

TRANSITIONAL CARE COORDINATION (TCC): PUERTO RICO

Evidence-Informed Structural Intervention

INTERVENTION DESCRIPTION

Goals of Intervention

- Address social determinants of health
- Improve access to HIV care services after incarceration

Intended Population

- Incarcerated persons with HIV (PWH)

Brief Description

Transitional Care Coordination (TCC) is a structural-level intervention focused on improving HIV-related outcomes for incarcerated persons with HIV (PWH) prior to their transition back into their communities. In Puerto Rico, TCC is integrated into the existing organization operations of The One Stop Career Center of Puerto Rico (OSCC-PR) to address health care access and social determinants of health (e.g., housing, employment/income, food, transportation, social support) for incarcerated persons with HIV. Direct service staff at OSCC-PR are trained in care coordination, HIV treatment and prevention, stigma, and sexually transmitted infections (STIs), as well as crisis intervention. Direct service staff responsibilities also include accompanying PWH from correctional facilities to their home and offering community case management, transportation, accompaniment to HIV care, and support in accessing mental health and substance use services, as well as support to address other needs (e.g., housing, employment/income, personal hygiene products). In addition to the TCC services, the OSCC-PR also established a provider network across all jurisdictions in Puerto Rico to support reentry and address care needs for PWH.

Theoretical Basis

- None reported

Intervention Duration

- Ongoing

Intervention Settings

- Correctional facilities
- Community-based organization

Deliverer

- Interventionists (i.e., direct service staff who are trained in care coordination, HIV treatment and prevention, issues of stigma, prevention of sexually transmitted infections (STIs), crisis intervention, and survey administration and documentation)

Delivery Methods

- Case management
- Discharge care plan development
- Linkage to care
- Transitional care services

Structural Components

- Access – HIV health care
 - Facilitated access to HIV care and services for PWH re-entering the community by establishing a provider network within Puerto Rico, which included the following activities:
 - Formalizing existing and developing new relationships with the public, providers, and non-profit organizations to facilitate care coordination and services
 - Creating a consortium of health, housing, and social service organizations (e.g., Ryan White) to help coordinate services and facilitate access to HIV care post-incarceration
 - Organizing annual stakeholder convenings named “Fortaleciendo Enlaces (Strengthening Collaborations)”
- Capacity Building – Hiring; Provider/supervisor training
 - Hired and trained additional direct service staff to assist in the implementation of care coordination, HIV treatment and prevention, issues of stigma, prevention of STIs, crisis intervention, and survey administration and documentation
- Physical Structure – Integration of services
 - Integrated TCC services into existing housing and employment service organizations (e.g., OSCC-PR)
- Social Determinants of Health – Survival
 - Offered transportation, accompaniment to HIV care and services, and assistance with accessing mental health and substance use services, housing, employment/income, food/groceries, clothing, and personal hygiene products (e.g., soap, shampoo)

INTERVENTION PACKAGE INFORMATION

The intervention package is not available at this time. Please contact **Alison O. Jordan**, New York City Department of Health and Mental Hygiene, 200 Construction Way, East Elmhurst, NY 11370; or **Janet J. Wiersema**, NYC Health + Hospitals Correctional Health Services, 55 Water Street, 18th Floor, New York, NY 10041.

Email: Alison O. Jordan (ajordan@health.nyc.gov) or Janet J. Wiersema (jwiersema1@nychhc.org) for details on intervention materials.

EVALUATION STUDY AND RESULTS

Study Location Information

The original evaluation study was conducted in Puerto Rico (PR) between November 2015 and July 2018.

Key Intervention Effects

- Improved ART uptake

Study Sample

The baseline study sample of incarcerated persons with HIV (n = 69) is characterized by the following:

- 75% male persons, 25% female persons
- Mean age of 43.9 years
- 53% < high school or GED, 41% high school diploma or GED, 6% > high school or GED
- 36% persons experiencing homelessness in the 6 months prior to incarceration
- 91% ever taken ART
- 89% currently taking ART (during incarceration)
- 46% took ART before current incarceration (n = 67)
- 95% plans to take ART after release (n = 66)
- 88% virally suppressed (viral load \leq 200 copies/mL)

Note: Percentages may not add up to 100% due to rounding.

Recruitment Setting

- One federal detention center and 12 PR-run correctional facilities

Eligibility Criteria

Persons with HIV were eligible if they were incarcerated in a PR correctional facility, likely to be released to the community within 6 months, and aged 18 years or older.

Comparison

The study design was a one group pre-post intervention cohort study. The cohort study pre-intervention (baseline) data was compared to 6-month and 12-month follow-up data. The analytic sample of participants who had 6- and 12-month assessments included 35 participants.

Relevant Outcomes Measured

- ART uptake was measured at baseline and at 6- and 12-month follow-ups defined as taking ART in the 6 months prior to incarceration (baseline) or in the 6 or 12 months after incarceration as reported at the respective follow-up interviews.

Participant Retention

- 61% of study participants (42 of 69) were retained at the 6- and 12-month follow-up. Because participant retention is not a criterion for the Structural Interventions chapter, the Prevention Research Synthesis project does not evaluate that information.

