American Academy of HIV Medicine
Certification Exam Preparation

ACTHIV Conference, Denver, CO
March 21-23, 2013

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The American Academy of HIV Medicine - Chairperson
Learning Objectives
Upon completion of this presentation, learners should be better able to:

- Why it is important for an HIV provider to become certified as an HIV Specialist
- Obtain available materials to prepare for the exam
- Effectively prepare for the credentialing exam
Faculty and Planning Committee Disclosures
Please consult your program book.

Off-Label Disclosure

There will be no off-label/investigational uses discussed in this presentation.
History & Background

- On average, about 2000 providers are actively maintaining an AAHIVM credential, a majority of which principally identify as an HIV provider.

- There are credentialed HIV Specialists in all fifty states and Puerto Rico and in 17 countries around the world.
History & Background

• In 2013, most US HIV-positive patients are now under the care of an Academy-certified provider.
• Providers earn the HIV Specialist™ (AAHIVS) or HIV Expert™ (AAHIVE) or HIV Specialist Pharmacist (AAHIVP) designations.
• The designation is active for two years.
• The Academy’s Credentialing Program is governed by a credentialing committee consisting of Academy Board Members and others selected for their expertise.
Why an Academy HIV Credential?

- It communicates to patients, colleagues, employers, governments and third-party payers an up-to-date core knowledge HIV care.

- It demonstrates support of a uniform national standard for HIV care, and offers appropriate recognition of this highly technical sub-specialty.

- It protects the healthcare consumer by creating a publicly identifiable professional standard of HIV care, which can be readily identified by a provider’s AAHIVS, AAHIVE or AAHIVP titling.
Why an Academy HIV Credential?

- It promotes professional visibility of providers working in HIV care.

- It may offer a competitive edge in employment. Increasing numbers of health care systems are requiring providers to be HIV credentialed as a minimum qualification for employment.

- It supports efforts to reform current reimbursement structures for specialized HIV care by creating a mechanism to determine the validity of expertise among a aggregate population of certified providers.
Eligibility Requirements

- **LICENSURE**: Maintain a current, valid MD, DO, PA, or NP state license
- **EXPERIENCE**: Provide direct, ongoing care to at least 20 HIV patients over the 24 months preceding the date of application.
- **EDUCATION**: Complete a minimum of 30 credits of HIV-related Category 1 CME/CEU/CE within the 24 months preceding the date of application.
Eligibility Requirements

– EXPERIENCE:
Direct, ongoing involvement or leadership in HIV care and treatment over the 24 months preceding the date of application, through service in one of the following realms:
• Pharmaceutical Industry (admin/research/medical affairs)
• Academia (admin/faculty)
• Government (FDA, NIH, VA, CDC, military, etc.)
• Other non-clinical environments without direct patient care activity

– LICENSURE:
Maintain a current, valid MD, DO, PA, NP state license.
Eligibility Requirements

– **LICENSURE:** Maintain a current, valid Pharmacist license in the state or region of practice; must have graduated from an accredited school of pharmacy.

– **EXPERIENCE:** Direct, ongoing involvement in the care of at least 20 HIV patients over the 24 months preceding the date of application.

– **EDUCATION:** Complete a minimum of 30 credits or activity hours of HIV-related continuing education, ACPE-accredited, within the 24 months preceding the date of application.
Clinical Consult Program

• The AAHIVM Clinical Consult Program allows providers seeing fewer than 20 HIV patients to be eligible to earn their HIV Specialist™ credential.

• Candidates are “paired” with a highly experienced, Credentialed Academy Member consultant during the exam process, and for the 2-year life of the earned Credential.

• The relationship between the provider “pair” is meant to provide a valuable personal resource to the lower-volume provider, and is intended to be a professionally supportive connection to assist that provider with particular clinical questions or other matters related to his or her HIV patient panel.
Formats of Credentialing Exams

• AAHIVM testing instruments consist of 125 case-based, 5-option multiple choice items.

• Candidates who do not pass the first round of the exam can take it again during the “Re-Testing” period for no additional cost.

• Approximately 10% of candidates do not pass the first round.
Passing Standard Determination

• The pass point varies for each examination cycle, based on
  – a detailed statistical analysis of aggregated exam item performance data
  – and an "equating" process which corrects for slight variances in the statistical "difficulty" of periodically revised exam forms

• A defensible cut score (passing standard) range for the exam is determined and an exact passing standard (or number of items needed correct for a passing result) from within the defensible range.

