Leveraging Existing Data Systems to Improve the Quality of HIV Care

DRAFT

Two Innovative Approaches:
Part I: New York State
Part II: Rural Alabama
Learning Objectives

1. Understand the new New York State DOH AIDS Institute’s HIV Quality of Care Program organizational assessment domain for development and use of facility level HIV care cascades.

2. Learn from community health centers and a large metropolitan hospital about how to develop and use facility level cascades.

3. Learn from a rural ASO in Alabama how to use quality management practices to enhance and track retention in care, monitor viral suppression, and assess these indicators across at-risk populations.
Defining the “End of AIDS”

A 3-Point plan announced by the Governor on June 29, 2014

1. Identify all persons with HIV who remain undiagnosed and link them to health care.

2. Link and retain those with HIV in health care, to treat them with anti-HIV therapy to maximize virus suppression so they remain healthy and prevent further transmission.

3. Provide Pre-Exposure Prophylaxis (PrEP) for persons who engage in high-risk behaviors to keep them HIV negative.

Reduce the number of new HIV infections to just 750 [from an estimated 3,000] by 2020.
Public Release of the Blueprint

April 29, 2015

We must add AIDS to the list of diseases conquered by our society, and today we are saying we can, we must and we will end this epidemic.

~Governor Cuomo
Data processes improved through stakeholder collaboration

<table>
<thead>
<tr>
<th>Facility</th>
<th>NYLinks</th>
<th>Ryan White Region</th>
<th>NYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Better ability to</td>
<td>✓ Improve HIV care outcomes</td>
<td>✓ Data-driven HIV care</td>
<td>✓ Few new infections by end of the decade</td>
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<tr>
<td>interpret &amp; understand data</td>
<td>though stakeholder collaboration</td>
<td>✓ Improve HIV care outcomes</td>
<td>✓ Promote data-driven HIV care</td>
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<tr>
<td>✓ Identification of</td>
<td>✓ Improve local ability to</td>
<td>✓ Regional HIV Cascades</td>
<td>✓ Statewide HIV care Cascades</td>
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<tr>
<td>gaps in care</td>
<td>understand &amp; interpret data</td>
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<tr>
<td>✓ Increase data-driven</td>
<td>✓ Collaboratively created data</td>
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<tr>
<td>HIV care</td>
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✓ Use of data for QI
Linking QI with Public Health Outcomes

- Process Improvements
  - Short Cycles of Change
  - Improvements in Facility Data
  - Improvements in Regional Data
  - Improvements in National Data

- Facility Improvements
  - Improvements in Population Health

- Regional Improvements

- National Improvements

- Public Health

**Time**
Facility Level Improvement: Using Robust Quality Improvement

• Reliably measuring the magnitude of a problem
• Identifying the root causes of the problem and measuring the importance of each cause
• Finding solutions for the most important causes
• Proving the effectiveness of those solutions
• Deploying programs to ensure sustained improvements over time
New York State Cascade of HIV Care, 2013
Persons Residing in NYS† at End of 2013

Cascade of HIV Care: Rochester Ryan White Region
Persons Residing in the Rochester Ryan White Region†, at End of 2013 (includes prisoner cases)

Cases w/any HIV Care during the year*

- Estimated HIV Infected Persons: 129,000
- Persons Living w/Diagnosed HIV Infection: 112,000

Cases w/continuous care during the year**
- Virally suppressed (n.d. or ≤200/ml) at test closest to end-:
  - Estimated HIV Infected Persons: 3,200
  - Persons Living w/Diagnosed HIV Infection: 2,000

Cases w/any HIV Care during the year*
- ≥1VL w/in one year
- Cases with continuous care (≥2 VL)
- Virally Suppressed (last vl <200 copies/mL)

Jordan Health HIV Care Cascade*

<table>
<thead>
<tr>
<th>Category</th>
<th>Count (N)</th>
<th>Percentage</th>
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<tr>
<td>Primary care cases</td>
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<tr>
<td>≥1VL w/in one year</td>
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<td>96% of infected</td>
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<tr>
<td>Cases with continuous care (≥2 VL)</td>
<td>132</td>
<td>75% of infected</td>
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<tr>
<td>Virally Suppressed (last vl &lt;200 copies/mL)</td>
<td>143</td>
<td>81% of infected</td>
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*HIV care evaluated from August, 2014 to July, 2015

* Any VL or CD4 test during the year; ** At le
†Persons presumed to be residing in NYS bas
AIDS with no evidence of care for 5 years an
Quality of Care Organizational Assessment: Ending the Epidemic (ETE) Domain

Background

2014 NYSDOH HIV Quality of Care Program Clinical and Consumer Advisory form joint ETE Quality of Care Subcommittee

2015 Development of new ETE domain to New York State’s Organizational Assessment to assess how healthcare agencies generate and use facility level cascades.

