

# A Multidisciplinary Intervention To Address Patients Engaged In Care but Not Virally Suppressed in New Orleans, LA 2019-2020

Seal PS. MD, MPH , Beckett S. MPH, Loeb-Guth D. RN, MPH, Olguin L. BSc, Richey, LE. MD, MPH, Frontini M. PhD  
Louisiana State University School of Medicine at New Orleans; University Medical Center of New Orleans



## Introduction

Established in 1987, the HIV Outpatient Program (HOP) is part of University Medical Center serving people living with HIV (PLWH) in New Orleans. We support and promote the health and well-being of PLWH by providing high-quality healthcare services regardless of income. HOP provides comprehensive, multidisciplinary HIV primary care delivered by a team of infectious diseases specialists from both Louisiana State University and Tulane Schools of Medicine. A full complement of services are available on-site and include psychology, psychiatry, dentistry, pharmacy, social work, health education, and patient navigation among others. HOP receives both Ryan White Part A and C funds. Viral load suppression at HOP was 87% in 2019 but a subset of patients remained in care who were not suppressed.

## Methods and Activities

Out of 1660 patients in care, 63 patients were selected by retrospective chart review confirming 2+ consecutive HIV viral load (VL) tests >1000 copies/mL. The intervention strategy involved an multidisciplinary team of the medical provider, health educators, patient navigators and social workers who regularly assessed patient's access, intentionality and motivation (AIM) . The intervention began in February 2019 with a goal to increase to viral suppression from 0% to 85% at one year. Outcome measures included HIV viral load and completion of medical and health educator appointments. The quality improvement project was approved by the LSU IRB and UMC Quality Management committee.

### Intervention strategy

Patient navigator (PN) contacted the patient 3 d prior for an appt. reminder.

At the scheduled visit, PN and health educator (HEd) met with the patient.

HEd scheduled an adherence follow-up appointment with the patient to review adherence to ART, assist with pill boxes, etc.

After the visit, PN followed up by phone with the patient to confirm receipt of ART therapy and assess motivations and barriers (AIM).

HEd engaged patients at adherence visits and by phone.

Barriers and other adherence issues were directed to the appropriate providers and team members for further intervention as needed.

## Results

Sixty-three patients met our inclusion criteria for the intervention out of 1660 patients who receive HIV primary care in our clinic (~4%).

