# QE Competency 2 Collaboration and Team Work MOCK Test

1) Model of collaborative working relationship (CWL), an example of pharmacist calling for refill request or alerting physician for possible side effects, and drug interactions is categorized as?

A) stage 0 B) Stage 1 C) Stage 2 D) Stage 3 E) Stage 4

Ans. A

**Stage 0**: exchange is minimal. Example pharmacist calling for refill request or alerting physician for possible side effects, drug interactions.

Stage 1: The efforts are mostly from pharmacist. Example as pharmacist develop new services, pharmacist may be visiting physician to ask for referral of patients.

Stage 2: Pharmacist still continue to be initiator. Recommend high quality and priority recommendations to physician. Value added services like Med check, screening.

Stage 3: Continue developing relationship to offer patient care.

Stage 4: Relatively high input, lengthy duration and great consistency.

2) JD is 49 year old and he customer of your pharmacy comes on busy morning says his blood pressure reading was 180/95. Just he

checked his blood pressure in pharmacy. His social habits include occasionally takes alcohol, smoking and regularly takes coffee. He is currently not taking medication for hypertension. Last 3 months ago his physician diagnosed him as borderline blood pressure However not initiated medications and recommend lifestyle modifications. Which of the following may be cause high blood pressure, except.

- A) He had smoked 5 min before taking his blood pressure
- B) He had taken coffee 10 min before taking his blood pressure
- C) He had taken blood pressure average from right arm and after interval 5 min taken left arm
- D) He had taken blood pressure average from the right arm with interval 5 min from the same arm
- E) He did not relaxed for 5 min before he taken his blood pressure

  Ans. C

Tips: JNC 7, Joint national committee recommendation for blood pressure monitoring are the standard.

- 3) JL is a 45 year old man previous customer of your pharmacy. Brings a new prescription for a drug. The same has been refilled a week before. However he states he lost his medications. During processing his medication to insurance claim. Insurance plan does not accept. He does not want to pay by cash. What to do?
- A) Ask patient to pay by cash
- B) Call doctor to change medication name
- C) Call doctor to increase the dose
- D) Give advance for a month and wait for insurance to cover
- E) Explain patient insurance company is not accepting Ans: E
- 4) A patient is on phenelzine for the past 3 mo. Currently looking for OTC nasal congestion. What is best action to do?

- A) Pseudoephedrine
- **B)** Codeine syrup
- C) dextromethorphan
- D) desloratadine
- E) xylometazoline

#### Ans.D

Tips: Phenelzine and Tranylcypromine are potent MAOi have high drug interaction.

- 5) Cystic fibrosis clinic should be invited all, except?
- A) Physiotherapy
- **B)** Respiratory specialist
- C) Physician
- D) Occupational therapist (rehabilitation, speech pathology, home assessment).
- E) Nurse practitioner

Ans: A

- 6) Laura woods a clinical pharmacist she visits primary care physician for academic detailing meeting, she presents charts and evidence information in inhalation therapy in COPD? What is incorrect therapeutic action for COPD management?
- A) short acting bronchodilators as needed used for mild COPD

- B) If COPD persist long acting bronchodilators like tiotropium is added
- C) If COPD persist add long acting beta agonist to tiotropium
- D) In COPD inhaled corticosteroids are used for patient FEV1 <50% coexistence of asthma or more than exacerbation of asthma.
- E) None of the above

Ans: E

Tips: TC page 699.

Tips: Promotes evidence based information to healthcare

professional.

- 7) Acute exacerbation of COPD patient, with simple low risk what is NOT a antibiotic regimen? Which of the following antibiotic has poor activity against *S. pneumoniae*.
- A) Ciprofloxacin
- B) Amoxicillin C) doxycycline D) Cefuroxime
- E) Clarithromycin

Ans: A

- 8) Acute exacerbation of COPD patient, high risk patient, increased dyspnea, increase sputum volume and increased sputum purulence continue after 3 days of initial antibiotics, What is best antibiotic options? except
- A) Amoxi/clav B) Moxifloxacin C) Levofloxacin D) Clarithromycin E) doxycycline

Ans: D

- 9) Acute exacerbation of COPD severe dyspnea, increase sputum production doctor will initiate anti-inflammatory drugs like?
- A) prednisone 7 to 10 days
- B) Inhaled corticosteroids
- C) Iv antibiotics
- D) In branchodilators
- E) Combination of LABA and Tiotropium

Ans: A

Tips: Anti-inflammatory steroids. However if patient have dyspnea, cough and sputum may require initiating antibiotic therapy.

- 10) Patient using inhaled corticosteroids for long term treatment of COPD, have all the following side effects, except
- A) skin bruising
- B) decreased BMD
- C) Increased risk of pneumonia
- D) Cataract or glaucoma
- E) gait

Ans: E

Tips: Gait is an imbalance and it is NOT a side effect of steroid.

CS is a 68-yo male who presented to the ER this morning at 0200 hours with a 2-day history of productive cough with fever. He also

complained of shortness of breath. He decided to seek medical treatment because the chest pain and other symptoms were preventing restful sleep. It was decided to admit CS to the hospital with a diagnosis of community-acquired pneumonia. The following antibiotic regimen was ordered:

- 11) An adult patient with community acquired pneumonia need for hospitalization ward can be guided by?
- A) PSI < 91
- B) PSI >91 C) > 162
- D) < 162

Ans: B

Tips: PSI > 91 require hospitalization therapy. PSI > 162 require ICU admission.

