LEVERAGING THE EMERGENCY DEPARTMENT AS A PUBLIC HEALTH SAFETY NET FOR HEPATITIS C AND HIV SERVICES

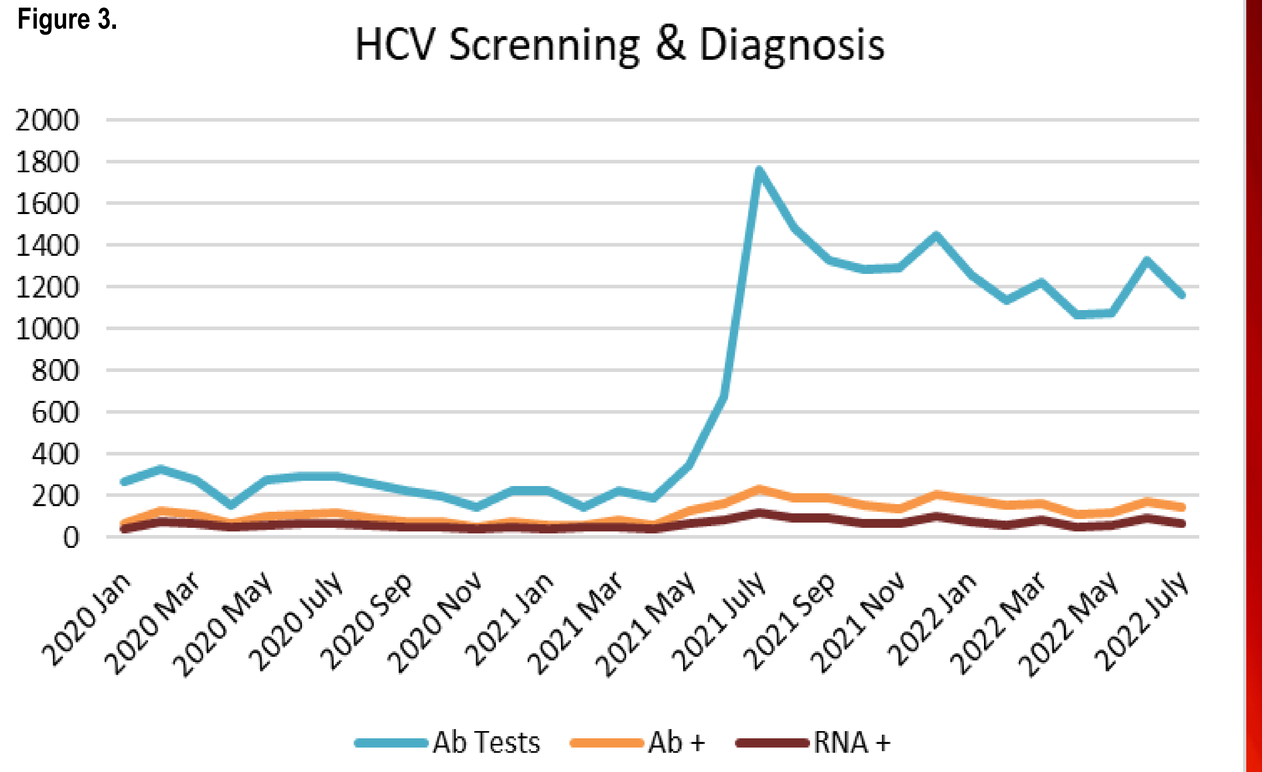
Barbra Cave PhD APRN[1], Kimberly Laun LCSW[1], Ashlee Melendez MSPH BSN[1], Suzannah Burch[1], & Adam Ross MD[1]
[1]University of Louisville
Louisville, Kentucky

Background: Primarily due to high rates of injection drug use**,** Kentucky is a leader in hepatitis C virus (HCV) and human immunodeficiency virus (HIV) infections (Van Handel et al., 2016; Zibbell et al, 2015). Investigators developed a self-sustaining model of HIV/HCV screening and diagnosis, linkage-to-care (LTC), and harm reduction (HR) services within an academic medical center in Kentucky. Program objectives included an increased rate of HCV/HIV diagnoses, LTC, and utilization of HR strategies.

Figure 1. Kentucky is highlighted in gold on this map of The United States. Kentucky is one of 13 states that make up the Appalachian Region of The United States.

Intervention: In 2019, a computer-based algorithm identified emergency department patients 18-45 years old who had not had HCV antibody and/or viral load in the previous 90 days, had an HCV risk factor, and did not opt out. In 2020, the program added HIV testing. To align with Centers for Disease Control guidance (Branson et al, 2006; Schillie et al, 2020), universal screening began in June 2021. Lab ordering was automated; results, education, and LTC were completed by navigators. People living with HCV and/or HIV were linked to care and HR; people at-risk, especially people who inject drugs(PWID) were offered HR. The cost of the program was offset by referring patients for services within the health system.

