

BACKGROUND

Viral load suppression reduces morbidity and increases the quality of life for PLWHA. It also significantly reduces the risk of HIV transmission making viral load suppression a primary goal in HIV treatment. Internal, external and systemic barriers to care may impede patient's ability to adhere to HIV treatment, reducing their chances of achieving viral load suppression. STAR Health Center (SHC), a part of C Ryan White funded, level 3 PCMH, developed a collaborative 5 step approach to improve HIV service delivery and patient health outcomes by increasing viral load suppression within a cohort of demographic heterogeneity.

PURPOSE

The purpose of this study is to implement and assess the 5 step approach to patient engagement and VL monitoring designed to increase VL suppression rates.

METHODS

SHC developed a clinical quality management team to:

- 1) Identify unsuppressed patients
- 2) Conduct qualitative chart reviews for each patient to identify barriers to care
- 3) Increase patient engagement
- 4) Refer patients for clinical interventions
- 5) Engage in viral load monitoring through our electronic health record platform.

294 patients who were virally unsuppressed were identified through our patient database. Qualitative chart reviews identified a high co-occurrence of unsuppressed viral loads and behavioral health conditions as a significant barrier to care. All unsuppressed patients were "flagged" (a notification was put in each patient's chart) in our EHR to be contacted by staff (via phone calls or face to face encounters) to be scheduled for medical appointments and lab work. Patients were referred to behavioral health providers or clinical pharmacist. Lab results were monitored via our EHR.

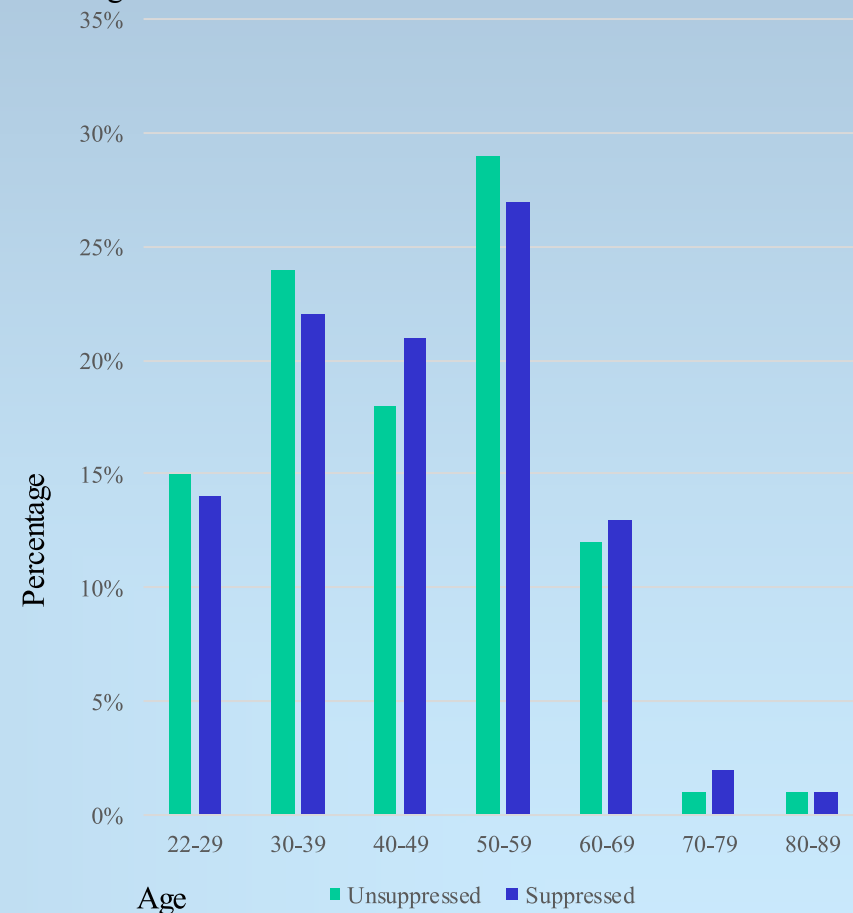
RESULTS

This cohort was comprised of 294 patients: 153 males, 138 females and 3 transgender women ranging in age from 22 yrs. to 81 yrs. Our qualitative chart review identified 74% of these patients as having behavioral health conditions. The most prevalent conditions were depression (26%) and alcohol use (43%). While contacting patients to increase patient engagement for this cohort, the quality management team identified "flagging" to be exceptionally helpful in identifying hard to reach patients who were difficult to contact via phone but would come in, as needed, for walk-in appointments. During the referral process, the CQM team identified a 12% attrition rate. 88% of this cohort, however, received medical and/or behavioral health interventions including approximately 10% consulted with the clinical pharmacist, and about 90% received care coordination. Viral load monitoring for this cohort reflected a 76% increase in viral load suppression. Most demographic characteristics were consistent between both suppressed and unsuppressed groups. However, there was a 11% increase in MSM patients in the unsuppressed group. Within the 24% of patients who remained unsuppressed, there was a higher concentration of behavioral health conditions (88%) in relation to the group that achieved viral load suppression (72%) reflecting the need to increase focus on behavioral health interventions and MSM patients.

