

Collaborations between AETCs, emergency departments, and health jurisdictions to identify and treat HIV, HCV, and syphilis

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Commercial support was not received for this activity.

LEARNING OUTCOMES

At the conclusion of this activity, participants will be able to:



- Explain the critical role Emergency Departments play in identifying and treating HIV, HCV, STIs and SUDs and ending the HIV Epidemic in both urban and rural settings
- Discuss how AETCs and other Ryan White-funded partners can work with Emergency Departments and health jurisdictions to help highrisk patients link to or re-engage in high quality HIV/HCV treatment
- Review how your local AETCs, planning bodies, and others can best work with Emergency Departments and health jurisdictions to maximize health outcomes for the most vulnerable and hard-to-reach populations in your community





Ending the HIV Epidemic (EHE) will require accessing the hardest to reach populations for HIV screening and treatment. Equally important is re-engaging out of care HIV positive individuals. Essential to the EHE will be finding the most at-risk HIV-negative patients and connecting them to HIV prevention services, including STI treatment, PrEP, MAT/buprenorphine and other social services. **Emergency Departments (EDs) can play a key role** in such EHE efforts by identifying, treating, linking, and re-engaging such hard-toreach patients.

Outline



- PAETC, LA AETC, and Kern County
- How collaboration with AETC started
- Critical role of the ED in Ending the HIV Epidemic (EHE)
- Demographics and Epidemiology of Kern County
- Routine HIV, HCV, Syphillis screening and linkage data (pre and post COVID-19)
- Challenges, Facilitators, and Lessons Learned
- Future Plans and Recommendations
- Questions and Answers

PAETC, LA AETC, and Kern





AIDS Education & Training

Bridging the connection between primary care providers and HIV experts.







Engagement & Retention in Care







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About Us

The Pacific AIDS Education and Training Center (Pacific AETC) is a member of a national AIDS Education and Training Center network of eight regional and two national centers, covering all 50 states as well as US Territories and Jurisdictions. Pacific AETC works to expand the number and ability of healthcare professionals and organizations in the Pacific region to provide high-quality HIV-related services to increase access to healthcare and decrease health inequities. Our Regional Office provides overall leadership and program direction and oversight for the 8 Local Partner sites in the Pacific region. The Regional Office is based at UCSF and housed within the Department of Family & Community Medicine.

VIRTUAL

Learn More





"I'm interested in implementing routine HIV screening in one or more Emergency Departments in Kern County. Can the AETC help?"

Kristopher Lyon, MD ---Thursday, May 17 2018

Critical Role of ED in EHE





How can the LA AETC help?



Training/TA Advice/Partners/Consultants

Arizona AETC? Bernie Branson, MD? Doug White, MD? Local Contacts Kern (LHJ, AETC, Part C...) WHERE IS KATHY JACOBSON, MD? VIRTUAL

Possible Supplemental Resources/Funders

Federal/State/Local? (Combine projects?) FOCUS ProgramRené Bennet, JD

Workplan/Timeline

Fit this project into our full plate of activities Be realistic

Critical Role of the ED in EHE



Kathy Jacobson, MD

Chief, STD Control Branch (CDPH) Leadership Team, California COVID-19 Testing Task Force

ARTICLE IN PRESS

INFECTIOUS DISEASE/REVIEW ARTICLE

HIV Prevention and Treatment: The Evolving Role of the Emergency Department

Kristi Stanley, MD*; Meredith Lora, MD; Stephen Merjavy, MD; Jennifer Chang, MD; Sanjay Arora, MD; Michael Menchine, MD, MPH; Kathleen R. Jacobson, MD

Why Emergency Departments?



- HIV patients are <u>3 times more likely to visit an emergency room</u>, be <u>racial</u> <u>minorities</u>, and <u>lack health insurance</u> compared with their non-HIV counterparts
 - *Rothman, R. E. et al. Academic Emergency Medicine, 14(7), 653-657. DOI: 10.1197/j.aem.2007.04.004
 - Pitts, S. R. et al. Natl Health Stat Report, 7(7), 1-38. PMID: 18958996
 - Lyons, M. S. et alPublic Health Reports, 120(3), 259.
 Bozzette SA et al. N Engl J Med. 1998;339(26):1897-1904
- Emergency Departments are a <u>safety net</u> for people with HIV

Often the sole point of entry into the healthcare system

(Hsieh et al, Annals of EM, July 2015)



HIV Testing in the ED

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Roll-Out

- Paralleled declines -- rates undiagnosed HIV
- Made significant strides
 - Curbing the HIV epidemic in the US

Hansoti B, Kelen GD, Quinn TC, Whalen MM, DesRosiers TT, Reynolds SJ, Redd A, Rothman RE. A systemic review of emergency department-based HIV testing and linkage to care initiatives in low resource settings. PLoS One. 2017 Nov 2;12(11):e0187443. doi: 10.1371/journal.pone.0187443. eCollection 2017.