Figure 3.



Effectiveness: The number of HCV and HIV diagnoses increased despite the evolving COVID-19 pandemic (Figure 2). Figure 3 demonstrates increased HCV antibody detection using the universal testing strategy. The program was credited for identifying an HIV cluster among local PWID (Figure 4). Nearly 25% of people with HCV were LTC within 30 days of diagnosis; people living with HIV were confirmed as already being in care or LTC in 94% of cases. PWID could link to local syringe exchange programs, receive naloxone, and have other needs addressed by navigators.

Figure 2.

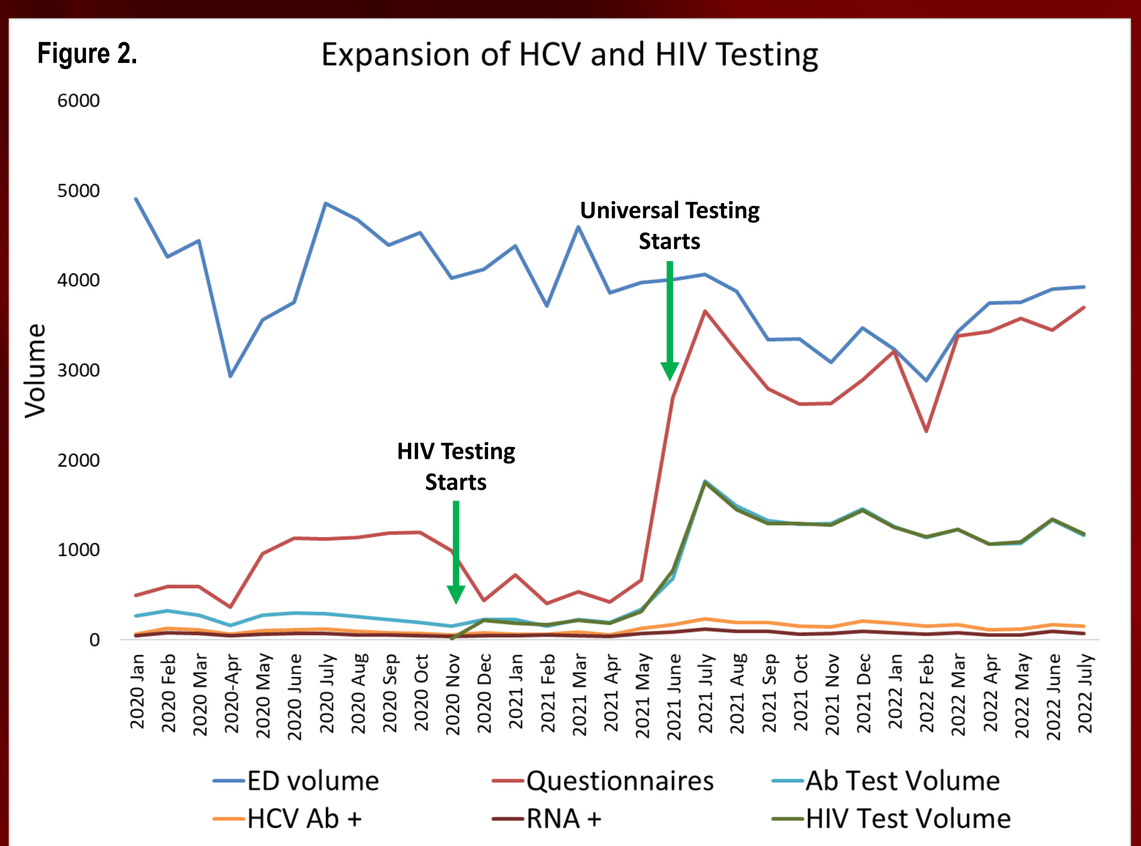
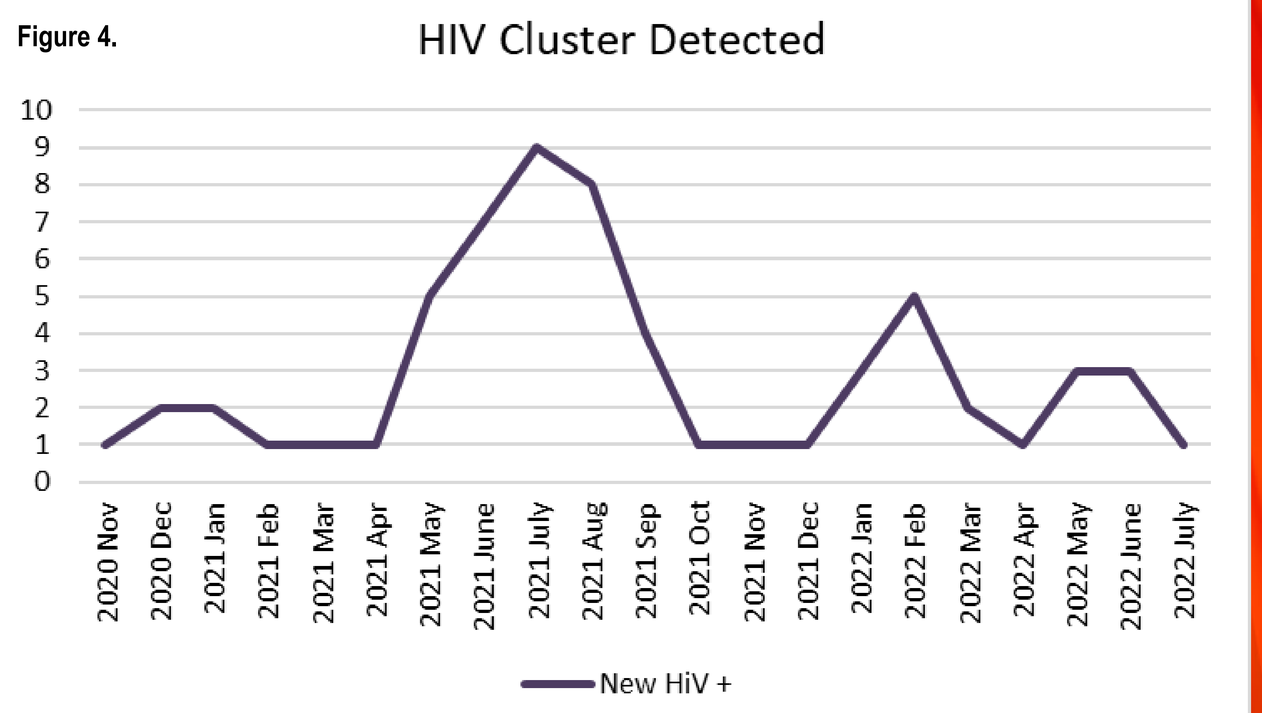


