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Texas Collaborative for HIV Education and Prevention (TCHEP) Learning Series

Updates and Recommendations for Primary and Emergency Care Services

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Texas Collaborative for HIV Education & Prevention

Financial Benefits and Barriers to Routine HIV Screening in Emergency Departments: Best Practices in Texas

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Disclosure to Learners

Texas Collaborative for HIV Education & Prevention Learning Activities:

"Financial Benefits and Barriers to Routine HIV Screening in Emergency Departments: Best Practices in Texas"

July 14, 2021

Successful Completion

Successful completion of this continuing education event requires that you:

- Complete registration and sign in
- Attend the entire event
- Participate in education activities, and
- Complete the participant evaluation

Commercial Support & Disclosure of Conflict of Interest

This event received no commercial support.

The speakers and Planning Committee for this event have disclosed no financial interests.

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Complete and submit the evaluation survey by **July 28th**, 2021.

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Other professions:

- Certified Health Education Specialists
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- Social Workers

- For more information on CE credits, please contact Isabel Clark Isabel.Clark@dshs.texas.gov or email us at tchep@uthct.edu
- For any other question on TCHEP, including materials from this learning series, please visit: http://tchep.org

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Financial Benefits and Barriers to Routine HIV Screening in Emergency Departments: Best Practices in Texas

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Ben Raimer, MD

Financial Disclosure

- Dr. Raimer has no relevant financial disclosures.
- Dr. Prater receives grant support from Gilead sciences to maintain a Hepatitis C screening program in the Emergency Department.
  - Grant support helps fund linkage to care for patients infected with HCV and/or HIV.

Learning Objectives

Upon completion of this event, participants should be able to:

- Identify perceived financial barriers and potential benefits associated with implementing routine opt out HIV screening in emergency departments.
- Describe effective strategies and best practices to maximize the financial benefits of and overcome the perceived barriers associated with routine HIV screening programs in emergency departments.

Historical Background

Routine HIV Screening

- Testing is Opt-Out
  - Texas does not require a separate written consent for HIV testing (see Texas Health and Safety Code Sections 81.105 and 81.106)
- Language matters
  - An example of opt-out language: “We will include an HIV test in your blood work today. Do you have any questions?”
- Gateway to all other HIV preventive services including PrEP and nPEP

Reimbursement Assumptions

- ACA requires most private insurance plan provide zero-dollar coverage for the preventive services recommended by the U.S. Preventive Services Task Force
- How to ensure your patients benefit from these services:
  - CPT codes, ICD-10 codes, use modifiers (33) as appropriate

Recommendation Summary

Population	Recommendation	Grade
Pregnant persons	The USPSTF recommends that clinicians screen for HIV infection in all pregnant persons, including those who present in labor or at delivery whose HIV status is unknown.	A
Adolescents and adults aged 15 to 65 years	The USPSTF recommends that clinicians screen for HIV infection in adolescents and adults aged 15 to 65 years. Younger adolescents and older adults who are at increased risk of infection should also be screened. See the Clinical Considerations section for more information about assessment of risk, screening intervals, and rescreening in pregnancy.	A

Memorial Hermann Opt-Out HIV Screening

- Started 2010
  - Screened ~85,000 (213 new diagnosis, 0.3%) from 2010-2014
- Combination financing
  - MH: IT design/build, testing imbedded in nursing workflow
  - DSHS: Linkage to care, data analytics
  - Patients/Payors: Cost of test billed directly as part of their EC visit
  - City of Houston: Financial support for nursing champion
- Current funding via MH-TMC, patients/payors, and grant funding for LTC

UTMB HIV Screening

Dr. Raimer

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Routine Opt-Out HIV Screening

Benefits and Cost-Effectiveness

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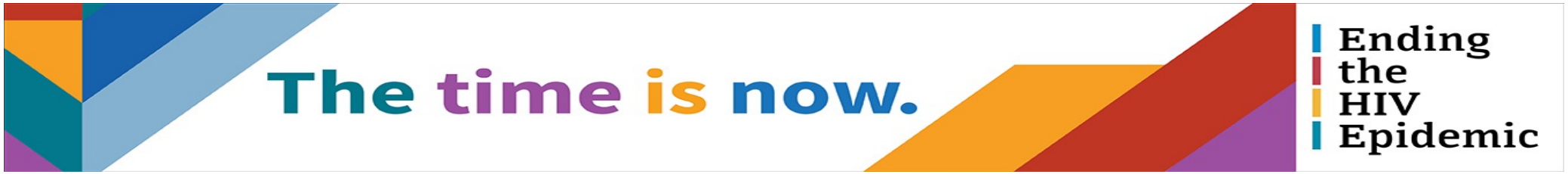
Benefits

- Augment risk-based testing
- Identify missed opportunities associated with risk-based only testing
- Identify PLWH unware of their HIV status
- Identify PLWH before they have advanced HIV disease or AIDS



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Benefits

- Educate PLWH regarding risk behaviors associated with HIV transmission
- Re-engage PLWH who are out of care into care to achieve viral suppression
- EDs accounted for highest percentage (75.4%) of new cases in DSHS screening program

