenter's Name: Nardine Nakhla
- I have the Relationships with commercial interests:
  - Advisory Board/Speakers Bureau – Ontario College of Pharmacists – member of Minor Ailments Advisory Group (MAAG)
  - Funding (Grants/Honoraria) : Food, Health & Consumer Products of Canada (2022), Canadian Institute for Health Research (2021)
  - Research/Clinical Trials: None
  - Speaker/Consulting Fees: Ontario Pharmacists Association, Centre for Family Medicine, Pear Healthcare, Apotex + Cari-Med, Ensemble IQ, Haleon, Dairy Farmers of Ontario
  - Other:
    - Current/past Employee of None
    - Investments: Investments in sponsor organization or entity with product in program: MAPflow
    - Patent in product for MAPflow
- Speaking Fees for current program:
  - I have received a speaker's fee from the Canadian Society of Hospital Pharmacists for this learning activity

# Learning Objectives

- By the end of this session, you should be able to:
  - Describe the 13 minor ailments approved in Ontario
  - Demonstrate the process of assessment for a minor ailment
  - Select, prescribe, and monitor appropriate treatment for a minor ailment
  - Document your care for minor ailments



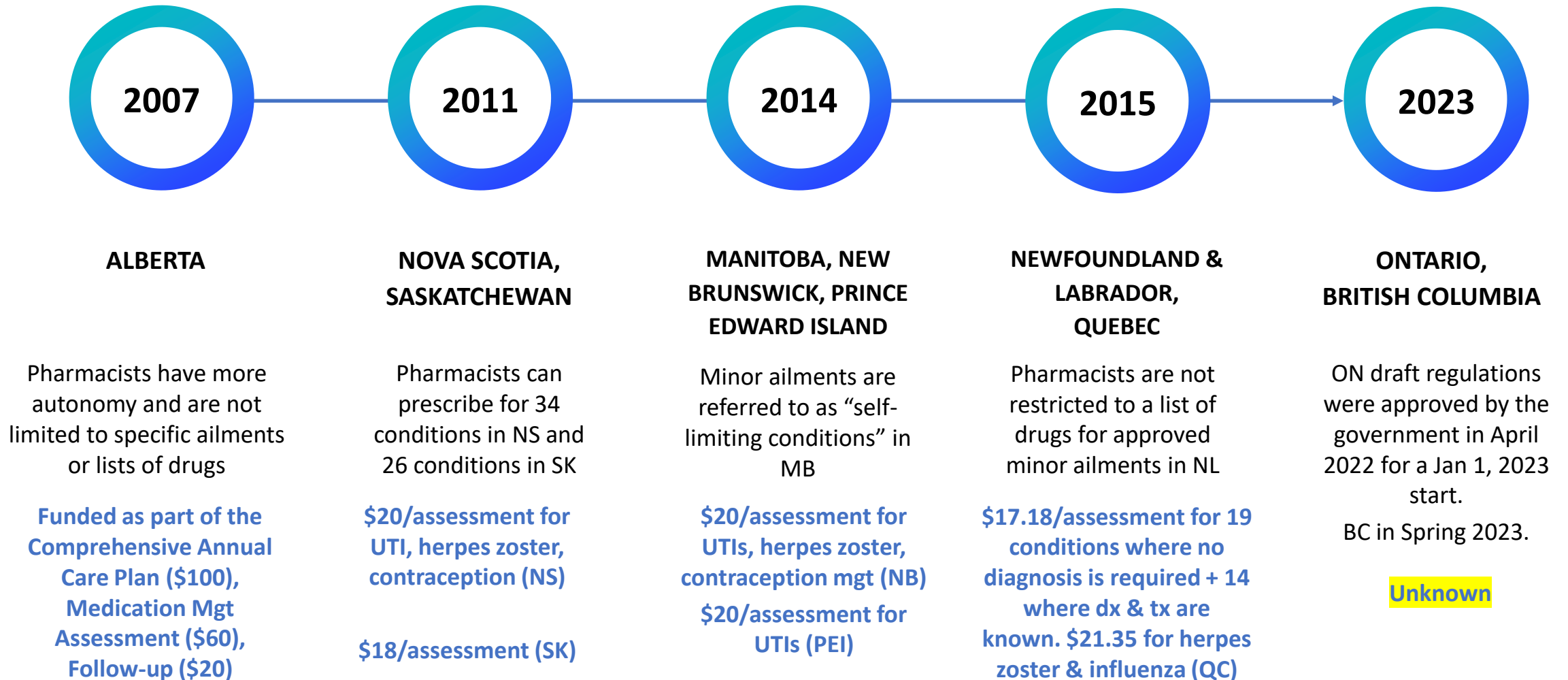
# A minor ailment is a health condition that...

- Can be reliably self-diagnosed by a patient
- Can be managed with self-care/minimal treatment

## Additional criteria:

- Usually a short-term condition
- Lab results are not usually required
- Treatment has a low risk of masking an underlying condition
- Medications and medical histories can reliably differentiate more serious conditions
- Only minimal or short-term follow-up is required

