NYC Health + Hospitals
2017 HIV Care Cascades

Presentation to the Quality of Care Committee
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NYC Health + Hospitals HIV Services & Data System

- New York City Public Healthcare system – 11 Acute Care Hospitals with DAC certification and 6 Federally Qualified Health Centers that follow the DAC requirements for AmCare
- Transforming from a structure of 6 regional networks to a single centralized management system
- Transitioning from 6 separate instances of an EMR run off the same platform (QuadraMed), to a single EMR (Epic)
- Transitioning from 3 separate platforms for revenue to a single platform
    - Data complications: each instance of Qmed records and reports data differently; diagnostic codes inconsistently used in Qmed; billing data from 2017 unreliable due to transition; no single patient identifier across the system; correctional health data not yet integrated; majority of IT staff dedicated to enhanced timeline for data transitions leaving few staff to support reporting.

Cascade Planning and Strategy

- Planning Goal – Primary goal was to establish processes for ongoing QI monitoring, with the secondary goal focusing on meeting reporting requirements
- Strategies
  - Work with Qmed IT data staff to map data points and work with sites on a series of sample reviews until report structure was valid and individual site cleaning needs identified
  - Work with Epic team to develop reports that match Qmed
  - Integrate information into sequel database allowing for automated cleaning based on individual site needs and building the capacity for monthly action lists and quarterly cascade reviews *[in process]*
  - Benchmark against ETE targets. Cascade indicators are only a sub-set of data review system
- Cascade Process
  - Centralized data collection
  - Facility-validation
  - Centralized reporting

Challenges and Resolutions

- For Qmed facilities, diagnosis based on a review of HIV testing, viral load testing, ART, and an encounter within an HIV clinic. Unable to run multi-year comparisons
  - *Data server will allow for analysis of patient retention and support tracking lost-to-follow-up patients seeking non-HIV care*
- Sexual orientation, gender identity and risk factors not captured in structured reportable fields across the system. Currently tracking indicators for several grants, but not able to capture in a standard and valid manner across all sites
  - *New EMR includes SOGI and structured fields for HIV risk factors. Efforts underway to capture in a structured assessment housing status and other social determinants – tool currently being piloted*
- DOHMH Care Status Report use limited by inconsistent data availability
  - *Often had only a single data point on a patient, leaving to a several hundred pending cases that could not be resolved due to the volume of review needed*
- Batch data review unavailable for incarceration databases
  - *Only excluded patients with a linkage-to-care tracking note regarding incarceration – considered a significant undercount*