Los Angeles County + University of Southern California ED



Largest ED in the western United States

- 170,000 annual visits
- 65% Hispanic, 15% Black, 5.4% Asian
- 42% women
- 80% household income <\$20,000



Case 1



- 45 year old homeless black female comes in for a sore throat, abdominal pain, fever to 102.5. You tell her that you will be getting some labs today including an HIV test.
- SH- ETOH
- Raped 3 weeks ago while under the influence
- Results of Routine Screen
 - Antigen/antibody combo: POSITIVE
 - HIV-1/2 antibody differentiation: pending
 - HIV viral load: pending



Acute HIV in the ED





Annals of Emergency Medicine An International Journal

Articles & Issues ~	Collections ~	Images	For Authors ~	Journal Info ~	Journal Access ~	ACEP ~
		All Conte	nt	▼ Sea	rch Advanced Sea	<u>rch</u>
< Previous Article	<u>July</u>	2018 Vol	lume 72, Issue 1,	Pages 29-40.e2	2 Ne	ext Article >

Acute HIV Discovered During Routine HIV Screening With HIV Antigen-Antibody Combination Tests in 9 US **Emergency Departments**

Presented at the International AIDS Conference, July 2016, Durban, South Africa; and the American Public Health Association annual meeting, November 2017, Atlanta, GA

Douglas A.E. White, MD^{a,*}, MD^{a,*}, Thomas P. Giordano, MD, MPH^b, Siavash Pasalar, PhD^c, Kathleen R. Jacobson, MD^d, Nancy R. Glick, MD^e, Beverly E. Sha, MD^f, Priya E. Mammen, MD, MPH^g, Bijou R. Hunt, MA^h, Tamara Todorovic, MPH^a, Lisa Moreno-Walton, MDⁱ, Vincent Adomolga, MPH^g, Daniel J. Feaster, PhD^j, Bernard M. Branson, MD^k

214,524 screened for HIV

839 (0.4%) new diagnosis

122 (14.5%) acute HIV

717 (85.5%) established infection

Compare % Historic Positivity PHDs (2 - 4%) High-risk, high-prevalence MSM (8 - 17%)

Opportunity to intervene

HIV Diagnosis





Acute

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- (Cohen, et al. JID, 2010)
- (Stacey, et al, J. of Virology, 2008)
- (Fiebig, et al, AIDS 2001)
- (Cohen et al. NEJM Aug 2011)

Transmission

- Brenner et al. JID, 2007, Hollingsworth, et al. JID, 2008,
- Pilcher, et al. JID, 2004,
- Gray, et al. JID, 2012





- 24 year-old H/M MSM comes to your ED following a motor vehicle accident. He is advised at your ED everyone getting labs gets a routine HIV test. He does not refuse the test.
- Routine Screening Results
 - Antigen/antibody combo: POSITIVE
 - HIV-1/2 antibody differentiation: Pending
 - HIV viral load: Pending







- 35 year-old w/m presents to the ED complaining of abscess of the left hand.
- Results of Routine Screen- POSITIVE
- Disclosure- HIV+ diagnosed 5 yr ago, previously LTC but didn't like the clinic so fell out of care.
- Did you waste your money repeating his HIV test?



HIV Transmissions in 2016



% OF PEOPLE WITH HIV	STATUS OF CARE	ACCOUNTED FOR X% OF NEW TRANSMISSIONS*
15%	didn't know they had HIV	38 %
23%	knew they had HIV but weren't in care	43%
11%	in care but not virally suppressed	20%
51%	taking HIV medicine and virally suppressed	0%
*Values do not equal 1009	% because of rounding	SOURCE: Vital Signs, 2019





The Washington Post

January 10, 2016

Opinions

No More Excuses. We Have the Tools to End the HIV/AIDS Pandemic. Anthony S. Fauci

"We must not squander this opportunity. History may judge us harshly if we do." ---Anthony S Fauci, MD, Opinions, Washington Post, January 2016