# Pharmacist-led minor ailment prescribing



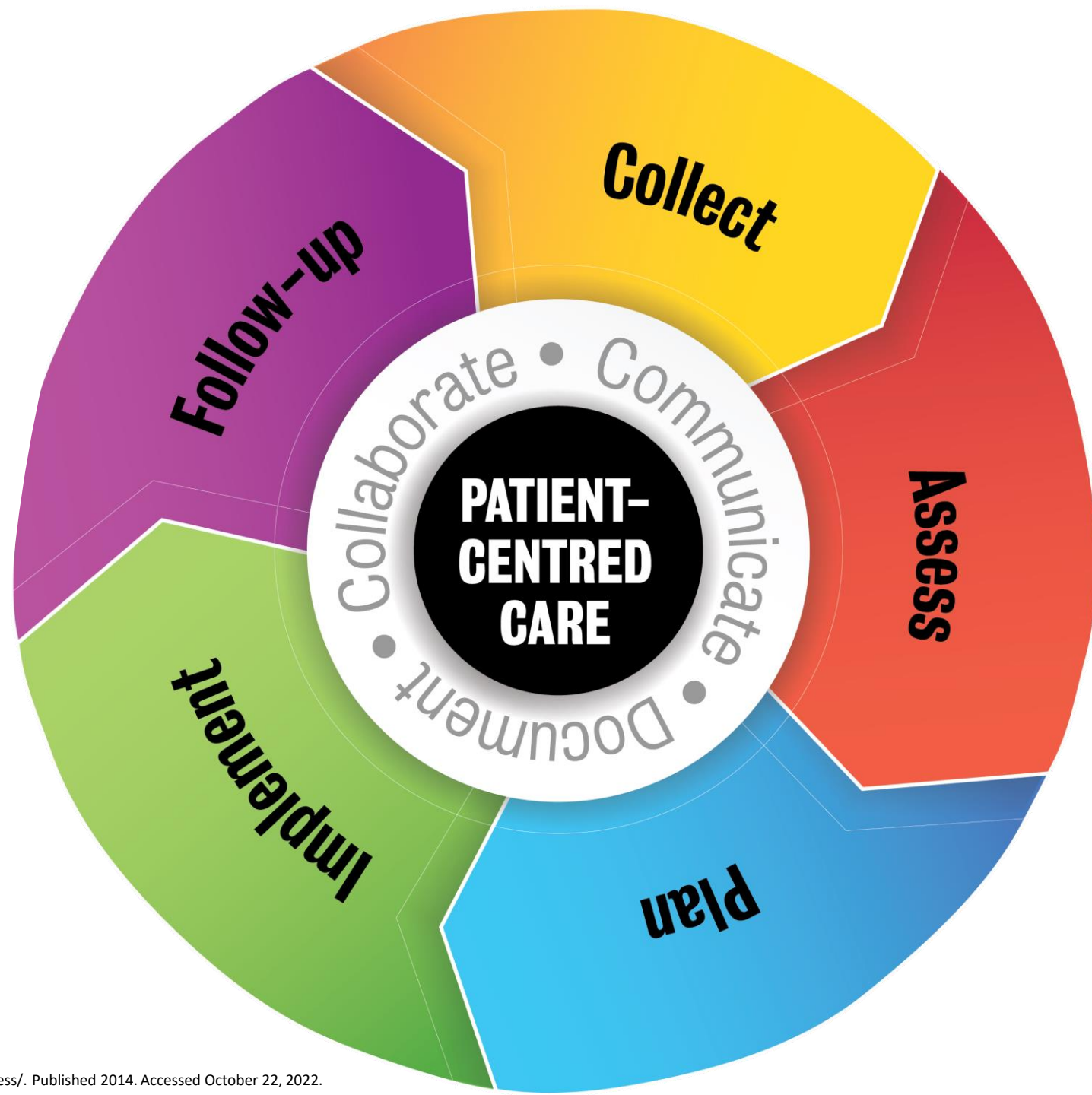
# 13 Minor Ailments Approved in Ontario

- Allergic rhinitis
- Candidal stomatitis (oral thrush)
- Conjunctivitis (bacterial, allergic and viral)
- Dermatitis (atopic, eczema, allergic and contact)
- Dysmenorrhea
- Gastroesophageal reflux disease (GERD)
- Hemorrhoids
- Herpes labialis (cold sores)
- Impetigo
- Insect bites and urticaria (hives)
- Tick bites, post-exposure prophylaxis to prevent Lyme disease
- Musculoskeletal sprains and strains
- Urinary tract infections (uncomplicated)

# The PPCP & Minor Ailment Services

- This presentation will juxtapose the 5 essential PPCP steps with the minor ailment service framework
- Minor ailment services include:
  - OTC consultations
  - Prescribing consultations\*

*\*This expansion of pharmacists' scope of practice comes into effect on January 1, 2023*

