ROUTINE UNIVERSAL SCREENING FOR HIV (RUSH) PROGRAM
Evidence-Informed for Retention in HIV Care

INTERVENTION DESCRIPTION

Goal of Intervention
- Improve engagement in HIV care
- Improve retention in HIV care

Target Population
- Previously-diagnosed HIV patients

Brief Description
The Routine Universal Screening for HIV (RUSH) program provides non-medical case management services, opt-out HIV testing and linkage to care for emergency department (ED) patients. The program entails automatically adding an HIV screening for any patient aged 16 years or older, having an IV inserted, or having blood drawn for other reasons, unless the patient opts out. Service linkage workers (SLWs) work closely with physicians to deliver HIV test results to patients and provide linkage to HIV medical care and social services. SLWs attempt to contact all ED patients who test positive for HIV, regardless of whether the SLW believes the patient is newly diagnosed or was previously diagnosed with HIV infection. Linkage services are tailored to the patient’s needs, but most often include posttest counseling, transportation assistance, appointment scheduling, and help with applications for medical care, Ryan White assistance, and HIV drug assistance. SLWs retain a patient in their caseload until the patient is linked or relinked to care. After completion of an outpatient visit with a provider with antiretroviral prescribing privileges, a patient is transferred to a SLW based at an HIV clinic.

Intervention Duration
- Ongoing until patient has successfully completed a medical appointment at an HIV clinic

Intervention Setting
- Publicly funded emergency departments in two hospitals

Deliverer
- Service linkage workers
INTERVENTION PACKAGE INFORMATION

An intervention package is not available at this time. For intervention materials, please contact Siavash Pasalar, Harris Health System, Thomas Street Health Center, 2015 Thomas Street, Houston, Texas 77009.

Email: siavash.pasalar@harrishealth.org for details on intervention materials.

EVALUATION STUDY AND RESULTS

Study Location Information
The original evaluation was conducted in Houston, Texas.

Recruitment Settings
HIV test results and medical records from the RUSH testing program at two general hospital emergency rooms were evaluated. Test records and results were extracted from electronic laboratory databases.

Eligibility Criteria
Persons who were previously diagnosed with HIV who had an ED visit at either hospital between 2009 and 2012 and a positive HIV test result at the visit. The cohort was restricted to persons with an original date of diagnosis that was at least 1 year before the ED visit.

Study Sample
Study participants in the intervention cohort (n = 2,068) had the following characteristics:

- 68% black or African American, 17% Hispanic/Latino, 13% white, 2% other
- 65% Male, 35% Female
- 4% 16-24 years old, 19% 25-34 years old, 32% 35-44 years old, 32% 45-54 years old, 13% over 55 years old

Comparison
The 1396 patients who were previously diagnosed and had an ED visit between 2009 and 2012 were compared on outcomes for a 12-month period to 672 patients who were previously diagnosed and had an ED visit between 2004 and 2007. Demographic data for the study cohort (n=1396) are not available; however, demographic data for the total study cohort (n=2068) and the comparison cohort (n=672) which is a subset of the total study cohort, were similar.

Relevant Outcomes Measured
- Retention in care was measured as having completed 2 HIV primary care visits in a 12-month period, with the 2 visits being at least 3 months apart.
- Viral suppression was measured as having an HIV viral load below 200 copies per milliliter at any point in a 12-month period.
Significant Findings on Relevant Outcomes

- A significantly greater percentage of intervention cohort (post-RUSH) patients were retained in care compared to historical cohort (pre-RUSH) patients (p < 0.01).
  - During the RUSH era, retention in care increased from 32.6% pre-ED visit to 47.1% post-ED visit (adjusted OR = 2.75, CI: 2.31-3.28, p < 0.001).
    - Significant positive intervention effects were also seen in the following subgroups: females; males; black or African American; Hispanic or Latino; white; 16-24 year olds; 25-34 year olds; 35-44 year olds; 45-54 year olds; patients with a clinic visit in 2009, 2010, 2011, 2012; patients diagnosed with HIV 1-5 years ago, 6-10 years ago, and 11-15 years ago.
- A significantly greater percentage of intervention cohort (post-RUSH) patients achieved viral suppression compared to historical cohort (pre-RUSH) patients (p < 0.001).
  - During the RUSH era, viral suppression increased from 23% pre-visit to 34% post-visit (adjusted OR = 2.61, CI: 2.15-3.16, p < 0.001).
    - Significant positive intervention effects were also seen in the following subgroups: females; males; black or African American; Hispanic or Latino; white; 16-24 year olds; 25-34 year olds; 35-44 year olds; 45-54 year olds; patients with a clinic visit in 2009, 2010, 2011, 2012; patients diagnosed with HIV 1-5 years ago, 6-10 years ago, and 11-15 years ago.

Strengths

- Baseline characteristics for the intervention and historical cohorts were similar.
- Sample size was greater than 100.
- The retention in care outcome and follow-up assessment occurred at 12 months.

Considerations

- Engagement in care defined by the study authors as completing a HIV medical visit in a 6-month period is not considered a relevant outcome for the LRC best practices review, but a significantly greater percentage of intervention cohort (post-RUSH) patients completed a HIV primary care visit within 6 months compared to historical cohort (pre-RUSH) patients (p < 0.017).
  - During the RUSH era, the percentage of study participants completing a HIV medical visit within 6 months increased from 41.3% pre-ED visit to 58.8% post-ED visit (adjusted OR = 3.74, CI: 3.09-4.53, p < 0.001).
    - Significant positive intervention effects were also seen in the following subgroups: females; males; black or African American; Hispanic or Latino; white; 16-24 year olds; 25-34 year olds; 35-44 year olds; 45-54 year olds; persons 55 years old and older; patients with a clinic visit in 2009, 2010, 2011, 2012; patients diagnosed with HIV 1-5 years ago, 6-10 years ago, 11-15 years ago, 16-20 years ago and 21 years or more.

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