Vision for ED in Kern



Kristopher Lyon, MD Public Health Officer, Kern County Emergency Medicine Physician

Demographics of Kern County

Home to 893,119 people

23% live below the Federal Poverty Level

53% Latino/Hispanic

33% White 5% Black/African American

Bakersfield is the largest city with 383,579



Vision for Kern EDs

- Improve individual and public health
- Increase local expertise and resources
- Coordinate with community providers
- Obtain help, training, technical assistance, where possible
- Test run approaches (PDSA cycles)
- Be compliant...standards/laws/rules
- Don't let perfection be the enemy of the good



Planning, Meeting, Applying

- Conducted PDSA cycle
- Applied for and received FOCUS HIV/HCV screening and linkage grant (Emergency Department and Health Department)

- Applied for and received Rapid ART grant from State Office of AIDS (health department)
- Met with legal, financial, regulatory, lab and other involved departments
- Conducted full day training with PAETC, health department, and clinicians/staff
- Hired new positions made possible by grants
- Successfully launched program in October 2019
- Dealing with COVID-19 since March 2020





Kim Hernandez, MPH *Epidemiologist Kern County Public Health*

Kern County HIV/AIDS Cases





Cumulative Cases

- 3,262 cases
- 67% dx as AIDS cases

2018 Cases

- 156 cases
- 21% dx as AIDS cases

Recent Trends

- 13% more cases in 17-18 than 91-92
- Rate is 26% lower in 17-18 than 91-92
- 2018 rate is 1.5x higher than 2005



Kern HIV Cases by Race/Ethnicity



Cumulative Cases

- 44% Hispanic
- 33% White
- 20% Black
- 1% Asian

Public Health Services

• 3% Multi-race

2018 Cases

- 63% Hispanic
- 19% White
- 15% Black
- 1% Asian
- 3% Multi-race

County Demographics (2018)

- 54% Hispanic
- 34% White
- 5% Black
- 4% Asian
- 2% Multi-race

Kern HIV Cases by Age Group





Cumulative Cases

- 34% are 30-39 years old
- 31% are 20-29 years old
- 2% are < 18 years old

2018 Cases

- 40% are 20-29 years old
- 29% are 30-39 years old
- o% are < 18 years of age

County Demographics (2018)

- 16% are 20-29 years old
- 13% are 30-39 years old
- 28% are < 18 years old

"Almost" an EHE-designated county

2018 Newly Diagnosed HIV Cases: California by County

- 1. Los Angeles- 1,711 (16.6/100K) ↓ from 2,155 in 2014 –EHE
- 2. San Diego- 379 (11.5/100K) ↓ from 503 in 2014 –EHE
- 3. Orange- 286 (8.9/100K) ↓ from 352 in 2016 –EHE
- 4. San Bernardino- 278 (12.8/100K) ↑ from 222 in 2014 –EHE
- 5. Riverside- 259 (10.7/100K) ↓ from 264 in 2014 –EHE
- 6. San Francisco- 240 (27/100K) ↓ from 327 in 2014 –EHE
- 7. Alameda- 200 (12/100K) ↓ from 270 in 2016 –EHE
- 8. Sacramento- 158 (10.3/100K) ↓ from 185 in 2014 EHE
- 9. Kern 156 (17.2 * /100K) ↑ from 110 in 2016 –<u>NOT EHE</u>

*second only to SF



Kern STD Summary, 2018



Disease	Number of Cases	Frequency
Chlamydia	6,957	19 per day
Gonorrhea	2,317	6 per day
Syphilis	1,520	4 per day
HIV	156	1 per 2.4 days (3/week)
Kern County	10,947	1 every hour

Disease	Number of Cases	Frequency
Congenital Syphilis	56	ı per week



Primary & Secondary Syphilis







Source: California Department of Public Health, All STDs Tables, Primary and Secondary Syphilis, Page 42 https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/STD-Data-All-STDs-Tables.pdf

Screening inside the ER



Kian Azimian, MD *Emergency Medicine Physician Bakersfield Memorial Hospital*



HIV Testing Data (Pre/Post COVID-19)



<u>Goal</u> for October 2019-2020: 9,000

October 2019-March 2020 <u>Expected</u>: 4,152 Achieved: **6,550**

Positivity Rate: 0.6%

(39 HIV+ patients- including 2 acute infections)