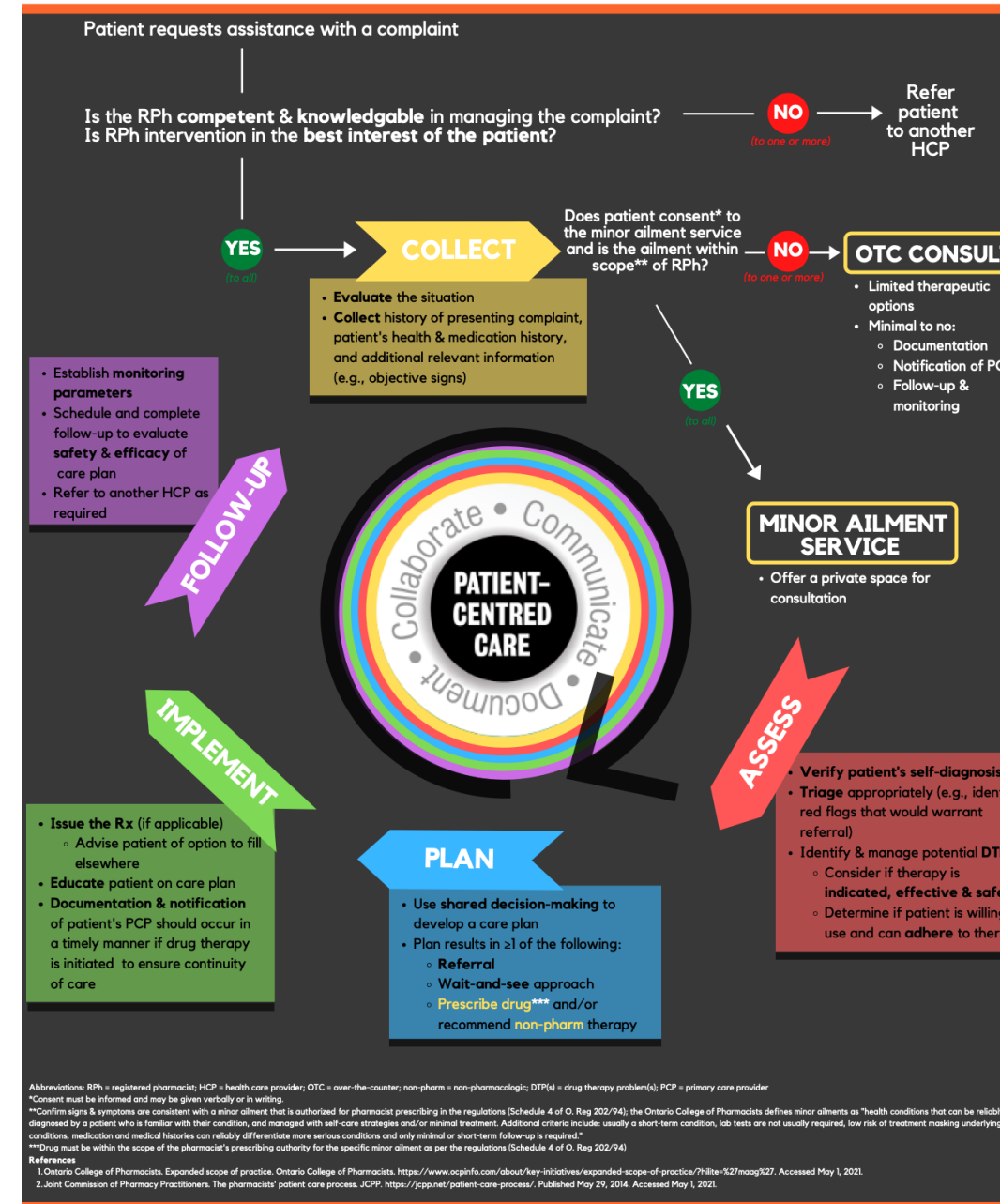


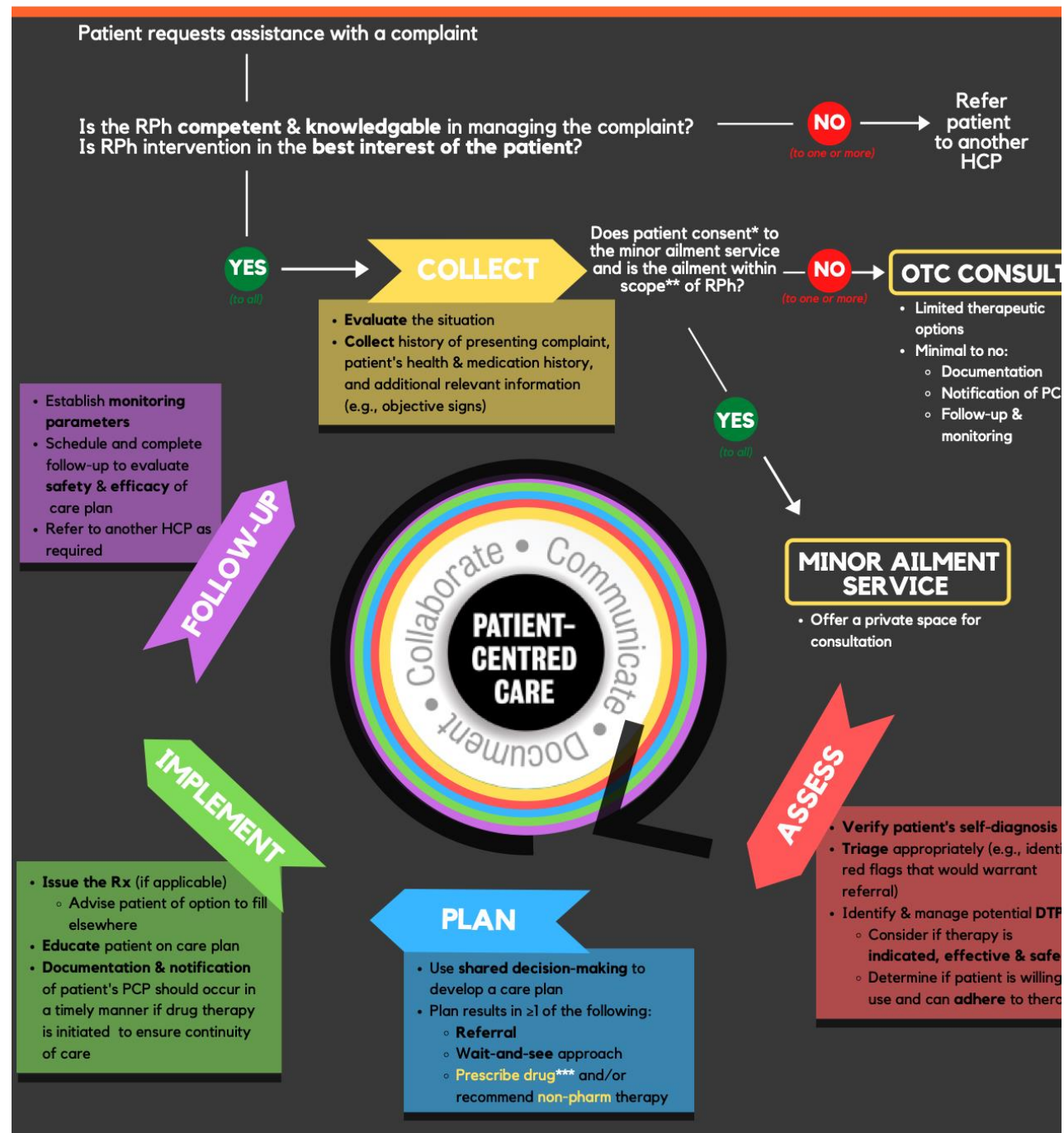


# Look familiar?

- You are already been doing much of this work
- You have the knowledge and tools needed to practice to your optimal
- Strong skills will come with practice

## Minor Ailment Service Framework (Ontario)





# Apply the PPCP/Minor Ailments Mode: Thomas



*“What can you recommend for my **heartburn**?”*

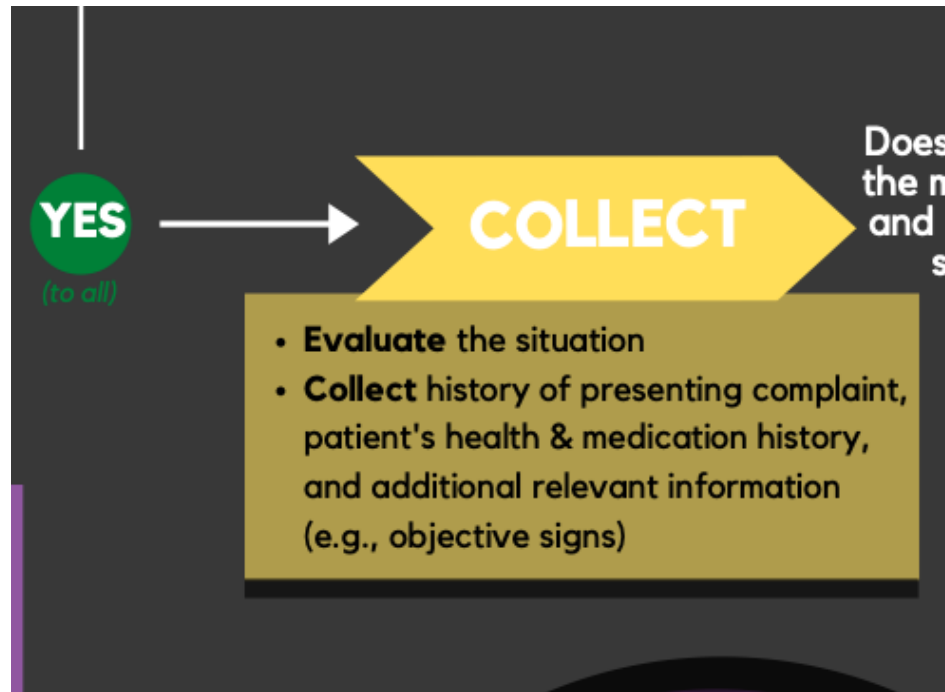
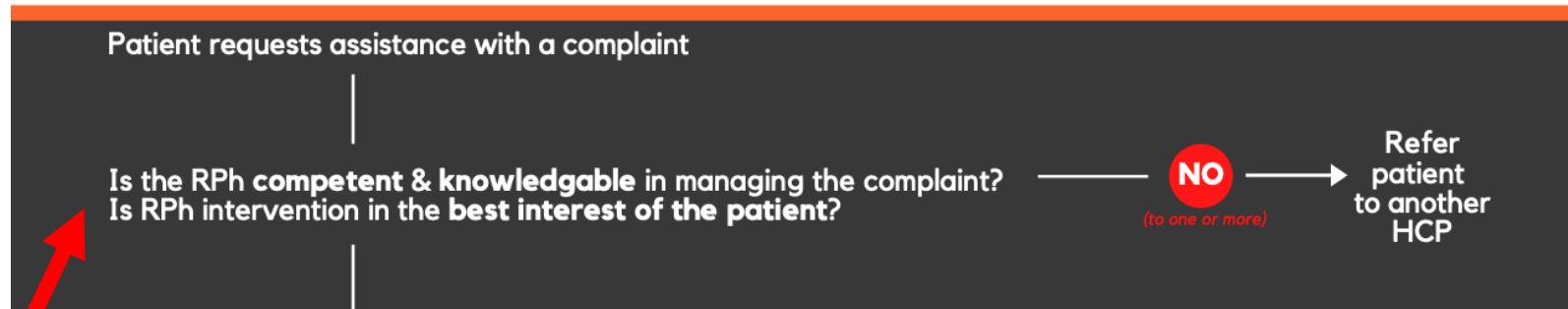
- 49 years old
- Hypertension, dyslipidemia x 5 years
- Amlodipine 5mg daily, Atorvastatin 20mg daily
- No known allergies
- Corporate Lawyer
- Third party drug coverage through ESI

# Question 1

What is the most appropriate FIRST step after hearing Thomas's chief complaint?

- a. Get informed consent
- b. Assess history of presenting illness
- c. Collect medication history
- d. Assess for red flag signs
- e. Assess your own competence for his complaint

# Minor Ailment Service Framework (Ontario)



Your FIRST step is always to assess your own knowledge and competency.





Before I make a recommendation, I need a bit more information. May I ask a few questions?

Let's start with your SYMPTOMS. You mentioned heartburn. Can you tell me more about what you're experiencing?



I've had heartburn for 10 years. It was just every now and then. I started a new job and get it 3-4 times/week now. Sometimes I taste acid after I have a spicy or heavy meal.



What other symptoms do you have?  
What else can you tell me about your heartburn?



I feel burning in my chest a half hour after I eat. It feels worse if I lie down. Tums helps but sometimes it comes back in an hour. I was hoping for something stronger.





