



MARCH 2018

PAEA ASSESSMENT

ITEM WRITING GUIDELINES

Understanding the Construction of PAEA-style Test Questions

The Physician Assistant Education Association (PAEA) has developed the following guidelines to assist PAEA item writers in the development of PACKRAT and End of Rotation examination items. Item writers should review these guidelines carefully and follow them as they write their examination items. Adherence to these guidelines is important for the consistency and quality of the examination products, as well as the efficiency of the editing and review process.

GENERAL GUIDELINES

- Examination items should be higher order items utilizing clinical vignettes
- Assure that the vignette includes enough information to answer the question (age, gender, care setting (if pertinent), duration, signs and symptoms, diagnostic study results, etc.)
- No negative stem items should be written (least likely, which of the following is not, etc.)
- Writers should attempt to balance topics within a content area to assure even coverage across a content area
- Each item should have four or five answer options
- Answer options should be from a single category (matching the task area for the question)
- Distractors should be plausible
- Options should be of similar length and complexity
- All items should be appropriately coded to include:
 - Correct Answer
 - Content Category (from PAEA coding document)
 - Organ System (from PAEA coding document)
 - Task Area (from PAEA coding document)
 - Diagnosis Key Word
 - Students will receive diagnosis key word feedback for the items that they miss. Please avoid making the diagnosis key word too specific (i.e. “ACE-inhibitors to treat hypertension” is too specific. The Key word should be “Hypertension”)
 - Examination Focus Code (for End of Rotation Examinations; from PAEA coding document)

TASK AREA EXPLANATIONS & EXAMPLE LEAD-IN QUESTIONS

Examination items fall into one of seven task areas. These include:

- History and Physical Examination
- Diagnostic Studies
- Diagnosis
- Health Maintenance
- Clinical Intervention
- Clinical Therapeutics
- Scientific Concepts

Each task area has a different focus which is explained in the PAEA Examination Core Tasks and Objectives Learning Supplement. When writing an item it should be clear which task area is covered by a particular item. Following is an explanation of each task area from the Core Tasks and Objectives Learning Supplement and some suggested examination question lead-ins to assist in the item writing process. This is a suggested list and is not all inclusive of all lead-in options.

HISTORY TAKING & PHYSICAL EXAMINATION

- Identify elements of, and need for, comprehensive and focused interviews appropriate for the age and gender of the patient, reason for visit, urgency of the problem and patient's ability to provide history.
- Recognize and interpret* pertinent historical information.
- Identify history commonly associated with specific medical conditions.
- Identify elements of, and need for, comprehensive and focused physical examinations appropriate for the age and gender of the patient, reason for visit, urgency of the problem and patient's ability to participate in the examination.
- Identify required techniques in the physical examination.
- Recognize and interpret* pertinent physical examination findings when presented in written or illustrated form.
- Determine the need for other resources (e.g. past records, consultation, other members of the health care team, etc.) to expand knowledge of the patient's history.
- Interpret history and physical examination findings in order to differentiate one disorder from another.

*Interpret means to determine if normal or abnormal, or determine the meaning of the finding relative to pathophysiologic processes and disease.

SUGGESTED HISTORY & PHYSICAL EXAMINATION QUESTION LEAD-INS

- Which of the following is most likely on physical examination of this patient?
- Which of the following is most likely on history of this patient?
- This patient is most likely to have a history of which of the following?
- Which of the following additional symptoms is this patient most likely to have?

DIAGNOSTIC STUDIES

- Demonstrate knowledge of appropriate patient and family education related to laboratory and diagnostic studies.
- Identify techniques and potential complications for common diagnostic procedures.
- Select the appropriate initial and subsequent laboratory and diagnostic studies based upon initial impressions determined from the history and physical examination or germane to the health-screening situation.
- Identify the indications for specific laboratory and diagnostic studies.

- Identify risks associated with laboratory and diagnostic studies.
- Recognize normal and abnormal values for routine laboratory and diagnostic studies.
- Interpret the results of routine laboratory and diagnostic studies.
- Select appropriate laboratory and diagnostic testing by considering and evaluating the cost, probable yield, invasiveness, and contraindications of laboratory and diagnostic studies.
- Determine if and when additional diagnostic studies are required.
- Identify laboratory and clinical studies considered to be the best for the diagnosis of certain conditions.

SUGGESTED DIAGNOSTIC STUDIES QUESTION LEAD-INS

- Which of the following is the most appropriate initial diagnostic study?
- Which of the following is the most appropriate definitive diagnostic study?
- Which of the following is most likely to be found on chest radiograph (CBC, ECG...)?

