

Week 1 Full Length Practice Exam

- Due Sep 8 at 11:59pm
- Points 150
- Questions 150
- Available Sep 2 at 12am - Sep 8 at 11:59pm
- Time Limit 180 Minutes

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	171 minutes	150 out of 150

Score for this quiz: 150 out of 150

Submitted Sep 8 at 8:23pm

This attempt took 171 minutes.

Question 1

1 / 1 pts

Effective long-term treatment of systolic heart failure with reduced ejection fraction should include which of the following?

Correct!

- Prescribing valsartan/sacubitril (Entresto) unless contraindicated on discharge

Angiotensin Receptor and Nephilysin Inhibition is considered goal-directed therapy for patients with reduced systolic heart function as evidence by the PARAGON-HF Trial. Auscultation is an assessment item, not a treatment. Midazolam does not have any long term benefit for heart failure. Fluid bolus in a patient with likely fluid overload from systolic heart failure only worsen their presenting symptoms.

- Prescribing 500 ml fluid bolus for hypotension
- Auscultating lung sounds for rhonchi
- Prescribing midazolam to aid with air hunger

Question 2

1 / 1 pts

A 45-year-old man presents with chest pain radiating to the left arm, diaphoresis, and shortness of breath. His ECG shows ST-segment elevation. What is the initial management response?

- Administer nitroglycerin sublingually
- Start intravenous heparin

- Perform immediate coronary angiography

Correct!

- Administer aspirin and call for emergency medical services

Question 3

1 / 1 pts

An 80-year-old man with a history of atrial fibrillation presents with sudden-onset unilateral leg pain and pallor. What is the most likely diagnosis?

- Deep vein thrombosis

Correct Answer

- Acute arterial occlusion
- Cellulitis
- Peripheral artery disease

Question 4

1 / 1 pts

An older adult female presents for her annual examination. She has been on antihypertensive medications for over 20 years, with good control. Laboratory values are within normal ranges. The nurse practitioner is concerned about the patient's cardiac health risks, due her to weight and her waist circumference. According to the AHA guidelines, which of the following goals is expected for this patient?

- Physical activity for 60 minutes daily, 7 days a week

Correct!

- Physical activity for 30 minutes daily, for a minimum of 5 days a week
- Physical activity for 30 minutes daily, 7 days a week
- Physical activity for 60 minutes daily, for a minimum of 6 days a week

Question 5

1 / 1 pts

Recommendation for lipid check in adolescent with type 1 DM?

- 10 years
- 5 years
- 2 years

Correct!

1 year

Remember than with pediatric patients with diabetes, the easiest way to remember the evaluation schedule is to perform lipid checks is with annual physicals.

Question 6

1 / 1 pts

An adult patient must maintain an International Normalized Ratio (INR) between 2.0 and 3.0. The patient goes to a clinic for INR determination, and the result is 1.4. Which of the following would be likely to decrease the effects of warfarin (Coumadin)?

- Red Wine
- Red meat

Correct!

- Broccoli
- Grapefruit

It's important to remember with warfarin (Coumadin) therapy that it is a vitamin K antagonist, and therefore it can be counteracted by a patient who is eating a dietary intake of vitamin K. Leafy green vegetables such as broccoli and spinach are notorious for increasing vitamin K levels, and therefore inhibiting the anticoagulation effect of warfarin. It's also important to remember that with the direct oral anticoagulants category, vitamin K is not affected, and therefore no dietary restrictions are required for this class of medications such as apixaban, rivaroxaban, and edoxaban, which is a distinct benefit over warfarin as noted above. Also, with warfarin it is important to remember that the effects are based on the free drug, not the protein bound drug level, so patients who have considerable protein stores will require more warfarin than those who are emaciated or have low protein levels chronically.

With respect to this particular question, red wine and grapefruit do not have an effect of lowering the INR, in fact, they will raise it by their unique mechanisms. Grapefruit specifically causes warfarin levels to rise through the CYP 450 system, and red wine causes the INR to increase by thinning the blood and and red meat is not likely to have a considerable impact, although it might have some impact if the protein stores are otherwise low prior to initiating the red meat in the diet. Broccoli is the only option that has vitamin K and should be an obvious choice for this question.