# SCHOLAR: History of presenting illness

## SYMP TOMS

- Heartburn
- Acid regurgitation

## CHARACTERISTICS

- Burning sensation
- Significantly impacts his QOL (unable to fully function at work)

## HISTORY

- Had for years
- Recently worsened

## ONSET/TIMING

- Normally occurs after a meal
- Occuring an average of 3 to 4 days per week

## LOCATION

- Chest
- Acid taste in mouth

## AGGRAVATING FACTORS

- Eating spicy and fatty foods
- Lying down

## REMITTING FACTORS

- TUMS helps relieve his symptoms for a short time (1-2 hours)

# HAMS: General history

## HHEALTH CONDITIONS

- Hypertension
- Dyslipidemia
- Overweight/Obesity (BMI went from 28 to 31 in last year)

## ALLERGIES

- None

## MMEDICATIONS

- Amlodipine, atorvastatin
- Acetaminophen PRN back pain
- Tums: every couple of hours when symptoms present

## SSOCIAL HISTORY

- Drinks alcohol socially (2 times per month)
- Not caffeine/tobacco
- New higher stress job, weight gain

## Question 2

Which of the following questions is **essential** for gathering information on heartburn?

- a. “Has anyone in your family had a history of heartburn?”
- b. “Has anyone in your family had a history of heart disease?”
- c. “Has anyone in your family had a history of pancreatic cancer?”
- d. “Has anyone in your family had a history of irritable bowel syndrome?”
- e. “Has anyone in your family had a history of throat or stomach cancer?”



## Question 3

Based on Thomas's answers, which of the following are his risk factor(s) for GERD?

- a. Overweight/Obesity
- b. Amlodipine
- c. Stressful work
- d. All are options

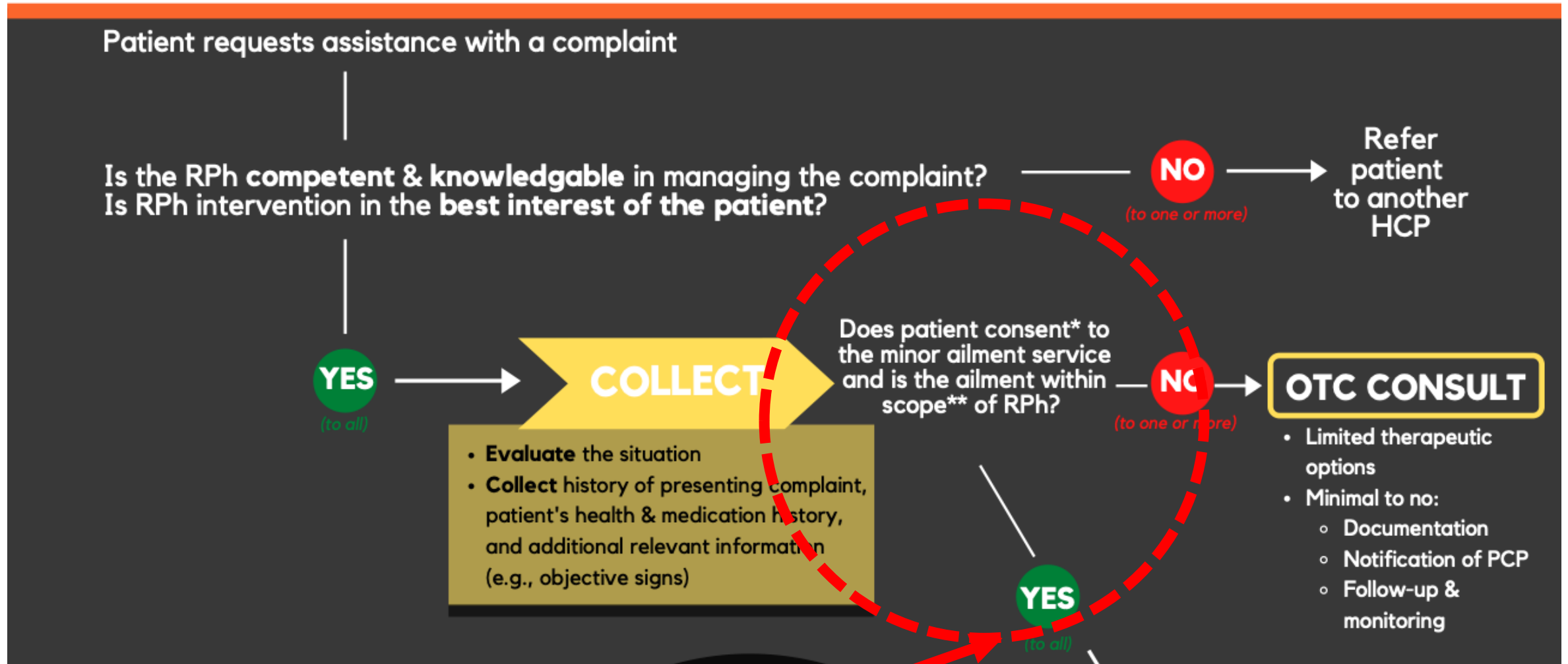
Based on what you've told me, I can help recommend a treatment under our provincial minor ailments program. Do you consent to this service. I'll need to gather a bit more information and may be able to prescribe something.



Yes, I consent to this service. I need to find something stronger than Tums. Maybe this is the path to getting there!



# Minor Ailment Service Framework (Ontario)



I have a few more questions to ask to help find the best treatment for you. Can we sit down in the pharmacy's private assessment room? It's more private.



## MINOR AILMENT SERVICE

- Offer a private space for consultation

### ASSESS

- **Verify patient's self-diagnosis**
- **Triage** appropriately (e.g., identify red flags that would warrant referral)
- Identify & manage potential **DTP(s)**
  - Consider if therapy is **indicated, effective & safe**
  - Determine if patient is willing to use and can **adhere** to therapy

## Questions 4 – TRUE or FALSE?

1. At this stage of the game, you can **confirm Thomas' self-diagnosis of heartburn.**
2. Thomas needs **a medical diagnosis** before you can prescribe anything.
3. Thomas must be **prescribed a Schedule 1 product** for the pharmacy to charge for the minor ailment service consultation.



## Question 5

Which of the following is a **red flag** requiring **non-urgent** referral to primary care for further evaluation?

- a. Bloating
- b. Dysphagia
- c. Hypersalivation
- d. Coffee ground emesis in vomit
- e. Age > 50 with new or worsening heartburn
- f. More than one of the above

# Screening for alarm features



Have you had:

- Difficulty or pain on swallowing?
- Black or tarry stools?
- Frequent vomiting?
- Vomiting blood?
- Unexplained weight loss?
- Pain that is moving to your neck or arm?
- Chest pain when you exercise and exert yourself?



No, none of that.  
That would be  
terrifying!



## Question 6

Based on the frequency of the symptoms, GERD can be classified as \_\_\_\_\_ if symptoms are present \_\_\_\_\_ **times per week**.

- a. Infrequent;  $<1$
- b. Infrequent;  $\leq 2$
- c. Frequent;  $>4$
- d. Frequent;  $\geq 2$

# GERD: Symptom Frequency

Infrequent/episodic:  
< 2 times per week

Frequent:  $\geq 2$  times  
per week

# GERD: Symptom Severity

## Mild

- a. Infrequent and low intensity symptoms for short duration
- b. Not nocturnal
- c. Do not affect daily activities

## Moderate

- a. Intense symptoms a few times a week
- b. May or may not be nocturnal
- c. May affect daily activities

## Severe

- a. Persistent (> 6 months), intense frequent symptoms
- b. Nocturnal
- c. Substantially affects daily activities, quality of life



## Question 7

How would you classify Thomas' current condition?

- a. Mild, infrequent symptoms
- b. Mild, frequent symptoms
- c. Moderate, infrequent symptoms
- d. Moderate, frequent symptoms
- e. Severe, frequent symptoms



## Question 8

What do you think is the most appropriate course of action to take next with Thomas?

