HIV CARE COORDINATION PROGRAM (CCP)

Evidence-Informed Structural Intervention

Evidence-Informed for Retention in HIV Care

INTERVENTION DESCRIPTION

Goal of Intervention

- Improve retention in HIV care

Target Population

- Persons who are recently diagnosed with HIV or who are at high risk for, or have a history of, suboptimal HIV care outcomes (e.g., never in care, lost to care, inconsistently in care, or exhibiting ART adherence problems)

Brief Description

The *HIV Care Coordination Program* (CCP) aims to retain clients in HIV care by offering home- and field-based patient navigation services, coordinating medical and social services, providing support and coaching for medication adherence, and assisting clients with gaining skills and knowledge to maintain a stable health status. Specific intervention components include: 1) outreach for initial case finding and after any missed appointment; 2) case management, including social services and benefits assessments; 3) multidisciplinary care team communication and decision-making via case conferences; 4) patient navigation, including appointment reminders, assistance with scheduling appointments, transportation resources, and accompaniment to primary care visits; 5) ART adherence support, including directly observed therapy for individuals with greatest need; and 6) structured health promotion using a curriculum developed by the Partners in Health and Brigham and Women's Hospital Prevention and Access to Care and Treatment (PACT) program. Depending on level of need, clients meet weekly, monthly or quarterly with CCP staff.

Intervention Duration

- On-going, based on client's level of need

Intervention Setting

- HIV clinic operated by hospitals and community-based organizations that are co-located with or have formal partnerships with clinical facilities; services also provided in client residences and other field-based settings

Deliverer

- Care coordinator, medical center liaison, patient navigator, medical care provider, and directly observed therapy (DOT) specialist (Note: the DOT Specialist role may be fulfilled by a person in any of the first four roles, in some instances)

Delivery Methods

- ART adherence support
- Case management services
- Case conferences
- Comprehensive care planning
- Outreach
- Patient navigation
- Structured health education curriculum

Structural Components

- Access
  - Increased access to HIV medical care, specialty care, mental health care, substance abuse services, diagnostic services, laboratory services, and supportive services
- Physical Structure – Services provided in non-traditional settings
  - Intervention components are offered in the clients' home or other field-based settings

INTERVENTION PACKAGE INFORMATION

Intervention materials are available in the form of an online toolkit at:
https://www.cdc.gov/hiv/effective-interventions/treat/steps-to-care/index.html

Email: Gina Gambone (**ggambone1@health.nyc.gov**) and **Jennifer Carmona** (**jcarmona@health.nyc.gov**) for additional intervention materials.

EVALUATION STUDY AND RESULTS

Study Location Information

The original evaluation was conducted in New York, New York, with follow-up data covering the period from December 2009 to September 2013.

Recruitment Settings

NYC CCP-funded service sites (hospitals and community-based organizations that are co-located with or have formal partnerships with clinical facilities)

Eligibility Criteria

HIV-infected adults or emancipated minors who were eligible for local Ryan White Part A services (based on residence within the New York grant area and household income <435% of federal poverty level) and who were 1) newly diagnosed with HIV; 2) never in care or lost to care for at least 9 months; 3) irregularly in care or often missing appointments; 4) starting a new antiretroviral treatment (ART) regimen; 5) experiencing ART adherence barriers; or 6) manifesting treatment failure or ART resistance.

Study Sample

At time of enrollment, the CCP participants included in the analysis (n = 3,641) had the following characteristics:

- *53% Black or African American, 38% Hispanic/Latino, 6% White, 3% other/unknown*
- *63% male, 37% female*
- *6% 24 years old or younger, 42% 25-44 years old, 49% 45-64 years old, 3% over 64 years old*

- *13% newly diagnosed (in the year before enrollment), 13% previously diagnosed and out-of-care, 74% previously diagnosed and current to care*
- *70% on antiretroviral therapy, 30% not on antiretroviral therapy*
- *29% with suppressed HIV-1 RNA viral load (≤ 200 copies/mL); 71% with unsuppressed HIV-1 RNA viral load (> 200 copies/mL)*

Comparison

For the 3,176 *previously diagnosed* study participants, outcomes during the 12-month period after enrollment in the CCP intervention (based on client-specific enrollment start dates in 2009 - 2011) were compared to outcomes for the same participants during the 12-month period before enrollment (2008 - 2010), by matching program data with the NYC HIV Surveillance Registry.

Relevant Outcomes Measured

- Retention in care was defined as having at least 2 laboratory tests (CD4 or VL) dated at least 90 days apart, with at least 1 of those tests in each half of a given 12-month period.

Significant Findings on Relevant Outcomes

- Among previously diagnosed clients (n = 3,176), the proportion of participants meeting the above criteria for retention in care significantly increased from the pre-intervention period to the post-intervention period (73.7% vs. 91.3%; RR = 1.24, CI: 1.21-1.27).
    - Significant positive intervention effects were also seen in the following subgroups: currently in care (had evidence of care in the 6 months before enrollment); males; females; Blacks or African Americans; Hispanics/Latinos; Whites; persons 24 years old and younger; 25-44 year olds; 45-64 year olds; persons 65 years old and older; English speakers; Spanish speakers; persons speaking a language other than English or Spanish; insured; uninsured; homeless persons; housed persons; persons with unknown housing status; persons with household incomes less than $9,000; persons with household incomes equal to or greater than $9,000; persons missing household income data; persons on ART at enrollment; persons not taking ART at enrollment; U.S.-born; foreign-born; persons with unknown country of birth; persons diagnosed before 1995; persons diagnosed between 1995 and 2004; persons diagnosed between 2005 and 2011; persons not virally suppressed; persons with CD4 counts less than 200; persons with CD4 counts between 200 and 349; persons with CD4 counts between 350 and 499; persons with CD4 counts 500 and above; and persons with no known CD4 count for the six months before enrollment.

Strengths

- Sample size was greater than 100.
- Post-intervention levels for retention in HIV care were above 80% among previously diagnosed clients (n = 3,176) and newly diagnosed clients (n = 465). Post-intervention levels for retention in care were over 90% for both groups.
- The retention in care outcome and follow-up assessment occurred at 12 months.
- There was a statistically significant positive increase in the percentage of persons with viral suppression from pre- to post- intervention.

Considerations

- Retention in care and viral load findings are also reported for newly diagnosed clients (n = 465), but pre-implementation data are not available for this group, and thus these findings cannot be evaluated using

evidence-informed criteria. Twelve months after the CCP intervention, 90.5% of newly diagnosed persons were retained in HIV care and 66.2% had viral suppression.

- This intervention is also determined to be evidence-informed for the Linkage to, Retention in, and Re-engagement in HIV Care (LRC) Chapter.
- A subsequent study that used a comparison group to evaluate CCP was determined to be evidence-based for the Linkage to, Retention in, and Re-engagement in HIV Care (LRC) Chapter.

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REFERENCES AND CONTACT INFORMATION

Irvine, M. K., Chamberlin, S. A., Robbins, R. S., Myers, J. E., Braunstein, S. L., Mitts, B. J., . . . Nash, D. (2015). Improvements in HIV care engagement and viral load suppression following enrollment in a comprehensive HIV care coordination program. *Clinical Infectious Diseases, 60,* 298-310.

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