# **SUPPRESSION BUNDLE**

<u>Evidence-Informed for the Structural Interventions Chapter</u>
Evidence-Informed for the Linking and Retention in HIV Care Chapter



#### **POPULATION**

Patients at HIV clinics with non-suppressed viral loads

## **KEY INTERVENTION EFFECTS**

Increased viral suppression

#### **BRIEF DESCRIPTION**

**Suppression Bundle** consists of three to five evidence-informed bundled strategies tailored to individual patients that aim to improve HIV viral suppression in persons with HIV at an outpatient infectious disease clinic setting. The Suppression Bundle addresses food insecurity, transportation, substance use, mental health, and HIV medication adherence using the following:

- Monthly phone reminders, phone alarms
- · Electronic medical record reminders
- Addiction resources
- · Mental health referrals
- Transportation resources, food resources, groceries
- Pill boxes/keychains
- Review of medications and side effects/interactions by a pharmacist with HIV expertise

The care team chooses appropriate bundles for each patient after evaluating patient characteristics. After the care team discusses options with each patient, the patient chooses which bundle, if any, they want to participate in or make suggestions to meet their individual needs.

**DURATION:** 9 months

SETTING: University-based outpatient infectious disease clinic in the United States (Kansas City, KS)

**STUDY YEARS: 2018** 

STUDY DESIGN: One-group pre/post

**DELIVERERS:** Primary physician, case manager, pharmacist

**DELIVERY METHODS:** Phone reminder and alarm, electronic medical reminder, pill boxes/keychains,

information resources

# **STUDY SAMPLE**

The post-intervention study sample of n = 65 patients was characterized by the following:

- 46% Black or African American persons
  - 37% White persons
  - 8% Hispanic, Latino, or Latina persons
  - 9% persons who identify as another race/ethnicity
- 20% female persons
- 55% persons with a mental health diagnosis

#### STRUCTURAL COMPONENTS

Access - HIV health care

- Referrals to mental health and addiction resources
- Vouchers for transportation

Social Determinants of Health – Survival

Provides food resources and groceries

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

• Following the intervention, 70.1% of patients who were previously non-suppressed were virally suppressed. A Chi-square test found a statistically significant difference in viral load suppression (< 40 copies mL) between pre- and post-intervention (p = 0.001).

## **CONSIDERATIONS**

• Communication preferences of the patient may need to be considered since many phone calls to remind patients were not answered and in some cases, voicemails could not be left.

#### **ADVERSE EVENTS**

The author did not report adverse events.

#### **FUNDING**

- Author reported no funding sources.
- Groceries were provided by donations from faculty and staff in the Division of Infectious Diseases and the Department of Medicine at the University of Kansas Medical Center.

## PRIMARY STUDY

Poplin, V., Katz, J., Herrman, M., Robertson, K., Chen, G., Clough, L. A. & Newman, J. R. (2023). <u>Effectiveness of a "Suppression Bundle" to improve HIV virologic suppression in an outpatient infectious disease clinic: A pilot implementation study</u>. *AIDS Care*, *35*(7), 1064-1068. <u>doi: 10.1080/09540121.2022.2040720</u>

#### PLEASE CONTACT STUDY AUTHOR FOR TRAINING AND INTERVENTION MATERIALS.

### **Contact information**

Jessica R. Newman, DO
Department of Medicine
Division of Infectious Diseases
University of Kansas Medical Center

Email: jnewman@kumc.edu