

## AACRN Content Outline

### **I. Clinical Judgment: Epidemiology and Prevention**

- A. Epidemiology
  - 1. Emergence/Recognition of Epidemic
  - 2. Basic Principles of Epidemiology
    - a. Incidence/Prevalence
    - b. Relative Risk/Odds Ratio
    - c. Epidemiologic Inquiry/Methods
  - 3. Global
    - a. Geographic Patterns of Disease Distribution
    - b. Current and Future Disease Projections
    - c. HIV-1, HIV-2, Clades
    - d. Comparison to the United States
  - 4. United States
    - a. Seroprevalence/Incidence
    - b. HIV/AIDS Case Rates
    - c. Major Routes of Transmission
    - d. Geographic Variations
    - e. Disease Projections
    - f. Other
- B. Screening
  - 1. Community Assessment and Health Education
  - 2. Individual Risk Factor Assessment
    - a. Sexual History
    - b. Substance Use History
    - c. Violence and Trauma
    - d. Occupational History
      - 1. Blood and Body Fluids/Standard Precautions
      - 2. Personal Protective Equipment
      - 3. Post-Exposure Management
    - e. Medical History
      - 1. Blood Transfusions
      - 2. Hemophilia/Coagulation Disorders
      - 3. Other
    - f. History of Incarceration
    - g. Other
- C. Disease Prevention/Risk Reduction
  - 1. Behavior Modification
    - a. Behavior Models/Theories
    - b. Harm Reduction
  - 2. Risk Reduction Interventions
    - a. Sex-Related Risk Reduction
      - 1. Safer Sex
      - 2. Treatment of Sexually Transmitted Diseases
      - 3. Partner Notification
      - 4. Post-Exposure Prophylaxis
    - b. Drug Use Related Risk Reduction
      - 1. Cleaning Drug Paraphernalia
      - 2. Drug Treatment
      - 3. Other
    - c. Vertical Risk Reduction
      - 1. Pregnancy Prevention
      - 2. HIV Counseling and Testing
      - 3. Perinatal Management
        - a. ART Therapy

- b. Intrapartum Management
    - c. Breastfeeding
    - d. Other Strategies
  - d. Occupational Risk Reduction
    - 1. Blood and Body Fluids/Standard Precautions
    - 2. Personal Protective Equipment
    - 3. Post-Exposure Management
  - e. Prevention for Positives
- D. Counseling and Testing
  - 1. Test Timing
  - 2. Pretest Counseling
  - 3. Anonymous versus Confidential Testing
  - 4. Reporting Requirements
  - 5. Test Results Interpretation
  - 6. Post-Test Counseling
    - a. Wellness Strategies
    - b. Behavior Change
    - c. Crisis Intervention
    - d. Partner Intervention
    - e. Referrals
    - f. Other

## **II. Critical Judgment: Immunopathology/Pathophysiology**

- A. Virology
  - 1. HIV Structure
  - 2. HIV Life Cycle
  - 3. Types/Subtypes
    - a. HIV-1/Clades
    - b. HIV-2/Clades
  - 4. Mutations/Resistance
- B. Immunology
  - 1. Normal Function
  - 2. HIV-Induced Immunosuppression
- C. Natural History
  - 1. Disease Progression
    - a. Usual Course
    - b. Cofactors
    - c. Biological Markers
      - 1. Viral Load
      - 2. CD4+ Lymphocytes
      - 3. Other
  - 2. Classification and Staging
    - a. Pediatric
    - b. Adult
  - 3. Direct Effect of HIV on Body Systems
  - 4. Clinical Studies
    - a. Multicenter AIDS Cohort Study
    - b. Women's Interagency HIV Study
- D. Diagnostic HIV Tests
  - 1. Antibody Testing
    - a. ELISA
    - b. Western Blot
    - c. Immunofluorescence Assay
    - d. Other
  - 2. Viral Testing
    - a. Polymerase Chain Reaction (PCR)
    - b. HIV Quantification

- c. Genotyping/Phenotyping
- d. Other

### **III. Clinical Judgment: Manifestations and Management**

#### **A. History and Physical**

##### **1. Complete Health History**

- a. Activities of Daily Living
- b. Nutritional
- c. Major Illness
- d. Medication
- e. Psychosocial
- f. Sexual
- g. Substance Use
- h. Occupational
- i. Social
- j. Travel

##### **2. Advanced Physical Examination**

- a. Anthropometric Measures
- b. Mental Status
- c. Body Systems

##### **3. Diagnostic Analysis**

- a. Laboratory
  - 1. Hematologic
  - 2. Immunologic
  - 3. Chemistry
  - 4. Virologic
  - 5. Resistance Testing
  - 6. Other
- b. Radiologic
- c. Other

#### **B. Treatment Goals**

- 1. Provider-Patient Goal Setting
- 2. Suppression of Disease Process
- 3. Wellness Strategies
- 4. Symptom Management
- 5. Opportunistic Disease Management
  - a. Prophylaxis
  - b. Treatment
- 6. Co-Morbid Disease Management
  - a. Diabetes
  - b. Atherosclerosis/Hyperlipidemia
  - c. Hepatitis B/C
  - d. Other
- 7. Adherence

