NYC HEALTH+ HOSPITALS
Jacobi

IMPROVING VIRAL LOAD SUPPRESSION
A Quality Improvement Project

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I. BACKGROUND

- **Best practices: the results of clinical studies move us to act.**

Data give evidence that persons who suppress viral loads (VL) are less likely to transmit the HIV to their partners sexually. (Katz et al., 2017; Masters, 2017; Park, 2017; CDC, 2017).

- **ETE efforts and the U=U campaign:**

In December 2017, the HIV Practice began utilizing the monthly viral load reports to systematically work with clients with high VL.

II. GOALS AND OBJECTIVES

A. Goal

To improve viral load suppression through a team approach.

B. Project Objectives

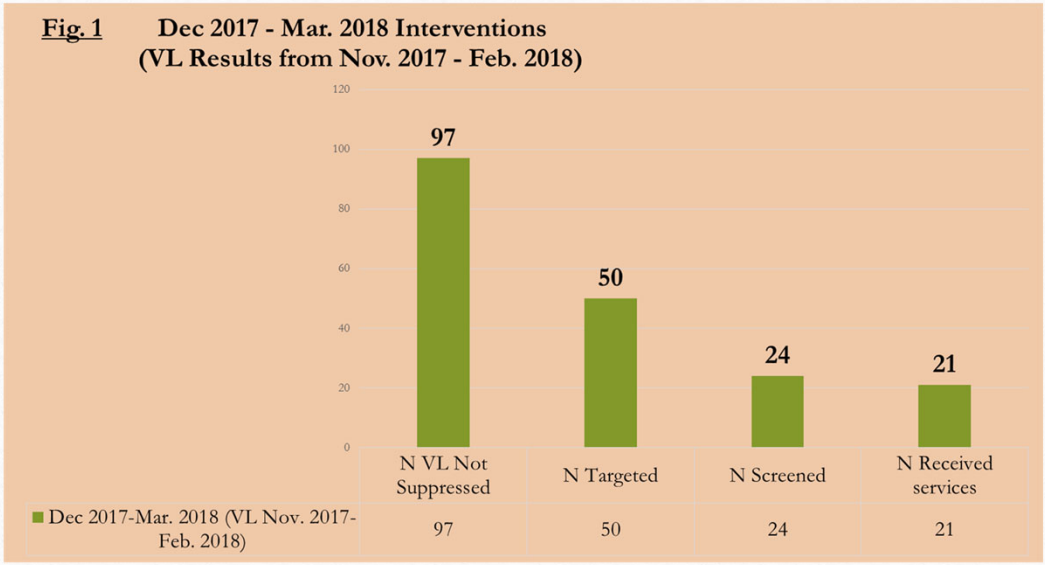
1. Target 10 clients who are not virally suppressed monthly for intervention
2. Systematically track viral load results in targeted clients
3. Reduce viral load results in targeted clients
4. Increase the number of clients who achieve viral suppression
5. Increased health promotion program enrollment

III. METHODS

- Baseline data determined: Viral loads were collected from November 2017 to February 2018. These viral loads were sorted from December 2017 to March 2018
- Identification of clients with viral loads > 200
- Review of clients' EMR
- Case conferences with physicians, and
- Outreach/engagement/Enrollment Inn Health Promotion Program.

IV. RESULTS

Table 1	Dec 2017 (VL Nov. 17)	Jan 2018 (VL Dec.17)	Feb 2018 (VL Jan. 2018)	March 2018 (VL Feb. 2018)	Total
N Tested	221	203	264	260	948
N VL Suppressed	199	178	237	237	851
N VL Not Suppressed	22	25	27	23	97
N Targeted	16	9	6	17	50
N Screened	8	7	1	8	24
N Received services	8	7	1	5	21



A. Barriers to viral load suppression

- Psychosocial/Mental Health Issues
- Substance abuse issues
- Co-morbidities
- Medication Management
- Perinatal Transmission of HIV
- Other issues (work schedule, loss of medication, and health literacy)

B. Interventions for viral load suppression

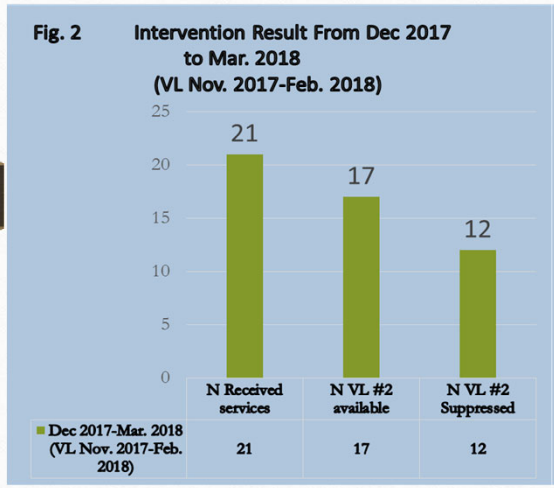
- Adherence Counseling using Evidence-Based Interventions (EBIs) such as motivational interviewing (MI) and partnership for health (PFH)
- Health Literacy and Treatment Education (How ARV medication works in their body; a cycle of 24 hours for a regimen of 1 pill per; resistance; U=U)
- Scheduled Weekly Encounters/Outreach
- Directly observed therapy (DOT)
- ADAP Rapid Tx
- Adherence tools (pill boxes, cell phone alarm to remind clients of their medication)