• More detailed information is available on the website

Formats of Credentialing Exams

WEB-BASED TESTING: Examinees may login and log out as often as needed during the examination period, saving all work completed to that point.

PAPER & PENCIL TESTING: The written exam is presented as a booklet, and examinee responses are recorded on typical "scantron" bubble answer forms.
Exam content is rigorously analyzed every year, and includes the creation of new items reflecting advances in the science, as well as review of existing material for editing or removal, again based on changes in the technology of HIV care.
Exam Content

The six areas of content include:

• Epidemiology and Prevention
• Pathophysiology
• Clinical management
• Social and economic issues
• Clinical research
• Pharmacokinetics and Pharmacodynamics
**Exam Process Schedule**

<table>
<thead>
<tr>
<th>Exam</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam Application Enrollment Period</td>
<td>April 15(^{th}) – July 1(^{st}), 2013</td>
</tr>
<tr>
<td>Exam Testing Period</td>
<td>August 16(^{th}) – October 1(^{st})</td>
</tr>
<tr>
<td>Results Published</td>
<td>November 1(^{st})</td>
</tr>
<tr>
<td>“Re-Testing” Period</td>
<td>November 15(^{th}) – December 1(^{st})</td>
</tr>
<tr>
<td>Results for Re-Testing group</td>
<td>December 17(^{th})</td>
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Credential is active from
January 1, 2014 to December 31, 2015
Vendor Information

• Castle Worldwide, Inc. (“Castle”) of Morrisville, NC is the contracted vendor for all AAHIVM certification offerings.

• Castle is a widely respected provider of high-quality testing services for trade associations, professional organizations and other entities.

• Castle’s doctoral-level psychometricians serve as AAHIVM project managers, working directly with the AAHIVM staff program director.

• Castle's representatives on AAHIVM projects also include highly skilled IT infrastructure, scoring, security, contract management and other personnel.
Applying for AAHIVS, AAHIVP or AAHIVE Credentialing Exam

- Applications period is open from April 15, 2013 to July 1, 2013
- Apply online at www.AAHIVM.org
- Or apply here at ACTHIV at the AAHIVM exhibit booth

Credentialing Exam Costs:

<table>
<thead>
<tr>
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<th>Academy Members:</th>
<th>Non Academy Members:</th>
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<tbody>
<tr>
<td>Online</td>
<td>$240</td>
<td>$290</td>
</tr>
<tr>
<td>Booklet</td>
<td>$320</td>
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SAMPLE QUESTIONS
Clinical areas covered: Sample Questions
Epidemiology and Prevention

Question 1:
According to the 2006 Centers for Disease Control and Prevention (CDC) recommendations, when should providers routinely offer HIV screening?
Clinical areas covered: Sample Questions
Epidemiology and Prevention

Question 1:

A. In healthcare settings where the seroprevalence of HIV is greater than 1%
B. In all healthcare settings after the patient is notified that HIV testing will be performed, provided that the patient does not opt-out of screening
C. In all healthcare settings without regard to patient notice or consent
D. In all healthcare settings after the patient is informed that HIV testing will be performed and the patient signs an informed consent to HIV testing
E. In populations where prevalence is greater than 1% without regard to notice or consent
Question 2:

A 19 year-old female comes to an HIV specialist's office for an annual physical exam and completion of her school clearance papers. She lives in a small mid-west town where the overall HIV prevalence is less than 1%. During her annual exam, the specialist raises the issue of HIV testing to which she answers, "I only had unprotected sex twice in the last two years, and besides, no one here is infected." Which of the following statements BEST reflects current Centers for Disease Control and Prevention (CDC) HIV testing guidelines?
Clinical areas covered: Sample Questions
Epidemiology and Prevention

Question 2:

