San Juan's Project TIES: Demonstrating the Strength of Rapid ART in Improving **Health Outcomes of People Diagnosed with HIV**

The Challenge

The federal, multi-agency Ending the HIV Epidemic in the U.S. (EHE) initiative, which began in 2020, is an ongoing effort to decrease the number of new HIV infections in the United States by 2030. CAI's Technical Assistance Provider-innovation network (TAP-in), funded by the Health Resources and Services Administration's (HRSA) HIV/AIDS Bureau (HAB), provided technical assistance (TA) to the 47 HRSA-funded EHE jurisdictions to help them achieve this goal. The San Juan jurisdiction partnered with TAP-in, including TAP-in Partner UCLA, to support expanding and strengthening Rapid ART in San Juan.

San Juan bears a disproportionate burden of HIV, with over 4,122 prevalent HIV cases in 2024,² primarily among men who have sex with men (MSM) and people who inject drugs (PWID).³ Previously, persons diagnosed with HIV referred to Ryan White HIV/AIDS Program (RWHAP) services underwent confirmatory testing prior to receiving a prescription for antiretroviral therapy (ART). While ideally slated to occur within 30 days, persons newly diagnosed with HIV in San Juan, on average, received a medical evaluation in 28.7 days and initiated ART in 43.4 days.²

"The results obtained from monitoring this standard of care in San Juan will be very useful when promoting its implementation in other jurisdictions. Our experience with Rapid ART is a model to follow to help end the HIV epidemic in Puerto Rico." ~ Deputy Director, AIDS Task Force, Ryan White HIV/AIDS Program Part A, EHE-TIES Project

EHE enabled San Juan to implement Rapid ART, an evidence-based intervention that dispenses medication to people diagnosed with HIV in seven or fewer days without a confirmatory HIV test.⁴ The protocol has been shown to reduce barriers to care, improve retention in HIV care, increase rates of viral suppression, and mitigate the chances of HIV transmission. 4 The San Juan EHE-TIES Project designed and implemented a Rapid ART program for its jurisdiction grounded in implementation science, the latest HIV treatment guidelines from the U.S. Department of Health and Human Services recommending Rapid ART (Figure 1),⁵ and the lessons learned from the 2020-2023 HRSA/HAB SPNS Initiatives Rapid ART Start⁶ and the Rapid ART Dissemination Assistance Provider (DAP) project.⁷

Figure 1: Evolution of Department of Health and Human Services ART Initiation Guidelines **Evolution of HHS ART Initiation Guidelines** 2019 – ART Initiation at Time of Diagnosis

2016 - Earlier ART Recommended, Regardless of CD4/Viral Load

1996-2016 - ART Initiation Based on CD4/Viral Load Levels

Methods

The San Juan EHE-TIES Project identified nine subrecipients to deploy Rapid ART. These subrecipients encompassed three early intervention providers (i.e., Estancia Corazon, Hogar CREA, and La Perla de Gran Precio) and an alliance of six clinics delivering HIV testing and outpatient medical services (i.e., AIDS Healthcare Foundation, Centro Ararat, Iniciativa Comunitaria, Programa SIDA (Centro Dr. Manuel Díaz Garcia and Municipoio de San Juan), Puerto Rico Community Network for Clinical Services, Research and Health Advancement (CONCRA), and Prepven Health Clinic. Municipio de San Juan grounded the EHE-TIES Project in

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implementation science practices with guidance and technical assistance from CAI's TAP-in and TAP-in Partner UCLA.

Figure 2: Phases of San Juan EHE-TIES Project Rapid ART Implementation (EPIS Model)

PHASES OF RAPID ART IMPLEMENTATION



Exploration

Understanding gaps and disparities
Analyzing the system of care
Determining interventions that address the needs of the population
Analysis of data from the

community needs assessment



Readiness

Readiness assessment Staff training Justification to leadership Commitment at all levels Development of the M&E system



Implementation

Monitoring and data collection Creating and modifying contracts to support implementation TA with experts Quality improvement cycles

Quality improvement cycles Care provided/services in progress



Sustainability

Financial support
Resource mobilization
Protocolization and
systematization of changes
Establishment of care
standards
Permanent coordination and
monitoring

Rollout of the EHE-TIES project followed a phased approach, starting with **Exploration**, which involved formative research to identify San Juan's gaps and disparities in HIV service. During the **Preparation** phase, the jurisdiction met with each subrecipient to assess their readiness to implement Rapid ART and develop a tailored Rapid ART protocol as part of their standard of HIV care. This protocol included diverse partners including the HIV Treaters Medical Association of Puerto Rico. The Northeast/Caribbean AETC contributed with additional training and capacity building for providers and staff. In this phase, the team defined the monitoring and evaluation (M&E) framework and established Rapid ART indicators for CAREWare. The ensuing **Implementation** phase included the development of support contracts, monthly technical assistance, workflow flowcharts, case studies, M&E updates, and refresher training for personnel in data entry and management. Finally, **Sustainability** was facilitated through monthly reviews of Rapid ART indicators results in the jurisdiction overall and within each subrecipient organization.

"When I received the diagnosis, I quickly tried to get the medication, but the medical plan denied it to me. I was very frustrated because I couldn't believe everything that was happening. That day, I went to the clinic and left with the medication. It was a bittersweet experience ... I even cried in your pharmacy. I couldn't believe that I finally had in my hands what I wanted so much and that I couldn't get." ~ EHE-TIES Project Client

Findings

From July 1, 2022, to May 6, 2024, the EHE-TIES Project's six clinical subrecipients identified 86 people with HIV (PWH), both newly diagnosed and re-engaged in care. Among them, 80 (93%) received ART in 7 days or less, and 73 (85%) received ART in 3 days (Table 2). While clinic assessments indicated providers initially felt that 3 days would not be possible, the jurisdiction decided to gather data for both 3- and 7-day initiation and found robust initiation within 3 days. These findings illustrate Rapid ART's ability to engage clients in HIV care from the time of diagnosis, breaking down barriers to care and treatment adherence. Of the 80 EHE-TIES project participants who received Rapid ART, 99% were retained in care, 96% received outpatient medical follow-up within 14 days, and 90% achieved viral suppression (Table 2). Iterative client satisfaction surveys found that clients fully "bought-in" to the care process.

