

## Jefferson Emergency Opt-Out Program: Working to Address Public Health within Acute Care

In the [2008 report on HIV and AIDS in the City of Philadelphia](#), then-Health Commissioner Donald Schwarz, MD, MPH, MBA, and team noted that 2007 marked the largest number of people living with HIV/AIDS in the city's history. The rate of HIV infection in Philadelphia was estimated to be 114 per 100,000 population, reflecting a rate five times greater than that of the United States (national rate of infection the same year was 23 per 100,000 population).<sup>1</sup> Moreover, it was estimated that more than 25% of those with HIV were unaware of their diagnosis. This data, combined with the [Revised Recommendations for HIV Testing of Adults, Adolescents and Pregnant Women in Health Care Settings](#) released in 2006, further prompted even greater city-wide efforts in HIV screening and early diagnosis.<sup>2</sup> Both the Centers for Disease Control and Prevention (CDC) and Philadelphia Department of Public Health recognized Emergency Departments as ideal sites for routine HIV testing.

The Thomas Jefferson University Hospital (TJUH) Emergency Department began HIV screening in 2008. With funding from the [AIDS Activity Coordinating Office \(AACO\)](#), the program initially consisted of a single counselor administering Point of Care (POC) HIV tests in the Emergency Department (ED). With this single tester, the TJUH ED implemented opt-in testing, where patients were individually approached and consented for HIV screening in the ED, and thus became perhaps the first in Philadelphia to do so. These efforts included a developed linkage to care process with Jefferson Division of Infectious Diseases. In 2014, the Emergency Department secured a grant through the [Frontlines of Communities in the US \(FOCUS\)](#) program of Gilead

Sciences. FOCUS funding supported program expansion and development of a sustainable infrastructure to promote ongoing HIV screening, with increased emphasis on blood-based testing using 4th generation testing technology, in the Emergency Department.

With the financial support for expansion of services and bolstered by policy changes for appropriate testing consent on the national, state and institutional levels, the Emergency Opt-Out Program was born. We implemented an *opt-out* model of testing where patients were informed that they would be tested for HIV unless they specifically declined, with a focus on a CDC-recommended cohort of patients ages 18 to 65 years old. The program further expanded to involve Methodist Hospital Division Emergency Department in 2015. The ED nurses and medical technicians have been the crucial backbone to the program throughout, as key drivers in informing patients of the opt-out process and initiating the testing protocol. The linkage to care process was further streamlined to ensure greater patient-centeredness and ease for those newly diagnosed.

In total, the Emergency Opt-Out Program has tested nearly 43,000 patients and has newly diagnosed 194 people with HIV. From 2008-2013, more than 7,000 HIV tests were performed, yielding 40 newly diagnosed patients with HIV. From 2014 to June 2018, more than 35,000 total HIV tests were done, yielding 154 new HIV diagnoses. Nearly 20% were newly diagnosed with acute HIV (infected within the previous 14-21 days) and 80% were diagnosed with chronic or established HIV. Of those newly diagnosed, 80% identified as male, 70% were African American/black, 48% identified

as men who have sex with men (MSM) and 36% identified as heterosexual, 23% were 18-25 years at diagnosis, 32% were 26-35, 20% were 36-45, 15% were 46-55, and 9% were 56-65. Working closely with Jefferson Division of Infectious Diseases, the program has successfully linked more than 80% to specialty care.

As opt-out testing steadily became more routinized in our EDs, Jefferson Emergency Opt-Out programmatic efforts expanded to address other facets of the HIV care continuum. Beginning in 2017, we implemented efforts for re-engagement to care for known HIV-positive patients who had fallen out of HIV treatment. Once identified, we facilitated linkage and re-engagement for those amenable within Jefferson Health for primary and specialty care. Finally, in order to further decrease risk of transmission and new infection, we worked to identify at-risk individuals who tested negative for HIV to focus education and counseling efforts around [Pre-Exposure Prophylaxis \(PrEP\)](#) services.

While our clinical efforts have been focused on patients and families, the Emergency Opt-Out Program also aligned academic efforts with the mission of Thomas Jefferson University. We implemented HIV educational and awareness campaigns for ED and hospital staff. We developed interdisciplinary collaborations with other clinical departments within Jefferson Health, including Jefferson Division of Infectious Diseases, Jefferson Obstetrics and Gynecology Associates (JOGA), Jefferson Women's Primary Care, and Jefferson Division of Geriatrics and Palliative Care. We worked to increase community awareness of Jefferson services and advocacy through collaborations with various community

