



Designated AIDS Center (DAC) PROGRAM

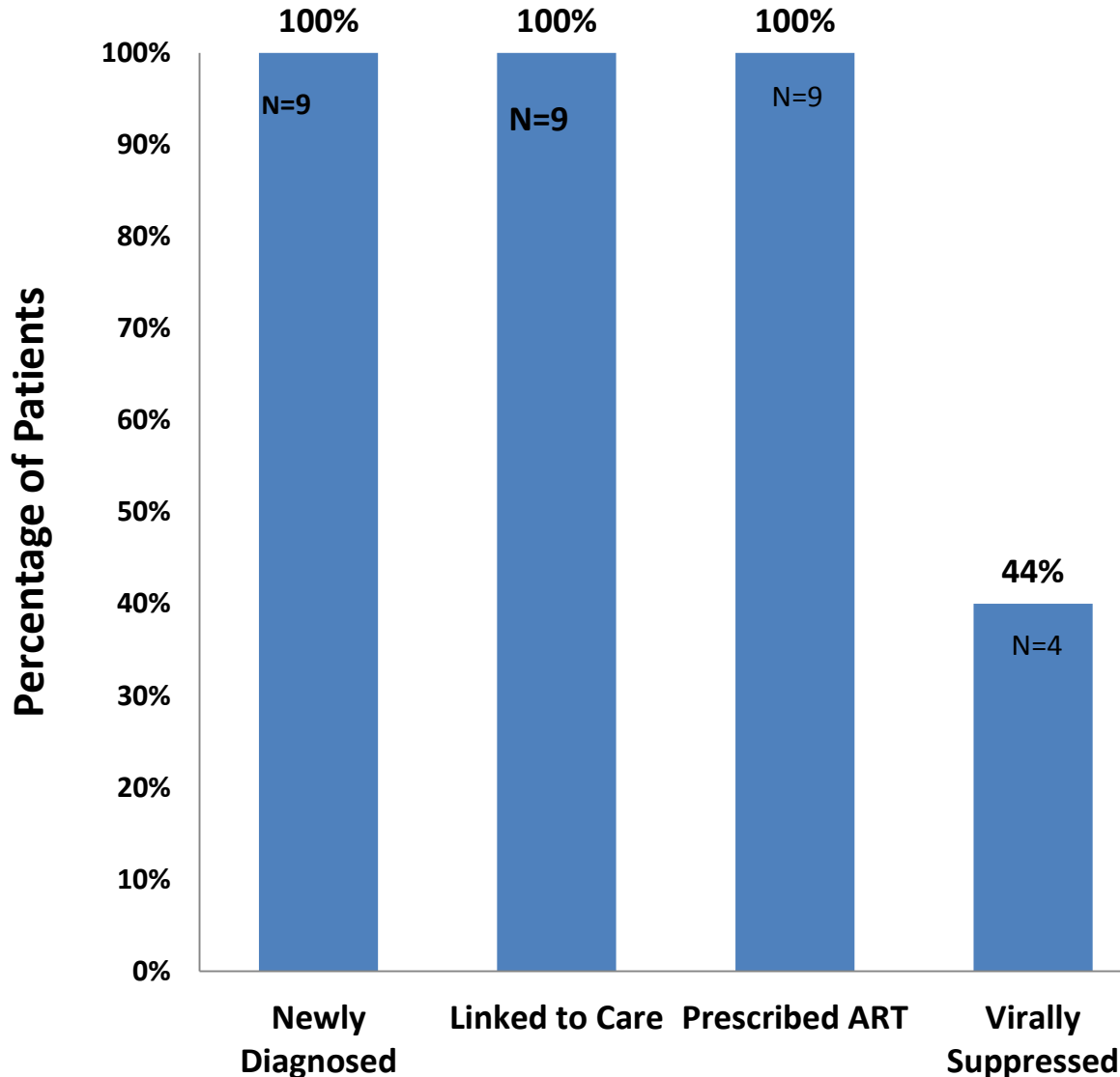
2016- HIV TREATMENT CARE CASCADE

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Kingsbrook Jewish Medical Center 2016 HIV/AIDS treatment cascade shows, in visual form:

- The proportion of individuals living with HIV/AIDS who are actually accessing the organization for care and services.
- The number of patients engaged in HIV medical care, treatment and services in the HIV program.
- The number of individuals timely linked to care after HIV/AIDS diagnosis.
- The number of HIV positive patients (New / Established) on ARV treatment and those achieving the goal of viral suppression.
- How to identify gaps in care and services that may exist in the organization and program.