#### **C. Treatment of HIV Infection**

##### **1. Treatment Options**

- a. Initiation of Treatment
- b. Change of Regimen
- c. Drug-Drug Interactions

##### **2. Pharmacological Management**

- a. Antiretroviral
  - 1. NRTIs
  - 2. NNRTIs
  - 3. PIs
  - 4. Fusion Inhibitors
  - 5. Nucleotide Inhibitors
- b. Immune Modulators

- c. Vaccines
  - 3. Complementary Therapies
    - a. Homeopathic/Herbal Therapies
    - b. Drug-Drug Interactions
- D. Opportunistic Infections
  - 1. Bacterial
    - a. *Mycobacterium*
      - 1. *Mycobacterium tuberculosis*
      - 2. *Mycobacterium avium* Complex
    - b. Other
  - 2. Fungal
    - a. *Candida albicans*
    - b. *Cryptococcus*
    - c. Histoplasmosis
    - d. *Pneumocystis carinii*
    - e. Other
  - 3. Protozoal
    - a. Toxoplasmosis
    - b. Cryptosporidiosis
    - c. Other
  - 4. Viral
    - a. Herpes Family
      - 1. Herpes Simplex Virus
      - 2. Cytomegalovirus
      - 3. Varicella Zoster Virus
      - 4. Other
    - b. Human Papilloma Virus (HPV)
    - c. Hepatitis A, B, C
    - d. Other
- E. Neoplasms
  - 1. AIDS Related Lymphoma
    - a. Non-Hodgkin's Lymphoma
    - b. Primary CNS Lymphoma
  - 2. Kaposi's Sarcoma
  - 3. Cervical Dysplasia
  - 4. Other
- F. Neurological and Neuropsychiatric Disorders
  - 1. HIV Encephalopathy
  - 2. Peripheral Neuropathy
  - 3. Psychiatric Complications of HIV Disease
    - a. Mood Disorders
    - b. Anxiety Disorders
    - c. Adjustment Disorders
    - d. Organic Mental Disorders
  - 4. Dementia
  - 5. Other
- G. Other HIV Related Conditions
  - 1. Wasting Syndrome
  - 2. Idiopathic Thrombocytopenic Purpura (ITP)
  - 3. Metabolic Conditions
    - a. Insulin Resistance
    - b. Hyperlipidemia
    - c. Osteomalacia/Osteonecrosis
    - d. Mitochondrial Toxicity
    - e. Metabolic Acidosis
  - 4. Other

#### H. Diagnosis and Management of Organ System Complications

1. Cardiac
2. Pulmonary
3. Gastrointestinal
4. Renal
5. Endocrine
6. Genitourinary
7. Musculoskeletal
8. Dermatologic
9. Sensory
10. Hematologic
  - a. Anemia
  - b. Neutropenia
  - c. Thrombocytopenia
  - d. Other

#### I. Pain Management

1. Pharmacologic Therapy
2. Behavioral Interventions
3. Complementary Therapies
4. Chemical Dependency Issues

#### J. Nutrition Management

#### K. Therapeutic Symptom Management and Self-Care

1. Fever
2. Cough
3. Dyspnea
4. Diarrhea
5. Nausea and Vomiting
6. Anorectal/Vaginal
7. Impaired Skin Integrity
8. Odynophagia
9. Fatigue
10. Immobility

#### L. Infection Control

1. Central Venous Access Devices
2. Other

#### M. Sexually Transmitted Diseases

#### N. Management of Special Populations

1. Perinatal
2. Pediatric/Adolescents

### IV. Caring Practices

#### A. Psychological Stages

1. Initial Crisis
  - a. Shock
  - b. Denial/Disbelief
  - c. Numbness
  - d. Anger
  - e. Guilt
  - f. Blaming
  - g. Helplessness/Hopelessness
2. Transitional
  - a. Relationships
    1. Sexual
    2. Family
    3. Work
  - b. Fears
    1. Disclosure

- 2. Abandonment
- 3. Intimacy
- 4. Loss of Control
- 5. Stigma
  - a. Sexual Orientation
  - b. HIV-Related
  - c. Losses
    - 1. Self-Esteem
    - 2. Body Image
    - 3. Sexuality
    - 4. Financial
    - 5. Sense of Future
    - 6. Isolation
    - 7. Other
- 3. Acceptance
  - a. Focus on Living
  - b. Active Participation in Health Care
  - c. Living in Present
  - d. Reengagement in Relationships
  - e. Preparatory
    - 1. Making Decisions
    - 2. Dealing with Unresolved Issues
- B. Social Support Systems
  - 1. Impact on Family
  - 2. Care for the Caregiver
  - 3. Community Resources
  - 4. Other
- C. Crisis Intervention
  - 1. Prevention
    - a. Suicide
    - b. Violence
    - c. Other
  - 2. Enhancing Coping Skills
  - 3. Psychiatric Referral
  - 4. Mobilizing Support Systems
  - 5. Other
- D. Addiction
  - 1. Etiologies
  - 2. Social and Environment Factors
  - 3. Impact on Behavior
    - a. Client
    - b. Care Providers
- E. Spiritual Issues
  - 1. Belief System
    - a. Client
    - b. Care Providers
  - 2. Organized religion
  - 3. Spiritual Counseling/Spiritual interventions
- F. Death and Dying
  - 1. Stages
  - 2. Bereavement
    - a. Grief
    - b. Loss
- G. Stress
  - 1. Effect of Immune System
  - 2. Stress Management Techniques