**Table 1. Study population demographics and clinical characteristics 2019-2020 (n=63)**

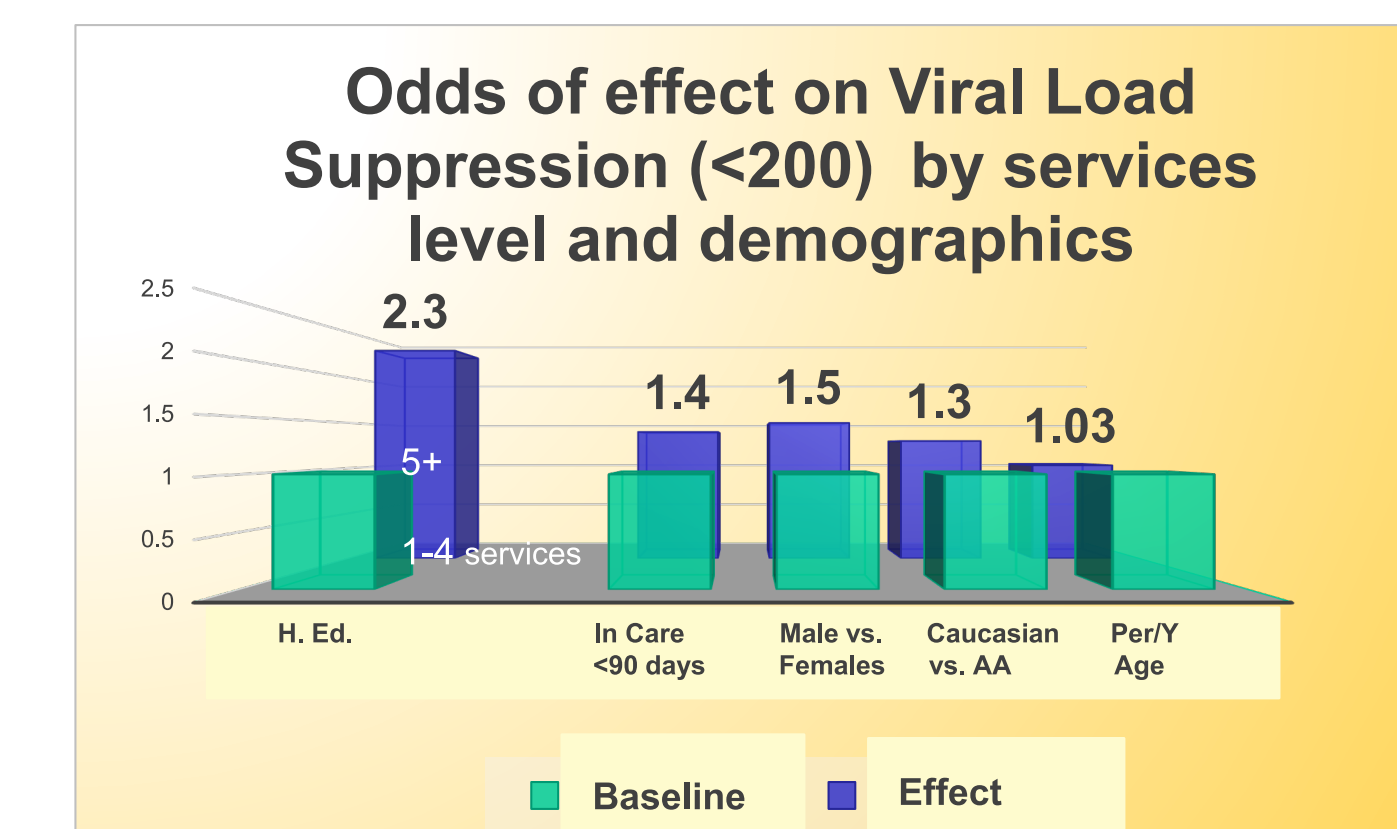
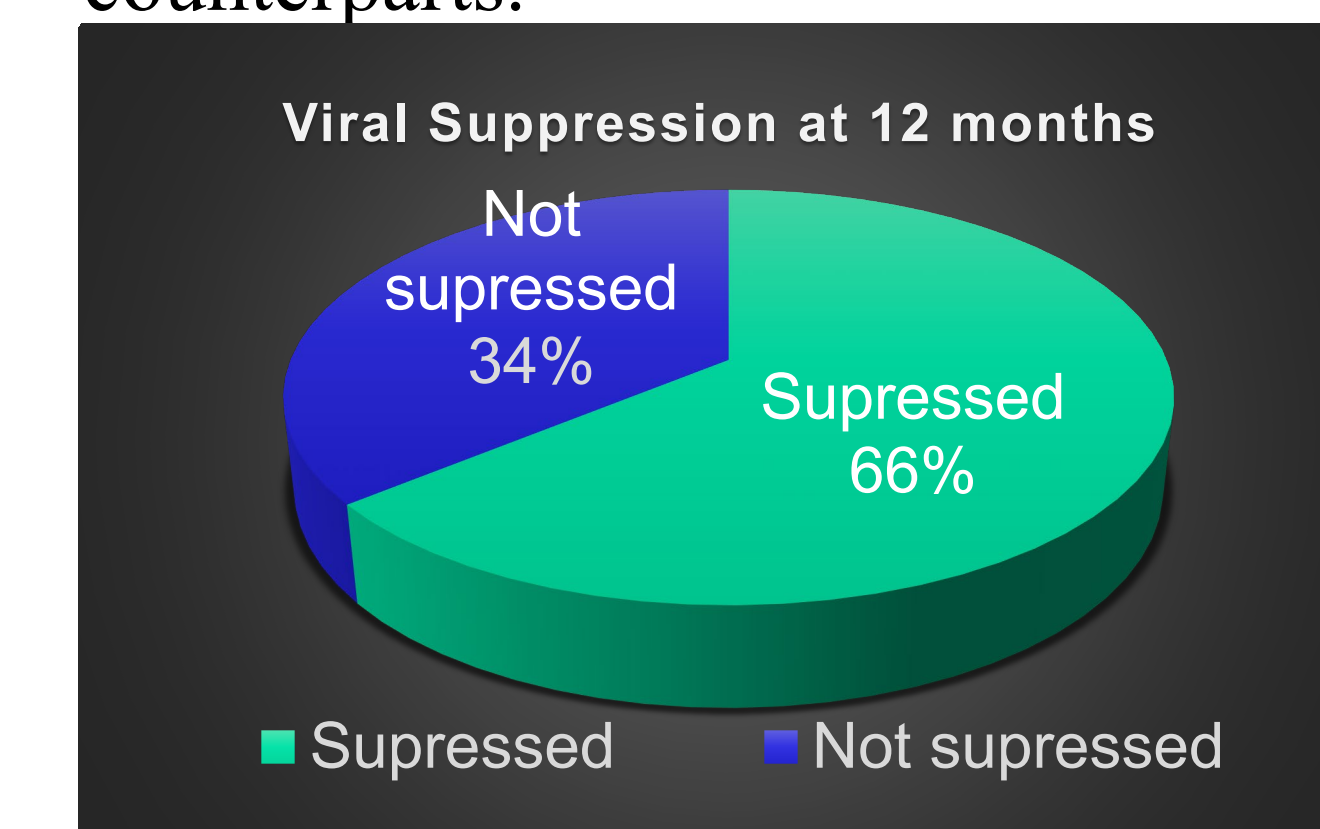
| Characteristic  | Female n=29 | Male n=34 | Total n=63 |
|---|-------------|-----------|------------|
| <b>Race</b>   |             |           |            |
| AA  | 26          | 30        | 56 (89%)   |
| White   | 3           | 4         | 7 (11%)    |
| <b>Ethnicity</b>  |             |           |            |
| Hispanic  | 1           | 0         | 1 (2%)     |
| Non-Hispanic  | 28          | 34        | 62 (98%)   |
| <b>Age</b>  |             |           |            |
| 24-44   | 13          | 11        | 24 (38%)   |
| 45-54   | 10          | 10        | 20 (32%)   |
| 55+   | 6           | 13        | 19 (30%)   |
| <b>Social/Clinic status at baseline<sup>†</sup></b>     |             |           |            |
| <b>Comorbidities<sup>†</sup></b>                        |             |           |            |
| None  | 1           | 4         | 5 (8%)     |
| 1-2   | 10          | 10        | 19 (30%)   |
| 3+  | 16          | 17        | 33 (52%)   |
| <b>Psychiatric diagnosis</b>                            | 15          | 13        | 28 (44%)   |
| <b>History of substance abuse</b>                       | 11          | 15        | 26 (41%)   |
| <b>Hospitalization in the past year</b>                 | 10          | 13        | 23 (37%)   |
| <b>Difficulty understanding medication instructions</b> | 11          | 11        | 22 (35%)   |
| <b>Transportation needs</b>                             | 7           | 10        | 17 (27%)   |
| <b>Reestablishing HIV care</b>                          | 2           | 6         | 8 (13%)    |
| <b>Prescription medication acquisition barriers</b>     | 3           | 4         | 7 (11%)    |

