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TIPS FOR IMPLEMENTING THE RUSH (ROUTINE UNIVERSAL SCREENING FOR HIV) INTERVENTION

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In 2006, the Centers for Disease Control and Prevention (CDC) recommended routine HIV screening for adults seen in all health care settings.[1] Routine HIV testing has been shown to require less time and labor than targeted or point of care (POC) testing, find undiagnosed cases on a larger scale than targeted testing, link patients to care resulting in earlier viral suppression, find out-of-care patients and re-link them to services, prevent new infections, and save lives and millions of dollars for the health care system. However, the implementation of routine testing recommendations has been inconsistent, with health care organizations encountering a multitude of challenges as they sought to adopt the recommended approach.

Harris Health System in Houston, Texas, a county-wide, urban, publicly funded health care system that includes emergency, inpatient and outpatient facilities, launched Project RUSH (Routine Universal Screening for HIV) in 2008 in their two high-volume emergency departments. Over the next two years, the program expanded to 12 ambulatory clinics and specialty programs (e.g., clinics based in homeless shelters) throughout the system. RUSH patients are residents of Harris County, TX. Patients between the ages 18 and 64 were considered eligible for testing. These types of public health care facilities are important venues to screen patients for HIV because HIV disproportionately affects populations whose primary access to health care is publicly supported systems. At the Thomas Street Health Center, an HIV clinic where newly diagnosed patients are referred, 74 percent of patients were living below 100 percent of the Federal Poverty Level (FPL) when the program began, and 85 percent were either African American (60 percent) or Latinx (25 percent).

Utilizing Ryan White Funding to Support HIV Testing Services

Even with the limitations of Ryan White funds (excluding Part C) to pay for HIV testing, funds can be used for the counseling, education, and case management activities essential to engaging individuals in the testing process and then linking them to appropriate services like HIV treatment, PrEP, and other prevention activities.

In Houston, the Ryan White Planning Council has developed detailed Standards of Care for Service Linkage (the term used locally to describe HRSA's service category of "non-medical case management"). To further delineate the role of Service Linkage Workers (SLW), Harris Health System developed a broad, flexible job description which includes:

- Provide HIV testing services
- Conduct and document initial patient assessments
- Assist patients with access and adherence to care
- Assure linkage to care through referrals and follow-up
- Assist patients in navigating service delivery systems
- Work with medical case managers and other clinicians to ensure the care plan is implemented

Salaries for most SLWs are split among grant funding from Ryan White Part A, Part C, and CDC Expanded HIV Testing, which is passed through to the Harris Health System from the Houston Health Department.

Considerations for Implementing a Routine Testing Program

To maximize existing assets and avoid pitfalls, it is essential to assess your readiness in several different areas. Basic areas that should be included in the assessment are:

- **Overview of HIV services currently being provided by the organization**
- **Consent process**
  - What does state law require?
  - What is the current consent process?
- **Data management needs and capabilities**
  - Is there an electronic medical record system? What capacity does it have for managing HIV data? If not, what will be needed to manage and report program data?
  - What data will be required to collect and report?
  - What else is needed for all necessary components of the data system to be in place before implementing RUSH?
- **Lab capabilities**
  - Which technology (rapid or standard) will be used?
  - Is there an on-site lab?
  - How will the collection of blood samples be organized?
- **Costs**
  - What resources (personnel, supplies, etc.) are needed, and what will they cost?
  - Will the organization receive third-party reimbursement for testing?
  - What will the process be for billing patients and third-party payers?
  - Are there existing funding sources that could be used to partially support the program? If not, what funding support is needed?
- **Leadership**
  - Has a senior-level champion for the program been identified?
  - Who/what departments should serve on the steering committee?
- **Staff and physician training**
  - Which groups of staff should be trained?
  - Who is the best person to conduct training for different groups?
  - How often and where should training be provided?
- **Leadership**
  - Have senior leaders been briefed about the program and are they supportive?
  - Who should be included on a steering committee?
  - What will be the role of the steering committee and how will it operate?
- **Communications**
  - Can you recruit a representative of your corporate communications department to be part of the steering committee?
  - What types of internal and external communications will be needed?
  - Will a communications budget be needed?
- **Legal**
  - What do state laws require regarding routine HIV testing?
  - Does your in-house legal department anticipate any legal barriers to implementing routine HIV testing?
  - Have you included legal representatives in your steering committee?
  - Is there someone from your risk management or corporate compliance department who should be included?

Possible Challenges

Creating a complex project which will operate throughout a large, multidisciplinary system inevitably brings challenges. Coordinating priorities such as obtaining consent, choosing a testing technology, ensuring patient privacy, especially when delivering test results in a busy emergency center, and overcoming negative attitudes about HIV and resistance to change is vital, especially given that processes must work seamlessly while being made clear to all staff involved. HIV testing can be a controversial subject, and some staff will likely have strong feelings about the topic. Educating those staff and providing a supportive environment for changing their attitudes will call for diplomacy and patience.