- a. Increase the dose of his antacid
- b. Start H<sub>2</sub>receptor antagonist therapy
- c. Start proton pump inhibitor therapy
- d. Refer Thomas to a primary care provider for nonurgent evaluation
- e. Refer Thomas to the emergency department for urgent evaluation



- Non-drug strategies alone generally provide **inadequate relief** for most GERD patients & have **little evidence** to support their effectiveness but may help as adjunctive therapy.
- Drug choice depends on **what the patient has tried** and the **frequency of symptoms**

# PLAN

- Use **shared decision-making** to develop a care plan
- Plan results in  $\geq 1$  of the following:
  - **Referral**
  - **Wait-and-see** approach
  - **Prescribe drug\*\*\*** and/or recommend **non-pharm** therapy





# Drug Therapy Options

## Mild, infrequent

(< 2 times/week)

- Antacids
- Alginates
- H<sub>2</sub> receptor antagonists (H<sub>2</sub>RAs)
- H<sub>2</sub>RA/antacid combinations

## Moderate, frequently

(≥ 2 times per week)

- Proton pump inhibitors

| Item | Minor Ailment                                                 | AHFS Classification                                                                                                                                                                                                                                                                                                                                                                                       |
|------|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.   | Allergic rhinitis                                             | 4:08 Second Generation Antihistamines<br>52:02 Eye, Ear, Nose and Throat (EENT) Preparations — Antiallergic Agents<br>52:08.08 Eye, Ear, Nose and Throat (EENT) Preparations — Anti-inflammatory Agents — Corticosteroids                                                                                                                                                                                 |
| 2.   | Candidal stomatitis                                           | 8:14.28 Anti-infectives — Antifungals — Polyenes                                                                                                                                                                                                                                                                                                                                                          |
| 3.   | Conjunctivitis (bacterial, allergic or viral)                 | 04:04.20 Propylamine Derivatives<br>52:32 Eye, Ear, Nose and Throat (EENT) Preparations — Vasoconstrictors<br>52:04.04 Eye, Ear, Nose and Throat (EENT) Preparations — Anti-infectives — Antibacterials<br>52:02 Eye, Ear, Nose and Throat (EENT) Preparations — Antiallergic Agents                                                                                                                      |
| 4.   | Dermatitis (atopic/eczema, allergic or contact)               | 84:06 Skin and Mucous Membrane Agents — Anti-inflammatory Agents                                                                                                                                                                                                                                                                                                                                          |
| 5.   | Dysmenorrhea                                                  | 28:08.04 Central Nervous System Agents — Analgesics and Antipyretics — Nonsteroidal Anti-inflammatory Agents                                                                                                                                                                                                                                                                                              |
| 6.   | Gastroesophageal reflux disease (GERD)                        | 56:04 Gastrointestinal Drugs — Antacids and Adsorbents<br>56:28.12 Gastrointestinal Drugs — Antiulcer Agents and Acid Suppressants — Histamine H <sub>2</sub> -Antagonists<br>56:28.36 Gastrointestinal Drugs — Antinuclear Agents and Acid Suppressants — Proton-Pump Inhibitors                                                                                                                         |
| 7.   | Hemorrhoids                                                   | 12:12.04 Autonomic Drugs — Sympathomimetic (Adrenergic) Agents — Alpha-Adrenergic Agonists<br>52:04.92 Eye, Ear, Nose and Throat (EENT) Anti-infectives — Miscellaneous<br>84:06 Skin and Mucous Membrane Agents — Anti-inflammatory Agents<br>84:08 Skin and Mucous Membrane Agents — Antipruritics and Local Anesthetics<br>84:04.04 Skin and Mucous Membrane Agents — Anti-infectives — Antibacterials |
| 8.   | Herpes labialis                                               | 8:18.32 Anti-infective Agents — Antivirals — Nucleosides and Nucleotides<br>84:06 Skin and Mucous Member Agents — Anti-inflammatory Agents<br>84:04.06 Skin and Mucous Membrane Agents — Anti-infectives — Antivirals                                                                                                                                                                                     |
| 9.   | Impetigo                                                      | 84:04.04 Skin and Mucous Membrane Agents — Anti-infectives — Antibacterials<br>84:06 Skin and Mucous Member Agents - Anti-inflammatory Agents                                                                                                                                                                                                                                                             |
| 10.  | Insect bites and urticaria                                    | 4:04 Antihistamine Drugs — First Generation Antihistamines<br>4:08 Antihistamine Drugs — Second Generation Antihistamines<br>84:06 Skin and Mucous Member Agents — Anti-inflammatory Agents<br>84:08 Skin and Mucous Membrane Agents — Antipruritics and Local Anesthetics                                                                                                                                |
| 11.  | Tick bites, post-exposure prophylaxis to prevent Lyme disease | 8.12.24 Anti-infective Agents — Antibacterials — Tetracyclines                                                                                                                                                                                                                                                                                                                                            |
| 12.  | Musculoskeletal sprains and strains                           | 28:08.04 Central Nervous System Agents — Analgesics and Antipyretics — Nonsteroidal Anti-inflammatory Agents<br>28.08.92 Central Nervous System Agents — Analgesics and Antipyretics — Miscellaneous                                                                                                                                                                                                      |
| 13.  | Urinary Tract Infection (uncomplicated)                       | 8:12.20 Anti-infective Agents — Antibacterials — Sulfonamides<br>8:36 Anti-infective Agents — Urinary Anti-infectives                                                                                                                                                                                                                                                                                     |

# A Note about AHFS classifications

Which specific products would fall under each of these AHFS classifications?

- Health Canada has removed the AHFS classifications from the DPD so you must now consult and reconcile information from the [CPMA](#), consult the revised CTMA and CTC chapters in the CPS (as they drugs in each chapter that fall under the approved ON AHFS classifications will be identified in each chapter), take CPD programs that list drugs within scope, or purchase a subscription to the [AHFS categories](#). Electronic tools for minor ailment prescribing may also be of assistance.
- Another helpful resource (but American):
  - <https://www.oregon.gov/obnm/Documents/Formulary%20Information/AHFSClassificationwithDrugs2019.pdf>

# Example:

## 56:04 Antacids

- Antacids neutralize esophageal acid within 15 minutes
- Provide modest relief for up to 90 minutes
- Do not prevent GERD; have a place in “as needed” symptomatic treatment

| Drugs                                                                                                                                                                                                                                                                                                                                                                               | Dosage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Adverse effects                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Four basic types (in order of least → most potent)</p> <ul style="list-style-type: none"> <li>• Aluminum hydroxide</li> <li>• Magnesium hydroxide</li> <li>• Sodium salts (bicarbonate, citrate)</li> <li>• Calcium carbonate</li> </ul> <p>Combination products (Magnesium/aluminum combo with or without simethicone, Magnesium/calcium combo with or without simethicone)</p> | <p><u>Aluminum hydroxide:</u><br/>500–1800 mg, 2–6 times per day, between meals and HS PRN</p> <p><u>Magnesium hydroxide:</u><br/>400-1200 mg per day, up to 4 times daily PRN</p> <p>Magnesium hydroxide/aluminum hydroxide combo:<br/>Liquid: 30 mls after meals, at bedtime PRN<br/>Tablets: 1-4 tablets 4 times daily between meals, at bedtime or as needed</p> <p><u>Sodium bicarbonate:</u><br/>2 tabs every 4 hours as needed; max 8 tabs /24 hours</p> <p><u>Sodium citrate:</u><br/>5gm in 150 ml of water every 2 hours PRN<br/>Should be taken within 20-60 minutes and/or after a meal at bedtime as needed</p> <p><u>Calcium carbonate:</u><br/>500–1500 mg per day in divided doses PRN</p> <p><u>Calcium carbonate/magnesium hydroxide</u><br/>2 tabs every 4 hours as needed, max 12 tabs/24 hours</p> | <p>Aluminum:</p> <ul style="list-style-type: none"> <li>• Constipation</li> <li>• Hypophosphatemia with prolonged/high dose use</li> </ul> <p>Magnesium</p> <ul style="list-style-type: none"> <li>• Diarrhea</li> <li>• Accumulation in patients with renal impairment</li> </ul> <p>Magnesium/aluminum combo</p> <ul style="list-style-type: none"> <li>• Minor changes in bowel habits</li> <li>• Accumulation in patients with renal failure</li> </ul> <p>Sodium</p> <ul style="list-style-type: none"> <li>• Flatulence, belching</li> <li>• Abdominal distention</li> </ul> <p>Calcium:</p> <ul style="list-style-type: none"> <li>• Constipation</li> <li>• Rebound hyperacidity</li> </ul> |