**Table 2 - Patient's Viral Load Suppression Improvement (%)**

| HIV Viral Load copies/ mL     | Feb 2019 | July 2019 | Dec 2019 | Feb 2020 |
|-------------------------------|----------|-----------|----------|----------|
| < 200 any time                | ----     | 59        | 64       | 66       |
| < 200 copies last lab         | 0        | 52        | 52       | 46       |
| <b>Out of care &gt; 180d*</b> | ---      | ---       | 16       | 29       |

\* Out of care > 180 d since last Primary Care visit at the end of the project; clinic overall VL Suppression rate 87%

At the end of intervention 41 patients (66%) had achieved VL suppression with labs < 200 copies/mL. However, twelve patients (20%) lost their viral suppression status over time. Effect was not homogeneous. Males, Caucasians, in care, 5+ HED visits and older groups performed better than their counterparts.



**Table 3 - Health education and patient navigation services time-effort (n=63)**

| Service            | Total time per patient | Total time in intervention |
|--------------------|------------------------|----------------------------|
| Health Education   | 3.5 hours/patient      | 218 hours                  |
| Patient Navigation | 6 minutes/patient      | 6 hours                    |

## Lessons Learned

While time intensive, an multidisciplinary intervention can improve viral suppression among patients in care but not virally suppressed. Often additional barriers persist for these patients which need individual assessment and attention. Patients may enter into cycles requiring an intensification of support followed by intertwined periods of auto-control and self-management of the disease. Improvements in viral suppression rates requires a structural approach to design and maintain intervention strategies based on patient's changing unmet needs set by health providers. The one solution fits all approach is currently inefficient for the achievement of the 2020 national HIV/AIDS strategy goal to end the HIV epidemic.

## Limitations/Challenges

Almost 30% of our patients in the intervention fell out of care leading to increased obstacles in working directly with them on viral suppression.

## References

1. U.S. Department of Health and Human Services. HealthyPeople.gov: 2020 Topics and Objectives <https://www.healthypeople.gov/2020/topics-objectives/topic/hiv?topicid=22> accessed 6/27/2020
2. Cohen MS, et al. Prevention of HIV-1 infection with early antiretroviral therapy. *N Engl J Med* 2011;365(6):493-505.
3. *Recommendations for HIV Prevention with Adults and Adolescents with HIV in the United States, 2014.* <http://stacks.cdc.gov/view/cdc/26062>.