2016 January – Official Launch of ETE domain, included in assessments at all HIV medical facilities in New York State performed by NYSDOH - Office of the Medical Director staff
Quality of Care Organizational Assessment

• Who is it for?
  • Any clinic that provides HIV medical care

• Purpose:
  • To improve organizational infrastructure for QI activities

• Who implements the Organizational Assessment?
  • Expert QI coaches from NYSDOH AI staff and internal key stakeholders are involved in the assessment process
  • Self evaluation

• How is it scored?
  • There are 8 domains, receiving a score of 0-5
Quality of Care Organizational Assessment

• 8 Domains:
  • Quality Management
  • Workforce Engagement in HIV quality program
  • Measurement, Analysis, and Use of Data to Improve Program Performance
  • Quality Improvement Initiatives
  • Consumer Involvement
  • Quality Program Evaluation
  • Achievement of Outcomes
  • Ending the Epidemic Initiative (NEW)

• How are the results used?
  • To develop a workplan with specific action steps to improve the facility’s Quality Management Program
Ending the Epidemic Assessment Domain

Why construct a facility-level cascade??

Aligned with NYS Ending the Epidemic Initiative, facilities assess how all PLWH who touch their institution are linked to ongoing care that results in achieving viral load suppression.

The facility-level cascade then is a driver to identify areas of focus to reach those patients not connected to care sparking improvement activities to achieve these goals.

The facility-level cascade visibly portrays the success of the agency in achieving both patient and public health goals related to ending the epidemic.
Domain H: Ending the Epidemic Initiative

**GOAL:** To assess how the HIV program generates and uses facility level cascades to identify opportunities for improvement and develop data-driven improvement plans, to align initiatives, and to ensure that accurate and timely information about the care engagement and viral load suppression status of patients is available to all members of the facility so that they can effectively achieve both patient and public health outcomes as New York State accelerates its work to end the HIV epidemic.

The Ending the Epidemic section assesses how the program selects, gathers, analyzes and uses data based on the cascade of care to improve performance. This includes how cascade data are collected and used by leaders, staff and the quality program to improve outcomes along the cascade throughout the entire healthcare agency and to achieve program goals.

H.1. To what extent does the HIV program routinely generate and use facility level cascades to drive improvement and address gaps in care?

| Each score requires completion of all items in that level and all lower levels (except any items in level 0) |
| Getting Started | 0 | ☐ Facility does not report required rates of retention, treatment and viral load suppression. |
| Planning and initiation | 1 | Facility: |
| | | ☐ Reports required rates of treatment, retention, and viral load suppression. |
| Beginning Implementation | 2 | Facility: |
| | | ☐ Can annually construct a cascade that reports rates of retention, prescribed ART, and viral load suppression. |
| Implementation | 3 | Facility: |
| | | ☐ Can conduct an analysis, based on its facility level cascade, to understand why patients do not meet expected outcomes and develop an intervention plan based on its analysis. |
| | | ☐ Facility leaders, quality committee members, including providers and consumers, and facility staff use facility level cascade to develop and implement a quality improvement plan. |
| | | ☐ Implements quality improvement plan, tracks the impact of interventions on facility level cascade rates, and responds to the results of QI projects. |
| | | ☐ Involves community service agencies, including health homes, in process analysis and improvement plans to address linkage, engagement, re-engagement, and viral suppression. |
| | | ☐ Makes its cascade visible to its internal stakeholders, and discusses it with its community advisory board. |
| Progress toward systematic approach to quality | 4 | Facility: |
| | | ☐ Can measure whether or not HIV+ patients are linked to medical care when they engage with any unit of the facility (including, but not limited to emergency room and supportive services] and can identify the status of every HIV+ patient ever seen at the facility |
| | | ☐ Can stratify data to identify potential disparities in care provided to sub-populations. |
| | | ☐ Identifies patients who are lost to follow up and reaches out to its local health department or the State or other source to determine whether or not each patient has been engaged in care elsewhere. |
| Full systematic approach to quality management in place | 5 | Facility: |
| | | ☐ Produces, at least annually, a full cascade that includes facility wide testing and linkage rates within the institution, including, but not limited to emergency departments, inpatient units and appropriate ambulatory care clinics. |
| | | ☐ Follows longitudinal cohorts of patients enrolled in care at the facility over a 24 month period to assess retention, treatment, and suppression. |
### H.1. To what extent does the HIV program routinely generate and use facility level cascades to drive improvement and address gaps in care?