Question 7

1 / 1 pts

A patient has been complaining of palpitations for the past week and presents to you at an urgent care clinic for evaluation. You perform a 12 lead EKG and identify atrial fibrillation with a hear rate of 122 beats per minute. What is your next order?

- Administer 5mg of warfarin

Correct!



Order a stat transthoracic (2D) echocardiogram and prepare the patient for transport to the closest appropriate hospital for inpatient evaluation

A wearable monitor does not provide you with actionable information until it is read, and the patient is already identified as being in atrial fibrillation. Warfarin without bridging will take several days to achieve a therapeutic INR and without bridging (as it is not mentioned) would potentially increase prothrombotic state for first few days due to inhibition of protein C and S. Amiodarone is a rhythm conversion medication and should not be given unless first identifying any evidence of clot burden with an echocardiogram.

- Apply a Holter monitor
- Administer 150mg of amiodarone IV bolus

Question 8

1 / 1 pts

As the nurse practitioner working in a primary care clinic, you have been notified from a hospitalist that your long-term patient with a history of HFrEF (heart failure with reduced ejection fraction) with an ejection fraction of 40% two years ago who is also not on optimal medical therapy has been diagnosed with a myocardial infarction this admission and received emergent placement of a drug-eluting stent to the left anterior descending artery. As the patient's medical home who will manage this patient after discharge, which of the following would you expect to be a priority in the patient's care for their heart failure after an acute MI?

- Ordering a Holter monitor for 7 days post-discharge
- Ordering a new transthoracic echocardiogram and order a Lifestart if EF is less than 45%
- Ordering aspirin and clopidogrel for 3 months at discharge

Correct!

- Ordering a new transthoracic echocardiogram and order a Lifestart if EF is less than 35%

Dual anti-platelet therapy is required for 12 months minimum post-MI. A Holter monitor does not provide any conceivable benefit for this patient as presented. The patient should have a protective mechanism such as an implantable automated cardioverter defibrillator (AICD) or a Lifestart if the EF is less than 35% due to the increased risk of sudden cardiac death with low EF states. Since most patients are not eligible for 90 days for an AICD in this state, optimizing their medication regimen and repeating an echo in 2-3 months to re-evaluate for improvement in their EF is required by most insurance companies. A baseline echo is needed at discharge to provide a baseline for improvement vs their repeat echo in 2-3 months.

Question 9

1 / 1 pts

An older adult with diabetes mellitus presents with leg cramps. She states that the cramps are worst when walking to the supermarket. If she stops to rest, the pain subsides. The nurse practitioner knows that this patient needs a workup for:

- Deep vein thrombosis
- Benign nocturnal leg cramps

Correct!

- Intermittent claudication
- Popliteal aneurism

Question 10

1 / 1 pts

A 65-year-old woman presents for a follow-up examination. She is a smoker, and her hypertension is now adequately controlled with medication. Her mother died at age 40 from a heart attack. The fasting lipid profile shows cholesterol = 240 mg/dL, HDL = 30, and LDL = 200. In addition to starting therapeutic lifestyle changes, the nurse practitioner should start the patient on:

Correct!

- a statin drug.
- a cholesterol absorption inhibitor.
- low-dose aspirin.
- bile acid sequestrant.

Bile acid sequestrants and cholesterol absorption inhibitors may be useful in reducing ASCVD risk, but for a patient who is an active smoker with premature coronary disease history (less than age 65 for women), has hypertension and is far from an LDL goal, this patient is most certainly a candidate for statin therapy, which represents the most aggressive therapy option of these four listed.

Question 11

1 / 1 pts

Which of the following is at highest risk for type II diabetes?

- A 51-year-old black female with a BMI of 22 who walks daily at least 30 minutes

Correct!