Significant Findings on Relevant Outcomes

- A significantly greater percentage of participants reported taking ART at 6- and/or 12-month follow-up interviews than at baseline (prior to incarceration) (baseline = 57.1%; 6-month follow-up = 94.3%; 12-month follow-up = 88.6%; Cochran's Q test = 22.62; p = 0.000). Post-hoc analyses indicated a statistically significant difference between baseline and 6- month follow-up, and baseline and 12-month follow-up.

Strengths

- None identified

Considerations

Additional significant positive findings on non-relevant outcomes

- A significantly smaller percentage of participants reported food insecurity (i.e., having 2 or more days without or with barely any food to eat) at 6- and/or 12- month follow-up interviews than at baseline (baseline = 42.9%; 6-month follow-up = 14.3%; 12-month follow-up = 31.4%; Cochran's Q test = 7.60; $p = 0.022$). Post hoc analyses indicated a statistically significant difference between baseline and 6-month follow-up
- A significantly smaller percentage of participants reported lack of transportation as a barrier to getting HIV care at 6-month and/or 12-month follow-up interviews than at baseline (baseline = 37.1%; 6-month follow-up = 8.6%; 12-month follow-up = 20.0%; Cochran's Q tests = 10.86; $p = 0.004$). Post hoc analyses indicated a statistically significant difference between baseline and 6-month follow-up.
- A significantly greater percentage of participants reported previously or currently having health insurance/Medicaid at 6-month and/or 12-month follow-up interviews than at baseline (baseline = 80.0%; 6-month follow-up = 94.3%; 12-month follow-up = 97.3%; Cochran's Q test = 6.89; $p = 0.032$). Post-hoc analyses indicated a statistically significant difference between baseline and 12-month follow-up.
- There was a significant increase in mean CD4 count at the 6-month and/or 12-month follow-up interviews than at baseline (baseline = 568.4; 6-month = 665.4; 12-month follow-up = 761.7; Friedman's Q test = 8.54, $p = 0.014$). Post-hoc analyses indicated a statistically significant difference between baseline and 12-month follow-up.
- A significantly greater percentage of participants reported engaging in care (i.e., self-report of receiving HIV-related care in a doctor's office or clinic) at 6- and/or 12-month follow-ups than at baseline (baseline = 68.6%; 6-month follow-up = 94.3%; 12-month follow-up = 97.1%; Cochran's Q test = 15.17; $p = 0.001$). Post-hoc analyses indicated a statistically significant difference between baseline and 6-month follow-up and between baseline and 12-month follow-up. This finding did not meet criteria for the Linkage to, Retention in, and Re-engagement in HIV Care chapter because engagement in care was self-reported.

Non-significant findings on relevant outcomes

- There were no significant intervention effects at 6- and 12-month follow-up for viral suppression

Negative findings

- A significantly greater percentage of participants needed transportation services for HIV care at 6- and 12-month follow-up interviews respectively than at baseline (baseline = 48.6%; 6-month follow-up = 68.0%; 12-month follow-up = 82.9%; Cochran's Q tests = 13.63; $p = 0.001$). Post-hoc analyses indicated a statistically significant difference between baseline and 6-month follow-up and between baseline and 12-month follow-up. Limited public transit availability outside of the San Juan metropolitan area hindered access to health care and other community supports, particularly for people returning to remote areas after incarceration. Recognizing this barrier, OSCC-PR secured funds for a vehicle and driver and transported more than half the clients to clinic visits and other needs.

Other related findings

- The program's positive outcomes could be attributed to the dedication of substantial resources for community follow-up, having the same interventionists meet with clients throughout the intervention (from incarceration to follow-up in the community), securing funds for a vehicle and a driver and transporting clients to clinic visits and for other needs, working with attorneys to clear arrest records to the extent possible and with employers and landlords, checking in on clients after Hurricane Maria and providing supplies for basic needs.

- During the implementation of TCC in Puerto Rico, Hurricane Maria occurred in September 2017, and disrupted Puerto Rico and all involved in the study. Three clients re-located to the mainland U.S. and four died. Although follow-up was impacted in the hurricane aftermath, it is unknown whether the intervention or hurricane impacted these or other clients who declined further participation, were lost to follow-up, or had insufficient follow-up time.
- This study is an adaptation of Transitional Care Coordination (TCC): New York City, which provided transition services and support for incarcerated PWH in New York City, NY. TCC New York is also determined to be an Evidence-Informed Structural Intervention.

Implementation research-related findings

- None reported

Process/study execution findings

- None reported

Adverse events

- None reported

Funding

Special Programs of National Significance (SPNS) grant from the Health Resources and Services Administration (HRSA), (cooperative agreement number 4 H97HA274310302)

REFERENCES AND CONTACT INFORMATION

Wiersema, J. J., Cruzado-Quiñones, J., Cosme Pitre, C. G., & Jordan, A. O. (2020). [Client outcomes from a multilevel intervention to support persons living with HIV and returning to the community after incarceration in Puerto Rico](#). *AIDS Education and Prevention*, 32(3), 181-195. doi: 10.1521/aeap.2020.32.3.181

Researcher: Janet J. Wiersema, DrPH, MPH

NYC Health + Hospitals Correctional Health Services
55 Water Street, 18th Floor
New York, NY 10041

Email: jwiersema1@nychhc.org

