FIRST VISIT BASICS:

INITIATING CARE FOR THE HIV-INFECTED PATIENT



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Whitney Marie Starr, MS, FNP

Clinical Education Coordinator, Mountain Plains AETC Assistant Professor, Division of Infectious Diseases, School of Medicine University of Colorado Denver

Steven Johnson, MD

Medical Director, Mountain Plains AETC Professor of Medicine, Division of Infectious Diseases, School of Medicine University of Colorado Denver

REVIEWER AND EDITOR:

Lucy Bradley-Springer, PhD, ACRN, FAAN

Principal Investigator and Director, Mountain Plains AETC Associate Professor, Division of Infectious Diseases, School of Medicine University of Colorado Denver This guide is intended to help clinicians initiate care for HIV-infected patients. As with other chronic conditions, it is important that people living with HIV (PLWH) be seen on an on-going basis and at regular intervals. The first visit provides a critical opportunity to establish rapport for a productive health-care relationship. This guide lays the groundwork for continuing care, provides a succinct description of the initial history and physical, and lists easily accessible resources.

In addition, we have provided two sample flow sheets that can be used to document care for your HIV-infected patients. The recommendations provided in the health maintenance flow sheets are based on information from currently available guidelines. Please consult the resources at the end of this publication for the most up to date information. The sample flow sheets may be copied or modified for your personal or clinic use.

CHIEF COMPLAINT

Initial visits often occur after a patient has received a positive HIV test. Initial visits may also occur if a patient could have been exposed to HIV, has been determined to have risk factors for acquiring HIV infection, or has symptoms that could indicate HIV infection. Some patients may have been treated for HIV at another facility and are transferring care to your practice as a result of changes in life circumstances, insurance coverage, or relocation.

ASSESS HISTORY

History of Present Illness

- Inquire about date of first diagnosis and circumstances that lead to testing (i.e., why the patient received an HIV test).
- If this is a new diagnosis:
 - Ask about previous testing.
 - ^a Ask about any signs or symptoms of a flu-like illness that may have occurred between the last negative HIV test and the first positive HIV test.
 - A recent flu-like illness may be suggestive of acute HIV infection. If you suspect recent infection, consultation with an HIV expert is recommended as some patients may benefit from treatment with antiretroviral therapy (ART) during acute HIV infection.
 - ^a Inquire about risk factors for acquiring HIV (e.g., sexual contact, intravenous drug use, blood transfusion).
 - □ Evaluate acute symptoms, if present.

- If this is a patient with a known history of HIV:
 - Obtain date of first diagnosis
 - Inquire about HIV treatment history
- Ask about all antiretroviral medications, including dates of use, reasons for discontinuation (e.g., side effects, drug resistance, poor adherence).
- Some patients only recognize medications by size and color. It is helpful to have a picture chart of medications available to ensure accurate identification.
- Include a history of immune function (lowest CD4+ T cell count) and most recent CD4+ T cell count and HIV viral load, if known.
 - Inquire about risk factors for acquiring HIV (e.g., sexual contact, intravenous drug use, blood transfusion).
 - $\mbox{\ensuremath{}^{\square}}$ Ask about opportunistic infections and other HIV-associated conditions.
 - Find out where previous care was provided and when the patient was last seen for HIV care. Ask if records can be obtained.
 - □ Evaluate acute symptoms, if present.
- For all patients, find out who knows about the patient's HIV diagnosis and assess support systems and personal coping mechanisms.

Past Medical History. Ask about:

- other chronic medical conditions (e.g., diabetes, heart disease, high cholesterol)
- other sexually transmitted infections (e.g., herpes, genital warts, syphilis, gonorrhea)
- history of tuberculosis, tuberculosis testing, or exposure
- hepatitis history (known infection with hepatitis A, B, or C, or prior immunization to hepatitis A, B)
- hospitalizations
- surgeries
- mental health and substance use treatment history
- for women, obtain a gynecological history including:
 - □ date of last Pap smear
 - □ history of abnormal Pap smears
 - □ pregnancy history
 - alast menstrual period, any irregular periods
 - ^a current method(s) of contraception, if applicable

Immunization History. Document vaccination dates, including tetanus, diphtheria, pertussis, influenza (annually), pneumococcal, polio, measles, mumps, rubella, HPV, and hepatitis A and B, or evidence of immunity.