- 12) Which of the following bacterial infection in pneumonia often require ICU care?
- A) S. pneumoniae
- B) S. aureus
- C) P. aeurigunosa
- D) M. Pneumonia
- E) H. influenza

Ans: B

- 13) Which of the following antibiotic has poor activity against S. pneumoniae.
- A) Ciprofloxacin
- B) Amoxicillin plus Clavulanate
- C) doxycycline
- D) Cefuroxime

# E) Moxifloxacin

### Ans: A

Tips: Ciprofloxacin has poor coverage for pneumonia infections. However, respiratory tract quinolones such as moxifloxacin, levofloxacin, gatifloxacin are used.

- 14) Ceftriaxone 1 g IV q 12 h and clarithromycin 500 mg po q 12 h. What comment would you make during rounds this morning regarding the dosing of the antibiotics?
- I) The ceftriaxone and clarithromycin doses must be reduces based on CS's estimated renal function.
- II) These antibiotics should be given at least 1 hour apart.
- III) Ceftriaxone can be given q 24 h for the treatment of community acquired pneumonia.
- A. I only B) III only c)I and II only d)II and III only e) I, II and III

  Ans: B

Tips: Ceftriaxone has long half life thus, it is used once daily (q24h)

Carol Smith, a 29 yo women presents to doctor with classic symptoms (dysuria, frequency, urgency) plus pyuria and NO fever. She is otherwise healthy women and there is no other medical conditions and medication on her profile. Doctor initiated empiric antibiotic therapy for lower urinary tract infection.

- 15) What is correct about empiric therapy of lower UTI?
- A) Nitrofurantoin is a reasonable first line treatment choice. It is effective against *E. coli* and resistance has remained low. It is a narrow spectrum antibiotic that concentrates in the urine.
- B) Nitrofurantoin for 3 day of therapy to treat lower UTI
- C) TMP/SMX for 7 days of therapy to treat lower UTI
- D) Ciprofloxacin 5 days of therapy to treat lower UTI

### E) Amoxicillin or cephalexin for 10 days

Ans: A

Tips: Only nitrofurantoin is given as 5 days for lower UTI or cystitis (bladder) infections. However all other antibiotics TMP/SMX, Ciprofloxacin. If susceptible amoxicillin or cephalexin is used for 7 days.

- 16) Which of the following antibiotic is **LEAST likely** used in urinary tract infections?
- A) Nitrofurantoin
- B) Cephalexin
- C) Amoxicillin
- D) Moxifloxacin
- E) Ciprofloxacin

Ans: D

Tips: Moxifloxacin does not accumulate in urine.

- 17) Which of the following antibiotic is contraindicated in renal impairment (CrCl<60mL/min) in UTI?
- A) Nitrofurantoin
- B) Cephalexin
- C) Amoxicillin
- D) Moxifloxacin
- E) Ciprofloxacin

Ans: A

Tips: Nitrofurantoin is contraindicated in renal impairment. However norfloxacin is can be used in renal impairment. Moxifloxacine does not require dose adjustment in renal disease.

- 18) Doctor has initiated empiric therapy TMP/SMX for 3 days of therapy to treat lower UTI. What is pharmacist concern?
- a) duration of therapy should be minimum 5 days
- B) duration of therapy should be minimum 10 days
- C) TMP/SMX increase resistance of to E. coli
- D) There is no indication of TMP/SMX
- E) Photo sensitivity of TMP/SMX

Ans: C

- 19) Carol returns to the clinic 10 weeks later with signs and symptoms of another UTI. The physician asks your opinion on treating her again with another course of TMP/SMX 1 DS tablet tid for 3 days. You reply:
- a) That this is probably a reinfection, and therefore, TMP/SMX is appropriate, although you recommend treatment for 14 days.
- b) That it is a relapse due to a resistant organism and would recommend treatment with a fluoroguinolone.
- c) That this is a reinfection with *E. coli* and a second course of treatment with 3 days of TMP/SMX should be initiated.
- d) That Carol may be a complicated UTI and should be admitted to the hospital for proper workup and IV antibiotics.
- e) That Carol appears to be candidate for long-term prophylaxis with single strength TMP/SMX 3 times a week.

**Answer: C** 

Tips: Most relapses (recurrence of bacteria caused by the same microorganism that was present before the initiation of therapy) occur within 1-2 weeks (within 4 weeks) after the completion of

therapy and are assumed to be due to the persistence of the organism in the urinary tract. TC 6th. page 1512

Re-infection: A second UTI occurring > 2 weeks after an initial UTI is most likely a second infection, or reinfection, and can be treated with the same antibiotics as the initial episode but a longer duration of therapy is advised. The majority of recurrent infections are caused by reinfections. As the patient has now experienced three UTIs in the past 9 months, the cause of these infections should be investigated. Potential behaviours associated with recurrent UTIs (sexual intercourse, or the use of spermicides/diaphragm) or the development of a structural abnormality (kidney stones) may need to be evaluated if these infections continue.

TC page 1513. If reinfection within a month treat for 7 d, in women symptoms lasting greater than 7 d. Women with recurrent infection in less than 7d.

- 20) A 68-year-old man with type 2 diabetes who visits your pharmacy complaining that he can't see the blood glucose readings on his meter. In 2003 his vision was blurry, so he visited his optometrist to get new glasses. His optometrist referred him directly to the emergency department because he has severe bilateral diabetic retinopathy. Since that visit he has had several laser treatments and surgeries on both eyes. He is now essentially blind in the lower. How could a pharmacist have made a difference? Which of the following is appropriate action for his dry eye, blurred vision?
- A) Recommend control his blood sugar levels
- B) Ask to be more compliant with his antidiabetic drugs
- C) Regular exercise

- D) Recommend ophthalmic drops Visine for his dry eye. E-Refer to the physician

  Ans. E
- 21) Pharmacist organized diabetic clinic in a community centre. What is incorrect about the pharmacist role in pre-diabetic patient
- A) Explain significance of pre-diabetes
- B) Prescribe lifestyle changes
- C) Refer to local diabetes Centre and/or community programming
- D) Re-screen annually or as clinically indicated
- E) Encourage patient monitor daily blood sugar levels at home Ans: E

22)Your neighborhood pharmacy hypertension seminar a patient Ms Dorothy Brown, a 66 year old presents with hypertension, he has diabetes with chronic kidney disease, what will be the appropriate selection?

