

Process

- Establish who the patient is
 - o If patient is customer ask to confirm their age and weight
 - o Child: ask for age
 - o Less than 12yo: ask for weight
- How long they have had symptoms for
- Ask them to describe their symptoms
- Differential Dx: Use targeted questions to confirm patient has the condition that can be treated. Question patient on the symptoms experiencing and also possible indications of the symptoms to rule out referrals & also find differential Dx
 - o Determining dangerous symptoms – referral
 - o Ask questions related to the condition presented
 - o Ask questions to rule out any other possible conditions that the symptom may also indicate
- Have they tried anything for their condition
- IF FEMALE: say you have to ask all your female patients this—
 - o Are you pregnant or is there a possibility that you are pregnant?
 - o Are you currently breastfeeding?
- Do they have any other medical conditions
- Are they taking any prescription medicines prescribed by a doctor
- Are they taking any medications, supplements or over the counter medicines they can purchase from super market or health food stores
- Have they ever experienced any bad effects from taking any medicines
- Do they have allergies to any medicines
- Do they have allergies to anything at all
- Decide to treat the patient ****
- May summarize the information that the patient has given to show active listening & ensure you have gathered the correct information
- Ask the patient if they have a preference on dosage form
- Tell patient to excuse you so you can grab the product
- Greet the patient again: thanks for waiting..
- Tell patient what the medication is
 - o Active ingredient
 - o Mechanism of action in laymen terms
 - o Give explanation to how the treatment is appropriate for the client
 - o What can the patient expect from taking the medication
 - o Tell patient there is evidence of this and this or that about the product
 - o Onset of effects from drugs
- Give instructions for use
 - o i.e. Shake bottle when required*
 - o Correct dose
 - If giving child a dose may want to demonstrate how dose is measured and using the correct measuring device
 - o Frequency
 - o Duration
- Give patients possible side effects
 - o Ensure they are normal or
 - o Side effects that patients should be aware of & if present to seek medical attention
- If treatment fails
 - o If treatment fails, come back and can recommend a different product, or go to GP
 - o If symptoms worsens go see GP
- Tell patients of any possible drug interactions medication may have
- Lifestyle advice to manage condition next time or how to manage it now
 - o May also want to notify GP of any Sx changes
- Give CMI
- Ask patient if have any questions

Considerations

- Must show empathy to patient
- Must show active listening

Possible oral exam cases

- Pregnancy
 - o Morning sickness
 - o Common cold
 - o Headache or Pain
 - o Constipation
 - o Heartburn

- Breastfeeding
 - o Headache or Pain
 - o Cough/Colds
 - o Constipation
- Children
 - o Common cold
 - Fever
 - Diarrhea
 - o Dyspepsia
 - GORD
 - Reflux
 - o Constipation
 - o Diarrhea
 - o Teething
- Elderly
 - o Constipation

Normal Adult

- Common cold
 - o Runny nose
 - o Sneezing
 - o Nasal congestion
 - o Cough
 - o Sore throat
- Allergic rhinitis
- Dyspepsia
 - o GORD
 - o Heartburn
 - o Children
 - GORD
 - Reflux
- Constipation
- Diarrhea
- Sprain/strain
- Headache
- Osteoarthritis
- Gout
- Period Pain (dysmenorrhea)
- Dry cough
- Productive cough

General referral points

Chest	Gastrointestinal	Musculoskeletal
Chest pain	Difficulty swallowing	Severe impact
Wheezing	Blood in vomit	Inability to weight bear
Blood in sputum	Bloody diarrhoea	Impaired range of movement
Palpitations	Inexplicable weight loss	
Persistent cough	Alternating bowel habit	
Whooping cough	Vomiting with constipation	

Blenkinsopp, Symptoms in the pharmacy (available online via the UQ Library) has an appendix that lists many of these and more.

Common cold—differential diagnoses

Common cold	Bacterial bronchitis	Influenza	Other conditions
Duration 7–10 days	May last > 7 days	7–14 days	Acute otitis media
Worse then gets better	Stable or worsening	Worse then better	Sinusitis
Few systemic symptoms	Pronounced cough	Systemic symptoms	(more)
Mainly upper-respiratory	Protracted cough Might start after cold	Fatigue Refer very young/old	

GORD—alarm symptoms

GORD	Alarm symptoms	Endoscopy indication*
Retrosternal discomfort	Chest pain	> 55 and first symptoms
Responds to therapy	Lack of treatment response	Family history of GI cancer
Typically worse after meals	Dysphagia/odynophagia Anaemia Suspected GI bleeding Unexplained weight loss	

*In addition to alarm symptoms

Beclomethasone

Intranasal corticosteroid	Beconase Allergy & Hayfever 12 hour 50mcg/dose (200 doses)
MOA	Produce local anti-inflammatory effects Decrease capillary permeability & mucus production via vasoconstriction of the nasal blood vessels
Dose	Children >12yo & adults <ul style="list-style-type: none"> • 2 sprays into each nostril BD • When Sx controlled, 1 spray each nostril BD Children 6-12yo (S4) <ul style="list-style-type: none"> • 1-2 sprays each nostril BD • Reduce to 1 spray each nostril BD when Sx controlled No more than 8 sprays total per day
Onset of action	Can expect to see improvement within 3-7 hours of administration Optimum effect is seen after 2-3 days of regular use
Side Effects	Local irritation like: nasal stinging, itching, nose bleed, sneezing, sore throat, dry mouth, cough High-doses & prolonged use for more than 5 days can cause more severe side effects
Indications	<ul style="list-style-type: none"> • Allergic rhinitis • Considerations: are you currently taking any other corticosteroids (like for asthma) <ul style="list-style-type: none"> ○ Yes: consider a non-sedating antihistamine tablet instead ○ No, that's fine • Safe to use in pregnancy & breastfeeding
Contraindications	<ul style="list-style-type: none"> • Frequent nose bleeds • Uncontrollable/severe hypertension
Counselling	<ul style="list-style-type: none"> • Do not use for more than 4-5 days as can cause rebound congestion • Be mindful to using other products that contain corticosteroids and it can cause more side effects, often more severe • *how to administer nasal spray

