Experience from the Largest Western United States Emergency Department on Ending the Epidemic

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BACKGROUND

Do Emergency Department (ED) based HIV testing programs play a role in Ending the Epidemic?

Emergency Departments (ED) account for 135 million healthcare visits annually. HIV positive patients are 3 times more likely to visit an ED, be a racial minority, and lack insurance than their non-HIV counterparts. Additionally, CDC estimated in 2016 that out of care patients account for 43% of new infections annually. EDs are a safety net for people living with HIV and are often patients sole and only point of entry into the healthcare system. The rollout of HIV testing in US emergency departments has coincided with the decline in undiagnosed HIV in the US, potentially contributing substantially to curbing the epidemic. However, a recent systemic review of 37 ED programs across the US showed that linkage to care (LTC) from EDs is suboptimal.

The Los Angeles County (LAC) plus University of Southern California (LACUSC) ED is the largest ED in the western US and sits in the heart of the epidemic with 50% of the LAC's PLWH in its catchment area. It has 170,000 patient visits annually, 65% by Hispanics, 15% blacks, 5% Asians, 42% women and 80% claiming a household income of <$20,000 annually. We describe LACUSC ED's HIV testing program its LTC and uniquely successful re-engagement in care program for out of care patients.

METHODS

- In March of 2011, the LACUSC ED implemented routine HIV screening via a parallel program with a designated room-to-room tester and POC HIV tests.
- In June of 2013, we implemented HIV 1-2 antigen antibody immuno-assay testing and offered provider initiated routine screens to all ED patients getting labs.
- In 2015 an EMR pop-up window was added reminding providers to screen for HIV in ED patients
- Rapid ART was initiated in:
  - Acutely infected individuals – December 2014
  - Newly diagnosed – August 2015
  - Return to care (RTC) patients – October 2015
    - Included HIV care visits in the ED

HIV screening programs in **Emergency Departments reach into the heart of the HIV epidemic** and **ensure some of the most difficult to reach individuals can access testing and rapid ART**. Scale up of ED HIV testing programs will contribute substantially to ending the US epidemic.

RESULTS

- From March 1, 2011 to January 30, 2020 we tested 119,902 patients.
- **2,612 confirmed positive tests (2.2% sero positivity)**
  - Males 2,231 (85.1%), females 365 (14.7%), and transgender 2 (0.0%)
  - Hispanic (44%), blacks (28.9 %), and whites (10.9%)
  - Age ranges 31-50 (51.5%) and over 50 years (29.9%).
- **624 (23.9 %) newly diagnosed**
- **62 (10%) acutely infected with HIV**
  - Hispanic (71.0 %), white (29.0 %), and Blacks (11.3%)
  - Most common age ranges were 23-30 years, followed by 31-40 years.
- **1,988 (76.1%) were previously known to be HIV positive**
- The majority 366 of the 624 (58.6 %) of the newly diagnosed have been successfully linked to care.

3/2011 - 1/2020	N (%)
Total number tested	119,902
Male	74,821 (62%)
Female	45,053 (38%)
Transgender	28 (0%)
Hispanic	73,309 (61%)
Black	19,314 (16%)
White	12,382 (10%)
Age ≤30 years	23,597 (20%)
Age 31-50 years	47,723 (40%)
Age >50 years	48,582 (40%)

Table 1 – Demographics of Patients Tested

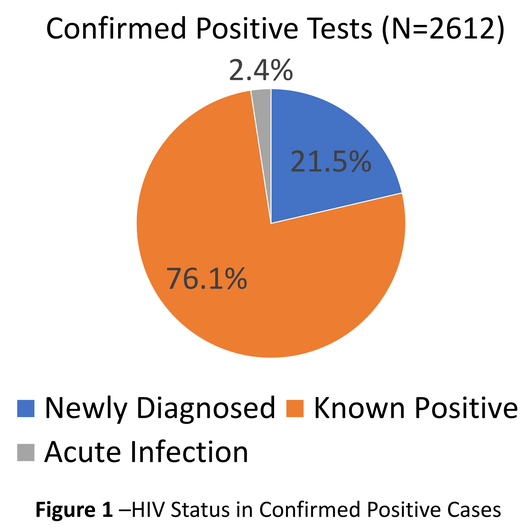

Figure 1 –HIV Status in Confirmed Positive Cases

	3/1/15 – 9/30/15 (6 mo)	10/1/15- 4/30/16 (7 mo)
Tested	10,723	14,918
Tested Positive	272	265
"Out of Care" Positives	219	212
Re-linked to Care	14/ 219 (6%) Primary Care> HIV Clinic	109/212 (51%) Primary Care> ED
Second visit		52/109 = (48%) 2nd Primary Care> clinic or ED 42/52 < 60 days 3/52 at 60 - 90 days 7/52 > 90 days

Table 2 – Out of Care patients' re-engagement in care rates before and after implementation of Rapid ART and HIV care within the ED

CONCLUSIONS

- Emergency Departments ensure that some of the most difficult to reach individuals can access HIV testing and care.
- EDs are an important location to find both newly diagnosed and out of care patients.
- Rapid ART and HIV care in the ED reaches the out of care and difficult to re-engage patients.
- Linkage to Care remains sub-optimal.
- Linkage to Care and Rapid ART in an ED is dependent on ED providers consulting HIV programs for linkage.

NEXT STEPS

- Implementation of EMR based identification of newly diagnosed and out to care patient will ensure HIV programs are mobilized to more successfully engage HIV patients in ED.
- Scaling up ED HIV testing and rapid treatment/care programs will contribute substantially to Ending the Epidemic in the US.

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