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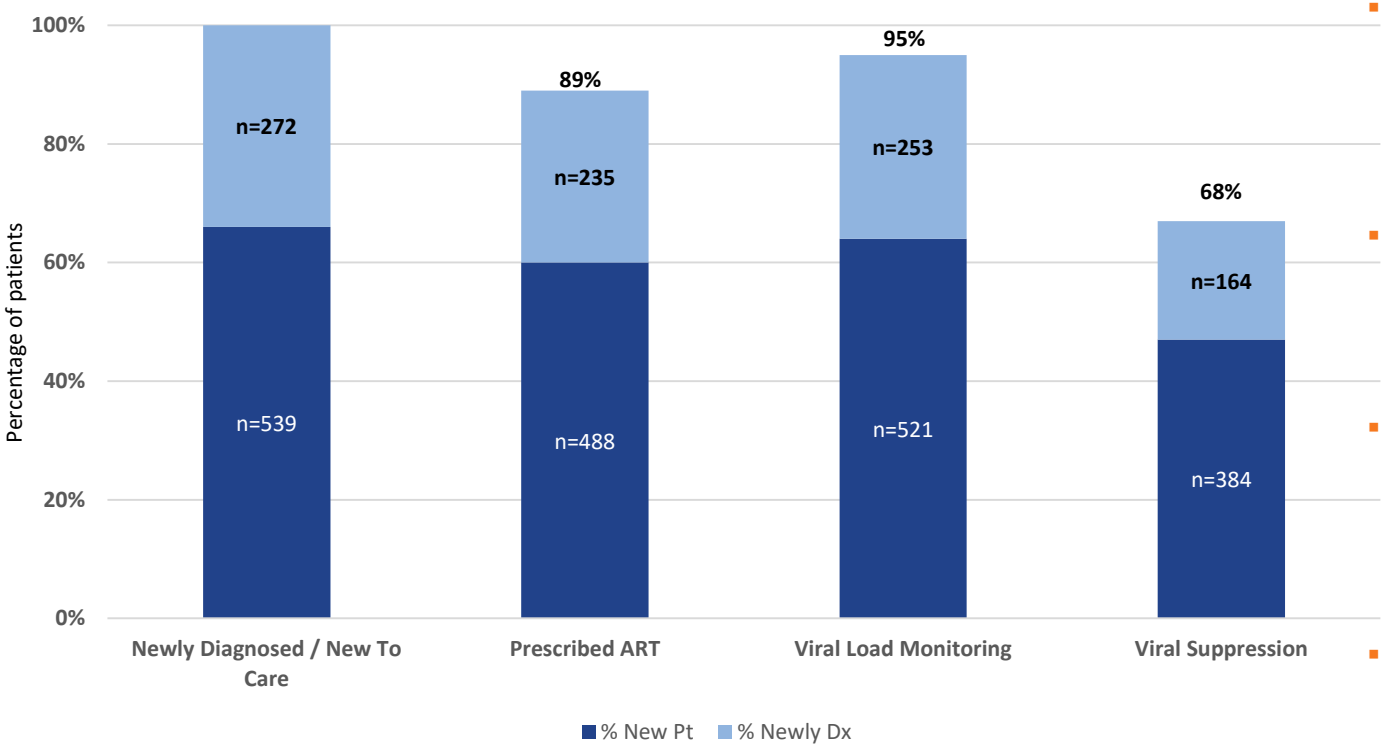
NYC Health + Hospitals 2017 New Patient Cascade



- **Newly diagnosed and new-to-care patients:** # of pts. newly diagnosed and patients new-to-care in the HIV program in 2017, regardless of HIV diagnosis date.
- **Prescribed ART:** # of newly diagnosed and new-to-care pts. prescribed ART / total # of newly diagnosed and new-to-care pts.
- **Viral Load Monitoring**: # of newly diagnosed and new-to-care pts. with a recorded viral load test / total # of newly diagnosed and new-to-care pts.
- **Viral Suppression**: # of newly diagnosed and new-to-care pts. with a viral load <200 copies/mL / total # of newly diagnosed and new-to-care pts.

Linkage to Care

- 17% (46 patients) of newly diagnosed patients were linked to care within 3 days of diagnosis. 80% (217 patients) of newly diagnosed patients were linked within 30 days of diagnosis.
- 10% (26 patients) of newly diagnosed patients were lost to follow-up