Bromhexine (expectorant)

Liquid	Bisolvyn chesty Oral Liquid 4mg/5ml
MOA	Reduces mucus viscosity, & facilitates expulsion of thick mucus secretions
Dose	Adult: 5-20 ml TID. Max. 60ml per day Child >6yo: 10 ml TID. Max. 30ml per day
Onset of action	Within 3-6 hours Notice an increase of watery mucus from your airway passages—common as the bromhexine is breaking up thick mucus and thinning it out so you are able to expel it easier by coughing or blowing your nose.
Contraindication	Children <6yo
Caution Use	Syrup—caution in those with hyperglycaemia Can disrupt the gastric mucosal barrier as it reduces the thickness of mucus—caution use in those with history of PUD Breastfeeding—some can enter breastmilk—pump milk and freeze in ice tray (3 cubes in sufficient for a feed), or breastfeed immediately after taking dose
Indication	Common colds, flu Expectorant: break up the mucus for easier expulsion Productive coughs Safe to use in pregnancy
Side effects	Nausea, vomiting, diarrhoea, allergic reactions
Counselling	Take it during the day, last dose should be around early evening around 5pm This medication will cause you to cough so don't take it right before bed Drink lots of water throughout the day to help with the productive cough & mucus Do not take at night time as it can increase the risk of infection if you try suppressing the cough and not cough out the mucus

Budesonide

Intranasal corticosteroid	Rhinocort Hayfever 32 mcg/dose (120 or 60 doses)
MOA	Local anti-inflammatory effects Decrease capillary permeability & mucus production via vasoconstriction of the nasal mucosa
Dose	Children >6yo & adults <ul style="list-style-type: none"> Initially 4 sprays into each nostril once daily, or 2 sprays into each nostril BD Maintenance: 1-2 sprays into each nostril once daily Do not exceed 8 sprays per day
Side effects	Headache, dizziness, tiredness, sneezing after spraying or irritated nose, nose bleed, crusting in nasal, dry nose or mouth, itching or sore throat, cough
Stop use & see doctor	Swelling of face, lips, mouth, tongue or throat Difficulty breathing or wheezing Severe rash Ulcer or open wound in nose Signs of nasal or sinus infections i.e. fever, pain, swelling or discoloured nasal discharge
Indications	<ul style="list-style-type: none"> Allergic rhinitis Considerations: are you currently taking any other corticosteroids (like for asthma) <ul style="list-style-type: none"> Yes: consider a non-sedating antihistamine tablet instead No, that's fine Safe to use in pregnancy & breastfeeding
Contraindications	<ul style="list-style-type: none"> Frequent nosebleeds
Counselling	<ul style="list-style-type: none"> Do not use for more than 4-5 days as can cause rebound congestion Be mindful to using other products that contain corticosteroids and it can cause more side effects, often more severe Can start using spray next time if know you will be exposed to an allergen: use before exposure to minimize inflammation and Sx of hay fever *how to administer nasal spray

Cetirizine (less sedating anti-histamine)

Dose	Adults & children >12yo: 10mg once daily Children: 1-2yo: 0.125mg/kg BD 3-6yo: 2.5mg BD or 5mg BD 5mg BD or 10mg once daily Take with or without food
Tablets	Zyrtec (10mg) qty:10
Liquid	Zyrtec Oral Liquid (1mg/ml) – shake well before use
MOA	Symptom relief of allergic rhinitis. Stabilizes the chemical modulators that causes the allergic reactions (histamine)
Onset of action	Within an hour of taking Noticeable therapeutic effect dependent on severity of symptoms
Contraindicated	Pregnancy & breastfeeding (better to use sedating, but if prefer less sedating, use loratidine) Severe renal impairment, but if have moderate ½ the dose
Indication	Allergic rhinitis Chronic urticaria Use oral liquid for children (give patients a choice)
Side effects	Well tolerated but less sedating, but can still cause drowsiness Drowsiness, fatigue, dry mouth, headache, nausea Rare: hypersensitivity & rash
Counselling	Medication may make some people drowsy even though it is less sedating, do not operate a vehicle or heavy machinery or be involved in any activities that require full attention Effective in relieving itch that's caused by histamine release Avoid drinking alcohol

Dexchlorpheniramine (sedating antihistamine)