Benefits

- **Routine screening addresses and reduces the stigma and bias**

Financial Benefits

- Decreased Transmission
  - Lifetime cost of HIV infection is estimated at ~$380K (2010 dollars)
  - Averting just one transmission can fund a program for years
- Earlier diagnosis results in treatment before AIDS-defining illness
  - Lower overall healthcare cost burden
  - Reduce repeat ED visits related to AIDS-related complications
    - Average cost in 2017 of ED visit was $690 (AHRQ)
- Improved Quality Adjusted Life Years (QALY)

https://clinicalinfo.hiv.gov/en/guidelines/adult-and-adolescent-arv/cost-considerations-and-antiretroviral-therapy

Cost Effectiveness

- Testing is cheap
  - Range $2.67-$109 per test (Mwachofi et al. 2020)
  - Cost of test includes labor, reagent/supplies, testing equipment
  - Larger platform = reduced cost per test
- Incremental cost effectiveness ratio (ICER) per QALY is less than CDC/WHO thresholds and standards
  - CDC = $50-$150K
  - WHO = $57-$171k
  - HIV screening = $39,700-$93,735 (Mwachofi et al. 2020)

Cost Effectiveness

- Reduced transmission can help sustain program and lower overall healthcare costs
  - Every transmission averted saves annual costs of treating HIV = ~$23,000
- Earlier initiation of ART can avert future ED visits and hospitalizations, saving patient, payer, and healthcare system future costs
  - Average ED cost $690 (AHRQ)
  - Average hospitalization cost $11,700 (AHRQ)

https://clinicalinfo.hiv.gov/en/guidelines/adult-and-adolescent-arv/cost-considerations-and-antiretroviral-therapy

Cost Effectiveness

- Earlier diagnosis and initiation of ART can directly save local hospital campus tens of thousands of dollars
  - Middle aged male with few missed opportunities in short period, screen + through opt-out, required ICU with mechanical ventilation and ECMO
    - Mean Total ECMO cost ~$213,000 (Mishra 2010)
  - Middle aged female with multiple visits over course of > 1 year with multiple specialty follow ups and procedures and was ultimately admitted, screen + through opt-out, expired < 2 weeks after admission
    - Mean ICU Cost ~$32,000 (Dasta 2005)

Reimbursement Strategies

- Bundled payments exist but cost of test is relatively cheap especially in comparison to avoidable hospitalizations and repeat visits.
- Hospital should submit CPT codes to payers and HCPS codes to Medicare for routine, opt-out HIV screening.

CPT Codes

Code	Rapid Test Modifier	Description
87389		4th Generation Combo HIV Ab/Ag test
86701	92	Antibody; HIV-1
86703	92	Antibody; HIV-1, HIV-2 **(Supplemental assay)**
87534		HIV-1: Nucleic Acid (DNA or RNA), direct probe **(viral load)**
87535		HIV-1 RNA assay **(QUALITATIVE)**; reverse transcriptase
87536		HIV-1: (DNA or RNA); reverse transcriptase **(viral load)**

The modifier 92 is added to the CPT code to identify point of care test technology.

Medicare HCPS Codes

Code	Description
G0475	HIV antigen/antibody, combination assay, screening
G0432	Infectious agent antibody detection by enzyme immunoassay (EIA) technique, HIV-1 and/or HIV-2, screening
G0433	Infectious agent antibody detection by enzyme-linked immunosorbent assay (ELISA) technique, HIV-1 and/or HIV-2, screening
G0435	Infectious agent antibody detection by rapid antibody test, HIV-1 and/or HIV-2, screening

Use ICD-10 Code Z11.4 with G-codes

Reimbursement Strategies

- Use Modifier 33
  - Informs payer that service provided carries an “A” or “B” rating from the USPSTF
  - Informs payer that service is required to be provided without patient cost sharing
  - “Use modifier 33 on the CPT code for HIV screening. This informs the payer that the service is a service recommended by the USPSTF. For patients with commercial policies, it ensures that the insurance company will pay the claim without a patient due amount. No co-pay or deductible should be applied to a service with a USPSTF “A” or “B” rating.” (NASTAD)

Reimbursement Pitfalls

- Multiple reasons for service denial of payment:
  - The test was done in a setting in which a bundled payment was negotiated for the service, and the screening is not included in the negotiated rate.
  - The patient is already diagnosed with the condition, and no longer needs to be screened for the illness.
  - An incorrect diagnosis is reported, can add ICD-10 code to EC visit:
    - **Use Z00.00 (Encounter for general adult medical examination without abnormal findings) – with modifier 33 and CPT code, flags service as USPSTF Grade A preventative service and not a diagnostic test**
    - Use Z11.4 (Encounter for screening for HIV) – some payers will interpret this code as diagnostic and not preventative
  - The payer has established frequency limits for the service.
  - Modifier 33 was not appended to the CPT or HCPCS code.

Closing Remarks

- Routine HIV screening is the right thing to do
- An HIV screening program can pay for itself
  - Reduced transmission saves $
  - Earlier initiation of ART saves $
- Numerous studies have shown that screening is cost-effective
- Insurers do reimburse for HIV screening
  - Remember to add modifier 33 to your CPT/HCPS codes
  - Use an additional ICD-10 code if needed

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That’s all, folks!

Any Questions?

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Thank you!

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