HIV Care Cascade, Newly Diagnosed Patients FYI 2016



Total Newly Diagnosed

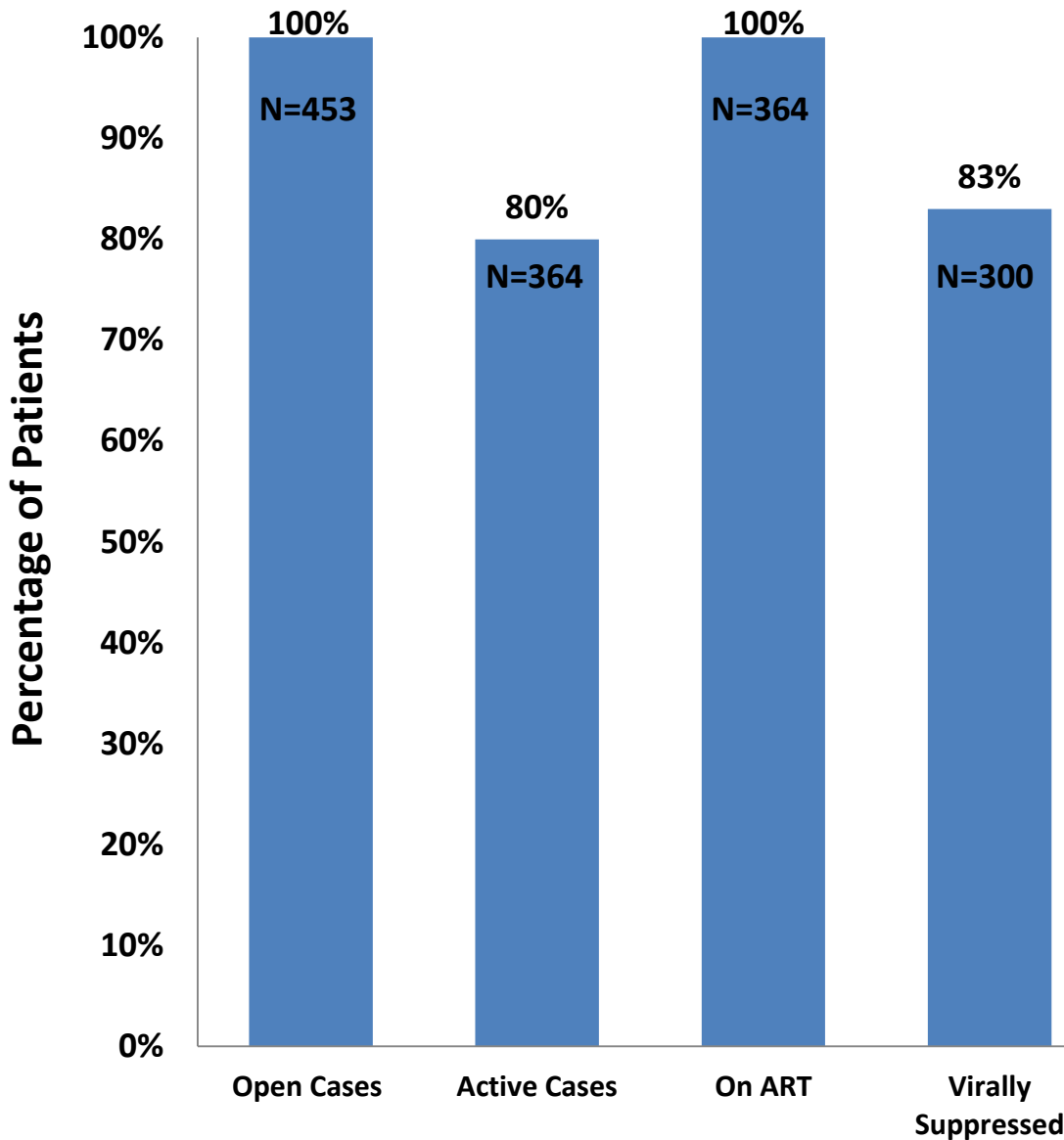
Patients: # of newly HIV+ pts diagnosed with in the last 12 months.

Linked to Care: # of newly diagnosed HIV + patients with one HIV Medical Visit within 3 days of diagnosis who were internally linked to care .

Prescribed ART: # of newly diagnosed patients prescribed ART.

Virally Suppressed: # of newly diagnosed patients with viral load <200 copies/mL.

Data Source : Electronic Medical Records



OPEN CASES – All HIV+ pts with visits in the organization between 1/1/2016 - 12/31/2016.

ACTIVE CASES – All HIV + patients with minimum one HIV medical Visit between 1/1/2016 – 12/31/2016.

On ART – # of Active patients with ART prescription during 2016.

Virally Suppressed – Number of active patients with viral load <200 copies/mL. during the measurement year 2016.

Data Source : EMR Laboratory Viral load Report



2016 HIV Care Cascade: Staff Involvement

HIV Program staff:

Overall, we were responsible for collection, gathering and reporting on the active case load data, including the patients that were excluded. HIV program staff meet weekly to review and update viral load test results and tracking the number of patients who are virally suppressed or unsuppressed.