Dose	Adult & children >12yo: 2mg every 6 hours max. QID. Once Sx are relieved can reduce to 1mg q6hr Children: (use syrup only) 6-12yo (common cold & allergies): 1mg 4 times daily 2-6 yo (allergies): 0.04mg/kg 3 times daily Take with full glass of water, before or after food
Tablets	Polaramine Colour Free Tablets (2mg) qty: 20 or 40 Swallow whole, do not crush or chew
Syrup	Polaramine (2mg/5ml) – shake well before use Contains sugars—becareful of use in those with hyperglycaemia
MOA	Sedating antihistamine Reduce symptoms of common cold and allergic rhinitis
Onset of action	Few hours within administration
Contraindicated	Children <2yo (allergies: use less sedating, sedating can cause sudden infant death syndrome) Children <6yo (common cold Sx—cough and cold: no evidence of effectiveness, more risks than benefits) Elderly (use less sedating antihistamines; sedation can cause increased risk of adverse effects) Precaution: glaucoma, hyperthyroidism, bladder obstruction, PUD
Indication	Pregnancy (preferred antihistamine—can be used as antiemetic & allergic overdose; no evidence of fetal AE with use) Breastfeeding: short term use is relatively safe, some polaramine can get into the breast milk but short term use is ok— main concern is sedation in mother Must monitor for infant sedation & irritability Common cold adults & children >6yo—sedation, sneezing, runny or itchy nose AR: sneezing, itching eyes, runny nose
Side effects	Sedation, impaired alertness, cognition, learning, memory and performance, dizziness, confusion, headache, blurred vision, mydriasis, dry eyes, dry mouth, urinary retention Nausea & vomiting, diarrhoea, hypotension Nausea especially: can stimulate the CNS but is rare—hallucinations, seizures, excitation, restlessness, nervousness Chest tightness, upset stomach, loss of appetite
Stop medication & seek doctor	Chest pain, sudden signs of allergic reactions—rash, hives, swelling of face, lips, mouth, tongue, or throat, dysphagia, or difficulty breathing
Counselling	Medication may make you sleepy, do not operate or drive machinery Avoid alcohol and other medications that may cause sedation Can cause hypersensitivity of the skin, as a precaution, avoid sun especially during afternoon when the sun is at its peak—wear a sunscreen with spf 30+, use a hat Dry mouth for more than 2 weeks; see dentist or doctor

Dextromethorphan (antitussive)

Oral Liquid	Bisolvon Dry 10mg/5ml
MOA	Suppresses the medullary cough center in the CNS—Sx relief of non-productive cough Opioid derivative – MAY have addictive properties but very low
Dose	Adult: 5-10ml q4h or 15ml q6-8h. Max: 4 doses daily Children >6yo: 7.5ml q6-8h. Max: 4 doses daily
Onset of action	Within a few hours of administration
Contraindication	Productive coughs Asthma, respiratory failure, pneumonia, shallow breathing Fructose intolerance Within 14 days of taking MAOI Children <6yo Irritant, dry cough >1mo
Caution Use	Hepatic impairment—requires dose reduction Elderly—requires dose reduction
Indication	Tx of dry, irritating coughs—cough suppressant Safe to use in pregnancy
Side effect	Drowsiness, constipation, nausea, vomiting Rare: respiratory depression
Counselling	Shake well before each use Use proper measuring device (show patient how to use) Stop use if cough persists for more than 1 week before continuing medication Medication can cause drowsiness or dizziness therefore take for a few days to see how body responds before operating vehicle or heavy machinery Avoid alcohol as it can worsen the side effects May want to take an osmotic laxative as it can cause constipation Drink lots of water

Diclofenac (NSAID)

Tablets	Voltaren Rapid (12.5mg) qty: 20 Voltaren Rapid (25mg) qty: 20
MOA	Analgesic, anti-inflammatory & anti-pyretic Block the enzymes involved in producing the chemicals that cause pain and inflammation
Tx	Rheumatoid arthritis Osteoarthritis Pain due to inflammation (dysmenorrhoea) Can be used for sprains and strains (less likely as a more local NSAID is used i.e. topical)
Dose	Adult: 75-150mg daily in 2 or 3 doses Children: 1-3mg/kg daily in 2 or 3 doses 12.5mg: 75mg daily in divided doses 25mg: 50-100mg initially, then 50mg tds for 3 days Take with food to decrease risk of GI irritation Swallow whole, with glass of water Short term use only
Onset of action	Within
Contraindication	NSAID hypersensitivity & NSAID-induced asthma Active PUD, GI bleed Third trimester of pregnancy (AE in infants & complications during labour) Triple Whammy (NSAID + ACEI + Diuretics)
Caution	Heart failure, hypertension, asthma—risk of exacerbation Elderly—increased risk of AE Hepatic impairment (if severe its contraindicated) Renal impairment: exacerbation & bleeding (avoid, or use minimal effective dose & monitor renal function) Oral corticosteroids—increase risk of GI ulceration Lithium, digoxin, methotrexate – avoid or monitor closely Anticoagulants, antiplatelet medicines, SSRIs: increase risk of bleeds
Avoid	Dehydration Cardiovascular disease: hypertension & heart failure Hx of GI bleed or use with extreme caution IBS—can worsen
Indication	Breastfeeding (NSAID of choice during lactation)
Side effects	Increased risk of: GI bleed, peptic ulcer, stomach irritation, MI or stroke Common: GI upset, headache, dizziness, nausea, diarrhoea, dyspepsia, salt & fluid retention, rashes, confusion Rare AE: hypersensitivity reactions, extensive bruising
Counselling	Avoid drinking alcohol Do not take medication if you are dehydrated especially in children and elderly If develop swollen ankles, difficulty breathing, chest pain, black tarry stool, or vomit looking like coffee grounds, stop medication and seek immediate attention from a doctor

Docusate Sodium + Senna

Tablets	Coloxyl with Senna (50mg/8mg) qty 30 Stool softener & stimulant laxative
MOA	Soften stools and stimulate the motility of the intestines to promote defecation
Tx	Constipation (short term relief of constipation—for prophylactic use, use other laxatives; especially for opioids causing constipation—movicol)
Dose	Adult: 2 tabs at night time
Onset of action	Should be able to go the next day upon waking (maximum effect in 1-3 days upon taking) If doesn't work, take 4 tablets the next night. Try for 2 nights & if do not work, see GP
Contraindicated	Pregnancy
Side effects	Abdominal discomfort, gas & cramping, diarrhoea, fluid and electrolyte imbalances with prolonged use or excessive doses, nausea
Counselling	If no improvement within 3 days or if develop alarming Sx—severe abdominal pain, anorexia, vomiting, blood/mucus in stool seek medical attention Can decrease the effects of other medicines taken at the same time Good diet, exercise, adequate water intake (RDI: 6-8 glasses a day, more in hot weather, high fiber diet requires more water)