- An adult woman with a BMI of 34 who just delivered a baby weighing 10 lbs
- A 77-year-old Caucasian male with a BMI of 27 who is sedentary
- A 63-year-old Hispanic male with a BMI of 23 who works as a carpenter

Of these options, an adult woman with a BMI of 34 who just delivered a baby weighing 10 lbs is the most likely due to their increased BMI and the large size of the baby. Giving birth to a large baby, also known as a large-for-gestational-age (LGA) baby, can increase the risk of developing type 2 diabetes later in life. Women who give birth to a LGA baby are 10% more likely to develop DMII 10-14 years after pregnancy compared to women who give birth to babies of average gestational age (AGA). This increased risk is even after adjusting for other risk factors, such as age, obesity, high blood pressure, and family history of diabetes.

Question 12

1 / 1 pts

A 50-year-old woman with hypertension and diabetes comes in for a routine check-up. What screening test should be regularly performed to monitor for early signs of diabetic nephropathy?

- Renal biopsy
- Serum electrolyte panel

Correct!

- Urine dipstick for protein
- Abdominal CT scan

The most sensitive indicator of diabetic nephropathy would be the evidence of small proteins in the urine (proteinuria) as found on urinalysis. The other options might describe macro-organ function (such as BUN/Creat from a BMP, a renal biopsy which is not indicated for routine diabetic nephropathy testing, and a Abd CT, which is more akin to evaluation of less subtle findings), but at the functional level of the nephron, namely the glomerulus, evidence of glucose-related damage is easily identified with proteinuria from a UA.

Question 13

1 / 1 pts

All the following are factors associated with a development of type II diabetes EXCEPT:

- weight greater than 20% of ideal body weight

Correct!

- peripheral vascular disease
- positive family history
- delivering an infant greater than 9 lbs.

Having peripheral vascular disease does not have correlation to development of DM2, whereas all the other options do.

Question 14

1 / 1 pts

A starting dose for a elderly adult patient with a BMI of 20 needing levothyroxine

Correct!

- 25 mcg
- 100 mcg
- 75 mcg
- 125 mcg

The widely considered best practice for treatment of hypothyroidism in the elderly is to "go slow and start low". 25 mcg is the most appropriate low dose to start with of these options. It is possible that over time the dose will be increased until therapeutic levels are obtained, but the risk of over-dosing the patient outweighs the desire to quickly achieve this state.

Question 15

1 / 1 pts

Patients on levothyroxine should be monitored for signs of:

Correct!

- Angina pectoris and dysrhythmias
- Increased nausea and constipation
- Ankle edema and discomfort
- Memory deficits and hyperreflexia

The risk of any supplementation is OVER-supplementation and of the potential options, angina pectoris and dysrhythmias are clinical symptoms associated with hyperthyroidism, or in this case over-treated hypothyroidism causing extrinsic hyperthyroid symptoms.

Question 16

1 / 1 pts

A patient is evaluated in the urgent care for complications of Type 2 diabetes due to an episode of recent life stressors. All the following are consistent with HHS except:

Correct!

- Markedly positive serum ketones
- Urine osmolality 380 mOsm/mL
- BS= 850 mg/dL
- Arterial pH 7.6

HHS presents with severe hyperglycemia with BS >600 and pts are more dehydrated. Ketosis is more common in DKA. Hyperosmolality is the hallmark of HHS, and the urine osmolality is typically 350-380 mOsm/mL and in DKA typically have elevated plasma osmolality. Arterial pH is suppressed in DKA <7.3 and is >7.3 in HHS

Question 17

1 / 1 pts

A 40-year-old female presents with abnormal thyroid labs. Her labs show: TSH 0.25 (0.4-5.69), Free T4 1.5 (0.5-1.1), TSI antibody positive. You counsel her that:

- Plan to monitor her for S&S and repeat labs in 6-8 weeks
- She likely has autoimmune hypothyroidism and will need thyroid hormone replacement

Correct!