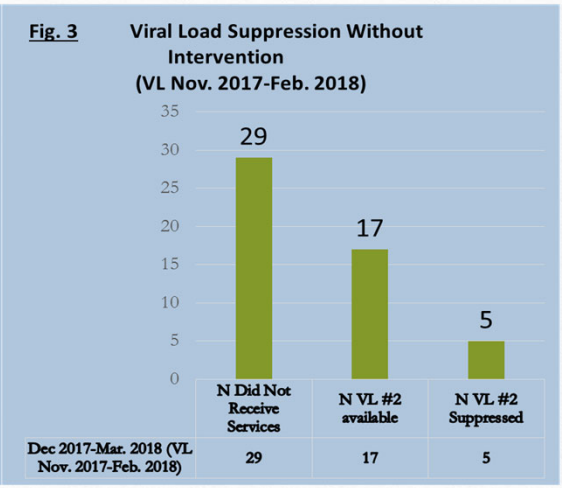
C. Summary of Outcomes

- From the 21 clients who received adherence services:
  - Follow-up viral load results were available for 17 at the time of this report
  - Out of these 17 viral loads, 12 (70.59%) were suppressed.
- From 39 the clients who did not receive services:
  - follow-up viral load results were available for 17 at the time of this report
  - Out of these 17 viral loads, only 5 (or 41.18%) were suppressed

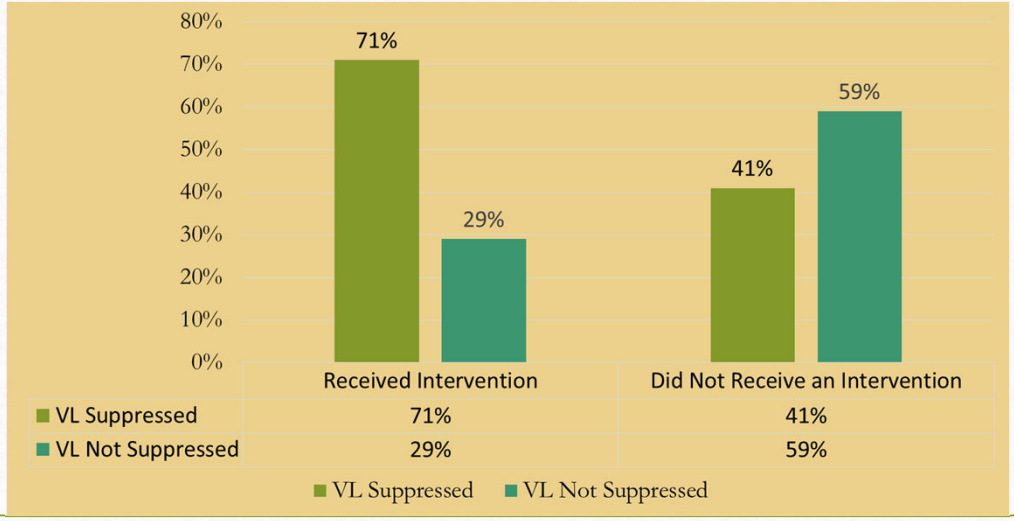
It appears that interventions help clients decrease viral load

Comparing Viral Load Suppression Cascades





Received Intervention vs. Did Not Receive an Intervention



V. Lessons Learned

- Most of our clients cannot suppress VL on their own; they need adherence support.
- Mental health, comorbidities, and psychosocial issues are major barriers to viral load suppression. Addressing these issues is critical for patients to adhere to ART
- Early ART can improve retention in care and medication adherence and can lead to viral load suppression
- There is a link between retention in care and viral suppression. For example, many of clients with high viral load also miss medical appointments.
- It is important to routinize patient appointments. Patients should be aware of how often they should come to clinic.
- Weekly encounters are important in addressing barriers to medication adherence.

VI. Conclusion

'It takes a village to raise child'.

Likewise, it takes the whole clinic (physicians, nurses, social workers, care coordinators, nutritionists, etc.) to engage patients in viral load suppression. Team approach is the key to viral load suppression.

VI. Next Steps

- We are in the process of compiling data to establish the role of ADAP Rapid Tx in connecting clients to ART within 1-3 days and its impact on suppression.

We will also:

- Expand the number of staff members assigned to conduct the outreach work by getting staff involved in the U=U Campaign (Cohen et al., 2016; Rodgers, 2016; CDC, 2017)
- Provide regular trainings to increase staff capacity to carry out interventions (E.g. motivational interviewing, partnership for health and effective use of peers)
- Collect ongoing data in a more organized manner in order to capture additional barriers and facilitators of medication adherence.
- Conduct monthly case conferences to review VLS barriers, identify appropriate patient level intervention and assign staff member follow-up. (n.d.)

References

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THANK YOU!