## **V. Response to Diversity**

- A. Cultural Considerations
  - 1. Belief System
  - 2. Social System
  - 3. Discrimination
- B. Gender
  - 1. Men
  - 2. Women
  - 3. Transgender
- C. Age-related
  - 1. Pediatric
  - 2. Adolescents
  - 3. Adults
  - 4. Geriatrics
- D. Racial-Ethnic
  - 1. African-American
  - 2. Latinos/Hispanics
  - 3. Native Americans/Alaskan Natives
  - 4. Asian/Pacific Islanders/Native Hawaiians
  - 5. Other
- E. Undocumented Immigrants
- F. Environmental
  - 1. Rural
  - 2. Urban
  - 3. Homeless
  - 4. Incarcerated
  - 5. Other
- G. Disabilities
  - 1. Hearing Impaired
  - 2. Chronically Mentally Ill
  - 3. Developmentally Delayed
  - 4. Other
- H. Occupational
  - 1. HIV-Positive Health Care Workers
  - 2. Sex Industry Workers
  - 3. Other

## **VI. Advocacy**

- A. Ethical Decision-Making
  - 1. Ethical Frameworks
  - 2. Ethics Related to HIV Testing
    - a. Discrimination
    - b. Partner Notification
    - c. Ethics Related to Prenatal Counseling and Testing
    - d. Mandatory Testing
- B. Deliberate Unsafe Behaviors
- C. End-of-Life Decision Making
  - 1. DNR Orders
  - 2. Living Wills/Advance Directives
  - 3. Durable Power of Attorney/Surrogate Decision Making
  - 4. Viatical Settlements
  - 5. Spiritual Conflicts
  - 6. Guardianship
- D. Access to Care and Treatment
  - 1. Obligation to Care
  - 2. Confidentiality
  - 3. Documentation

- 4. Duty to Warn/Due Process
- E. Americans with Disabilities Act
  - 1. Determining Disability
  - 2. Appealing Denials

## **VII. Collaboration/Systems Thinking**

- A. Consultation
  - 1. Consultation Theory
  - 2. Change Theory
  - 3. Communication and negotiation
    - a. Communication Techniques
    - b. Conflict Resolution
    - c. Negotiation
- B. Interdisciplinary Collaboration
  - 1. Establishing Partnerships
  - 2. Team Building
  - 3. Multidisciplinary Collaboration
- C. Organizational Theory
  - 1. Culture
  - 2. Structures
  - 3. Politics and Policy
  - 4. Principles of Leadership
  - 5. Management
    - a. Human Resource Management
    - b. Financial Management
- D. Public Policy Process
  - 1. Provider Reimbursement
  - 2. Local, State, Federal Regulations
    - a. Infection Control
    - b. OSHA
    - c. Ryan White/ADAP
- E. Case Management
  - 1. Insurance
  - 2. Entitlements
    - a. Medicare
    - b. Medicaid
    - c. TANF
    - d. ADAP
    - e. SSI/SSDI
  - 3. Community Resources
  - 4. Continuity of Care
  - 5. Coordination of Care
- F. Program Management
  - 1. Grantsmanship
  - 2. Strategic Planning
  - 3. Marketing
  - 4. Program Development and Evaluation
  - 5. Financial Management
  - 6. HIPPA Regulations
- G. Quality Improvement
  - 1. Methods of Quality Improvement
  - 2. Outcome Evaluation
  - 3. Organizational Accreditation
  - 4. Credentialing and Privileging of Providers

## **VIII. Clinical Inquiry/Facilitator of Learning**

- A. Evidenced-Based Practice
  - 1. Design and Conduct of Research



- a. Research Designs and Methods
  - 1. Behavioral Research
  - 2. Clinical Trials
  - 3. Outcome Evaluation
- b. Biostatistics
- c. Ethical Conduct of Research
  - 1. Informed Consent
  - 2. Adverse Events
  - 3. Voluntary Participation
- 2. Applying Research Findings to Clinical Practice
- 3. Applying Clinical Guidelines to Practice
- B. National Health Incentives
- C. Principles and Theories of Teaching-Learning
  - 1. Influence of Culture
  - 2. Developmental Status and Learning
- D. Teaching Methods
  - 1. Patient/Family
    - a. Symptom Management
    - b. Relapse Prevention
    - c. Self-Care management
    - d. Adherence
    - e. Health Literacy
  - 2. Nurse/Provider Focused
    - a. Precepting/Mentoring
    - b. Staff Development Programs