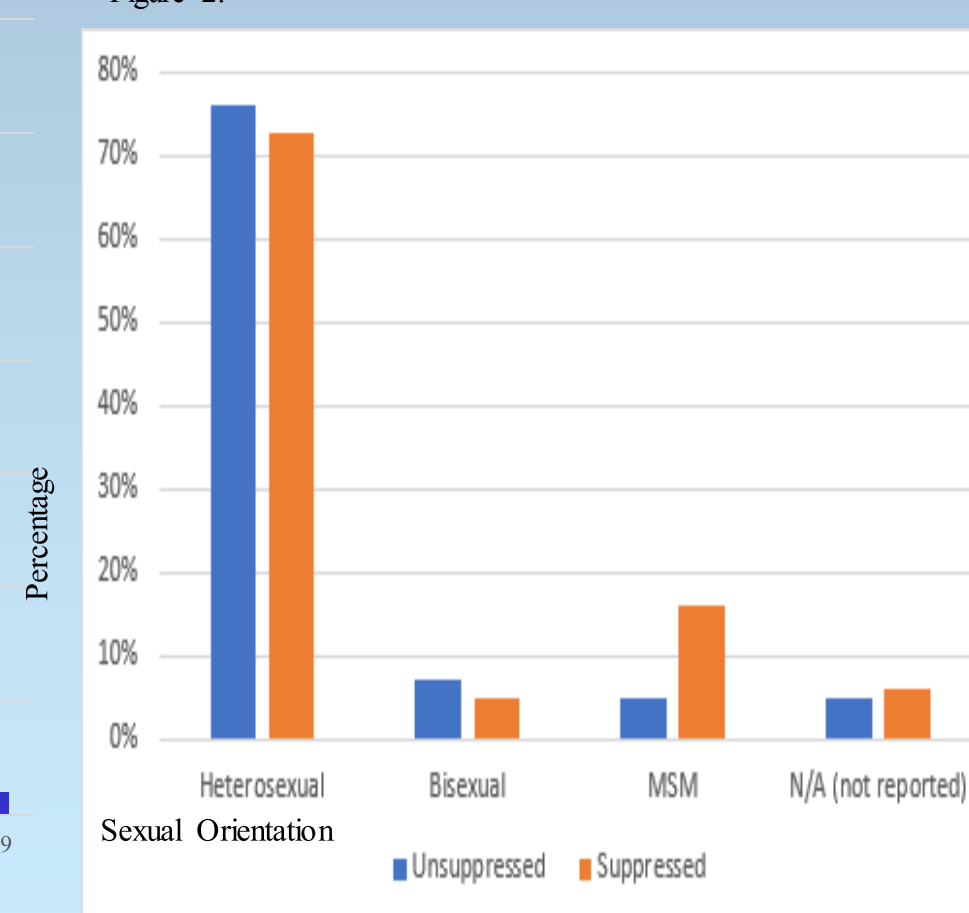
Limitations include: a high attrition rate and unidentified barriers to care. During this clinical quality management intervention, we identified 47 patients who dropped out of care. Many of these cases were closed due to permanent relocation and housing instability. This rises awareness to the fact that there are other barriers to care that have not been explored or addressed within this cohort.