Table 1: Number of San Juan Project TIES-EHE Clients by Subrecipient and Overall, that Received ART within 7 Days of Diagnosis, July 1, 2022, to November 30, 2024

6 Sub-recipients Offering Outpatient Medical Services	\ /	Patients Who Received ART in 7 Days or Less After HIV Diagnosis or Returned to Care (n, %)
Centro Ararat	19	17 (89%)
AIDS Healthcare Foundation	53	50 (94%)
Iniciativa Comunitaria	2	1 (50%)

Programa SIDA	23	23 (100%)
PR CONCRA	79	76 (96%)
Prepven	14	13 (93%)
Total	190	180 (95%)

Table 2: San Juan Project TIES-EHE: Indicators for Clients Who Received ART Within 7 Days of Diagnosis, July 1, 2022, November 30, 2024

Indicator	N (%)
Clients Who Received ART Between 1 – 3 Days	162 (90%)
Clients Who Received ART Between 4 – 7 Days	18 (10%)
Clients Retained in Care*	161/162 (99%)
Clients Received Outpatient Medical Follow-Up within 14 Days of Receiving ART	180 (100%)
Achieved Viral Suppression **	89/107 (83%)

^{*}Denominator includes those patients with at least one medical visit in the last 12 months by November 30, 2024.

Successes and Challenges

The San Juan jurisdiction faced several challenges, including the administrative/fiscal departments for subrecipients concerns regarding RAPID ART fiscal and legal coverage with the RWHAP and EHE funds. Finding consensus among diverse partners and subrecipients required negotiation but resulted in a Rapid ART protocol that met the training needs of clinicians and staff, while addressing the sociocultural experiences of the diverse populations served. While requiring ART initiation within 7 days with a 14-day follow-up, the remaining elements of the jurisdiction-wide protocol can be tailored for each clinic's workflow. The EHE-TIES Project deftly addressed these issues through its phased implementation science approach and iterative program evaluation. San Juan, in turn, tracked data and outcomes for clinical indicators for the jurisdiction overall and at each clinical subrecipient.

Implications and Next Steps

PWH in San Juan who engaged in Rapid ART experienced significantly better HIV outcomes than those who received services under the previous standard of care. The EHE-TIES Project shows that implementation science and M&E can be essential for the planning, implementation, and sustainability of Rapid ART as the standard of care. Next steps involve ongoing evaluation of the program, coupled with pursing funding and additional training to expand the program outside San Juan into neighboring Bayamón and Carolina, which have high HIV incidence rates. After seeing the results of the EHE-TIES Project at presentations at the National Ryan White Conference and the U.S. Conference on HIV/AIDS in 2024, these areas requested support for Rapid ART implementation. San Juan recommends that jurisdictions seeking to implement Rapid ART engage early in the planning process with all available technical assistance and obtain input from service providers and other stakeholders. A robust programmatic design and evaluation process for Rapid ART can help translate into better engagement in HIV services and, as a result, improve the lives of people with HIV and make progress toward the goals of ending the epidemic.

"The data from San Juan is exciting. Not only did they demonstrate the importance of including and planning for the monitoring and evaluation component from the beginning of the rapid initiation program, but they additionally included users who were out of medical care or who, although diagnosed, were never in medical care in their rapid initiation protocol, obtaining very good results for both groups." ~ Susa Coffey, MD – Professor, UCSF Division of HIV, Infectious Diseases and Global Medicine at San Francisco General Hospital (SFGH), Lead of RAPID ART program at SFGH, TAP-in SME for Rapid ART

^{**}Denominator excludes patients with 90 days or less active in the protocol from the end date of the report.

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⁶ Bourdeau B, Shade SB, Koester KA, Rebchook GM, Steward WT, Agins BM, Myers JJ, Phan SH, Matosky M. Rapid start antiretroviral therapies for improved engagement in HIV care: implementation science evaluation protocol. *BMC Health Services Research*. 2023 May 17;23(1):503.

¹ HIV.gov. (2023, December 4). EHE Overview. https://www.hiv.gov/federal-response/ending-the-hiv-epidemic/overview

² Visit the Puerto Rico Government Official Portal BioData, https://datos.salud.pr.gov/hiv-aids/publications, 4,122 cases by Oct 31, 2024

³ Meneses M, Quiñones-Morales M, Donohoe T. Utilizando la ciencia de la implementación para expandir y fortalecer la provisión de IR-TAR en San Juan [Using implementation science to expand and strengthen rapid ART provision in San Juan]. 2024 National Ryan White Conference on HIV Care and Treatment. 2024 August 23; Session ID: 25403.

⁴ Michienzi SM, Barrios M, Badowski ME. Evidence regarding rapid initiation of antiretroviral therapy in patients living with HIV. Current Infectious Disease Reports. 2021 May;23:1-9.

⁵ Department of Health and Human Services. HIV.gov Clinical Info. HIV clinical guidelines: adult and adolescent ARV. Federally Approved Clinical Practice Guidelines for HIV/AIDS. Updated September 12, 2024. Available at https://clinicalinfo.hiv.gov/en/guidelines.

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