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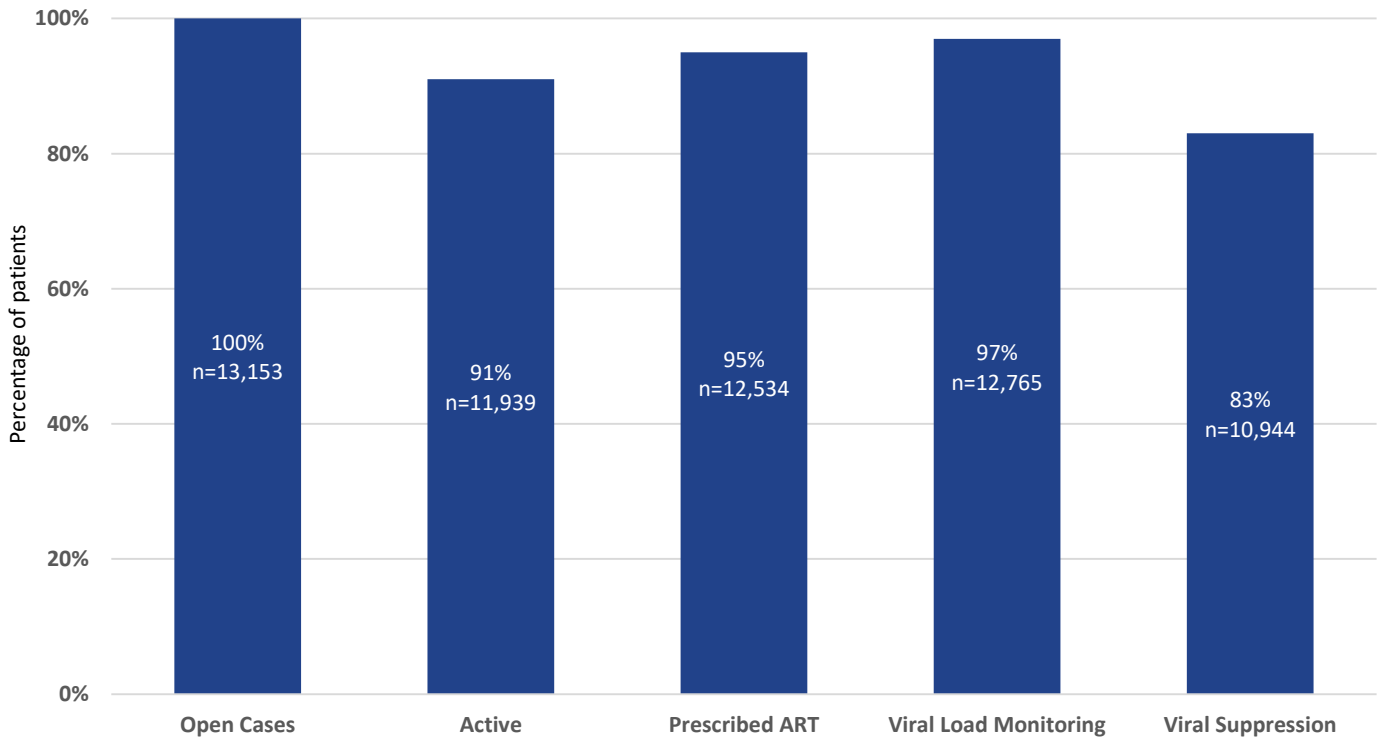
NYC Health + Hospitals 2017 Open Patient Cascade



- **Open Cases:** # of PLWH, diagnosed before 2017 with any service encounter, except those confirmed to be in care elsewhere, those recorded deceased by end of 2017, or those with an identified record of incarceration in 2017
- **Active Cases:** # of PLWH, diagnosed before 2017, with an HIV clinic visit in 2017 / total # Open Cases
- **Prescribed ART:** # Open Cases prescribed ART/ total # Open Cases
- **Viral Load Monitoring:** # Open Cases with a recorded viral load test/ total # Open Cases
- **Viral Suppression**: # Open Cases with a viral load <200 copies/mL / total # Open Cases