1. Guidelines for prescribing minor ailments and patient self-care prescribing; Gastroesophageal Reflux Disease (GERD) - Guidelines for Prescribing H2RAs and PPIs. Saskatoon (SK): University of Saskatchewan, medSask; Updated February 16, 2021. Accessed on October 22, 2022. <https://medsask-usask-ca.proxy.lib.uwaterloo.ca/professional-practice/restricted-guidelines/gastroesophageal-reflux-disease-gerd---guidelines-for-prescribing-h2ras-and-ppis.php>

2. Shaffer E. Gastroesophageal Reflux Disease. In: Therapeutics Choices. Canadian Pharmacist Association. Updated April 30, 2021. Accessed on October 22, 2022. <https://myrxtx-ca.proxy.lib.uwaterloo.ca>

# Example:

## 56:04 Adsorbents (Alginates)

- Alginic acid reacts with sodium bicarbonate in saliva to form mechanical barrier (sodium alginate) for the esophagus
- Effective for patients experiencing post-prandial symptoms
- Have a place in “as needed” symptomatic treatment; sometimes used as “add-on” therapy with other agents
- Combination of antacids and alginic acid is superior to the antacids alone to relieve GERD symptoms

| Drugs                                                                                                                                      | Dosage                                                                                                                                                                                                                                                     | Adverse effects                                                                                                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Alginates (sodium salt)/aluminum hydroxide</li> <li>• Alginic acid/magnesium carbonate</li> </ul> | <p>Alginates (sodium salt)/aluminum hydroxide liquid:<br/>10–20 mL after meals and HS PRN, followed by a glass of water</p> <p>Alginic acid/magnesium carbonate tablets:<br/>2–4 tablets (chewed) after meals and HS PRN, followed by a glass of water</p> | <ul style="list-style-type: none"> <li>• Flatulence</li> <li>• Belching</li> <li>• Constipation with liquid formulations</li> <li>• Hypophosphatemia with long-term use or high doses</li> <li>• Dementia and osteomalacia with long term use in end stage renal diseases</li> </ul> |

1. Guidelines for prescribing minor ailments and patient self-care prescribing; Gastroesophageal Reflux Disease (GERD) - Guidelines for Prescribing H2RAs and PPIs. Saskatoon (SK): University of Saskatchewan, medSask; Updated February 16, 2021. Accessed on October 22, 2022. <https://medsask-usask-ca.proxy.lib.uwaterloo.ca/professional-practice/restricted-guidelines/gastroesophageal-reflux-disease-gerd---guidelines-for-prescribing-h2ras-and-ppis.php>

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# Example:

## 56:28:12 H<sub>2</sub>RAs

- Bind to the H<sub>2</sub>-receptors to reduce gastric acid secretion
- Effective within 1 hour and lasting 4-10 hours
- All H<sub>2</sub>RAs are considered to be equally effective
- Provide complete symptom relief in 15% of GERD patients

| Drugs                                                                                                                            | Dosage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Adverse effects                                                                                                                                                                                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Cimetidine</li> <li>• Famotidine</li> <li>• Nizatidine</li> <li>• Ranitidine</li> </ul> | <p><b>Cimetidine:</b> 400 mg QID with meals and at bedtime OR 800 mg BID</p> <p><b>Famotidine:</b><br/> <i>NonRx dosing for symptom relief:</i> 10- 20 mg once daily, 10 mg doses can be repeated after 1 hr if needed, maximum 20mg/dose or 40 mg/day<br/> <i>NonRx dosing for prevention of food-related GERD symptoms:</i> 10 mg BID, maximum 40mg/day<br/> <i>Standard Rx dose:</i> 20 mg BID</p> <p><b>Nizatidine:</b> <i>Rx dosing:</i> 150 mg BID</p> <p><b>Ranitidine:</b><br/> <i>Non-prescription dosing for symptom relief:</i> 75-150 mg once daily, dose can be repeated after 1 hr if needed, maximum 300 mg/day<br/> <i>Non-prescription dosing for prevention of food-related GERD symptoms:</i> 75-150 mg 30-60 mins before eating, maximum 300mg/day<br/> <i>Standard Rx dose:</i> 150 mg BID or 300mg once daily at bedtime</p> | <p>Generally well-tolerated; common side effects include:</p> <ul style="list-style-type: none"> <li>• Headache</li> <li>• Dizziness</li> <li>• Diarrhea</li> <li>• Tiredness</li> </ul> <p>Cimetidine can also cause gynecomastia and impotence (rare side effect)</p> |

1. Guidelines for prescribing minor ailments and patient self-care prescribing; Gastroesophageal Reflux Disease (GERD) - Guidelines for Prescribing H<sub>2</sub>RAs and PPIs. Saskatoon (SK): University of Saskatchewan, medSask; Updated February 16, 2021. Accessed on October 22, 2022. <https://medsask-usask-ca.proxy.lib.uwaterloo.ca/professional-practice/restricted-guidelines/gastroesophageal-reflux-disease-gerd---guidelines-for-prescribing-h2ras-and-ppis.php>

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# Example: 56:28:36 PPIs

- Block acid secretion by irreversibly binding to & inhibiting the proton pump
- Stronger and longer acid suppression than H2RAs, lasting up to 24 hours
- For mild & infrequent symptoms not resolved by prn OTCs → 4-week course
- For mild & frequent or moderate symptoms → 8-week course
- PRN dosing not suitable, as PPIs don't have a rapid enough onset of action
- Best taken 30 minutes prior to the first meal of the day

| Drugs                                                                                                                                                                                                                                                                                  | Dosage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Adverse effects                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Dexlansoprazole</li> <li>• Esomeprazole*</li> <li>• Lansoprazole</li> <li>• Omeprazole*</li> <li>• Pantoprazole</li> <li>• Rabeprazole</li> </ul> <p><i>*Esomeprazole 20mg &amp; Omeprazole 20mg are available without a prescription</i></p> | <p><b><u>Mild, infrequent symptoms:</u></b></p> <ul style="list-style-type: none"> <li>• Dexlansoprazole 30 mg once daily</li> <li>• Esomeprazole 20 mg once daily</li> <li>• Lansoprazole 15 mg once daily</li> <li>• Omeprazole 10 mg once daily</li> <li>• Pantoprazole sodium 20 mg once daily</li> <li>• Pantoprazole magnesium 40 mg daily</li> <li>• Rabeprazole 10 mg once daily</li> </ul> <p><b><u>Mild-to-moderate, frequent symptoms:</u></b></p> <ul style="list-style-type: none"> <li>• Dexlansoprazole 30-60 mg once daily</li> <li>• Esomeprazole 20-40 mg once daily</li> <li>• Lansoprazole 15-30 mg once daily</li> <li>• Omeprazole 20 mg once daily</li> <li>• Pantoprazole sodium 20-40 mg daily</li> <li>• Pantoprazole magnesium 40 mg daily</li> <li>• Rabeprazole 20 mg once daily</li> </ul> | <p>Very well tolerated</p> <ul style="list-style-type: none"> <li>• Diarrhea</li> <li>• Headache</li> <li>• Dizziness</li> <li>• Rash</li> </ul> <p>Long term use may be associated with:</p> <ul style="list-style-type: none"> <li>• Osteoporosis related bone fractures</li> <li>• Intestinal infections</li> <li>• Pneumonia</li> <li>• Chronic kidney disease</li> <li>• Stomach cancer</li> <li>• Vitamin and mineral deficiency (Vitamin B12, magnesium)</li> <li>• Heart attacks</li> <li>• Stroke</li> <li>• Dementia</li> </ul> |