Fexofenadine (less sedating antihistamine)

Tablets	Telfast (120mg) qty: 10 or 30
MOA	Stabilises the effects of histamine
Dose	Adult: 120-180mg daily 180mg daily for urticaria Children: 6mo-2yo: 15mg BD 2-11yo: 30mg BD Renal impairment: adult ½ dose, children change BD to OD
Caution Use	Elderly: increase risk of sedation and anti-cholinergic effects—prefer sedating (if use require monitoring) Pregnancy – use sedating anti-histamine or loratidine if prefer less sedating antihistamine Breastfeeding is not recommended (APF), AMH says it is safe to use Renal impairment
Indication	Allergic rhinitis & urticaria: runny, itchy, blocked nose, sneezing and itchy, watery and red eye, hives
Side effects	Drowsiness, fatigue, headache, nausea, dry mouth Rash, hypersensitivity
Counselling	Medication may not work as well if you drink grapefruit juice within 4 hours of taking medication Medication can cause people to be sleepy even though it is less sedating, it can still cause drowsiness in some individuals; do not drive or operate machinery until you know how you respond to the medication or if drowsiness do occurs

Guaifenesin (Expectorant)

Liquid	Robitussin Chesty cough Oral Liquid (20mg/ml)
Tx	Productive cough
MOA	An expectorant so it will facilitate the expulsion of mucus
Dose	10-20mL q4h prn (max 6 doses daily)
Onset of action	Rapid within an hour of taking it
Side effects	Nausea & vomiting
Seek attention if	Recurring cough Tx fails If cough persists for >3 weeks Sputum colour progresses to thick, yellow, green, or blood—stained If illness worsens (systemic symptoms—fever, wheeze, shortness of breath, chest pain) Nocturnal cough
Counselling	Rest Fluids—hydration can help to reduce cough and assist with the action of the medication Could try honey and lemon Steam inhalations can promote expectorant Non-medication lozenges

Ibuprofen (NSAID)

Tablets	Nurofen 200mg
Liquid	Nurofen for Children 1-5years suspension (100mg/5ml) Nurofen for Babies 3mo+ Suspension (200mg/5ml)
Tx	Antipyretic, analgesic, anti-inflammation Dysmenorrhoea, pain, inflammation
MOA	
Dose	OTC Max adult dose: 1200mg per day – 6 tablets daily Max children dose: 40mg/kg/day or 4 doses per day Adult 200-400mg 3-4 times daily Children >3mo 5-10mg/kg 3 or 4 times a day Use 10mg/kg Swallow tablet whole with full glass of water, can be taken with food to reduce gastric irritation
Onset of action	Within a few hours of administering medication
Precaution	Drug interactions: combination with diuretic and ACEI is contraindicated, anticoagulating medicines, other NSAIDs, corticosteroids (increases risk of GI ulceration) Caution use in: renal impairment, hepatic impairment, elderly, children Pregnancy: contraindicated in 3 rd trimester; prefer to use another analgesic Safe to use in breastfeeding
Side effects	Common: Stomach upset, abdominal pain, dyspepsia, nausea, vomiting, diarrhoea, dizziness, fluid retention, increased heart rate, increase blood pressure Can cause: gastric ulcers, GI bleeds, increase the risk of MI or stroke, hypertension If see alarming Sx or worsening of Sx or persistent pain, vomiting, nausea, black tarry stools, vomit that looks like coffee grounds seek medical attention immediately
Counselling	Take with food to reduce stomach irritation Drink lots of fluids Can take with paracetamol Be careful not to take any other products containing an NSAID or ibuprofen

Ibuprofen + Codeine

Tablets	Nurofen plus 200mg/12.8mg
Tx	Antipyretic, analgesic, anti-inflammatory Codeine: anti-tussive (dry cough)
Dose	Adults 1-2 tablets q4-6h Maximum 6 tablets per day
Precaution	Drug interactions Other medications that contain ibuprofen and codeine Not to be used in breastfeeding Can be used in pregnancy, not in 3 rd trimester
Side effects	Codeine: nausea, vomiting, dry mouth, constipation
Ibuprofen & codeine MUST mention	Increased risk of GI bleed, ulceration Constipation Drowsiness & dizziness—do not operate vehicle or machinery Lots of drug interactions for either or Renal & hepatic impairment require monitoring and dose reduction

Lactulose

Syrup	Actilax 3.34g/5ml
Tx	Constipation
MOA	Draws water into colon (osmotic laxative) & soften the stool Can be used long term 24-72 hours within administration
Dose	Adults: Initially 15-45ml daily in one or two doses, then 15-30ml daily to maintain Children 1-11mo: 2.5mL BD 1-5y: 2.5-10mL BD >5yo: 5-20mL BD 1.5ml/kg BD may be required (if go by weight) Do not exceed 60mL daily Works best if taken with full glass of water Can take with milk or juice Can be diluted
Precaution	Can be used when breastfeeding and during pregnancy Caution use in diabetics Contraindicated in bowel obstruction, those that require low galactose diet or lactose intolerant
Side effects	Mild bloating, gas and abdominal cramps, diarrhoea
Counselling	Adequate water intake to facilitate the laxative Dietary changes Exercise regularly Increase fibre intake