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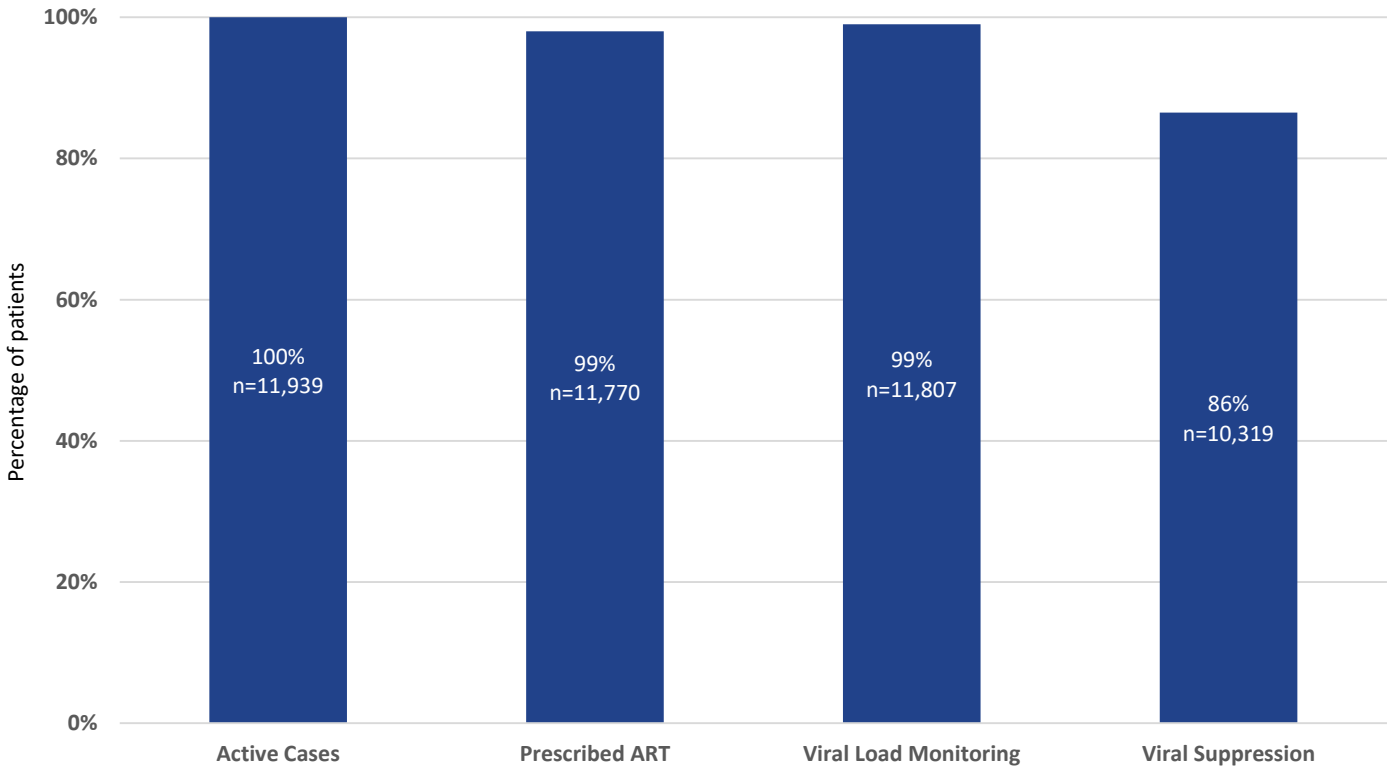
NYC Health + Hospitals 2017 Active Cases Cascade



- **Active Cases:** # PLWH with an HIV clinic visit in 2017
- **Prescribed ART:** # Active Cases prescribed ART/ total # Active Cases
- **Viral Load Monitoring:** # Active Cases with a recorded viral load test/ total # Active Cases
- **Viral Suppression**: # Active n Cases with a viral load <200 copies/mL / total # Active Cases

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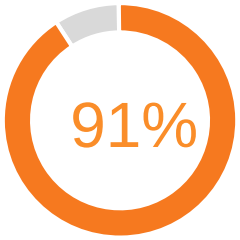
NYC Health + Hospitals Gap Analysis, 2017 Cascade

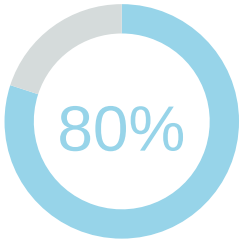


ETE Benchmark

90%

Receiving Any Care

Gap Analysis: In the absence of a vetted target for proportion of open, not active patients, we use the ETE benchmark for patients receiving any care. Using this standard, as a system NYC H+H is on target.