At what SBP should pharmacotherapy be started in Dorothy?

A) SBP ≥160 mmHg. B) SBP ≥130/80 mmHg. C) SBP < 160 mmHg. B) SBP < 130/80 mmHg

Ans: B

Tips: The Canadian diabetic association (CDA) recommends treatment be initiated at a BP of ≥130/80 mmHg.

- 23) What laboratory test Dorothy, should be monitored for chronic kidney disease
- A) Do annual random urine albumin to creatinine ratio (ACR).

- B) Blood pressure SBP ≥130/80 mmHg
- C) Blood pressure SBP ≥140/80 mmHg
- D) Blood pressure SBP ≥130/85 mmHg
- E) All of the above

Ans: A

- 24) What is correct about chronic kidney disease monitoring?
- I) If ACR >2 mg/mmol in men or <2.8 mg/mmol in women, result indicates no kidney damage, repeat in one year.
- II) Blood pressure SBP ≥140/80 mmHg
- III) If ACR >2 mg/mmol in men or >2.8 mg/mmol in women, result indicates kidney damage.
- A) I only
- B) III only
- C) I and II
- D) II and III
- E) I, II,III

Ans: D

• If Albumin creatinine ration ACR ≥2 mg/mmol in men or 2.8 mg/mmol in women, result indicates presence of kidney damage.

- 25) What is drugs are recommended to initiate patient like Dorothy?
- A) Start ACEI or ARB regardless of BP to delay progression of CKD
- B) Start Amlodipine daily and dihydropyridine calcium channel blocker
- C) Start Metoprolol 50 mg daily
- D) Start Hydrochlorothiazide 50 mg daily and Ramipril 10 mg daily
- E) Start telmisartan/amlodipine 40/10 mg daily

Ans: A

Tips: BP threshold and target uncertain but based on ACCORD BP

may be <140/90 rather than <130/80.

- If there are indicators of overt nephropathy, there is no need to repeat the test. The patient has kidney damage. Indicators of overt nephropathy include
- Positive urine dipstick for protein
- ACR levels above 20.0 mg/mmol for males and 28.0 mg/mmol for females
- Urine albumin level > 300mg/day
- If there are no indicators of overt nephropathy repeat ACR twice at 1 to 8 week intervals.
- If 2 of the 3 tests are positive, the patient has kidney damage.
- Start ACEI or ARB regardless of BP to delay progression of CKD (Grade A)
- BP target is SBP <130 mmHg (Grade C); DBP <80 (Grade B)

A 50-year-old male, otherwise healthy presenting complaint is retrosternal burning symptoms have been ongoing for approximately six months. At onset, retrosternal burning was occurring one to two times per week, mainly after meals. Symptoms do not worsen with activity or inspiration, but often worse when bending over or reclining. Burning occasionally accompanied by acidic taste in mouth. Over the last month, symptoms have been occurring on a daily basis, with the patient occasionally awakening at night with similar symptoms which disturb sleep. Patient has been over the counter drug TUMS® and Maalox®, finds they work, but only relieve symptoms temporarily. Patient has never seen a physician for similar symptoms or used prescription medication. Patient does not report any dysphagia, nausea, vomiting, other abdominal pain, change in bowel habits, melena, bright red blood

with stooling, or weight loss. Non-smoker; low alcohol consumption (average two beers per week).

26) Which investigations is appropriate to order at this time?

A) endoscopy B) barium series C) pH test for 24 hours d) do not need testing at this stage E) None

Ans: D

- 27) What alarm symptoms prompts endoscopy test?

  A) specifically significant weight loss B) dysphagia C) hematemesis
- D) melena E) all of the above

Ans: E

- 28) According to the Canadian Agency for Drugs and Technologies in Health (CADTH) scientific report, What is the most effective treatment in above patient?
- A) antacids B) H<sub>2</sub>RAs C) PPIs

D) Self-care e) none

Ans: C

- 29) Doctor prescribed omeprazole at a dose of 20 mg per day, when next follow up visit should be arranged?
- A) after 1 week B) after 2 weeks C) after 4 weeks D) after 8 weeks E) After 6 months

Ans: C

TC page 6th ed. page 805. Using PPI 2 to 4 wk. If no there is no response double dose. And check response after 4 to 8 wk.

- 30) Four months later patient returns with complaining over the past one month's heart burn symptoms are worsening? What is appropriate management
- A) Increase dose of PPI to double
- **B) Switch to other PPI**
- C) Switch to H<sub>2</sub>RA
- D) Combine PPI and antacids
- E) Combine PPI and H<sub>2</sub>RAs

Ans: A

31) A 60 year-old female. Presents with three-month history of difficult ambulating secondary-to-left knee pain. Pain worsens with activity, improves with rest. Had been using extra-strength acetaminophen (500 mg tablets) with minimal relief. You had seen her in the clinic two months ago, where you performed the following investigations: CBC, chemistry panel, renal function, ESR: all normal, X-ray left knee: asymmetrical joint-space narrowing, subchondral osteosclerosis consistent with osteoarthritis. At that time, you had recommended using acetaminophen 1 g four times daily, and

scheduled a follow-up for today. Today, she reports only minimal improvement in pain and mobility. Aside from her knee symptoms, she has no other complaints. No history of reflux or ulcers. Non-smoker; no alcohol.