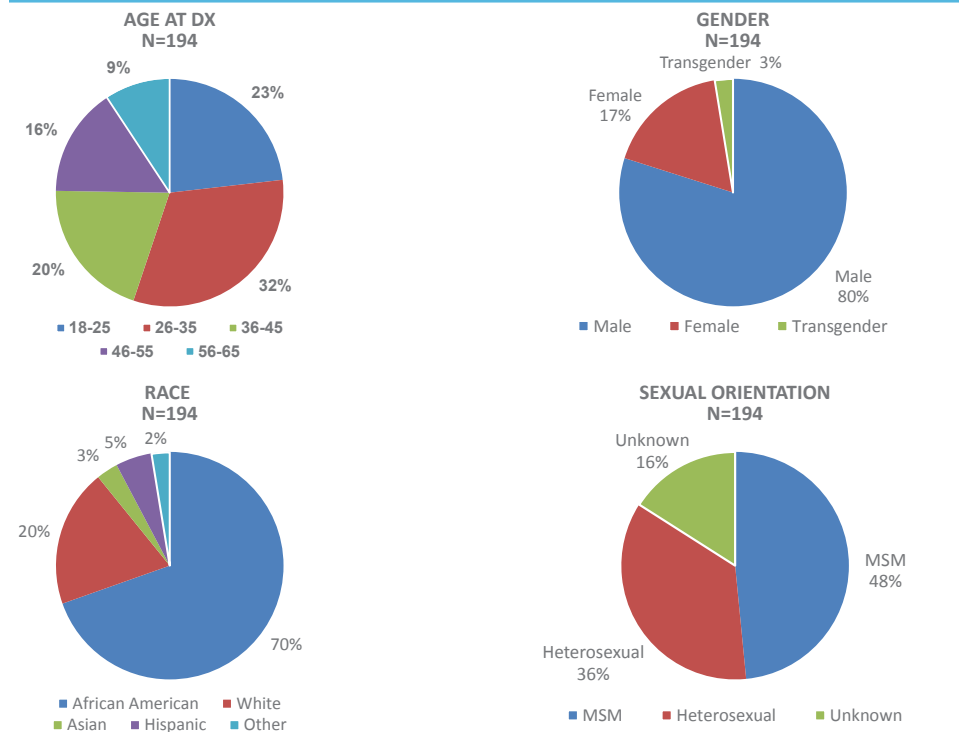
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organizations. Finally, we engaged in research and dissemination on local, regional, national and international platforms. Furthermore, the Jefferson Emergency Opt-Out Program has offered research and programmatic experience and mentorship for several students from Jefferson College of Population Health, including two [Health Economics and Outcomes Research students](#); as well as Fellows from Sidney Kimmel Medical College.

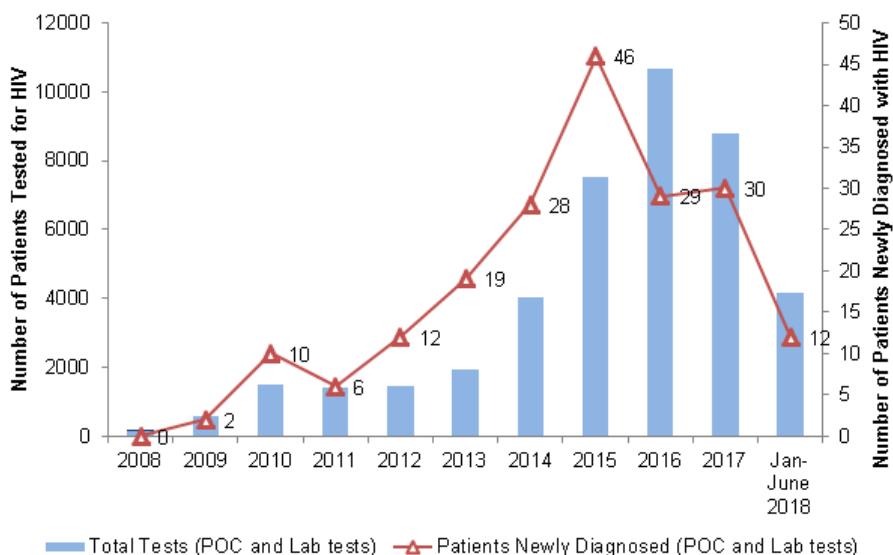
Where in 2007 it was estimated that one-quarter of those with HIV were unaware of their diagnosis, [estimates from 2016](#) indicate that less than 8% of people in Philadelphia and 15% nationally are unaware of their HIV infection.<sup>3</sup> Innovative approaches from the CDC, Philadelphia Department of Public Health, and health systems such as Jefferson Health, identifying EDs as key partners, has had a tremendous impact on HIV in the city. Emergency Departments function at the interface of the communities they serve and the hospital system. As such, they are uniquely positioned to address public health issues impacting vulnerable populations. The Jefferson Emergency Opt-Out Program illustrates the impact EDs can have on the health and wellbeing of a patient and their community through surveillance and patient-centered interventions. It further reflects the significant role EDs can play in reducing disparities in early diagnosis and care.

Since 2008, more than \$1.5 million has been invested in Jefferson EDs to design and implement an HIV screening process within the acute care space. The Emergency Opt-Out Program was developed to routinize HIV screening in the ED with a constant eye to sustainability. Federal programs, such as Ryan White funding, enable newly diagnosed patients to become eligible for insurance coverage. The return on investment for this and

## Characteristics of Newly Diagnosed



## HIV Testing Growth Jefferson EDs



other similar programs<sup>4</sup> from the ED is compelling, in terms of life expectancy, quality-adjusted life years (QuALY), and

reduced risks of transmission and incidence of HIV in the community, as well as on the health system as a whole. Through

increased referrals to internal specialty services and greater insurance coverage and reimbursements for chronic disease management, the Emergency Opt-Out Program could potentially fund itself with appropriate billing and capture. Jefferson Emergency Departments have been on the forefront of implementing programs that address population health needs. Unfortunately, funding for this program is ending, but it is hoped that the Opt-Out model can be implemented again in the future. Its impact on Jefferson patients and the community is very promising.

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## REFERENCES

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3. Philadelphia Department of Public Health. AIDS Activities Coordinating Office Surveillance Report, 2016. Philadelphia, PA: City of Philadelphia; September 2017.
4. Mammen PE, Sanaman P, Perrone, J. Grassroots efforts led by emergency physicians to mitigate the escalating opioid epidemic, circa 2012. Care redesign case study. *NEJM Catalyst*. April 25, 2018.