Figure 4.



Centers for Disease Control Prevention Screening and Testing Guidelines

HCV

HIV

Conclusion: In high HCV and HIV prevalence settings, universal testing uncovers high numbers of undiagnosed or out-of-care people, including PWID. Testing and LTC offer opportunities for education and implementation of HR strategies. This safety net model may lead to reduced disease burden in the community and improved health for people who use drugs.

References

Branson B, Handsfield HH, Lampe MA, et al. Revised recommendations for HIV testing of adults, adolescents, and pregnant women in health care settings. *MMWR Morb Mortal Wkly Rep* 2006;55(RR-14):1-17.

Schillie S, Wester C, Osborne M, Wesolowski L, Ryerson AB. CDC Recommendations for Hepatitis C Screening Among Adults — United States, 2020. MMWR Recomm Rep 2020;69(No. RR-2):1–17. doi: http://dx.doi.org/10.15585/mmwr.rr6902a1

Van Handel, M. M., Rose, C. E., Hallisey, E. J., Kolling, J. L., Zibbell, J. E., Lewis, B., Bohm, M. K., Jones, C. M., Flanagan, B. E., Siddiqi, A.-E. A., Iqbal, K., Dent, A. L., Mermin, J. H., McCray, E., Ward, J. W., & Brooks, J. T. (2016). County-Level Vulnerability Assessment for Rapid Dissemination of HIV or HCV Infections Among Persons Who Inject Drugs, United States. *JAIDS Journal of Acquired Immune Deficiency Syndromes, 73(3), 323-331.* doi:10.1097/qai.0000000000001098

Zibbell, J. E., Iqbal, K., Patel, R. C., Suryaprasad, A., Sanders, K. J., Moore-Moravian, L., Serrecchia, J., Blankenship, S., Ward, J. W., & Holtzman, D. (2015). Increases in hepatitis C virus infection related to injection drug use among persons aged≤ 30 years—Kentucky, Tennessee, Virginia, and West Virginia, 2006–2012. *MMWR. Morbidity and Mortality Weekly Report*, *64*(17), 453.

UNIVERSITY OF LOUISVILLE

Disclosure of Interest Statement: The model of care described here would not have been possible without a Frontlines of Communities in the United States (FOCUS) grant sponsored by Gilead Sciences. Gilead had no direct input into the model development or outcomes reported here.