What is appropriate action, to relieve her arthritic pain?

- A) increase dose of acetaminophen
- **B) Switch to NSAIDS**
- C) Switch to NSAIDS and PPI
- D) Switch to topical NSAIDS and PPI
- E) None of the above

Ans: B

Tips: Patient has no risk factors so she can be switched to NSAIDS.

what is the most important factor to initiating PPI in patient using NSAIDs? Age >65 yo

- 32) what type of patient require gastroprotection along with NSAIDs? except
- A) high dose NSAIDS
- B) history of previous ulcers
- C) concomitant therapy with corticosteroids
- D) concomitant therapy with anticoagulants
- E) Patient did not respond with acetaminophen

Ans: E

33) Two years later, Ms. W. has been admitted to hospital with an acute, upper gastrointestinal bleed, and you are her admitting physician. She had been using Naproxen 500 mg twice daily,

chronically over the past two years, with adequate control of her symptoms of osteoarthritis. What is appropriate action?

- A) Discontinue Naproxen 500 mg bid and switch to ibuprofen
- B)Discontinue Naproxen 500 mg bid to switch to acetaminophen 1 g qid
- C) Discontinue Naproxen 500 mg bid
- D) Reduce the dose of Naproxen 500 mg qd
- E) Add PPIs

Ans: B

- 34) A pharmacist in academic detailing discussing with doctor about NSAIDs, what is incorrect statement?
- A- if patient is on NSAIDS have heartburn or ulcer symptoms refer to doctor
- B) Discontinue NSAIDs if patient is > 65 yo and renal disease
- C) if continuing NSAID add one PPI if patient have heart burn or ulcer symptoms
- D) Recommend to reduce the dose of NSAID for ulcer symptoms
- E) Discontinue NSAIDS if there is GI bleeding symptoms
- F) None of the above

Ans: D

Tips: PSC 2<sup>nd</sup> ed. page 301.

- 35) Who provides recommendation for formulary listing to the to publicly drug plans in Canada and cost effectiveness of new drugs.
- A) Common Drug Review (CDR)
- B) Therapeutic directorate, Health Canada
- C) Drug utilization review (DURs)
- D) Pharmacy and Therapeutic Committee

# **E) Medication Advisory Committee**

Ans: A

Tips: Common drug review provides recommendation for formulary listing to the publicly drug plans in Canada.

- 36) Who provides recommendation for formulary listing to hospital drugs?
- A) Pharmacy and Therapeutic committee
- B)Therapeutic directorate, Health Canada
- C)Drug utilization review (DURs)
- D)Purchase committee
- **E)Medication Advisory Committee**

Ans: A

- 37) Osteoarthritis patient using diclofenax gel (Voltaren gel) what risk factors you consider? except
- A) age >65 yo
- B) GI bleeding
- C) Renal disease
- D)already using NSAIDs

Ans: A

Tips: age > 65 yo is not risk factor topical diclofenac solution for acute migraine is approved.

- 38) A 60 yo have chronic osteoarthritis pain should be referred to all except?
- A) physician B) chiropractor C) podiatrist D) occupational therapist E-neurologist or psychiatrist

Ans: E

Tips: PSC page 458, Assessment of patient with joint pain. If spine arthritis chiropractor referral may require.

39) What is outcome of academic detailing?
A)patient coming to refill earlier than the refill time
B)physician is not prescribing excessive benzodiazepine
C)physician is not prescribing medications more frequently
D)pharmacist are not receiving new prescription
E)physician is prescribing one specific drug more
Ans. B

- 40) A Patient has approached you for recommendations of OTC for vomiting for past 4 days. Patient's profile: Enalapril 5 mg po BID, Digoxin 125 mcg po daily
- A) Refer patient to doctor urgently
- B) Refer patient to emergency
- C) Do not take next dose, stop using digoxin
- D) Refer to Dr to check digoxin blood levels E-Refer to doctor to get vomiting meds

Ans-D

Tips: digoxin toxicity symptoms are vomiting, anorexia, weakness. diarrhea, palpitation, and visual changes for this symptoms refer to doctor.

- 41) A patient is on fluoxetine for the past 3 mo. Currently looking for OTC cough suppressants. What is best action to do?
- A) Do not give OTC dextromethorphan, it can give serotonin syndrome
- B) Give dextromethorphan, counsel to monitor serotonin syndrome symptoms
- C) Give codeine syrup for cough suppressant
- D) Do not gives any cough suppressant, refer to dr.

#### Ans-D

Tips: Warning. combining SSRI with other SSRI agents may rarely results in serotonergic syndrome. However small doses of combining MAO Inh. can result in to serotonin syndrome. Ref. eTherapeutics.

- 42) A patient diagnosed with are gastrointestinal tract complications ulcers. The risk of having ulcers is bigger in people having which of the following conditions:
- a) Smokers
- b) Chronic alcoholics
- c) NSAID long-term treatment
- d) Corticosteroids long-term treatment
- e) All are correct

# Ans. E

43) A patient is on clozapine, have high fever for last 5 days. Used acetaminophen and Advil. Still fever is continued and feel like getting seizure.

A-Refer to emergency or urgency to Dr.

B-Refer to doctor inform it is Neuroleptic malignant syndrome

C-Discontinue clozapine, it is a neutropenia problem

**D-Discontinue Advil and continue clozapine** 

Ans-A

Tips: neuroleptic malignance symptoms (tremors, rigidity, fever, tachycardia and hypertension) require referral and emphasize on urgency or emergence.