Medications. Review use of all current medications, including:

- antiretroviral medications
- medications to prevent or treat opportunistic infections
- medications for conditions other than HIV infection (e.g., diabetes, cardiovascular disease, hyperlipidemia, pain)
- over-the-counter medications
- herbs, alternative medications, and/or nutritional supplements
- "as needed" and occasional prescription or over-the-counter medicines

Allergies.

- · document allergic reactions to any medications
- · document allergies to food and other environmental triggers

Health Maintenance. Ask about previous:

- primary care
- dental care, eye care, and other specialty care
- cholesterol screening
- cervical cancer screening
- anal cancer screening (anal pap)
- age- and sex-appropriate preventative health screenings such as:
 - colon cancer screening
 - □ mammography
 - prostate cancer screening

Personal Social History. Start with less threatening areas to establish communication and build rapport. Inquire about:

- employment (financial resources)
- housing (stability, safety of neighborhood)
- living arrangements (who lives with the patient) and social support
- pets (establish risk for infections such as toxoplasmosis)
- responsibilities (children, other relatives, partners)
- travel (especially to areas of endemic disease inside and outside of the United States)

- alcohol and tobacco use
- other substance use
 - "Do you now or have you ever used drugs that weren't available over the counter or prescribed by a health care provider?"
 - "How do/did you use those drugs (i.e., inject, smoke, snort)?"
 - "Do/did you share your drug-using equipment with others?"
- · sexual activity
 - "Are you sexually active?"
 - "In your life, have you had sex with men, women, or both?"
 - "How do you protect yourself and your partner(s) from sexually transmitted infections?"
- inquire about history of violence, including forced sex and domestic abuse

REVIEW OF SYSTEMS

- Constitutional: fevers, chills, night sweats, weight change, anorexia, fatigue
- HEENT: visual symptoms, hearing changes, sinus pain, oral lesions, sore throat, pain when swallowing
- Lymphatics: swollen or painful lymph nodes
- Cardiovascular: chest pain, palpitations
- Respiratory: shortness of breath, cough, sputum production
- Gastrointestinal: nausea, vomiting, diarrhea, abdominal pain
- Genitourinary: dysuria, frequency, urgency, hematuria
- Genital-rectal: sores, lesions, discharge, tenderness, rectal bleeding
- Neurologic: headaches, numbness or tingling in extremities
- Skin: rashes, sores
- Psychological: anxiety, depression, cognitive changes

PHYSICAL ASSESSESMENT - a comprehensive physical exam:

- Constitutional: evaluate overall appearance
- HEENT: perform thorough oral, eye, and ear exams
- Lymphatic: evaluate for lymph node enlargement
- Heart: assess rhythm and rate, note presence of murmurs or rubs
- Lungs: assess breath sounds
- Abdomen: measure liver span, note any mass or organ enlargement

- Neurologic: test reflexes and sensations in lower extremities, assess mental status, cranial nerves
- Skin: note any rashes or lesions, evidence of trauma
- Musculoskeletal: tenderness, edema, limited range of motion
- Psychiatric: mood, judgment, ability to communicate
- Women: pelvic exam, anorectal exam, breast exam
- Men: genitourinary exam, anorectal exam, prostate exam

Note: depending on time, prioritization of needs, and patient comfort, GU and rectal exams may be deferred at the first visit, but should be done as soon as possible on all patients.