A. It is recommended that all adults get tested for HIV regardless of their risk behavior.

B. Routine HIV testing is not recommended for adults with fewer than three lifetime sexual partners.

C. Routine HIV testing is recommended in areas where the prevalence is $\geq 2\%$.

D. Patients should be screened for high-risk sexual and drug-use behaviors and screened for HIV accordingly.

E. Patients should have prevention counseling prior to undergoing HIV testing.
Question 3:

A 32 year-old HIV-positive man presents with HIV infection of five years' duration. He is entirely without symptoms and has never been treated for HIV disease. He comes in for a routine follow-up visit and has no complaints. Upon questioning, he denies any evidence of increased bleeding or bruising. His CBC reveals a hemoglobin of 15g/dL, the WBC count is normal at 5,400/mm$^3$, and his platelet count is 25,000/mm$^3$ (normal is 150,000 to 300,000). The bone marrow examination reveals normal cellularity, no abnormal cells, and no evidence of infection. The megakaryocytes are increased in number. Which of the following is the BEST initial therapy for this patient?
Clinical areas covered: Sample Questions
Pathophysiology

Question 3:
A. Antiretroviral therapy
B. Prednisone, at a dose of 1 mg/kg/day orally
C. Intravenous gamma-globulin
D. WinRho SDFa (anti-Rh+ globulin) in an Rh+ patient
E. Platelet transfusion
A 43 year-old man who has been HIV positive for five years has been on his initial antiretroviral regimen of tenofovir/emtricitabine/efavirenz (co-formulated) for two years. He had an undetectable viral load (< 50 copies/mL) for 18 months; however, his most recent HIV-1 viral loads have been 350 copies/mL (six months ago) and 4,500 copies/mL (1 month ago). Which HIV-1 genotypic resistance test result would predict the MOST favorable response to etravirine?
Clinical areas covered: Sample Questions
Pathophysiology

Question 4:

A. K103N, Y181I

B. L100I, K103N, M184V

C. K103N, Y181C, M184V

D. K65R, K103N, V108I, Y188L

E. L100I, V106M, M184V, G190A
Question 5:
A female patient has been taking efavirenz/emtricitabine/tenofovir (Atripla) for about one year. She has complained about intermittent sleep problems and dizziness for the past several months. In addition to Atripla, she is taking citalopram for depression, omeprazole for severe GERD, itraconazole for onycomycosis, trazodone for insomnia, and intermittent sumitriptan for migraine headaches. In considering a regimen switch to rilpivirine/emtricitabine/tenofovir, which medication is CONTRAINDIATED with rilpivirine?
Clinical areas covered: Sample Questions
Clinical management

Question 5:

A. Omeprazole
B. Citalopram
C. Itraconazole
D. Sumitriptan
E. Trazodone
Question 6:
A patient is triple-class experienced with limited treatment options and is started on a new antiretroviral regimen containing darunavir. He has an initial response followed by loss of virologic control. Which of the following statements is MOST likely to be true?
Question 6:

A. Genotypic resistance testing performed at the point of loss of virologic control showed mutations V32I, L33F, I47V, I54L, and L89V.

B. Genotypic resistance testing before starting darunavir already indicated darunavir resistance with these mutations: I50L, D30N, L90M, I84V, V82A.

C. The patient is now resistant to darunavir and is most likely resistant to all other protease inhibitors including tipranavir.

D. The patient was taking concomitant omeprazole with his darunavir therapy leading to suboptimal concentrations.

E. The patient was taking his medications with food instead of on an empty stomach leading to suboptimal concentrations.
Clinical areas covered: Sample Questions
Social and economic issues

Question 7:

A 25 year-old woman presents to a clinic for HIV testing but is concerned about the confidentiality of the results of her test. She would feel morally bound to adhere to whatever the law requires and is reluctant to test for this reason. She is also concerned that if she moves to another part of the country in the future, her HIV confidentiality protection might be different. Acknowledging her concerns, the HIV specialist explains that there are numerous laws that protect HIV patient's confidentiality. What MOST accurately describes the legal situation of a patient living in the United States with respect to HIV and confidentiality?
Number 7:

A. Her physician can continue to see her and bill her insurance for an unrelated diagnosis in order to maintain the confidentiality of her HIV status.

B. Her physician can disclose her HIV status to other health care providers.

C. Legal protections for the confidentiality of her HIV test results are determined primarily by federal law, not state law.

D. Someone with the diagnosis of HIV enjoys all the same protections of confidentiality as would someone with a diagnosis of another medical condition, such as diabetes.