DEMOGRAPHIC DATA

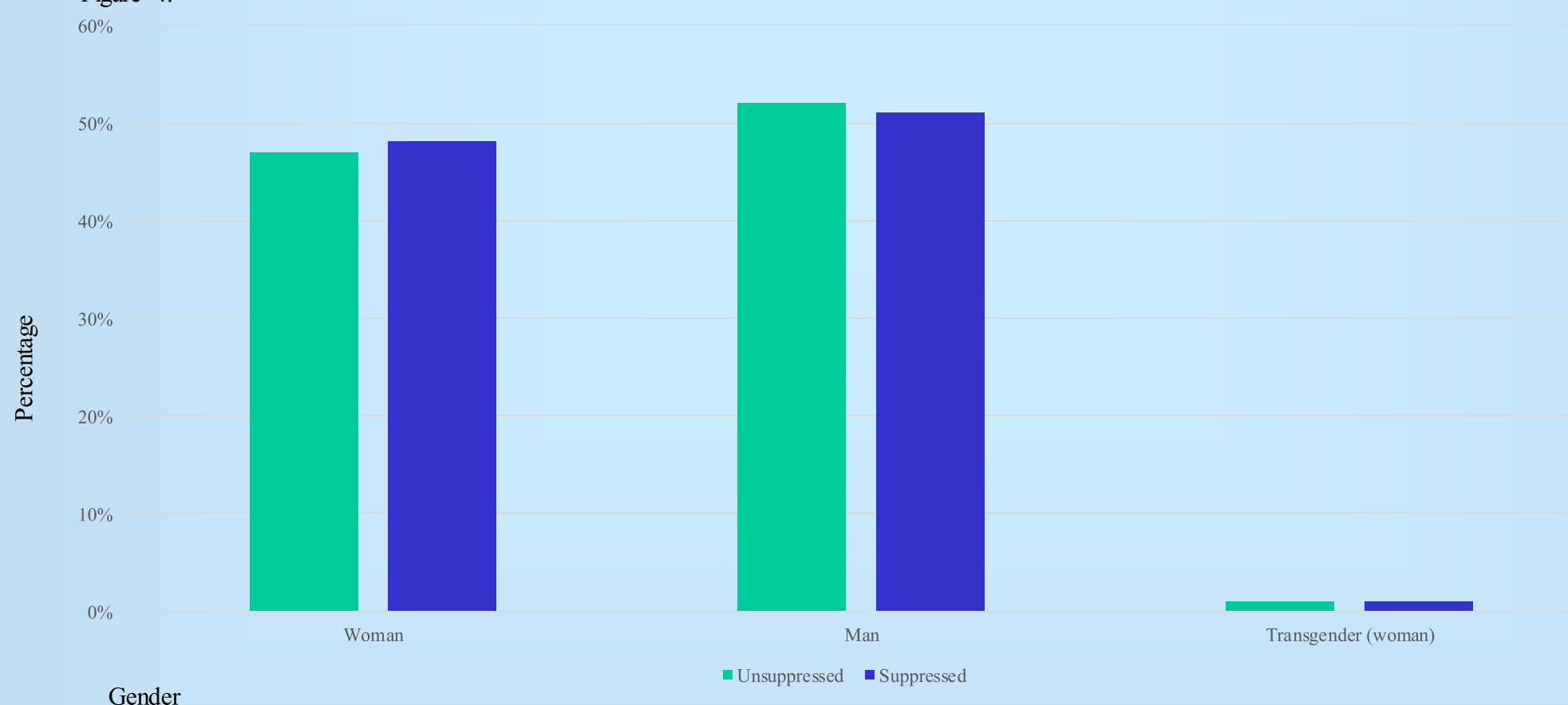
Viral Load Suppression Stratified by Age
Figure 1.



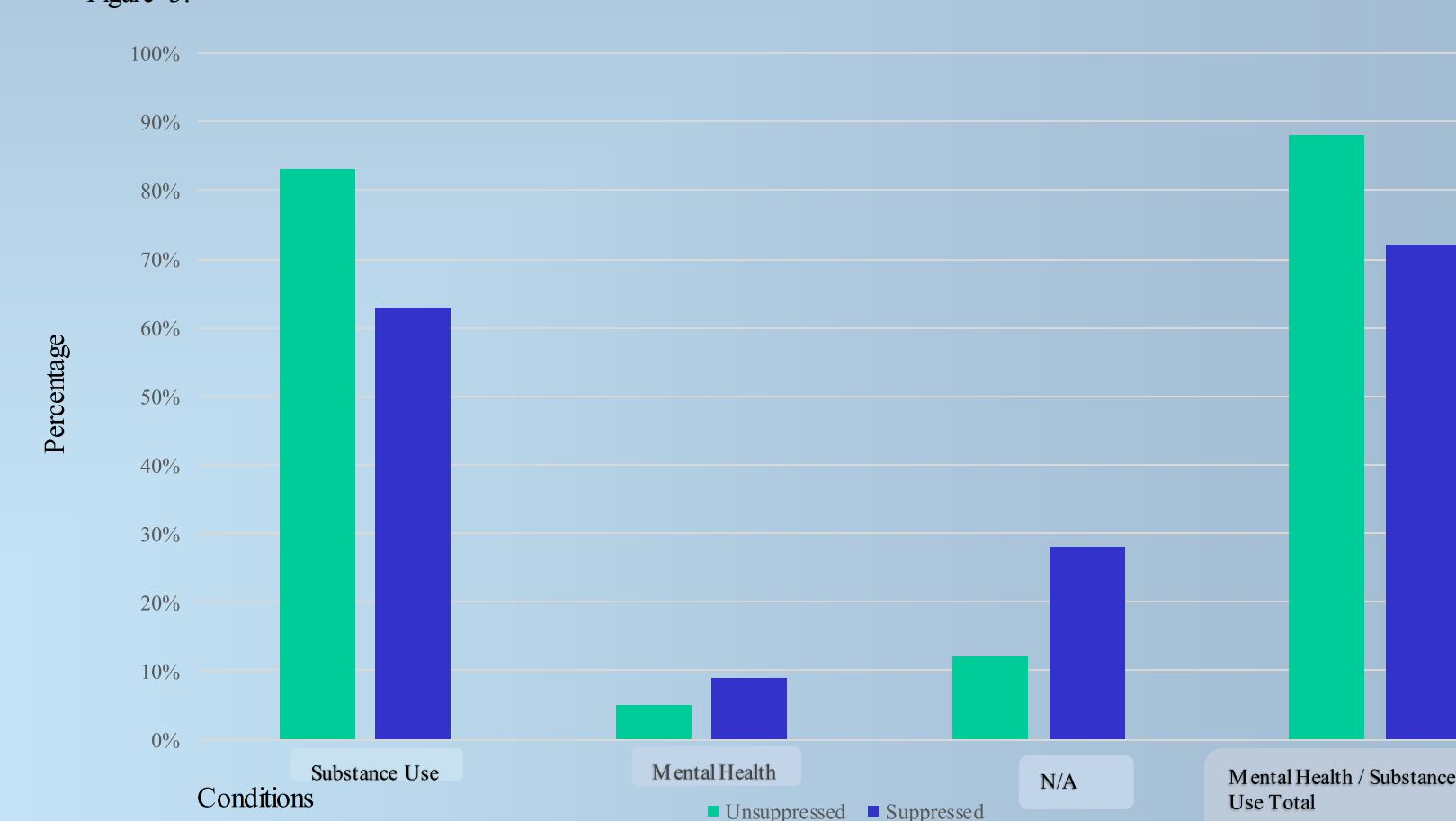
Viral Load Suppression Stratified by Sexual Orientation
Figure 2.