1. Guidelines for prescribing minor ailments and patient self-care prescribing; Gastroesophageal Reflux Disease (GERD) - Guidelines for Prescribing H2RAs and PPIs. Saskatoon (SK): University of Saskatchewan, medSask; Updated February 16, 2021. Accessed on October 22, 2022. <https://medsask-usask-ca.proxy.lib.uwaterloo.ca/professional-practice/restricted-guidelines/gastroesophageal-reflux-disease-gerd---guidelines-for-prescribing-h2ras-and-ppis.php>

2. Shaffer E. Gastroesophageal Reflux Disease. In: Therapeutics Choices. Canadian Pharmacist Association. Updated April 30, 2021. Accessed on October 22, 2022. <https://myrxtx-ca.proxy.lib.uwaterloo.ca>

# GERD: Principles of Prescribing

- Use lowest dose, shortest duration appropriate
- Mild & infrequent symptoms that have improved but not resolved by “as needed” non-prescription treatment:
  - 2-week course of an H<sub>2</sub>RA
- Mild and frequent OR moderate symptoms:
  - 4-week PPI course/duration with 1 refill for a total 8-week course.



School of Pharmacy  
40 Victoria Street  
Kitchener, ON

Thomas Wilson  
HCN – 9877-890-987-JF

June 8, 2022

Esomeprazole 20mg  
S: t 1 tab once daily x 4 weeks  
M: 30  
Rx1

Nardine Nakhla, PharmD, RPh  
OCP Registration #608193

Ok, here is your prescription. The prescription is for 8 weeks, but you should start to see your symptoms get better in the next few days. You can have it filled here or at another pharmacy. The choice is yours.

I want like to fill it here.

Ok, the team will get the prescription ready for you. I will check with you in 7 days to see it is helping. Is that okay?

Once the treatment options are selected, work with the patient to implement the individualized plan. This is normally through patient counselling.

- Educate about the condition
- Educate about the care plan
- Document
- Notify primary care

**IMPLEMENT**

- **Issue the Rx (if applicable)**
  - Advise patient of option to fill elsewhere
- **Educate patient on care plan**
- **Documentation & notification** of patient's PCP should occur in a timely manner if drug therapy is initiated to ensure continuity of care



# Mandatory notification

You must notify the primary care providers(s) of the initiated treatment(s) and follow-up plan in a timely fashion

| Patient Information                                                                                                 |                                                |
|---------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| Name (Last, First):                                                                                                 | Date of Birth:                                 |
| Address:                                                                                                            | Telephone:                                     |
| Patient Consent was obtained from: <input type="checkbox"/> Patient <input type="checkbox"/> Patient's Agent: _____ |                                                |
| Primary Care Provider (PCP) Information                                                                             |                                                |
| Primary Care Provider Name:                                                                                         |                                                |
| Date of Notification:                                                                                               | Method of Notification: [ Fax / Phone / Other] |
| PCP Fax:                                                                                                            | PCP Phone:                                     |
| Prescription Information                                                                                            |                                                |
|                                                                                                                     |                                                |
| Rationale for Prescribing                                                                                           |                                                |
| (e.g., results of patient assessment and/or lab tests)                                                              |                                                |
|                                                                                                                     |                                                |
| Monitoring and Follow-up Plan                                                                                       |                                                |
|                                                                                                                     |                                                |
| Prescribing Pharmacist Information                                                                                  |                                                |
| Name:                                                                                                               | Pharmacy:                                      |
| Registration #:                                                                                                     | Telephone:                                     |
| Prescriber Signature:                                                                                               |                                                |



# Follow-up

- Establish **monitoring parameters**
- Schedule and complete follow-up to evaluate **safety & efficacy** of care plan
- Refer to another HCP as required

**FOLLOW-UP**

- Use an appropriate timeline based on the product recommended/prescribed
- **Assess Effectiveness**
- Refer at follow-up if:
  - Red flag symptoms
  - Symptoms worsen
  - Symptoms resolve but recur within 90 days
- Symptoms recurring >90 days after resolution can be managed with the same drug and dose used to previously control symptoms

Guidelines for prescribing minor ailments and patient self-care prescribing; Gastroesophageal Reflux Disease (GERD) - Guidelines for Prescribing H2RAs and PPIs. Saskatoon (SK): University of Saskatchewan, medSask; Updated February 16, 2021. Accessed on October 22, 2022. <https://medsask-usask-ca.proxy.lib.uwaterloo.ca/professional-practice/restricted-guidelines/gastroesophageal-reflux-disease-gerd---guidelines-for-prescribing-h2ras-and-ppis.php>

Shaffer E. Gastroesophageal Reflux Disease. In: Therapeutics Choices. Canadian Pharmacist Association. Updated April 30, 2021. Accessed on October 22, 2022. <https://myrxtx-ca.proxy.lib.uwaterloo.ca>

Nakhla N. Prescribing for Minor Ailments – The Fundamentals. Presented as part of the University of Waterloo-Ontario Pharmacists Association Course. January 2022; Available at: <https://opatoday.com/product/prescribing-for-minor-ailments-the-fundamentals/> GRAPHIC CANNOT BE REPRODUCED WITHOUT PERMISSION.



# Follow-up

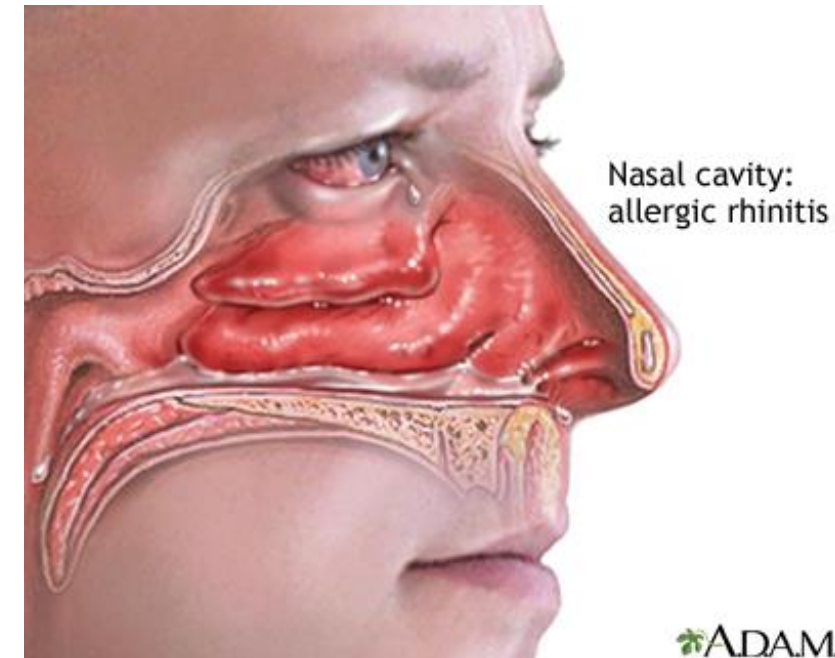
## Assess Adverse Effects

- H<sub>2</sub>RAs have an excellent safety profile; side effects (e.g., diarrhea, headache, dizziness) are usually well tolerated. If persistent or very bothersome, discontinue and consider alternate therapy or refer to patient's PCP.
- PPI short-term side effects (e.g., diarrhea, constipation, headache, nausea) are usually mild and well tolerated. If persistent or very bothersome, discontinue and consider alternate therapy or refer to patient's PCP.
- Observational studies with PPIs indicate that long-term use may be associated with potentially serious side effects; risks and benefits must be weighed, and patients should be re-evaluated on a regular basis.