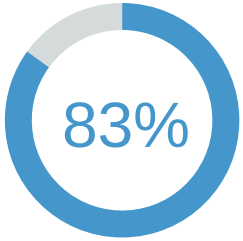


ETE Target

90%

Linkage within 30 Days, Newly Dx

Gap Analysis: Rapid linkage to care is a significant gap seen across the H+H system. When the indicator is extended beyond 30 days, the linkage rate increases to 90%. Time to linkage as an area in need of focus.

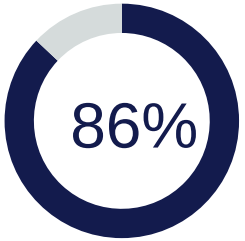


ETE Target

85%

Viral Suppression – Open Cases

Gap Analysis: Using the ETE metric of viral suppression for individuals diagnosed with HIV regardless of HIV care, NYC H+H as a system is near target. There were 588 open cases that were not virally suppressed across the NYC H+H system. The demographic analysis does not suggest any group was disproportionately represented in the non-active, unsuppressed patient population.



ETE Target

95%

Viral Suppression – Active Cases

Gap Analysis: Effort is needed to address the gap between actual and target for viral load suppression. The group that consistently had low viral load levels were patients under 30-years of age. The impact at individual facilities is often difficult to determine due to the small sample size. However, when consolidated across all sites, this groups viral load suppression rate is 72% vs. the average rate of 86%.

Quality Improvement Strategies

Data Strategies

- Build communication cycles and standard protocols to alleviate reporting burden of clinic sites and focus their efforts on integrating data for care improvements
- Utilize Population Health Data tools (e.g. Tableau dashboards), to improve understanding of QI concerns and identify areas of success that can be reviewed for best practices
- Follow ETE data targets and identify with clinical and consumer leaders additional data components to be tracked

Quality Improvement Strategies

- Focus on addressing systems issues (e.g., standardizing HIV testing, linkage systems and documentation processes of non-HIV clinics)
- Establish a quality management cycle guided by clinical and consumer leaders to distribute work in a structured manner, promoting long-term solutions and avoiding ‘intervention fatigue’
- Build toolkits to support independent QI projects based on discrete local concerns
- Strengthen connections between HIV clinics and larger facility to avoid siloing HIV care and ensure that HIV primary care receives the same benefits/supports of standard primary care

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NYC H+H Care Cascade Improvement Plan

Objectives	2018/2019 Activities	Staff	February 2019 Update
By December 2018 establish tracking system and standard follow-up protocol for patients not virally suppressed	• Finalize programming of data reporting system • Establish quarterly data collection and cleaning process • Add viral load suppression rate to H+H Population Health Dashboard and provide patient-level data reports to facility HIV medical directors • Establish standard follow-up process with HIV clinical leaders	• HIVS • Pop Health Data Corp • EITS • HIV Medical Directors • HIV Administrators • Chief Medical Officers	• Beta version of Qmed Registry complete. Final version in development • Data Analyst position in process of being filled – staffer will manage reports • Facility-based Data workshop scheduled for December 14th
Connect 50% of diagnosed patients to HIV primary care within 3 days of diagnosis by June 2019	• Establish Work Group to build shared understanding of obstacles to rapid linkage and strategies to address issues, with the goal of identifying best practices • Develop standard protocol • Develop facility-specific plan for operationalizing standard protocol	• HIVS • HIV Medical Directors • HIV Administrators • Chief Medical Officers • Facility Chiefs of Service	• DSRIP Work Groups established and on schedule to develop best-practice and standard work related to testing and Linkage
Connect to HIV primary care 30% of lost-to-follow-up (LTFU) patients (from diagnosis or after initial linkage) by June 2019	• Establish data management system to improve identification of LTFU patients and track activities to connect these patients to care • Identify “special populations” that disproportionately fall out of care and customize outreach and engagement efforts to address common obstacles	• HIVS • HIV Medical Directors • HIV Administrators • Peers / Alliance for Positive Change	• Contract executed for FY19. • Monthly reporting and communication cycle established and implemented • Peer / HIV Team Meetings underway

Questions, Comments, Feedback…

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Thank you!

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