Viral Load Suppression Stratified by Gender
Figure 4.



Viral Load Suppression Stratified by Mental Health and Substance Use
Figure 3.



CONCLUSIONS

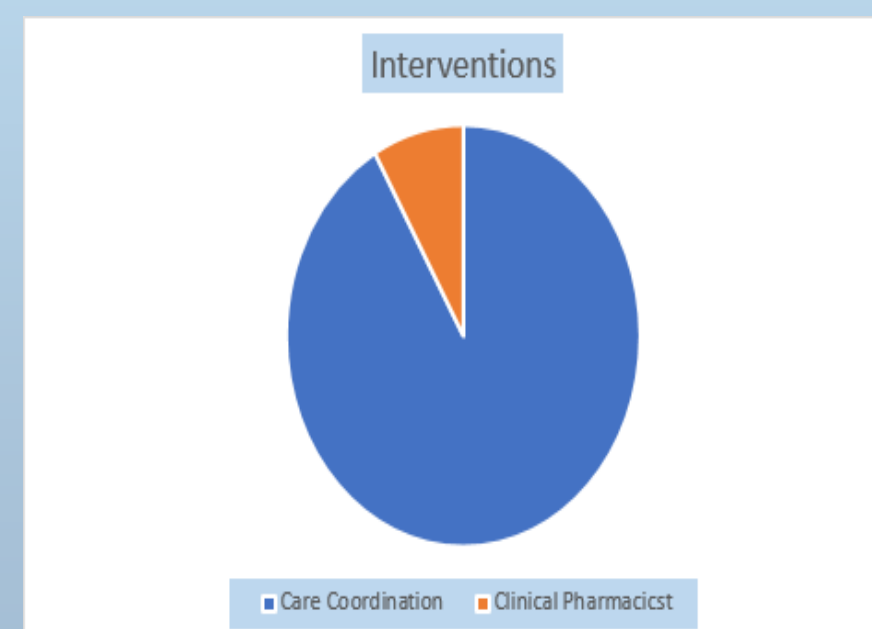
Patient engagement is an essential aspect of HIV care and treatment. This cohort exhibited high rates of co-occurring behavioral health conditions and benefited from increased patient engagement efforts. This study suggests that patient engagement strategies including flagging, appointment scheduling, referrals and appointment follow up calls have a positive correlation to HIV care continuum and therefore, VL suppression.

LESSONS LEARNED

Flagging aided in engagement for hard to reach patients. Allowing team members to identify patients during walk-in appointments. Assistance with scheduling and rescheduling medical appointments was effective in increasing treatment adherence resulting in positive patient health outcomes.

MENTAL HEALTH DATA

Interventions Used
Figure 5.



Alcohol Use and Depression Prevalence Between Groups
Figure 6.

