

GERIATRIC HEALTH SCREENING CURRICULUM

(2 Contact Hours Each)

Overview of Geriatric Health Screening, Kim Cybulski, Pharm D
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Description: The module will discuss the basic issues that surround health screening in the geriatric population. It will:

- Describe the current status of healthcare pertaining to the aging population.
- Describe governmental (national and state) initiatives to address the health concerns of the elderly.
- Define levels of disease prevention.
- Discuss patient-related barriers to performing geriatric health screening.
- Define frequently encountered terms in health screening.

Objectives:

- Describe the scope of the problems facing the growing geriatric population.
- Describe governmental initiatives related to the geriatric population.
- Distinguish between the different levels of disease prevention and state where screening of disease fits into the preventative plan.
- Describe how patient-related barriers may impact geriatric screening and recommend how to overcome these barriers.
- Describe the differences between:
 - Accuracy & precision
 - Specificity & sensitivity
- Describe how Clinical Laboratory Improvement Amendments (CLIA) is important to geriatric health screening.
- Suggest how to handle potential emergencies that may arise during geriatric health screening.
- Name key websites pertaining to geriatric health screening.
- Describe tests available for geriatric health screening and state when they are appropriate for geriatric patients.

Screening for Diabetes in Older Persons, Kim Cybulski, Pharm D

Description: This module will discuss the basic issues that surround screening for diabetes in the geriatric population. It will:

- Describe the impact diabetes has on health
- Provide an overview of diabetes: classification, causes, risk factors, complications and prevention
- Describe how diabetes can be screened for in specific populations
- Describe how to use the A1c Now® testing device
- Briefly describe non-pharmacologic and pharmacologic therapies available for treatment of diabetes

Objectives:

- Summarize the impact of diabetes on health in relation to disease prevalence, health care expenditures and its relation to obesity.
- Describe the specialized needs of an older adult with diabetes.
- Describe how diabetes impacts the health of American Indians.
- Differentiate between type 1 and type 2 diabetes in regard to typical age of onset, etiology, endogenous insulin secretion and insulin resistance.
- Define insulin resistance and describe its role in type 2 diabetes.
- Identify patient risk factors for type 2 diabetes.
- Differentiate between macrovascular and microvascular complications found in patients with diabetes.
- Describe treatment recommendations and/or goals for diabetic patients who may have dyslipidemia or hypertension.
- Describe how kidney disease plays a significant role in patients with diabetes.
- Describe the progressive changes found in non-proliferative and proliferative diabetic retinopathies.
- Briefly discuss the three main types of neuropathies seen in patients with diabetes.
- Identify patients who are good candidates for diabetes screening.
- Describe how to perform hemoglobin A1c test using the A1cNow® device, and identify which screened patients should be referred.
- Briefly describe non-pharmacologic and pharmacologic therapies available for treatment of diabetic patients.

Screening for Lipid Disorders in Older Persons, Kim Cybulski, Pharm D

Description: A 2-hour module will discuss the basic issues which surround screening for lipid abnormalities in the geriatric population.

Objectives:

- Summarize the role lipids play in atherosclerosis.
- Differentiate among the different lipoproteins and identify their role in lipid transport.
- Summarize the pathophysiology of atherosclerosis.
- Discriminate between primary and secondary causes for dyslipidemias.
- Examine the ATP III 2001 guidelines and integrate the August 2004 revisions to the guidelines.
 - Identify patient specific risk factors
 - Calculate a patient's 10-year risk of developing coronary heart disease.
 - Given a patient's 10-year risk, categorize his or her LDL goals and cut-points for interventional therapy.
- Summarize components of Therapeutic Lifestyle Changes and provide examples of acceptable modifications.
- Describe which patient populations are recommended for lipid screening.

- Describe how the Cholestech LDX[®] detects lipid levels and demonstrate how to set up, perform quality assurance checks, and run a blood sample for analysis.
- Describe the technique of finger-prick blood sample collection and provide suggestions on how to improve the collection process in difficult patients.
- Formulate a plan for a patient based on risk factors, therapeutic options and determine when it is appropriate to refer a patient to his or her primary care provider.

Screening for Osteoporosis in Older Persons, Kim Cybulski, Pharm D

Description: This 2-hour module will discuss the impact of osteoporosis in the elderly population, discuss screening technology available for osteoporosis, and provide non-pharmacological interventions for osteoporosis.

Objectives:

- Describe the impact osteoporosis has on elderly patients & the health care system.
- List the definitions for osteoporosis.
- Describe bone development and pathologic changes.
- Identify risk factors for osteoporosis.
- Identify patients who should be screened for osteoporosis.
- Understand the technology behind quantitative ultrasound and how fracture risk is determined.
- Demonstrate how to set up, calibrate, and operate the CUBAClinical system.
- Formulate a plan for a patient based on risk factors and their T- and Z-score results.
- Define the daily recommendations for calcium and Vitamin D.
- Recommend a calcium supplement and state the rationale for choosing one product over another.
- Identify ways to decrease a patient's risk of falling.

Screening for Thyroid Disorders in Older Persons, Kim Cybulski, Pharm D

Description: This 2-hour module will:

- Describe the issues surrounding hypothyroid screening in the geriatric population.
- Provide an overview of thyroid function and the impact of hypothyroidism on body systems.
- Describe how to use the ThyroTest[™] device to screen for hypothyroid disease.

Objectives:

- Briefly describe the differences between hypothyroidism and subclinical hypothyroidism.
- Articulate how age and sex affect the prevalence of hypothyroidism.
- State the main issues surrounding thyroid screening in terms of who should be screened.
- Briefly summarize the synthesis of thyroid hormones.
- Describe the affects of thyroid hormone on target organs and metabolism (protein, lipids and carbohydrates).
- Articulate how low thyroid levels may contribute to elevated lipid levels.

- Describe how thyroid hormone synthesis is regulated by the brain.
- List common causes of hypothyroidism.
- Identify patients who may be good screening candidates for hypothyroidism.
- Describe how to perform the thyroid screening using the ThyroTest™ device, including interpretation of results and when a patient should be referred for follow-up care.