44) A 19 year old man walks into the pharmacy, red hair, green eyes and freckles with a red face and neck. He needs help to treat him before he heads back out onto the slopes too cruise for chicks. He started taking bactrim about 7 days ago for a sinus infection he had. He doesn't wear a hat or anything protective skiing since it is not cool. What is incorrect about sunburn?

A-This is a photosensitive sun burn secondary to use of Septra (sulfonamide) since only his face and neck are burnt due to sun exposure while skiing.

- B) He is going to need to be well hydrated, Tylenol for pain (No Aspirin during first 4 days since the inflammation reaction is helping the healing process).
- C) emollient, cool compress, sun block, or (sunscreen) and hat, goggles, scarf, etc. to cover up as much as possible since he is definitely going to ski remaining few days he is there.
- D) Use 0.5% hydrocortisone cream only, do not exceed higher concentration of cortate cream
- E) None of the above

Ans-E

45) FW is a 23-yo female who presents to your pharmacy in a grocery store chain on November 15<sup>th</sup>. She asks the pharmacy technician if the pharmacist can recommend something for what she thinks is a cold. As you approach FW, your notice that she is visibly shaking with a heavy sweater wrapped around her. She tells you that yesterday she started feeling "terrible." You ascertain that her symptoms include myalgias, arthralgias, fatigue, cough, runny nose, and a stuffy nose. She says that she is not really sneezing, and she doesn't know for certain if she's been running a fever because she does not have a thermometer at home, although she states that at work today her temperature was 40.7°C. She wants you to recommend something to make her feel better. She just started a new job as a preschool teacher and does not have very much sick time saved up.

FW is intolerant to alcohol containing products.

Which of the additional questions below is most appropriate to ask FW before safely recommending an OTC product?

- a) "Are you pregnant or could you be pregnant?"
- b) "Have you called your doctor's office?"
- c) "Is your roommate sick?"
- d) "Did you receive this year's flu shot?"
- e) "Do you have a coupon today?"

# **Answer: A**

Tips: Since SW is of childbearing age and is currently taking a prescription oral contraceptive, it would be prudent to ask if she were pregnant. To safely recommend an oral product, a pharmacist should ascertain whether a woman could be pregnant.

- 46) FW wants to know how long she will have to endure this misery. The average duration for influenza infection in adults is:
  - A. 3-5 days
  - B. 5-10 days
  - C. 7-14 days
  - D. 1-21 days
  - E. As long as 30 days

#### **Answer: B**

Tips: Whereas an individual's response to an influenza infection will vary, the average duration of symptoms is 5-7 days. If an individual develops a secondary bacterial infection, the symptoms may seem to endure for a longer period of time.

- 47) In addition to an OTC medication, what other interventions may help decrease FW's symptoms?
  - I. Vacuuming all carpets and rugs thoroughly
  - II. Drinking at least six 8-ounce glasses of water or other clear liquids
  - III. Trying to get plenty of rest
  - a. I only
  - b. III only
  - c. I and II only
  - d. II and III only
  - e. I, II, III

Ans: D

- 48) Which of the following vaccinations are usually recommended, on a yearly basis, for elderly patients with chronic respiratory conditions?
- I) Influenza virus

- II) Pneumococcal
- III) Meningococcal
- a. I only
- b. III only
- c. I and II only
- d. II and III only
- e. I, II, III

Ans: A

- 49). Which of the following clinical days presented in a community pharmacy would be beneficial in helping clients reduce their risk factors for heart disease?
- I) Smoking cessation
- II) Dietary strategies for fat and cholesterol
- III) Pulmonary function home testing
- a. I only b. III only c. I and II only d) II and III only e) I, II, III Ans: C

- 50) What is incorrect about medical reconciliation?
- A) It ensures the collection and communication of accurate client/patient medication information.
- B) medical reconciliation is to facilitate continuity of pharmaceutical care for patients at admission/beginning of services and or at discharge/transition from hospital to home or another level of care. C)The overall objective of medical reconciliation is to reduce adverse
- effects.
- D)To minimize the hospital admissions due to inappropriate prescribing

E) Retention and use of medication, and discontinuation of medication, if not necessary.

Ans: D

- 51) Medication reconciliation performed mainly during, except
- A) Medication reconciliation process on admission
- B-Medication reconciliation process on transfer
- C-Medication reconciliation process on discharge
- D-Medication reconciliation process on surgical pre-admission
- E-Medication reconciliation process at community pharmacy

Ans: E

52) A pharmacy technician has worked in retail pharmacy for 10 years. He is well trained and interested in learning new aspects of pharmacy. His manager now wanting to delegate a new technical project:

I-Describe projects and details to complete this project

II-Describe time line to complete this project

III-Follow up until completion of project

A-I only B-III only C-I and II only D-II and III only E-All of the above

# Ans: E

- 53) A pharmacist notices the technician writing down the information of the new Rx for a patient while the pharmacist is on the phone with a doctor. What would be the appropriate course of action?
- a) Tell the technician right away that it is not his job, disregarding who is around
- b) See if the Rx is correct, if there is an error, the pharmacist should show him how to correct the error so the technician can do it right next time.
- c) Plan a meeting so that everyone is aware of the work they are responsible for
- d) None of the above

Ans: C

- 54) A 75 year-old woman asks for your advice. She says she is allergic to cats and she would like to know if she could take something BEFORE she visits her granddaughter who owns a cat.
- A) Recommend self care
- B) Recommend Loratadine effective if taken 2 to 4 hour before exposure
- C) Recommend diphenhydramine effective if taken 30 min before exposure
- D) Recommend to avoid cat
- E) None of the above