- She likely has autoimmune hyperthyroidism, and a thyroid uptake scan and US may be helpful
- She likely has a multinodular toxic goiter

Positive TSI and TRAB antibodies are consistent with Graves/hyperthyroidism. Positive TPO antibodies are consistent with Hashimoto's/hypothyroidism.

Question 18

1 / 1 pts

An adult male is seen for an initial visit. He denies tobacco, drug, or alcohol use. He has a sedentary lifestyle and no family history of diabetes. BP = 120/80, P = 76, and BMI = 31. Which of the following diabetes screening tests should the nurse practitioner order?

- No screening is indicated until age 45

Correct!

- Fasting plasma glucose
- Urine for glycosuria
- Basic metabolic panel

With a sedentary lifestyle, a BMI of 31, on an initial visit establish a baseline, a fasting glucose is an appropriate response to specifically evaluate the diabetes screening for this patient.

Question 19

1 / 1 pts

A 55-year-old woman presents with fatigue, hair loss, and cold intolerance. Her thyroid function tests reveal high TSH and low free T4. What is the most appropriate treatment?

- Radioactive iodine
- Beta-blockers
- Methimazole

Correct!

- Levothyroxine

All of these are clinical features of hypothyroidism. The only appropriate answer to augment thyroid levels is levothyroxine. Methimazole and radioactive iodine both directly antagonize thyroid levels and are used in the treatment of hyperthyroidism. Beta blockers, namely propranolol is used for the symptom management of hyperthyroidism (tremors, tachycardia, anxiety).

Question 20

1 / 1 pts

A 33-year-old woman presents with irregular menstrual cycles, hirsutism, and obesity. Laboratory tests reveal elevated serum testosterone and LH ratio $> 2:1$. What is the most appropriate initial treatment?

Correct!

- Oral contraceptives
- Spironolactone
- Metformin
- Clomiphene

These are classic symptoms of polycystic ovarian syndrome and the patient should be treated with oral contraceptives to help stabilize their estrogen and progesterone. Additionally, they may be managed on metformin and/or spironolactone for their PCOS.

Oral contraceptive pills (OCPs) are often the first pharmacological treatment for polycystic ovary syndrome (PCOS) because they help manage in several ways:

- Menstrual irregularities: OCPs can help regulate menstrual cycles, making periods lighter and more regular. This is important because irregular ovulation can lead to endometrial hyperplasia, which is a buildup of uterine tissue that can increase the risk of uterine cancer.
- Androgen excess: OCPs can reduce androgen production and increase sex hormone-binding globulin (SHBG), which binds androgens. This can help reduce symptoms like acne, hirsutism (unwanted body and facial hair), and androgenic alopecia (male pattern baldness).
- Endometrium protection: OCPs can protect the endometrium by ensuring regular ovulation

Question 21

1 / 1 pts

A 90-year-old female is brought to the clinic by her neighbor. She states that everything is fine, but the nurse practitioner notes that she has poor hygiene and bruises on her trunk. The neighbor is concerned that the patient often has no money to buy food, despite income from social security and a coal miner's pension. The nurse practitioner suspects abuse. Which of the following is the nurse practitioner obligated to do next?

- Document the data and report the information to risk management.
- Call the patient's family and inquire about the concerns.
- Tell the neighbor to check on the woman daily and report back.

Correct!

- Report the case to the proper authorities.

Remember, that suspected abuse is always a reportable event and therefore should be the right answer you gravitate toward on any question that suggest that there is any type of actual or suspected elder abuse.

Question 22

1 / 1 pts

The management of COPD in the elderly is best guided by:

- radiologic imaging.
- spirometry.

Correct!

- symptomatology.
- arterial blood gases.

Symptomatology is what guides COPD management since the severity and frequency of symptoms will warrant changes and additions to medications as exacerbations present.

Although very useful tool for chronic management and baseline status, spirometry does not typically dictate therapy, rather diagnose the disease state itself. Our blood gases may be used for clinically correlate severity during an exacerbation, and radiologic imaging may showcase severity of stable chronic finding such as somatic, lung tissue or bullae.