Loperamide

Capsule	Imodium 2mg
Tx	Anti-diarrhoeal Traveller's diarrhoea
MOA	Makes stool more solid Normalizes muscle contraction of intestine Give bowel time to absorb water from fluid
Dose	Adults only, not given in children <12yo Initially take 2 capsules, then one capsule daily after each loose stool as needed Do not exceed 8 capsules a day
Precaution	Pregnancy: contraindicated in 1 st trimester—use short term otherwise Breastfeeding: safe to use Caution use in hepatic impairment Avoid in severe IBS
Side effects	Constipation, nausea, vomiting, abdominal pain, gas, bloating Rare: dizziness, blurred vision, headache, dry mouth, hypersensitivity, drowsiness, respiratory depression
Counselling	Should stop diarrhoea within 48 hours; use only for short periods If any Sx worsen or are persistent see GP as it may be cause for something else Do not operate vehicle or machinery as can cause drowsiness Drink plenty of fluids to avoid dehydration **constipation lifestyle advice **alarming Sx to look out for

Loratadine (Less sedating antihistamines)

Dose	Adult & child 2yo >/=30kg: 10mg daily Children: 1-2yo: 2.5mg once daily 2yo <30kg: 5mg once daily Hepatic impairment: give dose on alternate days
Tablet	Claratyne (10mg) qty: 10
Syrup	Claratyne (peach flavour): 1mg/ml
MOA	Reduces the effects of histamines released during an allergic reaction
Contraindication	First trimester of pregnancy
Caution use	Hepatic impairment Elderly: higher risk for sedation & anticholinergic effects—requires monitoring (sedating antihistamines better tolerated)
Indication	Allergic rhinitis & urticaria Pregnancy: preferred less sedating antihistamine Breastfeeding: preferred less sedating antihistamine
Side effects	Headache, sedation, dry mouth, nausea, drowsiness, fatigue Rash & hypersensitivity (bronchospasms)
Counselling	May cause drowsiness Take a few days if you know you will be exposed to known allergen

Macrogol 3350 (Osmotic laxative)

Sachet	Movicol 13.125g (10) Movicol 13..125g (30) Movicol Half 5.9g (30)
Tx	Comfortable bowel movement Works in faecal impaction Remains unabsorbed in the large intestine and will draw water into the intestine
Dose	Constipation Adult -Movicol: 1 sachet a day; if required increase to 2 or 3 sachets per day -Movicol half: 1-6 sachets per day Child Movicol Half 6-11y: 2 sachets per day 2-5y: 1 sachet per day Faecal Impaction Adult -8 sachets daily (Movicol half—16 sachets daily); take within 6 hours, can be repeated up to 3 days -If have cardiovascular disease: 2 sachets/hr (Movicol half 4 sachets per hour) 6-11y: Movicol Half—4 sachets on first day then can increase up to 12 sachets per daily if req. (up to 7 day Tx) 2-5yo: Movicol Half—2 sachets on first day, then as required can increase to 8 sachets daily (up to 7 day Tx) Mix 1 sachet into 125ml of water until powder dissolves and drink
Precaution	Contraindication: intestinal obstruction Little absorption in pregnant woman but not enough to do harm thus can be used Decrease dose in renal and hepatic impairment Caution use in cardiovascular diseases Safe to use in breastfeeding
Side effects	Nausea, vomiting, diarrhea, anal irritation, abdominal distention, cramps, pain, stomach rumbling Rare: allergic reactions, fluid and electrolyte disturbances
Counselling	Can affect the absorption of other medications you are currently taking—decreasing the effects of other medications Should be able to go within 1-2 hours of taking Movicol Increase fluid intake to facilitate osmotic effect of movicol If taken on an empty stomach can have a faster onset Increase fibre intake (except in opioid induced constipation) If get bad diarrhea stop taking Movicol until it clears Recurrence of constipation—refer

Naproxen tablets (NSAID)

Tablets	Naprogesic 275mg (24) – Naproxen sodium
Tx	Rheumatoid arthritis, osteoarthritis Dysmenorrhoea
MOA	Analgesic, antipyretic, and anti-inflammatory Block the pain pathway from sending signal that causes you to feel pain
Dose	275-550mg BD Max. 1275mg daily Period pain: 550mg initially, then 275mg q6-8h prn Migraine: 3 tabs initially then 1-2 tablets after at least 1 hr prn
Precaution	Can worsen: Dehydration, asthma, coagulation disorders, bruising, IBS Contraindicated: PUD or GI bleed, hypersensitivity reactions (severe asthma) Caution: renal impairment, hepatic impairment, elderly, pregnancy (contraindicated in 3 rd trimester), breastfeeding (appears safe)
Side effects	Nausea, dyspepsia, GI ulceration, Gi bleed, diarrhoea, headache, dizziness, salt & fluid retention, hypertension Infrequent: confusion, rash, oesophageal ulceration Rare: blurred vision, hypersensitivity
Counselling	Drug interactions: do not use in combination with ACEI and diuretics, corticosteroids can exacerbate effects of ulcers Black tarry stools, or vomit that looks like coffee grinds –refer *alarming Sx to look out for depending on condition Drink lots of fluids Take with food to avoid stomach irritation Used short term only