E. While AIDS is a reportable disease, HIV is not, so her condition would not be reportable to public health authorities unless and until she was diagnosed with AIDS.
An estimated 1.2 million persons were living with HIV in the U.S. in 2008. Approximately what proportion of persons diagnosed with HIV have been linked and retained in care?
Clinical areas covered: Sample Questions
Social and economic issues

Number 8:

A. 15%
B. 28%
C. 51%
D. 77%
E. 89%
In most studies comparing the initial efficacy and long-term response to treatment of HIV-positive patients with hepatitis C infection, relative to HIV-negative patients with hepatitis C infection, the conclusions reached are BEST summarized as which of the following?
Number 9:

A. HIV-positive patients have increased initial efficacy and decreased long-term response to hepatitis C treatment.

B. HIV-positive patients have similar initial efficacy and decreased long-term response to hepatitis C treatment.

C. HIV-positive patients have similar initial efficacy and similar long-term response to hepatitis C treatment.

D. HIV-positive patients have decreased initial efficacy and similar long-term response to hepatitis C treatment.

E. HIV-positive patients have decreased initial efficacy and decreased long-term response to hepatitis C treatment.
A clinical trial is being conducted to compare the efficacy of two different regimens of antiretroviral agents. Which of the following statements BEST describes the findings of the as-treated analysis compared with the intent-to-treat analysis?
Number 10:

A. The as-treated analysis is preferred to the intent-to-treat analysis by the FDA for drug approval.

B. The as-treated analysis provides more informative data on how well a drug is tolerated than the intent-to-treat analysis does.

C. The as-treated analysis is likely to show a higher percentage with undetectable viral load compared with the intent-to-treat analysis.

D. The as-treated analysis is likely to show a lower percentage of patients reaching an undetectable HIV viral load than is the intent-to-treat analysis.

E. The intent-to-treat analysis assumes missing data is failure, whereas as-treated analysis replaces missing data with the last observation carried forward.
Question 11:

Which of the following combinations is contraindicated?

A. Unboosted atazanavir with proton pump inhibitors
B. Abacavir in hepatitis B/C co-infected patients
C. Efavirenz with psychotropic drugs
D. Zidovudine with non-steroidal anti-inflammatory drugs
E. Tenofovir with beta-blocking agents
Clinical areas covered: Sample Questions
Pharmacokinetics and Pharmacodynamics

Number 12:

A 27 year-old woman with hepatitis B infection and HIV co-infection is anxious to initiate antiretroviral therapy. Her HIV viral load is 36,000 copies/mL, and CD4 count is 310 cells/mL. Her hepatitis B viral load is 1,200,000 copies/mL. She is eager to get both of her viral infections under control so that she can get pregnant. A fixed-dose combination of which of the following regimens would be **BEST** suited for her?
Clinical areas covered: Sample Questions
Pharmacokinetics and Pharmacodynamics

Number 12:

A. Zidovudine-lamivudine and nevirapine
B. Zidovudine-lamivudine and efavirenz
C. Emtricitabine-tenofovir-efavirenz
D. Emtricitabine-tenofovir and rilpivirine
E. Emtricitabine-tenofovir and darunavir/ritonavir
Helpful Hints

It is a difficult exam—you have 6 weeks to take it—do not wait until the last minute!

Read all instructions and questions carefully!!
Helpful Hints

Resources for Exam Preparation

– While exam questions are not specifically taken from the 2012 edition of the AAHIVM Fundamentals of HIV Medicine, it is an extremely useful resource for those taking the exam.

– It is available at the Academy website—or can be purchased at the Academy ACTHIV exhibit booth. It will be shipped for you so you do not have to lug the 900 plus page text back home.

– Prices:
  • $195 for Academy members
  • $245 for non-members—and it includes a USB stick.

CME: AAHIVM Fundamentals of HIV Medicine. “MEC is accredited by the ACCME to provide continuing medical education for physicians. MEC designates this educational activity for a maximum of 38 AMA PRA Category 1 Credit(s) ™.”
Resources for Exam Preparation

The Fundamentals of HIV Medicine
Medical Journals
AIDS Info: http://aidsinfo.nih.gov/guidelines/
CDC HIV Guidelines: http://www.cdc.gov/hiv/resources/guidelines/
HIV Clinical Resource: www.HIVGuidelines.org
National HIV/AIDS Clinician’s Consultation Center: http://www.nccc.ucsf.edu/hiv_clinical_resources/
HIV medications resources:
   WebMD http://www.webmd.com/hiv-aids/hiv-medications