Ans: B

- 55) A 44 year-old man, already taking fexofenadine once daily, asks you if there is something he could take to relieve his occasional bouts of night time congestion. His medical profile daily paroxetine to generalized anxiety. What would you recommend?
- a) Recommend diphenhydramine
- b) Recommend self care and nasal drops of xylometazoline
- C) Recommend desloratadine
- D) Recommend saline drops
- E) Recommend dextromethorphan

Ans: C

- 56) A 32 year-old woman suffers from seasonal allergic rhinitis. She asks your advice because she can't find relief despite the use of nasal oxymetazoline QD for the last three weeks. What is your opinion?
- A) ask her continue for another 3 days
- B) refer to doctor due rebound congestion
- C) ask her to use saline drops
- D) ask her to use desloratadine
- E) Ask her to discontinue oxymetazoline

Ans: B

57) A 28 year old woman tries to renew her nasal fluticasone prescription. She complains about the bad taste of the drug and asks if anything can be done about this? What is your opinion?

A) contact doctor to it seems oral thrush

- B) suggest drinking glass of water after taking medication
- C) suggest drinking glass of water after taking medication it this is not effective suggestive switch to other steroid triamcinolone
- D) recommend to use spacer
- E) Recommend to decrease dose

Ans: C

Tips: What is a solution nose bleed because nasal steroid? demonstrate nasal spray device.

DM is a 76-year-old woman who was recently seen at an outpatient clinic following a fall. She was given a bone mineral density scan and was found to have a T-score at the spine of -1.8 and at the hip of -2.6. The physician at the clinic gives her a prescription for alendronate 70 mg by mouth weekly, and she brings the prescription into the pharmacy. The pharmacist reviews DM's profile and sees that she is also taking simvastatin, lisinopril, lansoprazole, and calcium carbonate plus vitamin D. DM tells the pharmacist that she feels fine and does not understand why she should take this medication. She also asks if it is true that she has to stand up for 2 hours after she takes the alendronate. What should the pharmacist tell the patient?

- 58) All of the following factors a pharmacist consider for her osteoporosis condition, EXCEPT
- A) Cigarette smoking
- B) Her obesity
- C) Caucasian entity
- D) Lots of alcohol
- E) Lots of caffeine

### Ans: B

- 59) Which of the following laboratory test require initiating osteoporosis therapy, except
- a) BMD Scan using DEXA machine
- B) Portable ultrasound
- C) X-ray
- D) T score > -1
- E) T score > -2.5

Ans: D

- 60) What is true about bisphosphonates therapy in DM
- A. Take alendronate in the morning with a full glass of water (~8 ounces) at least 30 minutes before eating, taking other medications, or drinking anything besides water
- B. Change calcium supplements to calcium citrate, as DM using lansoprazole
- C. T-score < -2.5 is diagnostic for having osteoporosis
- D. Alendronate prevents bone loss, and should be taken in addition to the calcium and vitamin D
- E. All are correct

Ans: E

Osteoporosis is due to an imbalance of bone formation and resorption, and may lead to complications such as fractures.

Diagnosis is typically made by measuring the T-score, which compares a patient's bone mineral density with a young healthy person of the same sex. A T-score <-2.5 is diagnostic for having osteoporosis. Based on MK's T-score at the hip (-2.6), she is considered to have osteoporosis and should receive treatment to prevent fractures. The pharmacist should tell the patient that her alendronate should help to keep her bones strong, so that she would be less likely to get a fracture if she were to fall again. Alendronate prevents bone loss, and should be taken in addition to the calcium and vitamin D. DM should take alendronate in the morning with a full glass of water (~8 ounces) at least 30 minutes before eating, taking other medications, or drinking anything besides water, and should remain upright (either sitting or standing) for 30 minutes, not 2 hours. This is to prevent any esophageal damage that might result from direct contact of alendronate on the esophagus. MK also is taking lansoprazole, which may interact with the calcium. Calcium is better absorbed in an acidic stomach environment, but MK likely has reduced calcium absorption due to her lansoprazole-induced acid suppression. She might benefit by switching to a calcium citrate form (plus vitamin D), which does not require as much acidity in the stomach for absorption.

- 61) What are the risk factor for osteoporosis?
- I) Caucasian
- II) Smoking
- III) Renal diseases
- A) I only B) III only C) I and II only D) II and III only
- E) I, II, III

Ans: E

TC page 637

- 62) What is true about alendronate
- A) Take on empty stomach in the morning
- B) Must take with calcium supplement dose
- C) With glass of orange juice
- D) May be taken anytime of the day
- E) All are correct

Ans: A

- 63) A pharmacist wants to organize a seminar on osteoporosis. What kind of patients he may invite
- I) Postmenopausal women
- II) Adults
- III) Old people
- A) I only
- B) III only
- C) I and II
- D) II and III

E-I, II, III

Ans: A

64) Patient on raloxifene (Evista) for the postmenopausal symptoms with high cholesterol, the doctor asks you if she has to stop. What is not right about raloxifine?

Patient medical history includes: Diabetes, High cholesterol, DVT

- A) Raloxifene aggravates flushing
- B) Raloxifene increase LDL
- C) Raloxifene has no significant effect on HDL, and TG
- D) Raloxifene treats osteoporosis

# Ans: B

Tips: TC page 644, Evista may aggravate flushing.
Raloxifene decrease LDL and no significant effect on HDL, and TG
Evista and HRT Effects on Cardiovascular Intermediate Endpoints in a
6-Month Study-Median Percentage Change from Baseline

65) What should be the most concern the Dr for the above patient?