Oral rehydration salts

Sachets	Gastrolyte qty:10
Tx	Fluid and electrolyte loss associated with diarrhoea
MOA	Provide fluid, electrolyte & glucose replacement
Precaution	Contains aspartame Can be used in pregnancy & breastfeeding
Dose	1 sachet in 200mL water Infants: use freshly boiled and cooled water Stir well and drink small amounts frequently Children 5-9kg: 200-400 mL first 6 hours then 150-210mL every 6 hours 10-14kg: 400-800mL in first 6 hours then 300-420mL q6h 15-19kg: 800-1000mL first 6h then 450-630ml q6h 20-29kg: 900-1500mL first 6h then 600-840mL q6h 30kg(adult): 1000-2000ml first 6 hours then 900-1260mL q6h Discard made up solution after 1 hour or refrigerate for up to 24h or less
Counselling	Well tolerated Children can dehydrate rapidly—careful monitoring is required; continued large fluid loss or inability to tolerate fluid replacement should seek medical attention Replacement solutions may be better tolerated if frozen

Oxymetazoline

Intranasal decongestant	Drixine decongestant Nasal Spray No drip 0.5mg/ml
MOA	Vasoconstriction of the nasal mucosa; decrease nasal blood flow and congestion Relief of nasal congestion with acute rhinitis, common cold, sinusitis
Dose	Adult & children >6yo: 1 or 2 sprays into each nostril TID. Do not exceed 6 sprays daily
Onset of action	Few hours within administration Optimal response in few days
Caution Use	Avoid use in pregnancy & breastfeeding due to long acting effects Avoid use in children <6yo: rebound congestion may cause breathing difficulties, CNS effects
Indication	Decongestant for common cold, rhinitis
Side effects	Nasal irritation: transient burning, stinging, increased nasal discharge Rebound congestion with prolonged use Rare: hypertension, nausea, nervousness, dizziness, insomnia, headache
Counselling	Do not use for more than 5 days as it can cause rebound congestion, use for only 5 days will minimize risk of rebound congestion Recommend use of an intranasal saline spray for congestions in infants to loosen and liquefy mucus secretions *how to use nasal spray

Pantoprazole

Tablets	Somac Heartburn Relief 20mg (14)
Tx	Heartburn, dyspepsia, GORD, PUD, reflux >2 episodes per week
MOA	Proton pump inhibitor, inhibit the secretion of gastric acid Will work within few hours of taking it, but will not give instant Sx relief; full effect seen within a few days of taking it
Dose	Prevention of NSAID associated dyspepsia, PUD or erosion: adults 1 tablet daily Children >5y 19-35kg: 20mg OD >35kg: 20-40mg OD Swallow tablet whole, do not crush or chew Take for 14 days—Sx should be relieved
Precaution	Pregnancy: Used only if antacids and H2 antagonists are ineffective. Omeprazole is PPI of choice Breastfeeding: use with caution if antacids and H2 antagonists are ineffective Interactions: methotrexate—caution use Reduce dose if have hepatic impairment
Side effects	Abdominal pain, diarrhea, gas, nausea, vomiting, constipation, headache AE: blurred vision, metallic taste, rash, dizziness, increase sweating, fatigue Rare: hallucinations, anaemia, depression, confusion
Counselling	Avoid alcohol (limit intake) Aspirin and other NSAIDs can irritate the stomach and worsen Sx Avoid caffeine and caffeine containing foods and drinks—tea and coffee, chocolate, pop Smaller and frequent meals—eat slowly and carefully chew food Stop or cut down on smoking Exercise, adequate fluid intake Elevate bed head

Paracetamol

Tablets	Panadol 500mg
Baby drops	Childrens Panadol 1mo-2yo (100mg/5ml)
Suspension	Children's Panadol 1-5yr (120/5ml)
Liquid	Dymadon Children's 2-12yo (250mg/5ml)
Tx	Analgesic, antipyretic Mild to moderate pain Fever
MOA	Unsure
Dose	Adult & children >12yo 1 to 2 tablets q4-6h Maximum. 8 tablets daily (4g) Children >1mo 15mg/kg (max 1g per dose) q4-6h Max. 60mg/kg (max 4g) per day up to 48 hr
Precaution	Can be used in pregnancy & breastfeeding Hepatic & renal impairment use with caution—paracetamol can further cause liver damage Caution use with warfarin Can be used with NSAIDs Sodium restriction—paracetamol contains large amount of sodium
Side effects	Liver damage*main concern Rare: hypersensitivity, bleeds
Counsel	Avoid alcohol Max. of 4g (8x500mg tablets) in 24 hrs Onset of pain relief is approx. 30 min after oral admin. Be aware of different strengths of paed. products avail. May be used in all age groups Preferred to NSAIDs for mild to mod. Pain Regular use alone inadequate can add NSAID for pain Many brands of Paracetamol, and other medicines that may also contain Paracetamol, always check labels to avoid overdosing Ibuprofen + Paracetamol combined to Tx fever in children not recommended Children & infant with low grade fevers don't necessarily have to be Tx with Paracetamol, fluids and comfort may suffice

Paracetamol + Pseudoephedrine

Tablets	Panadol Sinus relief (Original formula) 500mg/30mg
Tx	Sinus congestion & pain Nasal congestion & runny nose Common cold Sx relief
MOA	Paracetamol: blocks pain pathway Pseudoephedrine: Vasoconstrictor (sympathomimetic decongestant) Reduce congestion—runny nose, nasal passage and sinus
Dose	Adults & children >12y 2 tablets q6h do not exceed 8 tablets in 24h
Precaution	Not to be used in children younger than 12 yo; for children 12-17 only use for 48 hours Pregnancy: not recommended Breastfeeding: use with caution—may suppress lactation Caution use in: hypertension, hepatic and renal impairment, diabetics Drug interactions: warfarin, antidepressants
Side effects	Nausea, drowsiness, insomnia, dizziness, increased BP, tachycardia, fluid retention, headaches
Counselling	If see any of the following Sx seek medical attention immediately: shortness of breath, wheezing or difficulty breathing, swelling of face, lips, tongue, unexplained bruising or bleeding, severe headache, abdominal pain, or black tarry stool Medication can cause drowsiness so avoid operating vehicle or heavy machinery Paracetamol and pseudoephedrine are both contained in a lot of other products, read labels carefully before taking another product – to avoid OD Drink lots of fluids Rest when necessary Avoid drinking alcohol