LABORATORY TESTING

- HIV antibody or 4th generation HIV antibody/antigen testing should be done to confirm infection unless patient produces reliable documentation.
- HIV plasma RNA level (HIV viral load).
- CD4+ T cell count (absolute and percentage).
- Complete blood count (CBC) with differential.
- Comprehensive metabolic panel (including liver enzymes, creatinine, and glucose)
- HIV resistance assay: Genotype testing should be performed for newly infected and treatment naïve patients.
- HIV resistance testing, including for Integrase Strand Transfer Inhibitor (INSTI) susceptibility, if applicable, should also be performed in patients with viremia on presentation who are currently on ART. Consider phenotype testing in addition for patients with known drug resistance.
- Hepatitis serologies: HAV Ab, HBsAb, HBsAb, HBsAg, HCV Ab.
- STD testing: including gonorrhea, chlamydia, syphilis in both men and women, and trichomoniasis in women at baseline. Site-specific testing (i.e., anus, urine, throat, and vagina) should be based on reported sexual practices and any history of site-specific symptoms.
- Baseline lipid profile and fasting glucose.
- •Toxoplasma serology.
- Urinalysis and baseline creatinine clearance.
- PPD or interferon gamma release assay.

ADDITIONAL LABORATORY TESTING

Depending on the clinical situation, some clinicians recommend additional testing to include:

- HLA-B*5701: the presence of HLA-B*5701 is associated with a hypersensitivity reaction to abacavir. If present, abacavir should be listed as an ALLERGY and the patient should NOT be prescribed abacavir.
- Co-receptor tropism assay, if use of CCR5 antagonist is a consideration in the treatment regimen.
- Glucose-6-Phosphate Dehydrogenase (g6pd) prior to starting treatment with an oxidant drug such as dapsone or trimethoprim-sulfamethoxazole, in at-risk racial and ethnic populations. For example, people of Mediterranean, Asian, or African descent are more likely to have this result.
- CMV IgG, screen for latent infection in patients who are not men who have sex with men (MSM) or who have a history of injection drug use.
- Chest x-ray if warranted by symptoms or to rule out evidence of active tuberculosis infection if initial tuberculosis screening is positive.
- Cryptococcal antigen and acid-fast bacilli blood cultures in patients at risk for crytptococcal infection or disseminated Mycobacterium avium complex infection, CD4 ≤ 50 cells/mm³.
- Pregnancy testing in all women of child-bearing age

To be addressed during visit:

- Stage of HIV disease
- Medical indication and readiness for ART, or adherence to and appropriateness of current regimen if on ART
- Prior ART exposure or intolerance, possible resistance
- Medication interactions and adverse effects
- Other medical conditions
- Possible opportunistic infections
- Need for prophylaxis against opportunistic infections
- Prevention of transmission to others
- Family planning and contraception options for women of childbearing age

Health Maintenance, including:

- Immunizations
- TB testing
- Pelvic exam with cervical pap smear
- Anorectal exam with or without anal pap smear
- Age-appropriate health and wellness preventative health exams

Education, Discuss:

- HIV pathophysiology, including significance of HIV viral load and CD4+ T cell count, and the expected progression of disease of both treated and untreated HIV infection
- Routine lab tests with expected monitoring intervals
- Plan of care including need for immunizations and routine health maintenance
- The importance of adherence to ART
- The importance of staying in care and keeping appointments
- HIV transmission and methods to decrease risks to partners
- Community programs and social service needs

FOLLOW UP

- Schedule appointment to return to clinic.
- Explain how to contact providers between appointments, if needed.
- Review signs and symptoms to report between scheduled care visits.
- Refer to case manager for other services, including insurance and medication assistance, or other social service needs.
- Patients who achieve an undetectable viral load and are stable on ART for at least 24 months who are clinically stable may consider moving to every 6 month follow-up visits.

Sample Flow Sheet For Tracking Laboratory Results and Medication Lists

Name:	Name:Date of Birth:									
Medical Red	Medical Record #: Telephone:									
Pharmacy:_	Pharmacy: Pharmacy #:									
			Da	te	Date	Date	D	ate	Date]
	CD4+ T Cell Count (cells									
	CD4+ T Cell Percentage									
	HIV viral loa (copies/ml)									
Medication										
Name	Dose	Route		Frequ	iency	Indicat	ion	Sta	rt Date	Stop Date
								-		
Allergies:										
Prophylaxis				Medi	cation Na	ame(s)			
Pneumocystis jiroveci pneumonia (PCP) Absolute CD4 < 200 cells/mm³ or CD4 %<14										
Mycobacterium avium Complex (MAC) Absolute CD4 < 50 cells/mm³										
Toxoplasmosis + IgG, Absolute CD4 < 100 cells/mm³										

Sample Flow Sheets For Tracking Adult Health Maintenance

Note: Clinicians are encouraged to consult the references contained in the bibliography for the most up-to-date and appropriate health maintenance recommendations for their clinic population.

