

# HIV NURSE NAVIGATION PROGRAM

## Evidence-Informed Structural Intervention

### INTERVENTION DESCRIPTION

#### Goal of Intervention

- Improve CD4 count
- Improve medication adherence
- Improve viral load suppression
- Increase engagement in HIV care

#### Target Population

- Veterans with HIV who have poor engagement in HIV medical care

#### Brief Description

*HIV Nurse Navigation Program* is a structural intervention designed to improve engagement in care and medication adherence for veterans with HIV who attend a Veterans Affairs (VA) Infectious Disease primary care clinic. A registered nurse is dedicated as a navigator in the clinic and provides an individualized approach that includes care management, intensive outreach, and collaboration with existing support systems. In the event of missed clinic visits, the nurse navigator actively reaches out to patients by calling both the veteran and any available emergency contact until the patient is reached. The nurse navigator helps with pillbox renewals, reminder calls (i.e., upcoming appointments and medication renewal), text reminders, same day walk-in clinics, and collaborates with family members, clinic staff, and specialty consultants. The nurse navigator also maintains a password protected database of patient-specific information (e.g., medication renewal dates, upcoming appointments, most recent contacts) to track progress, and disseminates any pertinent information (e.g., patient moved out of state) to the rest of the treatment team.

#### Theoretical Basis

None reported

#### Intervention Duration

- Ongoing

#### Intervention Setting

- Washington, D. C. Veterans Affairs Medical Center's Infectious Disease Clinic

#### Deliverer

- Registered nurse navigator

#### Delivery Methods

- Patient outreach
- Care management
- Collaboration with existing networks (e.g., families, social work, medical services, community programs)

## Structural Components

- Access
  - Increased access to HIV testing and linkage to HIV medical care
- Capacity building – Hiring staff
  - Hired registered nurse with experience working within integrated teams and chronic disease management to serve as nurse navigator and create nurse navigation program
- Policy/Procedure – Institutional policy/procedure
  - Implemented nurse navigation program in the Infectious Disease Clinic

## INTERVENTION PACKAGE INFORMATION

**An intervention package is not available at this time.** Please contact **Alpha Y. Tessema** or **Debra A. Benator**, Washington D. C. Veterans Affairs Medical Center, 50 Irving Street, NW, Washington D. C. 20422.

Email: [alpha.tessema2@va.gov](mailto:alpha.tessema2@va.gov) or [debra.benator@va.gov](mailto:debra.benator@va.gov) for details on intervention materials.

## EVALUATION STUDY AND RESULTS

### Study Location Information

The original evaluation study was conducted in Washington, D. C. between March 1, 2014 and March 1, 2015.

### Key Intervention Effects

- Improved medication adherence
- Improved viral suppression
- Increased engagement in HIV care

### Recruitment Settings

- Washington, D. C. Veterans Affairs Medical Center's Infectious Disease Clinic

### Eligibility Criteria

Clinic patients were eligible for the nurse navigation program if they had poor engagement in care (i.e., multiple no shows for scheduled appointments, inconsistent medication renewal, and/or elevated viral loads).

### Study Sample

Participants in the nurse navigation program (n = 84) had the following characteristics:

- *98% male, 2% female*
- *86% non-Hispanic black, 10% Other, 4% non-Hispanic white, 1% Hispanic*
- *Median age of 56 years*

### Assignment Method

Not applicable

**Comparison**

The study utilizes a pre/post research design. Cohort study participants' pre-intervention data (i.e., laboratory values, clinic visits, and medication renewals) before or at the start of the navigation program were compared to their post-intervention data closest to the end of data collection (July 3, 2015).

**Relevant Outcomes Measured**

- Viral suppression was assessed as undetectable (< 200 copies/mL) or detectable.
- CD4 count was measured as cell counts and CD4 percentage and assessed as <200 cells/mm<sup>3</sup> or <14%, respectively.
- Medication adherence was measured as the percentage of completed medication renewals.
- Engagement in care was measured as the number of scheduled and completed clinic visits.

**Participant Retention**

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**

- There was a significant increase in the number of participants achieving viral suppression in the post-navigation period compared to the pre-navigation period (69.0% vs. 47.6%,  $p < 0.05$ )<sup>°</sup>
- There was a significant difference in the mean number of clinic visits between the post-navigation period and the pre-navigation period (2.1 [SD = 1.06] vs. 1.1 [SD = 1.00],  $t [74] = -9.14$ ,  $p < 0.001$ ).
- There was a significant difference in the mean rate of medication renewal between the post-navigation period and the pre-navigation period (80.6% [SD = 22.42] vs. 40.9% [SD = 36.00],  $t [69] = -8.75$ ,  $p < 0.001$ ).

**Strengths**

- None identified

**Considerations**

- This study was not evaluated for the Medication Adherence chapter because only studies with a comparison group are eligible for that chapter.
- This study was not evaluated for the Linkage to, Retention and Re-engagement in HIV Care chapter because engagement in care is not a relevant outcome for that chapter at this time.
- The assessment time for the pre-navigation and post-navigation periods are different. The pre-navigation assessment time period was 6 months, and the post-navigation assessment time period was 12 months.

*Non-significant findings on relevant outcomes*

- There was a decrease in the number of participants with a CD4 count <200 cells/mm<sup>3</sup> (33% vs 27.3%,  $p=0.40$ ), and a CD4% <14% (42.9% vs 30.9%,  $p=0.11$ ) from the pre-navigation period to the post-navigation period; however, these changes in CD4 count or CD4% were not statistically significant.<sup>°</sup>

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<sup>°</sup>Calculated as McNemar Chi-Square by the PRS project and confirmed by author.

## REFERENCES AND CONTACT INFORMATION

Hemmy Asamsama, O., Squires, L., Tessema, A., Rae, E., Hall, K., Williams, R., & Benator, D. (2017). [HIV nurse navigation: charting the course to improve engagement in care and HIV virologic suppression](#). *Journal of the International Association of Providers of AIDS Care*, 16(6), 603-607.

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