# Allergic rhinitis

## Example treatment:

- Second generation oral antihistamines (nonRx and Rx)
- Intranasal corticosteroids (nonRx and Rx)
- Combination intranasal antihistamine + corticosteroid spray (Rx)



# Candidal stomatitis (oral thrush)

## Example treatment:

- Infants < 1 year: nystatin oral drops (100,000 u/ml): 2ml QID x 7 days
- Children and Adults: nystatin oral suspension (100 u/ml): 4-6 ml QID x 7 days





# Conjunctivitis (bacterial, allergic and viral)

Example treatment:

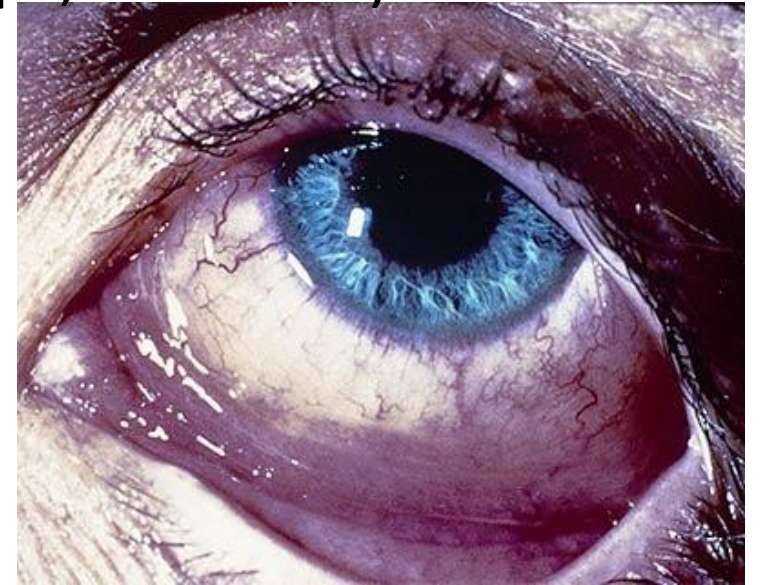
- Viral: lubricants; no Rx products recommended for uncomplicated cases
- Bacterial: antibacterials (e.g., erythromycin 0.5% ointment)
- Allergic: antiallergics (e.g., olopatadine 0.2% drops, ketotifen)



Viral



Bacterial



Allergic



# Dermatitis (atopic, eczema, allergic and contact)

- Example Treatment:
  - Topical corticosteroids



Contact dermatitis from a cast



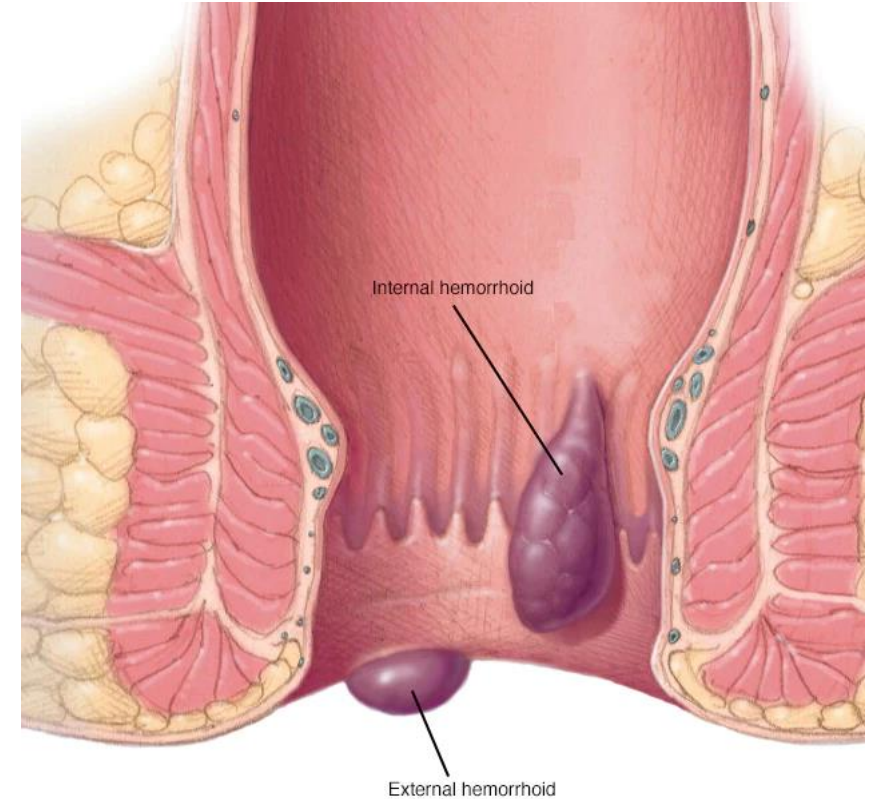
Atopic dermatitis/eczema



Atopic dermatitis/eczema

# 7. Hemorrhoids

- Example Treatment:
  - Nonprescription agents containing astringents (e.g., zinc sulfate) +/- local anesthetics (e.g., dibucaine)
  - Prescription combination products containing topical hydrocortisone 1% in combination with zinc sulfate and/or local anesthetics



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# Herpes labialis (cold sores)

- Example Treatment:
  - Tablets: Valacyclovir, famciclovir, acyclovir
  - Topical: Acyclovir 5% + Hydrocortisone 1%





# Impetigo

- Example Treatment:
  - Topical antibiotics: Fucidic acid 2% cream/ointment
  - Mupirocin 2% cream/ointment



# Insect bites and urticaria (hives)

- Example Treatment:
  - First generation oral antihistamines
  - Second generation oral antihistamines
  - Anti-inflammatory agents (e.g., hydrocortisone 1% cream, ointment)
  - Antipruritic and local anesthetics





# Tick bites, post-exposure prophylaxis to prevent Lyme disease

- Example Treatment:
  - Adults: Doxycycline 200mg PO x 1 dose
  - Children: Doxycycline 4mg/kg PO x 1 dose (*no age restriction!*)



# Musculoskeletal sprains and strains

- Example Treatment:
  - Nonprescription topical and/or oral analgesics
  - Prescription-strength NSAIDs



# Urinary tract infections (uncomplicated)

- Example Treatment:
  - 1<sup>st</sup> line: Nitrofurantoin macrocrystals 100mg PO BID x 5 days
  - 2<sup>nd</sup> line: Trimethoprim/sulfamethoxazole, Trimethoprim, Fosomycin tromethamine



# Dysmenorrhea

## Treatment Options (first-line)

### NSAIDs:

- *For mild pain that has minimal impact on patient's QOL:* initiate **nonprescription NSAIDs** (e.g., ibuprofen, naproxen sodium) at self-care dosages
- *For moderate pain that restricts daily activities:* initiate **prescription NSAIDs** (e.g., mefenamic acid, naproxen) at Rx dosages

### Hormonal contraceptives:

- While also considered first-line therapies, prescribing of these agents falls outside of the scope of pharmacists in Ontario!

# Summary

- Minor ailments combine your OTC and therapeutic assessment skills
- Minor ailment scope extends treatment choices to include prescription medications
- Assessment may feel more comprehensive
- Always should document your assessment
- Expect to prescribe treatment and provide a script to be filled elsewhere
- Always notify the primary care provider
- Patient education requires a follow-up plan