April + May 2020 Expected: 1,384

Achieved: 489

Positivity Rate: 1.43%

(7 HIV+ patients)

HCV Testing Data (Pre/Post COVID-19)

VIRTUAL 2020 NATIONAL RYAN WHITE CONFERENCE ON HIV CARE & TREATMENT

Goal for October 2019-2020: 9,000

October 2019-March 2020 Expected: 4,152 Achieved: 6,097 Positivity Rate: 6.5% (394 HCV RNA+ patients)

April + May 2020 Expected: 1,384 Achieved: 487 Positivity Rate: 6.6% (32 HCV RNA+ patients)

HIV Testing Data Post COVID-19 Drop



- HIV Tests Performed
- HIV Positive Patients Identified Through Testing
- New HIV Positive Patients Idenitified
- Known out of care HIV Positive Patients Identified
- Diagnosed Acute HIV Infections
- New HIV Positive Patients (identified through testing) Attended First Appointment
- Known out of care HIV Positive Patients Identified/Pending First Appointment
- Known out of care HIV Positive Patients Attended First Appointment(LTC only clients)

HCV Testing Data COVID-19 Drop





- HCV Ab Tests Performed
- HCV Ab Positive Patients Identified Through Testing
- HCV RNA Tests Performed
- HCV RNA Positive Patients Identified Through Testing
- HCV RNA Positive Patients (identified through testing) Attended First Appointment
- Known HCV RNA Positive Patients Pending First Appointment (LTC Only Clients)
- Known HCV RNA Positive Patients Attended First Appointment (LTC Only Clients)

Syphilis ED Screening Data



Month/Year	RPRs Conducted	RPRs Reactive	Percentage Reactive
Oct 2019	1,471	84	5.70%
Nov 2019	1,602	88	5.49%
Dec 2019	1,283	62	4.83%
Jan 2020	987	56	5.67%
Feb 2020	684	48	7.02%
March 2020	497	31	6.24%
April 2020	289	17	5.88%
May 2020	199	19	9.55%
June 2020	338	24	7.10%

Opioids & ED: The Bridge Program

VIRTUAL 2020 NATIONAL RYAN WHITE CONFERENCE ON HIV CARE & TREATMENT

- Bridge Grant provides education and resources to make emergency rooms into primary access points for opioid addiction treatment.
- In the last year at Bakersfield Memorial Hospital, we have successfully started 214 individuals on Medication for Addiction Treatment (MAT) with Buprenorphine / Suboxone, from 321 patients with substance abuse identified. Approximately 66% success rate.
- Benefits of MAT treatment are a 15x decreased risk of death (all causes).
 Decrease risk of HIV & HepC, criminal activity, becoming victim of crime, and obstetric complications in pregnant women.





- Electronic Health Record (needs to be approved, "built", for gold standard)
- Legal/Administrative Concerns (understanding current laws, adjusting policies)
- Laboratory Preparedness (volume of tests, reagents needed, etc)
- Revenue Integrity/Billing (need to code/document)
- Hiring/training/sustaining new positions from grants
- Getting buy-in from 100% of leadership and staff





Kristopher Lyon, MD Public Health Officer, Kern County Emergency Medicine Physician

2020 HIV Screening - Adventist ED



VIRTUAL

■ HIV 1/2 Ab/p24 Ag ■ HIV-1 and HIV-2 Antibody Differentiation

2020 HCV Screening - Adventist ED



Hepatitis C Antibody by CIA

HCV by Quantitative NAAT

2020 Syphilis Screening - Adventist ED



Plans for Future



- Screenings will increasingly be tied to EHR rather than providers
- Provide immediate ART in EDs where possible
- Secure 3rd ED to implement screening and linkage (post COVID-19)
- Develop sustainability plans for post-grants environment
- Increase numbers screened/treated/linked for HIV
- Increase numbers screened/diagnosed/linked for HCV
- Increase numbers screened/treated/linked for syphilis (including PrEP)

Acknowledgements



- Terri Church, Michelle Wheeler, William Watts, Tracy Langenfield, Sherri Weaver, and Renae Wade – Dignity Health, Bakersfield
- Patrick Salazar, Shantell Waldo, Nick Morse
 Kern County Department of Public Health
- Kevin Watson, Jennifer Bones, and Lisa Boudreault Adventist Health, Bakersfield
- Rene Bennett FOCUS Program
- And Many Others who make this entire project possible

Questions and Answers for follow up: tdonohoe@mednet.ucla.edu









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