Paracetamol + Phenylephrine + Codeine

Tablets	Codral Cold & Flu (New formula) 500mg/5mg/9.5mg
Tx/MOA	Analgesic, antipyretic Nasal congestion Cough Paracetamol: reduce pain and reduce fever Phenylephrine: vasoconstriction to reduce congestion in nose, nasal passages, sinuses, easier to breath Codeine: opioid analgesic, blocks pain
Dose	Adult & children >12yo 2 tablets q6-8h. Do not exceed 8 tablets daily Use for only up to 3 days
Precaution	Do not use in pregnancy or breastfeeding Hypertension, diabetes, CV disease, renal and hepatic impairment Contraindicated: MAOIs
Side effects	May cause drowsiness, skin rash, urinary retention, constipation, hypersensitivity, nausea, vomiting, GI upset, dizziness Rare: respiratory depression
Counselling	Avoid alcohol Drink plenty of fluids Other products may contain paracetamol and codeine in them, be sure you are not taking other products with them

Paracetamol + Pseudoephedrine + Codeine

Tablet	Codral Original Cold & Flu tablets 500mg/30mg/6mg
Tx/MOA	Decongestant, analgesic, antipyretic Symptom relief from cold & flu without drowsiness Paracetamol: reduce pain and reduce fever Pseudoephedrine: vasoconstriction to reduce congestion in nose, nasal passages, sinuses, easier to breath Codeine: opioid analgesic, blocks pain
Dose	Adult & children >12yo 2 tablets 3-4 times daily. Do not exceed 8 tablets daily Do not use in children < 30kg or <10yo: dose for pseudoephedrine in 1 tablet is greater Use only up to 3 days
Precaution	Do not use in pregnancy or breastfeeding Hypertension, diabetes, cardiovascular disease, renal and hepatic impairment, respiratory impairment, COPD, etc Contraindicated: MAOIs
Side effects	May cause drowsiness, skin rash, urinary retention, constipation, hypersensitivity, nausea, vomiting, GI upset, dizziness Rare: respiratory depression
Counselling	Avoid alcohol Drink plenty of fluids Other products may contain paracetamol and codeine in them, be sure you are not taking other products with them

Day: paracetamol + pseudoephedrine + codeine | Night: paracetamol + pseudoephedrine + triprolidine

Tablets	Codral Original Day & Night Cold & Flu Tablets Day: 500mg/30mg/6mg Night: 500mg/30mg/1.25mg
MOA/Tx	Paracetamol: reduce pain and reduce fever Pseudoephedrine: vasoconstriction to reduce congestion in nose, nasal passages, sinuses, easier to breath Codeine: opioid analgesic, blocks pain Triprolidine: antihistamine—reduce allergic symptoms
Dose	Adult & children >12y Day: 2 white DAY tablets, once in the morning and once in the afternoon Night: 2 blue NIGHT tablets at bedtime Use for up to
Precaution	Refer to paracetamol, pseudoephedrine, codeine and antihistamines Avoid in pregnancy Do not use in breastfeeding Drug interactions Hypertension, renal & hepatic impairment, diabetics, glaucoma, asthma—CAUTION use
Side effects	Nausea, vomiting, dyspepsia, constipation, drowsiness, sleepiness, dizziness, nervousness, excitability, dry mouth, restlessness Rare: respiratory depression
Counselling	Take for a few days, if Sx worsen or do not get better see GP Sx that required medical attention: shallow breathing, breathlessness, wheezing, tachycardia, rash, swelling of face Do not drink alcohol Do not operate a vehicle or heavy machinery as it can cause drowsiness or dizziness Drink plenty of fluids Rest

Paracetamol + Codeine

Tablets	Panadeine (500mg/8mg) qty: 24
Tx/MOA	Antipyretic, analgesic Temporary relief of pain Cold & flu—reduce fevers
Dose	Adults & children >12: 2 tablets q4-6h prn Do not exceed 8 tablets daily Do not take more than 2 tablets in 4 hour Do not use for more than 3 days
Precaution	Can be used in pregnancy Avoid in breastfeeding Hepatic & renal impairment use with caution—paracetamol can further cause liver damage Caution use with warfarin Can be used with NSAIDs Sodium restriction—paracetamol contains large amount of sodium
Side effects	Heartburn, nausea, vomiting, constipation, dizziness, skin rash Rare: respiratory depression
Counselling	Drink plenty of fluids Avoid alcohol Can cause drowsiness; avoid operating vehicles or heavy machinery

Phenylephrine

Capsule	DimeTapp PE Nasal Decongestant 10mg
Tx	Nasal decongestant
MOA	Vasoconstriction (sympathomimetic)
Dose	Adult & children >12yo: 1 capsule q4h. Max 6 capsules daily Children >6yo: 2.5-5q4h
Precaution	Avoid use in children under 6yo Pregnancy: not recommended. Avoid in first trimester Breastfeeding: use with caution—suppresses lactation, may cause irritability, restlessness and disturbed sleep in infants Hypertension, diabetics, glaucoma (closed-angle) Elderly Interactions: MAOIs contraindicated with or must wait 14 days after stopping MAOI
Side effects	CNS stimulation, nausea, vomiting, nervousness, excitability, dizziness, insomnia, tremor, tachycardia, palpitations, hallucinations, arrhythmias, hypertension, seizures, hypersensitivity
Counselling	If you notice any of the following seek medical attention immediately: shortness of breath, wheezing, difficulty breathing, swelling anywhere on face, rash, itching or hives Included in many other products, read product label carefully to avoid OD Does not cause rebound nasal congestion like INCS Potential for misuse and addiction