DIAGNOSIS

- Determine a differential diagnosis based upon historical information, physical examination findings, and laboratory and diagnostic study findings.
- Select the most likely diagnosis based upon historical information, physical examination findings, and laboratory and diagnostic study findings.

SUGGESTED DIAGNOSIS QUESTION LEAD-INS

- Which of the following is the most likely diagnosis?

HEALTH MAINTENANCE

- Determine appropriate counseling, as well as patient and family education, related to preventable diseases, communicable diseases, immunization schedules and healthy lifestyles.
- Determine the appropriate history and physical examination in screening an asymptomatic patient during well-care visit based on age.
- Recognize risk factors for conditions amenable to prevention or detection in an asymptomatic individual.
- Recognize the impact of stress on health and the psychological manifestations of illness and injury.
- Recognize the effects of aging and family roles on health.
- Recognize the impact of environmental and occupational exposures on health.
- Recognize the signs and symptoms of abuse and neglect and the indications for intervention and referral.
- Identify common barriers to care.
- Identify the risks and benefits of immunizations.

- Select the appropriate laboratory and diagnostic screening studies and identify normal ranges.
- Identify growth and human development milestones.
- Match anticipatory guidance to the appropriate age level and to the sequelae it intends to prevent.

SUGGESTED HEALTH MAINTENANCE QUESTION LEAD-INS

- This patient is at greatest risk for which of the following?
- Which of the following screening tests is most indicated in this patient?
- Which of the following immunizations is most likely to have prevented this patient's symptoms?

CLINICAL INTERVENTION

- Select the application or technique required for common clinical interventions. Identify appropriate monitoring for patients after interventions, including checking for compliance, adverse reactions, and effectiveness.
- Recognize appropriate counseling and patient and family education related to clinical interventions.
- Identify proper referral strategies for patients to other services for clinical intervention as appropriate.
- Determine appropriate follow up from referrals.
- Select a clinical intervention plan that is consistent with the working diagnosis. Prioritize clinical interventions in emergent, acute and chronic care situations.
- Evaluate severity of patient condition in terms of need for medical and/or surgical referral, admission to the hospital or other appropriate setting.
- Determine appropriate surgical treatment and post-surgical/post-procedural management.
- Identify potential complications of specific clinical interventions and procedures.
- Recognize appropriate plans for patient discharge; and appropriate medical, surgical and rehabilitation follow up.
- Select non-pharmacologic modalities (e.g. physical therapy, surgery, counseling) to integrate into patient management plans.

SUGGESTED CLINICAL INTERVENTION QUESTION LEAD-INS

- Which of the following is the most appropriate initial intervention in this patient?
- Which of the following is the most appropriate first step in the management of this patient?
- Which of the following is the most appropriate definitive intervention in this patient?

CLINICAL THERAPEUTICS

- Identify appropriate counseling and patient and family education related to a clinical therapeutic agent including drug-drug interactions
- Identify key safety factors related to the administration of medications (oral, topical, sublingual, subcutaneous, intramuscular, rectal, otologic, vaginal and ophthalmic).
- Recognize appropriate plans to monitor pharmacotherapy, checking for compliance, side effects, adverse reactions, and effectiveness.
- Select a clinical therapeutic plan, which considers the cost, efficacy, possible adverse reactions, contraindications, and drug interactions for medications selected.
- Recognize the pharmacokinetic properties, indications and contraindications for the use of pharmacologic agents. Apply this knowledge to the safe and effective selection and administration of medications.
- Identify side effects, adverse reactions, contraindications, precautions, therapeutic effects and dosing of the major classes of clinically important drugs and commonly used medications.
- Identify the risks for, and signs and symptoms of, drug interactions resulting from poly-pharmacy in the therapeutic regimen.
- Recognize the appropriate actions to take in response to acute, specific drug toxicity.
- Modify therapeutic regimen within the context of continuing care.

SUGGESTED CLINICAL THERAPUTIC QUESTION LEAD-INS

- Which of the following is the treatment of choice?
- Which of the following medication classes is most indicated for this patient?
- Which of the following laboratory studies must be performed prior to initiation of ____?
- Which of the following medications is contraindicated in this patient?
- Which of the following is the most likely side effect this patient will experience?

SCIENTIFIC CONCEPTS

- Apply basic sciences (anatomy, physiology, microbiology, genetics, etc.) to the diagnosis and management of specific medical conditions.
- Recognize associations of disease conditions and complications through application of scientific concepts
- Demonstrate understanding of concepts of public health in the management of the population's and an individual patient's health and well-being, as well as disease.
- Identify underlying processes or pathways responsible for a specific condition or disease.

SUGGESTED SCIENTIFIC CONCEPTS QUESTION LEAD-INS

- Which of the following is the most likely etiology?
- Which of the following is the most likely complication?