A-If patient has high cholesterol

**B-If patient has diabetes** 

C-If patient is postmenopausal

D-If patient is with DVT or PE

E-All of the above

### Ans-D

Tips: TC page 639 and 644. Raloxifene is NOT associated with increased cardiovascular risk.

- 66) Hormones replacement therapy contraindication are all except?
- A) Hypertension
- B) Breast cancer
- C) Thromboembolism
- D) unexplained uterine bleeding
- E) Suspected Pregnancy

### Tips: A

CPS: estrogen: Contraindications: Uterine bleeding, active hepatic dysfunction, breast cancer, endometrial disease, Known or suspected

pregnancy, cerebrovascular incidence, coronary thrombosis, DVT, PE.

Major side effects: hypertension, DVT.

Oral contraceptives can cause breast cancer and endometrial cancer.

- 67) A 55 years female is in treatment of stress incontinence. She has 3 children. Best therapy that suites her is/are:
  - I. Systemic estrogen
  - II. Imipramine
- III. Vaginal estrogen

A-I only

**B-III only** 

C-I and II only

**D-II** and III only

**E) I, II, III** 

Ans: D

Tips: Systemic estrogen is for menopausal hormonal therapy (MHT) while vaginal estrogen is for vasomotor symptoms and urine incontinence in female.

TC 6th ed. page 877

Urge incontinence: Patient education, lifestyle modification, psychotherapy. 1st line anticholinergic, vaginal estrogen if post menopausal atrophy. TCA last resort if all fails.

Stress incontinence: Patient education, lifestyle modification, psychotherapy. (Note: NO anticholinergic), vaginal estrogen if post menopausal urogenital atrophy. Duloxetine is second line.

- 68) She wants to know, where can she get help to know more about kaegel pelvic exercise? What is appropriate?
- A) refer to chiropractor

- B) refer to podiatrist
- C) refer to physiotherapist
- D) refer to nurse
- E) refer to midwife

Ans: C

Tips: if it is K-type, and have nurse and midwife. Choose all.

- 69) A mother asks you whether she should give acetaminophen drops for her 2 month old baby. The baby had fever of about 39C since this morning? What is appropriate?
- A) fever lasting > 24 h with no obvious cause give acetaminophen
- B) fever lasting > 72 h give acetaminophen
- C) fever > 40.5 C give acetaminophen
- D) refer to dr. child patient less than 2 mo age
- E) none

Ans: D

PSC 2<sup>nd</sup> page 81; fever less than 24 h and age < 6m refer

- 70) A child has had epileptic seizure before in medical profile. Now has fever. Mother is worried about seizure. What to do?
- A) give acetaminophen and recommend cold compress
- B) give acetaminophen and refer to doctor
- C) refer to emergence
- D) give acetaminophen

Ans: B

71) A 12 yo boy, very athletic and he spends lot of his time outdoor sports specially from 10:00 am to 4:00 pm. His mother calls to your pharmacy. She explains her son have got red itchy vesicles on face and trunk. She wants to know what to do?

I-Recommend self care like avoid playing between 10:0 to 4:00

II-Refer to physician for reassessment of drug therapy if necessary III- refer to emergency

A-I only B) III only C) I and II D-II and III E-All of the above

- 72) A diabetic patient differential diagnosis of foot infections revealed erythema without raised borders, swelling with fluctuance. Doctor has diagnosed as cellulitis. What is the most common organism?
- A) *S. aureus* B) *S. pyogenes* C)S. viridians D) S. pneumonia E)Pseudomonas

Ans: A

Ans-C

- 73) What is the drug is not used against cellulites in diabetic foot infections?
- A) Cloxacillin B) Amoxicillin/clavulanate C) Clindamycin D) Cephalexin E) Ciprofloxacin

Ans: E

- 74) What is the duration of Cloxacillin therapy against mild cellulites in diabetic foot infections?
- A) 7 days B) 14 days C) 21 days D) 30 days E) 2 months

Ans: A

Tips: mild soft tissue 7 days, and severe 21 days.

- 75) What is not correct about self care to prevent diabetic foot infections?
- A) Open lesions on foot of diabetic person does not require antibacterial treatment
- B) Inspect foot and shoes daily
- C) have regular nail care (cutting nails straight across).
- D) Avoid application of heat or chemicals to the feet
- E) Regularly remove corns, calluses, by sharp knife

Ans: E

76) All of the following are invited in diabetic clinic except?

A) Pharmacist B) Endocrinologist C) Psychiatrist D) Nurse E-Dietician

Ans: C

- 77) A doctor wants to recommend treatment and prevention of allergic rhinitis in 70 yo Parkinson's disease patient. What is the best choice?
- A) DiMENhydrinate
- B) DiPHENhydramine
- C) Cetrizine
- D) Desloratatine
- E) Ketotifen

Ans: D

- 78) A resident of a long term care facility was admitted to hospital with behavioral challenges. The patient condition stabilized on olanzapine 10 mg qid. After discharge from hospital, the resident required readmission a short time later because of over sedation and falls. What is reason for second time admission?
- A) due to side effect of olanzapine
- B) neuroleptic malignant syndrome
- C) overdose of olanzapine
- D) because patient is old
- E) not sure what is going on?

Ans: C

79) An elderly patient had a prescription of lorazepam 1 mg as needed for escalation of aggressive, agitated behavior. About 30 min after administration of a dose of the lorazepam, the patient was

given clonazepam. Which of the following should be monitored? except?

