



Primary Care for People Living with HIV

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- The activity planners and speakers do not have any financial relationships with commercial entities to disclose.
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Learning Objectives

- Appreciate the key to great primary CARE!
- Compare and contrast different models for providing primary care to people living with HIV
- List important drug-drug interactions and complications seen with antiretroviral therapy (ART)
- Describe how HIV and ART impact screening, monitoring and management of chronic medical conditions
- Describe how HIV changes preventive care: cancer screening, immunizations

What does high quality primary care look like to you?







<https://www.blueoseyachts.com/unategorized/hh-42-exciting-to-hr-cacing-yacht-newport-4/>





Background



- Antiretroviral therapy (ART) has dramatically altered the natural history of HIV
- Near normal life expectancy
 - Greater than 50 percent of deaths in individuals infected with HIV receiving ART are now related to conditions other than AIDS
- **Primary Care Providers and Professionals needed!**

1. PLoS One. 2013;8(12):e81355. Epub 2013 Dec 18.
2. AIDS. 2002;16(12):1663.



How and where?

Models of Care

- Fenway Community Health
 - Managed by generalists trained in HIV care
- UF Health
 - Co managed primary care and ID
- Others
 - ID only, managing HIV and all other issues
 - Telehealth
 - Traveling Infectious Diseases physician



Arch Intern Med. 2005;165:1133-1139
Clinical Infectious Diseases 2005; 41:738-43



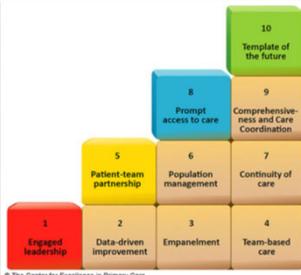
The Key to Great Primary Care

"The treatment of a disease may be entirely impersonal; **the care of a patient must be completely personal.** The significance of the intimate personal relationship between physician and patient cannot be too strongly emphasized, for in an extraordinarily large number of cases both diagnosis and treatment are directly dependent on it, and the failure of the young physician to establish this relationship accounts for much of their ineffectiveness in the care of patients."

- Francis Peabody MD, *The Care of the Patient* (JAMA, 1927)



Building blocks of high-performing primary care:



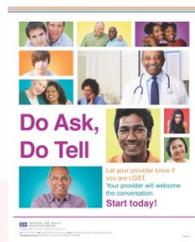
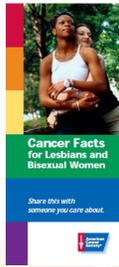
Ann Fam Med 2014;166-171. doi: 10.1370/afm.1618.

Do your patients/clients see themselves in your clinic?



What are ways you make your patients feel more welcome?





1. Which of the categories best describes your current annual income? Please check the correct category. <input type="checkbox"/> < \$10,000 <input type="checkbox"/> \$10,000 - \$19,999 <input type="checkbox"/> \$20,000 - \$29,999 <input type="checkbox"/> \$30,000 - \$39,999 <input type="checkbox"/> \$40,000 - \$49,999 <input type="checkbox"/> Over \$50,000	2. Employment Status: <input type="checkbox"/> Employed full time <input type="checkbox"/> Employed part time <input type="checkbox"/> Student full time <input type="checkbox"/> Student part time <input type="checkbox"/> Retired <input type="checkbox"/> Other _____	3. Racial Group(s): <input type="checkbox"/> African American/Black <input type="checkbox"/> Asian <input type="checkbox"/> Caucasian <input type="checkbox"/> Multi-racial <input type="checkbox"/> Native American/Alaskan <input type="checkbox"/> Hispanic/Latino <input type="checkbox"/> Pacific Islander <input type="checkbox"/> Other _____	4. Ethnicity: <input type="checkbox"/> Hispanic/Latino/Latina <input type="checkbox"/> Not Hispanic/Latino/Latina
5. Country of Birth: <input type="checkbox"/> US <input type="checkbox"/> Other _____	6. Language(s): <input type="checkbox"/> English <input type="checkbox"/> Spanish <input type="checkbox"/> French <input type="checkbox"/> Portuguese <input type="checkbox"/> Yoruba <input type="checkbox"/> Other _____	7. Do you think of yourself as: <input type="checkbox"/> Lesbian, gay, or homosexual <input type="checkbox"/> Straight or heterosexual <input type="checkbox"/> Bisexual <input type="checkbox"/> Something Else <input type="checkbox"/> Don't know	8. Marital Status: <input type="checkbox"/> Married <input type="checkbox"/> Partnership <input type="checkbox"/> Single <input type="checkbox"/> Divorced <input type="checkbox"/> Other _____
9. Veteran Status: <input type="checkbox"/> Veteran <input type="checkbox"/> Not a veteran	10. Referral Source: <input type="checkbox"/> Self <input type="checkbox"/> Friend or Family Member <input type="checkbox"/> Health Provider <input type="checkbox"/> Emergency Room <input type="checkbox"/> Adm/Internist/Nurse/Oncology Worker/School <input type="checkbox"/> Other _____		

Figure 2. Structured Data on Sexual Orientation as Included with the Demographic Information at Fenway Health, Boston.



