

RAPID (RAPID ART Program Initiative for new Diagnoses)



Evidence-Informed for the Structural Intervention Chapter

Evidence-Informed for the Linking and Retention in HIV Care Chapter

POPULATION

- Persons with a new HIV diagnosis

KEY INTERVENTION EFFECTS

- Improved linkage to HIV care
- Increased ART initiation
- Improved viral suppression

BRIEF DESCRIPTION

RAPID is a San Francisco citywide initiative to link persons with a new HIV diagnosis to care within 5 days of HIV diagnosis and initiate antiretroviral therapy (ART) within 1 day of the first care visit. Strategies during the first care visit include:

- Counseling and education
- Medical evaluation
- Baseline laboratory testing
- Benefits navigation
- Providing ART
- Providing follow up services including appointment with HIV primary care
- Partner services from the San Francisco Department of Public Health Linkage, Integration, Navigation, and Comprehensive Services (LINCS) Program
- Linkage to psychosocial support (housing assistance, substance use treatment, mental health care)

DURATION: One clinic visit, plus limited follow-up visits as needed until patient established in HIV primary care

SETTING: Clinic sites (San Francisco, CA) including several RAPID ART hubs

STUDY YEARS: 2013 – 2017

STUDY DESIGN: Serial cross-sectional

DELIVERERS: Trained HIV providers, LINCS navigators, social workers

DELIVERY METHODS: Counseling, Navigation services, Partner services

STUDY SAMPLE

The baseline study sample of N = 1,354 providers was characterized by the following:

- 42% White persons
 - 13% Black or African American persons
 - 27% Hispanic, Latino, or Latina persons
 - 13% Asian or Pacific Islander persons
 - 5% Persons identifying as another race or ethnicity
- 89% male persons, 8% female persons, 3% transgender female persons
- 32% persons 13-29 years old; 31% persons 30-39 years old; 37% persons ≥40 years old

STRUCTURAL COMPONENTS

Access – HIV medical care

- Immediate (within 5 working days) access to HIV medical care and ART

Capacity Building – Trained staff

- Trained LINCIS navigators, social workers, clinicians, and clinic staff on RAPID ART using in-services, medical grand rounds, written materials, and public health detailing program.

KEY INTERVENTION EFFECTS (see **Primary Study** for all outcomes)

- Throughout San Francisco, median time from diagnosis to first care visit decreased by 44%, from 9 to 5 days ($p < 0.001$) from 2013 to 2017.
- Median time from first HIV care visit to ART initiation decreased by 96% from 28 days to 1 day ($p < 0.0001$) from 2013 to 2017 and decreased significantly among all sociodemographic and exposure categories.
- Median time from ART initiation to viral suppression decreased by 37% from 79 to 50 days ($p = 0.0007$) from 2013 to 2017.
- Median time from diagnosis to first viral suppression decreased by 48% from 145 days to 76 days ($p < 0.0001$) from 2013 to 2017, but this varied widely by sociodemographic and exposure categories.

CONSIDERATIONS

- In a previous pilot study of RAPID ART at Ward 86, San Francisco General Hospital, that included 39 patients with new diagnosis of HIV in 2013 to 2014,* post-intervention participants reported:
 - a lower median time from referral to clinic intake visit than pre-intervention participants (1 vs. 13 days, respectively, $p < 0.001$)
 - a lower median time from referral to viral suppression than pre-intervention participants (56 vs. 132 days, respectively, $p < 0.001$)
 - a lower median time from diagnosis to viral suppression than pre-intervention participants (65 vs. 190 days, respectively, $p < 0.001$)
 - a shorter median time between clinic referral to viral suppression than pre-intervention participants (1.8 vs. 4.3 months, respectively, $p < 0.0001$)
- Another study with 225 patients who were referred to RAPID at Ward 86 from 2013 - 2017 found that 95.8% participants achieved viral suppression (< 200 copies/mL) within one year after intake.†
 - Viral suppression rates were 92.1% at last recorded viral load.

ADVERSE EVENTS

- The author did not report adverse events.

FUNDING

- Centers for Disease Control and Prevention (grant number NU62PS924536-01-00)

PRIMARY STUDY

Bacon, O., Chin, J., Cohen, S., Hessol, N., Sachdev, D., Coffey, S., Scheer, S., Buchbinder, S., Havlir, D., & Hsu, L. (2021). [Decreased time from human immunodeficiency virus diagnosis to care, antiretroviral therapy initiation, and virologic suppression during the citywide RAPID initiative in San Francisco](#). *Clinical Infectious Diseases*, 7(1), e122-e128. doi: 10.1093/cid/ciaa620

Bacon, O., Coffey, S., Hsu, L., Chin, J., Havlir, D., & Buchbinder, S. (2021). [Development of a citywide rapid antiretroviral therapy initiative in San Francisco](#). *American Journal of Preventative Medicine*, 61(5 Suppl. 1), S47–S54. doi: 10.1016/j.amepre.2021.06.001

PREVIOUS STUDIES

* Pilcher, C. D., Ospina-Norvell, C., Dasgupta, A., Jones, D., Hartogensis, W., Torres, S., Calderon, F., Demicco, E., Geng, E., Gandhi, M., Havlir, D. V., & Hatano, H. (2017). [The effect of same-day observed initiation of antiretroviral therapy on HIV viral load and treatment outcomes in a US public health setting.](#) *JAIDS Journal of Acquired Immunodeficiency Syndromes*, 74, 44-51. doi: 10.1097/QAI.0000000000001134

† Coffey, S., Bacchetti, P., Sachdev, D., Bacon, O., Jones, D., Ospina-Norwell, C., Torres, S., Lynch, E., Camp, C., Mercer-Slomoff, R., Lee, S., Christopoulos, K., Pilcher, C., Hsu, L., Jin, C., Scheer, S., Havlir, D., & Gandhi, M. (2019). [Rapid antiretroviral therapy: High virologic suppression rates with immediate antiretroviral therapy initiation in a vulnerable urban clinic population.](#) *AIDS*, 33(5), 825-832. doi: 10.1097/QAD.0000000000002124

PLEASE CONTACT STUDY AUTHOR FOR TRAINING AND INTERVENTION MATERIALS.

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