A)disorientation B)difficulty in walking C)fall D)insomnia E)sedation

Ans: D

Tips: Insomnia cannot be possible after taking two benzodiazepine.

- 80) A patient profile has nitroglycerin SL, and gets prescription of sildenafil 50 mg prn? What is appropriate to do?
- A)ask patient if he informed doctor about nitroglycerin SL on profile B)call doctor and inform that patient on nitroglycerin are contraindicated to use sildenafil.
- C) Counsel patient about drug interaction and document.

Ans: B

Tips: Problem solving: CPS 2011 suggests if patient is on nitrate do not use sildenafil.

81) A patient is on phenelzine for the past 3 mo. Currently looking for OTC nasal congestion. What is best action to do?

A-Pseudoephedrine B-Codeine syrup C-dextromethorphan D-desloratadine E-xylometazoline

Ans: D

Tips: PSC 2<sup>nd</sup> page 179; pseudoephedrine and phenylephrine concurrent use with MAOI may cause hypertensive crisis. Page 180: xylometazoline, phenylephrine drops, can be used.

TC page 642: desloratadine has demonstrated modest improvement in nasal congestion in clinical trials and indicated for relief of nasal decongestions

82) Cystic fibrosis clinic should be invited all, except?

A) physiotherapy B) respiratory specialist C) physician, D) occupational therapist (rehabilitation, speech pathology, home assessment)

Ans: A

84) In senior seminar should discuss? Except:

A-Ca supp, B-pain relievers, C-Vit. B<sub>12</sub> supp. D-immunization E-comparison of number of brands

Ans: E

- 85) A patient is discharged from hospital after acute MI. Patient brings the prescription of isosorbide dinitrate po tablets tid-qid. Currently patient profile also in nitroglycerin patched daily. What is appropriate to do?
- A) ask patient to stop using nitroglycerin patches
- B) ask patient what did dr tell you about new medications
- C) call doctor to ask patient needed to discontinue nitroglycerin patch
- D) ask patient take nitroglycerine patch in morning and isosorbide dinitrate in the night time
- E) tell patient it is prescription error and call doctor Ans: B
- 86) Identifying and promoting evidence based best practices in drug prescription and utilisation that helps pharmacy develop academic detailing programs? What is goal of academic detailing?
- A) Increase appropriate prescription
- B) Decrease inappropriate prescription
- C-Enhance appropriate prescribing practice
- D-To decrease abuse of opioids

E-To decrease dependence of benzodiazepine

Ans: C

- 87) What is incorrect about academic detailing?
- a) Industry funding is offered to conduct program
- b) Evidence based/objective info
- c) Practical alternatives offered
- d) Improved quality of care, reduced cost of care
- e) Primary care physician and other care professional are academic detailed and sessions are confidential

### Ans: A

- 88) Which of the following is not true about academic detailing?
- A) Pharmacist plays very important role in academic detailing.
- B) It is also called as counter detailing
- C) It is sponsored by the governing body
- D) It is sponsored by the Manufacturer of drugs on large scale
- E) pharmacy meets primary care physician face to face or online meeting

# Ans: D

- 89) What is correct academic detailing funding sources
- a) Pharmacist academic detailing can accept funding from drug companies
- b) Pharmacist academic detailing can accept food from drug companies
- c) Pharmacist academic detailing can directly invest in drug companies
- d) Collaborate with other educational initiatives and academic detailing groups across Canada
- e) Academic detailing is funded by provincial health care agencies

  Ans: E
- 90) Which of the following agencies are NOT associated in identifying and promoting evidence based best practices in drug prescription

and utilisation that helps pharmacy develop academic detailing programs?

- A) The Canadian Agency for Drugs and Technologies in Health (CADTH)
- B) Canadian Optimal Medication Prescribing and Utilization Service (COMPUS)
- C) Provincial college of pharmacies
- D) Provincial health care agencies
- E) Generic Drug manufacturer association of Canada Ans: E
- 91) All of the following professions are regulated under health professions act (RHPA), except?
- A) Psychiatrist
- B) chiropodist
- C) physiotherapist
- D) Optometrist
- E) Personal support workers

Ans: E Tips:

- 92) MK is 59 year old women. Receiving treatment of methotrexate 25 mg/wk for the past 6 months. However, she continues have prolong stiffness in morning and difficulty in joint mobilisation. She is in regular consultation with her physician for methotrexate therapy monitoring. Additionally which of the following professional can be helpful professional can be help to improve her strength, range of motion and function?
- A) occupational therapist
- B) Chiropractor
- C) Podiatrist
- D) Physiotherapist

# E) Psychiatrist

Ans: D

Physiotherapy treatments can include the following:

- Personalized exercise programs designed to improve your strength, range of motion, and function
- Massage
- Joint mobilization and manipulation to reduce pain and stiffness
- Hot and cold packs and modalities to relieve pain, reduce swelling, speed up the healing process, improve movement and function
- Airway clearance methods to assist people with breathing difficulties
- Skin and wound care
- Management of incontinence including pelvic floor re-education
- Functional activity and tolerance testing and training
- Work and occupational re-training and return to work planning
- Prescription, fabrication and application of assistive, adaptive, supportive and protective devices and equipment
- Environmental change, focusing on removing barriers to function

- 93) MP is a 47 year old a computer programmer comes to your pharmacy complaining job related eye strain. Which of the following professional professionals appropriate to consult?
- A) Psychiatrist
- B) Optometrists
- C) Chiropractor
- D) Occupational therapy
- E) Social worker

Ans: B

your optometrist can detect, manage and treat conditions such as job-related eye strain, also known as computer vision syndrome, age-related vision changes, known as presbyopia, and offer advice on workplace safety.