Pholcodine

Linctus	Gold cross Pholcodine Linctus 1mg/ml
Tx	Anti-tussive for dry cough Depress the cough center in the central nervous system to stop non-productive cough
Dose	Adult: 10-15mg 3 or 4 times a day Child >6y: 5-10mg 3-4 times a day
Precaution	Elderly Hepatic impairment Contraindicated in children less than 6yo Pregnancy: safe to use Breastfeeding: can be used, must monitor baby for drowsiness, sleep disturbance and constipation Respiratory function compromised
Side effects	Drowsiness, constipation, nausea, vomiting Can cause respiratory depression
Counselling	Avoid taking alcohol—it may increase the feeling of drowsiness Medication may cause drowsiness, do not operate or drive machinery Do not use in a productive cough Adequate fluid intake

Poloxamer

Solution	Coloxyl drops 10%
Tx	Constipation—stool softener in infants and young children
Dose	TID <6mo: 10 drops 6-18mo: 15 drops 18mo-3y: 25 drops
Precautions	Prolong use can lead to dependence Do not use if child is dehydrated, vomiting, or has nausea. Intestinal obstruction Interactions: can increase absorption of other laxatives Long term use can lead to potassium leaking out—diarrhoea, excessive water loss & electrolytes
Side effects	Abdominal cramps, gas, diarrhoea if used excessively
Counselling	Temporary use only Increase fiber intake Increase fluid intake Healthier diet Exercise Use the washroom more frequently Condition to go when feel the urge to go

Pseudoephedrine

Tablet	Sudafed Sinus & nasal decongestant tablets 60mg
Tx	Nasal decongestant
MOA	Vasoconstriction (sympathomimetic)
Dose	Adults: 1 tab q4-6h Max. 4 tablets per day Children >6yo: 1mg/kg 3-4 times daily
Precaution	Avoid use in children under 6yo Pregnancy: not recommended Breastfeeding: use with caution—suppresses lactation, may cause irritability, restlessness and disturbed sleep in infants Hypertension, diabetics, glaucoma (closed-angle) Elderly Interactions: MAOIs contraindicated with or must wait 14 days after stopping MAOI
Side effects	Insomnia, headache, nervousness, palpitations, sweating & flushing, excitability Others: CNS stimulation, tremor, tachycardia, hypertension, hallucinations, seizures
Counselling	If you notice any of the following seek medical attention immediately: shortness of breath, wheezing, difficulty breathing, swelling anywhere on face, rash, itching or hives Included in many other products, read product label carefully to avoid OD Does not cause rebound nasal congestion like INCS Potential for misuse and addiction

Ranitidine

Tablets	Zantac 12h Action 150mg (14)
Tx	GORD, PUD, dyspepsia
MOA	Reduces the secretion of acid via blocking one pathway
Dose	150mg BD q12h Take with or without food, swallow whole
Onset	Slow but longer DOA
Precautions	Drug interactions: NSAIDs Individuals on strict low sodium diet—tablet contains sodium Can be used in pregnancy and breastfeeding
Side effects	Usually well tolerated Common: headaches, dizziness, nausea, vomiting, constipation, joint pain If experience any of the following seek immediate attention: allergic reaction (rash, shortness of breath), stomach pains, fever, tachycardia, black tarry stool, vomit that looks like coffee grounds *lifestyle advice for GORD Avoid certain foods—acidic foods (grapefruit, tomatoes), coffee & tea, pop, spicy foods, alcohol, chocolate, high fat & large meals Eat smaller meals Drink water after meals instead of during meals Don't lie down right after a meal; do not eat 2-3 hours before bed time Raise the bed head so your head is elevated to prevent risk of reflux Exercise, eat healthy, drink water Decrease stress Stop smoking & drinking

Sodium alginate, calcium carbonate, sodium bicarbonate

Liquid	Gaviscon Cool Liquid 500mg/160mg/267mg per 10ml
Tx	Antacid for reflux, GORD, heartburn, dyspepsia Neutralise gastric acid in stomach
Dose	Adults & children >12yo: 10-20mL Children 6-12y: 5-10mL After meals and before bed or when you think Sx may occur Up to 4 times daily Optimum effect if taken 1-3 hours after meals
Precaution	Product contains calcium, so limit calcium supplements up to 1g Pregnancy can be used—safest to treat heartburn in pregnancy Caution use in renal impairment—calcium can accumulate in kidneys and cause toxicity; sodium can increase risk or exacerbate renal failure (contraindicated) Avoid use in low sodium diet
Side effects	Diarrhoea
Counselling	Alarm Sx Drink water Healthy diet Exercise Avoid foods that can exacerbate Sx

Sodium chloride isotonic

Nasal spray	Fess Nasal Spray 7.04mg/ml
Tx	Nasal congestion Intranasal saline
MOA	Liquefy mucus in nasal cavity to allow expulsion upon nose blowing
Counselling	Can be used in association with other medicated sprays to relieve congestion **how to use nasal spray

Administering Intranasal Sprays

1. Clear nasal passages before administration—blow your nose
2. Shake the bottle and prime the spray if this is a first use spray by spraying dose into air until a consistent mist is made
3. Bend neck slightly forward & look down
4. Place nozzle into on nostril and aim towards the outside wall
5. Spray 1-2 times along the outside wall, and gently sniff. Avoid sniffing too hard that contents go straight down throat, and not too soft that it does not reach target area

Repeat for the next nostril