HIV Medical Director and HIV Provider:

Reviewed the collected data.

The cascade data was then analyzed by the HIV Medical Director, HIV Specialist and the Nurse Manager.

Provided data regarding newly diagnosed patients identified while hospitalized.

Data summarized for reporting and dissemination.

HIV Program Manager:

Compiled the data from the various sources in order to construct the charts for the HIV treatment cascade.

Case Managers:

From their respective case load, they were able to provide target data regarding active number of patients, those lost to contact, incarcerated, and or expired.

Navigator:

Provided data on the number of newly diagnosed patients and their linkage to care.

Information Specialist:

Provided data regarding the number of open cases in the organization.



Methodology: Open Case Load

How was open and active caseloads differentiated and subsequently extracted from the data source?

The organization made every effort to avoid duplication of HIV/AIDS patients data that were collected from multiple sites during the measurement year.

Entire Open Caseload, HIV+ Patient Population: N= 453

Represent the number of patients who received care at multiple sites in the organization.(Emergency room, out patient and specialty clinics).

EAGLE System:

The Information Systems Department performed a systematic search according to ICD-10 billing codes (B20) and according to service locations.

HIV Testing Lab Results: Newly diagnosed patients from laboratory 4th Generation HIV + test.

Non- Duplicated Method:

The Names, medical record numbers of patients from the different service locations were combined onto one Excel sheet and the duplicates were filtered and removed.

Cases Outside the Organization: N=68

These are the number of patients from the open case load seen in the institution but are not engaged in care with the HIV program. Some are receiving care other facilities.



Methodology: Active Case Load

Entire Case Load of HIV+ Population: N =385

Represent the total number of patients enrolled in the HIV program.

Excluded Patients: N= 21.

This number represents incarcerated, expired and patients lost to care.

Active Case Load: N= 364

Number of patients remained after the excluded patients were removed.

Auto Filter Technique in Excel for Duplicates:

Active case data were filtered to remove duplicates according to name, medical record numbers and date of birth.

HIV Program Data:

Data validated with the program roster to ensure all the active patients were captured.



Care Cascade: Data Sources

The following data sources were used to enhance the quality of care provided to the HIV/AIDS patients in the organization and to construct the HIV treatment care cascade.

EMR Chart Abstractions: (Open and Active Case):
(eClinical Works (eCW) and EAGLE system)

These electronic data storage systems continuously collect data on insurance, demographic and contact details of the patient; treatment support information, radiology , HIV testing, ART regimen (first or second line ART), vital signs, co-infections , opportunistic infections and treatment outcomes .

EMR -Laboratory Report and Clinician View:

Viral Load Monitoring:

The primary lab data sources used for identifying patients who are suppressed or unsuppressed.

HIV Positive Data: 4th Generation HIV test results daily for monitoring and identifying HIV positive patients. (newly diagnosed).

EAGLE Billing System:

Facility-wide billing system used to obtain “Open cases”. The program analysis indentified and reported on the number of HIV/AIDS patients under care in the institution by the ICD-IO diagnosis billing code (B20).



Care Cascade: Data Sources Cont'd.

Program Data: (Open Vs. Active Cases):

(Excel file) maintained manually by program staff regarding the number of patients newly diagnosed, newly enrolled(known HIV positive patients), inactive, deceased or incarcerated.

The duplicate names were excluded by the Case Managers and Nurse Manager.

Consumers Involvement:

To ensure patients' voices are being heard, patients have the opportunity to complete the following questionnaires regarding services ,delivery system and make suggestions on improvements.

- *Speak up Campaign*
- *Satisfaction survey.*
- *Clinic Visit Survey.*



Care Cascade: Methodology to Determine Decease and Incarcerated patients.

1. EMR System:

Staff documentation regarding treatment outcomes (including death, transfer-out, loss to follow-up, interrupted treatment and missed appointments).

2. Emergency Contact:

Patient's emergency contact will inform staff when a patient is deceased or incarcerated.

3. Patient Self Report:

When a patient becomes *re-engaged in care* after a gap, the staff inquires about the reason for the gap, i.e. incarceration, travel, etc;

4. Notification by HIV Medical Provider:

Admitted HIV+ patients from the program are followed by their HIV medical provider. The provider will inform the staff about the patient's outcome (discharged, expired)

5. Community Based Organizations:

Community case workers update staff about disposition and status of patients

6..Correction Dept:

Probation officers sometimes contact the program to re-schedule appointments for patients who are being released after incarceration.

Open Case Load Data:

- HIV +patients may not be captured if the ICD-10 billing code was not used.(patients admitted or seen for non HIV related condition)
- Multiple EMR systems in organization for exchanging or collecting of clinical data .