1. What is your current gender identity? (Check an/or circle ALL that apply)

- Male
- Female
- Transgender Male/Trans Man/FTM
- Transgender Female/Trans Woman/MTF
- Genderqueer
- Additional category (please specify):

- Decline to answer

2. What sex were you assigned at birth? (Check one)

- Male
- Female
- Decline to answer

3. What pronouns do you prefer (e.g., he/him, she/her)?

 Improving the Health of LGBT People, Fenway Institute



 Improving the Health of LGBT People, Fenway Institute



 Improving the Health of LGBT People, Fenway Institute

Chronic Disease

- Cardiovascular Disease
- Hypertension
- Weight Gain
- Osteoporosis
- Mental Health
- Substance Abuse

Prevalence of diagnosed chronic disease among adults aged 18 years - 2020
by State

0.0-1.0
 1.1-2.0
 2.1-3.0
 3.1-4.0
 4.1-5.0
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 97.1-98.0
 98.1-99.0
 99.1-100.0

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Cardiovascular Disease

- Incidence of HIV
- Degree of factor dyslipidemia
- Discontinuation of ART associated with higher risk

C Major Cardiovascular, Renal, or Hepatic Disease
 Hazard ratio, 1.7, 95% CI, 1.1-2.5, P=0.009
 Cumulative Probability of Event
 Months
 Drug conservation group
 Viral suppression group
 No. at Risk
 Drug conservation: 2720 2070 1663 1292 1041 867 693 543 443 375 273 157
 Viral suppression: 2752 2077 1692 1307 1070 899 713 563 462 380 282 165

JAMA Intern Med. 2013;173(8): 614-622
 N Engl J Med 2008; 355: 2263-66

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Hypertension

- ART/HIV NOT felt to increase risk of hypertension
- **Treat aggressively** given increased risk of CVD risk
- Lifestyle modifications are key
 - **Weight loss** (DASH Diet)
 - <https://www.nhlbi.nih.gov/health-topics/dash-eating-plan>
 - **Exercise** (30 minutes, moderate intensity, 5 days a week)
 - **Reduce salt** (<1500 mg daily)

Circulation. 2012;126:2880-2889

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Weight Gain

- Weight gain is common with initiation of ART (integrase inhibitors)
- Weight gain leads to increase in HTN, Dyslipidemia, Diabetes, Heart Disease
- **Help patients make weight loss goals**
 - 1 diet, 1 exercise goal
 - Track calories (diet journal, myfitness pal app)
 - Exercise: 30 minutes, moderate intensity (difficult to sing), 5 days a week
- **Meet patients where they are and help them get where they want to be!**



<https://www.heart.org/en/healthy-living/fitness/fitness-basics/aha-recs-for-physical-activity-in-adults>

How do you help clients change behavior?



Behavior Change

- Behavior change is **personal**
- The primary care team is optimally positioned to provide the collaborative, supportive, nurturing environment to promote behavior change



The Bottom Line

ASSESS

- Fasting lipid levels: prior to ART, 6 and 12 months after initiation, annually if nl
- HgbA1c/fasting blood sugar: prior to ART and every 3 -6 months after initiation, annual if nl
- Measure blood pressure, waist circumference, body mass index
- Know your patient! smoking habits, diet, level of exercise activity
- Family history

Calculate

- American Heart Association CV Risk Calculator

Prevent and/or Treat

- Lifestyle modification
- Smoking cessation
- Aspirin
- Statin, Change ART Regimen
- Control blood pressure and blood sugar

 Hivinfo.nih.gov

Osteoporosis

- Higher rates of bone loss in patients with HIV
- Studies have shown possible link with tenofovir disoproxil fumarate (TDF) and older Protease Inhibitors
- Tenofovir alafenamide (TAF) less impact on bones**



The Bottom Line

Osteoporosis

Screen: postmenopausal women and men aged 50 years of age or older

Rule out: secondary causes (ie. hypogonadism, vitamin D deficiency, hyperparathyroidism, and thyroid disease)

Treat

- calcium, vitamin D, weight bearing exercise, bisphosphonate therapy

 aidsinfo.nih.gov

Mental Health and Substance Abuse

- A disproportionate number of people with HIV have substance abuse and/or psychiatric disorders
- Leads to disease progression secondary to poor adherence as well as increased risk of HIV/STI transmission





The Bottom Line

Mental Health and Substance Abuse

- **Screen, LINK, and aggressively treat** psychiatric and substance use disorders
- **Depression "PHQ 2"**
 - Over the past two weeks have you been bothered by any of the following problems?
 - Little interest or pleasure in doing things
 - Feeling down or hopeless
- **Substance Abuse**
 - How many times in the past year have you had five (four for women) or more drinks in a day?
 - How many times in the past year have you used an illegal drug or used a prescription medication for non-medical reasons?