Immunizations	Immunizations					
Parameter	Timeframe	Date	Date	Date		
Haemophilus influenzae type B vaccine	Administer to asplenic patients					
Hepatitis A	2 doses: 0 and 6-12 months apart, document titer 1-2 months after last dose					
Hepatitis B	3 doses: 0, 1 and 6 months apart, document titer 1-2 months after last dose					
HPV (HPV2 or HPV4 for women, HPV4 for men)	3 doses, 0, 8-12 weeks, and 24 weeks, up to age 26					
Influenza (NOT LAIV)	Annually					
Pneumococcal (PPSV23)	2 doses 5 years apart and at age 65					
Pneumococcal (PCV13)	Vaccinate with single dose of PCV 13 initially, followed by PPSV23 at least 8 weeks after. PCV13 should be given at least 1 year after PPV23 if previously vaccinated with PPV23.					
Polio	Give 3 doses of IPV over 6-12 months if indicated (travel to endemic area)					
Td/Tdap vaccine	Every 10 years; one dose of Td should be substituted for Tdap in adult patients					
Varicella vaccine	2 doses, 3 months apart in patients who do not have evidence of immunity, CD4+T cells ≥ 200 cells/mm ³					
Zoster vaccine	Once at age 60, if CD4+T cells ≥ 200 cells/mm³					

Sample Flow Sheets For Tracking Adult Health Maintenance

	HIV-Related Parameters						
Parameter	Timeframe	Date	Date	Date			
Antiretroviral therapy (ART)	Offer to all patients						
Lipid Screen	Before initiation of ART, and 1-3 months after initiation of ART.						
Fasting Glucose and/or hemoglobin A1c	Before initiation of ART, and 1-3 months after initiation of ART. Goal of <7%, monitored every 6 months.						
GC/Chlamydia screen	Once a year/site, and more frequently based on risk Repeat at 3 months with positive result.						
Hepatitis B screen	Once, repeat based on risk						
Hepatitis C screen	Once, repeat based on risk						
MAC prophylaxis	CD4+T cells < 50 cells/mm ³						
PCP prophylaxis	CD4+T cells < 200 cells/mm ³						
Syphilis screen	Annually, repeat based on risk						
Toxoplasma screen	Once						
Tuberculosis testing	Every 2 years, and with exposures						

Sample Flow Sheets For Tracking Adult Health Maintenance

Age and Gender-specific Parameters					
Parameter	Timeframe	Date	Date	Date	
Anogenital exam	Annually in men and women				
Trichomoniasis screening	All women; repeat at 3 months to ensure resolution of infection				
Cervical Pap smear	Every 6 months, then annually after 2 consecutive negative Pap smears for women ages 21-65				
Family Planning	To be reviewed regularly with every woman of childbearing age, and to be screened at regular intervals with men.				
Breast cancer screen	Annually in women ages > 40; earlier if high risk				
Colon Cancer Screening	Ages 50-75 colonoscopy every 10 years; if high risk, consider earlier May also consider Fecal Occult Blood annually, or flex sig every 5 years with FOB every 3 years				
Dental exam	Every 6 months				
Depression Screen	As needed, with support plan in place				
Prostate Specific Antigen (PSA)	Weigh benefits and risks of screening: may begin at age 45 for African American men or men with family history of prostate cancer before the age of 65 Not recommended for men over the age of 70				
Bone densitometry (DXA)	Postmenopausal women and men ≥ age 50				
Lung cancer screening	Annually with low dose chest CT in 55-80 year old men and women with 30 year smoking history (USPSTF Grade B recommendation)				
Cardiovascular prevention and use of ASA	Women: ages 55-79 Men: ages 45-79 ASA dose of 75-162 mg/day when benefits outweighs risks of GI hemorrhage				

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Mountain Plains AIDS Education and Training Center University of Colorado • Anschutz Medical Campus 303.724.0867 www.mpaetc.org