Active Case Load Data:

- Dependent on staff updating demographic data, scanned medical information and keep abreast of patients who are lost to contact.
- Monitoring Adherence to prescribed regimen can be unreliable at time since it relies largely by patient self reporting their consistency with medications.
- Sometimes dual patient identification number requires merging of chart data.

Viral Load (VL) Data.

- Sometimes VL tests are queried and need to be verified by viral load re-testing..
- Sometimes V L results are not reported when there are issues with specimens collection.
- Some patients failed to complete viral load tests as ordered.

Care Cascade: Linkage to Outside Organization

How was the status of patients linked to or engaged in HIV care at an outside organization verified?

The organization's active approach to linking patients to timely HIV care and treatment to an outside organization(s) entails Navigator Services:

- Follow up on all patients who are tested HIV positive.
Provide assistance to schedule the first medical care appointment, ensuring that the first and subsequent medical appointments are attended
- When the Navigator is unable to reach the patient to confirm successful linkage to care, then follow up with the HIV medical provider or clinic to verify if the patient attended appointment and is now enrolled in care services.
- When patients don't immediately engage in care, the Navigator will continue to make multiple contacts with that patient at later points to ensure successful linkage into care. Navigator will make monthly follow up phone contact for 6 months if necessary.
- Once this linkage has taken place, HIV care and treatment programs usually assume responsibility for retaining patient in care for clinical monitoring, ART initiation, and viral suppression.

Analysis of HIV Clinical Care Cascade

The HIV Continuum of Care—sometimes also referred to as the HIV treatment cascade—is a model that is used by federal, state, and local agencies to identify issues and opportunities related to improving the delivery of services to people living with HIV across the entire continuum of care.

The leadership program staff analyzed the 2016 treatment cascade to identify gaps in care for HIV+ patients, diagnosed, retained in care, adherence to ART and those who have achieved viral suppression.

Viral load Data Measurement Outcome:

The staff tracks and monitors viral load of HIV positive patients by most recent viral load results to determine if they are virally suppressed or unsuppressed.

Newly Diagnosed Patients: N= 9

Patients diagnosed by 4th Generation HIV test and results confirmed by HIV Viral load testing.

Demographic Data:

Black Male: N= 7, Risk factors: MSM: N= 5 Heterosexual Contact = 4

Black Female N= 1,

Hispanic Male = 1,

Ages:

Linkage to Care:

➤ The new patients were diagnosed during hospitalizations and were linked to care within 3 days of the confirmed diagnoses.

➤ 8/9 patients were linked to care while they were still hospitalized by the HIV medical provider

Viral Load Suppression (VLS) Data:

➤ 4/9 (44%) are VLS at the last tests; These patients were prescribed ARV for more than 6 months.

➤ 5/9 (56%) are not VLS at the last Viral load test. These patients started on ARV less than 6 months.

As shown in 2016 HIV Care Cascade:

Open Case Load: N = 443

- 385 /453 or (85%) patients from the open case were patients who accessed care in the HIV program during 2016.
- 68/453 or 15% of patients used the institution for non-HIV related issues and were not affiliated with the HIV Program.

Active Case Load: N = 364 patients

- 4 active patients did not complete VL test in 2016.
- 300/360 or 83% were virally suppressed.
- 60/360 or 17% were virally unsuppressed

Excluded Patients: N = 21patients

- *Deceased N=8 (Male = 7 Female = 1)*
6 /7 deceased patients were virally suppressed and died from non HIV-related causes.
- *Incarcerated: N =1 Female*
non compliant to ARV therapy and virally unsuppressed.
- *Unknown Disposition: or lost to Contact N= 13.*
- 11/13 excluded patients with unknown disposition were virally unsuppressed.

ARV Therapy:

100% of active patients (364) were prescribed ARV therapy.
99% of these patients were prescribed once a day regimens.

Viral Load Suppressed (VLS):

- 300/360 or (83%) of active patients of the HIV care continuum, achieved VLS.*
- 41 of them were previously unsuppressed patients; They became virally suppressed at last viral load test results due to QI strategies implemented by staff for adherence to ARV medications

Viral Load unsuppressed:

60/360 or (17%) of the active patients are virologically unsuppressed.
25/60 virally unsuppressed patients: (5) were newly diagnosed, (8) newly linked to program but known HIV positive, (5) re-engaged patients , (7) were suppressed patients who became unsuppressed at last VL test.

Barriers Identified for unsuppressed patients.)

- Non Adherence to ARV medications,
- Non- Adherence to clinic visits,
- Substance and alcohol abuse issues
- Mental illness,
- Unstable housing.

SUMMARY

The key to quality improvement is identifying causes affecting performance and changing systems to effect improvements.

Thorough analysis was made of the 2016 HIV treatment cascade data.

The measurable data will be used to develop new QI activities to address identified gaps and to expand on our existing areas of success to continue achieving viral load suppression.