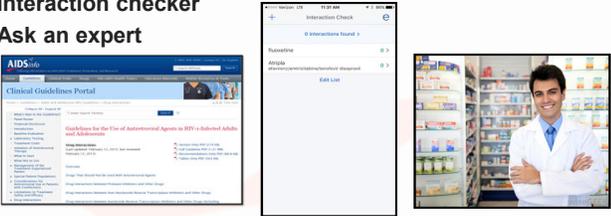
Antiretroviral Therapy

- Even if not prescribing, the primary care team should understand drug-drug interactions, complications and assess/counsel regarding ART adherence



Drug-Drug Interactions

- Lists
- Interaction checker
- Ask an expert



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Southeast Healthcare

Drug-Drug Interactions

- Encourage pts to bring all prescribed meds, OTC meds, and herbal supplements to appointments!
- Common interactions with:
 - Statins (for cholesterol)
 - Steroids (reduce inflammation)
 - Metformin (diabetes)
 - Antacids (heartburn)
- St Johns Wart: **Contraindicated**, decreases antiretroviral levels
- Labs every 3-6 months to monitor for side effects

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The Bottom Line

Drug-Drug Interactions

- **Be mindful** of possible drug-drug interactions
- **Reconcile medications** at each visit, including herbs and OTC drugs
- **Get comfortable** with a resource to review possible interactions

aidsinfo.nih.gov

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Cancer Screening/Prevention

- With ART the incidence of AIDS-defining malignancy has decreased but **non-AIDS-defining cancers are on the rise**
- No current changes to standard guidelines except related to **HPV associated neoplasia**
- **Vaccinate: HPV and Hepatitis B**
- **Smoking Cessation**
- **Treat Hepatitis C**



Clinical Infectious Diseases 2012;55(9):1228–35

Non-AIDS Defining Cancer

Non-AIDS-Defining Cancer	Cancer Risk (Standardized Incidence Ratio)
Anal	33.4–42.9
Hodgkin's Lymphoma	14.7–31.7
Liver	7.0–7.7
Skin	
Squamous cell carcinoma/Basal cell	3.2
Melanoma	1.1–2.6
Head and Neck	1.0–4.1
Lung	2.2–6.6
Leukemia	2.2–2.5
Renal	1.8–2.2



Clinical Infectious Diseases 2012;55(9):1228–35

Cervical Cancer Screening (HPV)

- **Start:** within first year of sexual activity and no later than age 21
- **Stop:** continue lifelong (general population stop age 65)
 - **<30 years old**
 - If normal repeat 12 months (some argue for 6 months if newly diagnosed)
 - After 3 negative, screen 3 year interval
 - **≥30 years old**
 - At diagnosis if normal repeat 12 months, after 3 negative, screen 3 year interval
 - **HPV co-testing**, if negative, screen 3 year interval



Obstet Gynecol. 2016;128(4):e111.

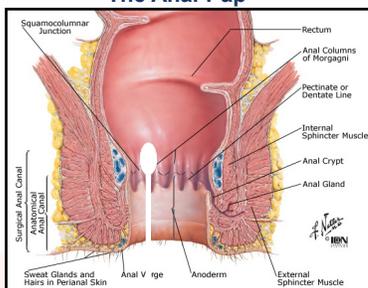
Anal Cancer Screening (HPV)

- Consider if access to high resolution anoscopy and biopsy
 - MSM HIV + incidence 42 to 137 per 100,000 person years
 - Others: HIV + women engaging in receptive anal intercourse or abnormal pap smears, or HIV+ with Anal/Genital warts
- Two cost-effectiveness studies have shown anal pap for MSM to be comparable with other accepted preventive measures in clinical medicine
 - HIV+: 1-2 years
 - HIV-: 2-3 years

Curr Infect Dis Rep (2010) 12:126-133
JAMA. 1999;281:1822-1829
Am J Med. 2000;108:634-641
Clin Infect Dis. 2014 Jan;58(1):1-10.



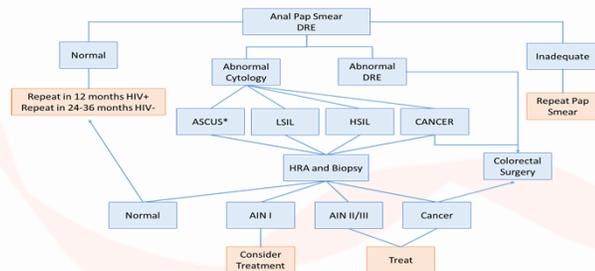
The Anal Pap



<https://www.netterimages.com/rectum-and-anal-canal-labeled-multiple-publications-gastroenterology-frank-r-netter-4491.html>



Anal Pap Follow UP



Algorithm for Anal Pap Screening and HRA (Adapted from Paley and Rubin, 2009 (3)).



Curr Infect Dis Rep (2010) 12:126-133

Screening for Infection

- STIs, Hepatitis (A,B,C),TB screening at initial evaluation
- Further testing based on risk and site of exposure



Question?

- A 50 yo male living with HIV who presents for routine follow up. He reports being sexually active exclusively with men and engages in oral and receptive anal sex with intermittent condom use. He is asymptomatic. What screening for sexually transmitted infection would you recommend?



STI Self Testing



<https://aidsetc.org/resource/test-yourself-visual-guide-self-collected-swab>

Contact me with questions!

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