Another potential stumbling block is the necessity of building and maintaining close working ties with other public health partners. These relationships are essential to maintaining a smooth, accurate reporting process and assuring follow-up with newly diagnosed patients who have not successfully been linked to care. Agendas and priorities among public health partners are not always aligned. Alliances may need to be created where they have not existed in the past.

Creating a well-thought-out data management system before testing begins will ensure all information needed to monitor the project and produce required surveillance data is available from the first day of testing. It is much easier to have a data system in place before the first test is conducted rather than trying to design it after your program is inundated by patient demographics, test results, consent documentation, and all the other pieces of information you never realized you needed to track. Make sure to include representatives from your information technology department on the steering committee and budget for data management expertise, either on-staff or via a consulting relationship. Investigate how other organizations have addressed this challenge before trying to create a data management system from scratch.

Relevant Statistics

RUSH has continued to demonstrate its effectiveness, as shown by the increased prevalence rates in 2019, 11 years after the program began. RUSH activities were limited during 2020 due to Emergency Department operations being overwhelmed with COVID-19 patients, so 2019 data were used below instead to illustrate activity in a recent, more typical year.

RUSH Results

Measure	Aug 2008 – July 2021 Number/Percent	Jan – Dec 2019 Number/Percent
Tests performed	1,059,689	83,939
New positives	2,031	205
New positives prevalence rate	0.20% 0.30% in ERs	0.24% 0.60% in ERs
Previous positives	8,972	463
Total positives	11,003	668
Total positives prevalence rate	1.0%	0.8%
New Dx linked to care w/in 90 days*	NA	N = 184/241 76%

*New positives include those who received their diagnosis at health centers outside of the Harris Health System as well as by RUSH.

Stories from the Field

A 45-year-old Latinx male construction worker visited the Ben Taub Hospital Emergency Center with a fever and chief complaint of swollen lymph nodes on his neck. He also complained of epigastric pain and recent weight loss, which his primary care physician treated with a proton pump inhibitor. He reported being married with two children. His exam showed a low fever (100.3), and he was in no acute distress. He had a 2 cm supraclavicular lymph node. The patient was thought to have upper respiratory syndrome and gastroesophageal reflux. As he was about to be discharged from the Emergency Center, his HIV test results were delivered to the Service Linkage Worker. The patient was brought back into the Emergency Center and immediately admitted to the hospital. He was then diagnosed with disseminated histoplasmosis, and his CD4 cell count was found to be 9 cells x 10^6/L, with an HIV viral load >750,000 copies/mL. He was referred to Thomas Street Health Center on discharge from the hospital and has since started antiretroviral therapy. His most recent viral load is <50 copies/mL, and his CD4 cell count is 63 cells x 10^6/L. Without the routine screening program, his true diagnosis would have been missed and definitive care delayed.

Conclusion

Although RUSH began in a large, busy emergency center, it has proven to be adaptable to smaller environments with a few modifications. While you may find different population profiles in different sizes and types of organizations, the key components of using an opt-out process (minimizing extra work for staff), and incorporating service linkage into the workflow have consistently been feasible and successful.

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About CIE

NASTAD's Center for Innovation and Engagement (CIE) is funded by HRSA's HIV/AIDS Bureau (HAB), RWHAP Part F, Special Projects of National Significance (SPNS), under a three-year initiative entitled Evidence-Informed Approaches to Improving Health Outcomes for People with HIV. The purpose of this initiative is to identify, catalog, disseminate, and support the replication of evidence-informed approaches and interventions to engage people with HIV who are not receiving HIV health care or who are at risk of not continuing to receive HIV health care. Learn more at **www.CIEhealth.org** and **www.TargetHIV.org/CIE**.

References

[1] Branson, B.M., Handsfield, H.H., Lampe, M. et al. (2006). Revised recommendations for HIV testing of adults, adolescents, and pregnant women in health-care settings. *MMWR Recomm Rep.* 2006:55: 1–17.

[2] Hoxhaj, S., Davila, J., Modi, P., et al. (2011). Using nonrapid HIV technology for routine, opt-out HIV screening in a high-volume urban emergency department. *Annals of Emergency Medicine*, 58(1) S79–S84. DOI:10:1016/j.annemergmed.2011.03.030

Additional Resources

Ryan White HIV/AIDS Program Services: Eligible Individuals & Allowable Uses of Funds

https://hab.hrsa.gov/sites/default/files/hab/program-grants-management/ServiceCategoryPCN_16-02Final.pdf

2020–2021 Houston Eligible Metropolitan Area: Ryan White CARE Act Part A Standards of Care for HIV Services

http://rwpchouston.org/Publications/RWGA/Part%20A%20Standards%202020-2021.pdf

Center for Innovation and Engagement (CIE). Project RUSH Intervention Page

https://ciehealth.org/intervention/rush-routine-universal-screening-for-hiv/

Center for Innovation and Engagement (CIE). Project RUSH Technical Assistance

https://ciehealth.org/contact/