Question 23

1 / 1 pts

A 92-year-old presents with a decline in personal care and increasing forgetfulness. They had a CVA a three years ago with mild cognitive changes then which has slowly progressed. The more likely diagnosis in this case is?

- Lewy-body dementia
- Alzheimer's dementia
- Mini-strokes

Correct!

- Progressive vascular dementia

Question 24

1 / 1 pts

Which is best performed to assess the risk for fall in an 88-year old adult?

- Clock-drawing test
- PHQ-2 questionnaire
- Global screening assessment

Correct!

- Get up and go test

This question is asking you if you understand the different screening to available for Mobility and fall risk. The global screening assessment, PHQ-2 questionnaire, and clock drawing test have no clinical significance to mobility. The “get up and go” test is the only option that is a mobility test of these four.

Question 25

1 / 1 pts

A frail elderly patient presents with constipation. Which of the following normal physiologic changes seen with aging is the most likely cause?

- Increased bile secretion
- Decreased pancreatic secretions

Correct!

- Decreased bowel muscle tone
- Increased absorption of calcium

The frail, elderly patient will typically have their GI track decrease bile secretion and decrease absorption of calcium. A decrease in pancreas secretions is not related to presence of constipation, however, decreased bowel muscle tone certainly does reduce the GI motility and increase the transit time, thereby increasing the drying of stool in the large intestine which leads to constipation

Question 26

1 / 1 pts

A 28-year-old woman presents with abdominal pain, diarrhea, and weight loss. She also reports occasional bloody stools. Colonoscopy reveals continuous inflammation from the rectum extending proximally. What is the most likely diagnosis?

- Crohn's disease
- Celiac disease
- Diverticulitis

Correct!

- Ulcerative colitis

The presence of inflammatory bowel disease which is present in the patient with bloody stool suggests ulcerative colitis. This patient should be acutely managed with steroids and chronically with auto-immune therapy such as biologics and/or DMARDs.

Question 27

1 / 1 pts

The most specific indicator of the presence of ascites is:

- A liver scratch test
- A positive Murphy test
- Costovertebral angle tenderness

Correct!

- A prominent fluid wave

During assessment for ascites, a fluid wave test should produce a prominent fluid wave if the patient is experiencing ascites.

Question 28

1 / 1 pts

An adolescent with asthma presents for follow-up evaluation. After several changes in medications and doses, the parents report that the adolescent continues to experience difficulty with coughing, especially at night. Which of the following conditions is most likely cause of the continued cough?

- Vocal cord dysfunction

Correct!

- Gastroesophageal reflux
- Cystic fibrosis
- Allergic rhinitis

Many times with GERD, the coughing is actually worse at night due to the postural changes of lying down, and as such, vocal cord dysfunction being a more constant issue than intermittent is easily ruled out. Cystic fibrosis does tend to have more coughing with postural change during chest physiotherapy, but this option is a sophisticated detractor. Allergic rhinitis may induce more post nasal drip more when supine from position changes, but most commonly this patient should be evaluated for GERD first, as aspiration to the airway would very easily trigger it an asthma attack due to both the bronchoconstriction and inflammatory mechanisms.

Question 29

1 / 1 pts

Your patient is suspected to have colon cancer. Which labs/marker are important to be performed on this patient?

- AFP
- BRCA 1 and 2

Correct!

- CEA
- CA-125

CEA is a complex glycoprotein and is produced by 90% of colorectal cancers. It is also helpful in post treatment (surgery) follow up/management

Question 30

1 / 1 pts

A geriatric female presents with complaints of dyspnea and fatigue. All blood work is normal except for Hgb of 9.0 g/dL, Hct of 33%, and guaiac positive stool. The patient also reports a bowel pattern of alternating constipation and diarrhea, and frequent laxative use. Which diagnostic tests should be ordered?

- Upper GI series
- CT scan of abdomen

Correct!

- Colonoscopy
- MRI scan of abdomen

This patient is in need of a colonoscopy to evaluate for the cause of occult bleeding.

Question 31

1 / 1 pts