Each score requires completion of all items in that level and all lower levels (except any items in level 0)

<table>
<thead>
<tr>
<th>Level</th>
<th>Score</th>
<th>Facility Requirements</th>
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<tr>
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<td>☐ Facility does not report required rates of retention, treatment and viral load suppression.</td>
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<tr>
<td><strong>Planning and initiative</strong></td>
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<tr>
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<td></td>
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<td><strong>Beginning Implementation</strong></td>
<td>2</td>
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Comments:
Guidance Example: Community Health Care Network
HIV Testing and **Linkage** to Care - 2013

- **27,829** HIV tests performed in 2013
- **292** Patients who tested positive in 2013
- **227** Patients linked to care in 2013

- **1.04%** Sero-prevalence
- **78%** Percentage of newly diagnosed linked to care

Linked to Care = # of newly diagnosed HIV+ patients with 1st visit to PCP within 4-6 weeks of confirmatory HIV+ test.
Guidance Example: Community Health Care Network
HIV Treatment Cascade - 2013

The Cascade

992
All HIV positive patients seen in 2013

904
Unique patients retained in care

904
Unique patients on ARV

790
Unique patients with VL <200

91%
Retained in care ¹

91%
Prescribed ART

80%
Virally suppressed ²

¹ Retained in Care = % of patients with 1 visit per quarter within 2013
² Virally suppressed = % of patients with VL <200 cps/ml at last VL test in 2013
Guidance Example: Community Health Care Network
HIV Treatment Cascade - 2013

The **Cascade**

- **Linked to care**: 78%
- **Retained in care**: 91%
- **Prescribed ARV**: 91%
- **Virally suppressed**: 80%

*Denominator: newly diagnosed patients in 2013*

*Denominator: all HIV positive patients seen in 2013*
HIV CARE CASCADE 2014
INSTITUTE FOR ADVANCED MEDICINE

NYS 2013 eHIVQual Benchmarks:
- Top 25%
- Median
- Bottom 25%

Data Source: Calendar Year 2014 Epic + Climas
Open: 1+ PC visits in past 24 months
Active: Open pts with 1+ PC visits in past 12 months
Retained: Active pts with 1+ PC visits in each half of past 12 months
On HAART: Active pts prescribed HAART anytime in past 12 months
VL <200: Active pts with last viral load in past 12 months below 200
Challenges and Unresolved Issues

• Testing:
  • Who should be tested? How often? Is there a standard for facility-based testing?

• Linkage:
  • What’s the right timeframe for linkage within the facility?
  • What about linkage to an outside clinic?
  • Who’s eligible for linkage: how long is a case open?

• Retention:
  • What’s the right measure? Is there one? How do different needs translate into measurement?

• Data Source:
  • How will you identify the eligible patients?

• Resistance?
Facility-level Enablers and Challenges

• **Helps**
  - Supportive facility leadership
  - AIDS Institute and NYCDOHMH sponsorship & TA: *Ending the Epidemic!!*
  - Designated data staff, esp for larger programs
  - Strong quality management program
  - Early engagement of IT department
  - Transparency across institution of the visual display
  - Ability to analyze by key populations and then focus on them

• **Hinders**
  - Lack of clarity about the denominator
  - Access to larger data sets and RHIO data
  - Staff turnover
  - Weak QI program
  - Time commitment
Linking to Improvement

HIV Cascade of Interventions

Testing
- Universal: Opt-out testing (IAPAC: A) 20
- Active choice testing 2
- Community based testing: Multi-disease prevention
  community health campaigns (IAPAC: A) 3, 4, 6, 9, 13, 14, 23, 4.
- Partner notification and referral to testing (IAPAC: A) 2
- Self-testing (IAPAC: B) 23
- Testing in workplace and institutional settings,
  including prison, military, police, mining/trucking
  companies, and educational venues
  (IAPAC: B III) 2, 9, 11, 14, 20

Domestic
- Pharmacy-based testing 8, 19

International
- Community based testing: Home-based (IAPAC: A) 5, 9, 13, 14, 20
- Community based testing: Mobile testing (IAPAC: A) 5
  6, 12, 13, 15
- Peer-led testing 14
- Routine testing for pregnant women 14

Linkage
- Universal: Co-locating medical services for onsite testing and
  medical care (IAPAC: A) 20

Domestic
- ARTAS case management (IAPAC: B II) 1, 4, 6, 9
- HIV clinic-based linkage to care team (IAPAC: A) 20
- Strength-based case management 1, 8, 10, 16
- Outreach workers 1, 8, 13, 22
- Youth targeted interventions 1, 8, 15, 19, 12
- Patient navigation 1, 8, 13

International
- Extended home visit counseling 4, 10
- Food Incentives 10
- Immediate inpatient HIV counseling and testing
  (IAPAC: A) 9, 12, 13, 11
- Peer home visits post-diagnosis 20

Retention
- Universal: Reminders (SMS, call, post mail) within 48 hours
  (IAPAC: B III) 20

Domestic
- Clinic-wide messaging (IAPAC: A) 20
- Enhanced Personal contact 2, 8, 10, 11
- Computer decision-support systems (Virology Fast
  Track) 20
- Medical case management 1, 14
- Buprenorphine Treatment 16

International
- Peer support 20

Adherence
& Viral Load Suppression
- Universal: Computer Based Adherence Interventions
  - Decentralization of Treatment

Domestic
- Cognitive Behavioral Therapy for Adherence 17
- Cognitive Behavioral Therapy & Motivational
  Interviewing
- Coping Skills & Self Management of Treatment
  Side Effects 20
- Monetary Reinforcement
- Personalized Cell Phone Reminder System
- Pillboxes

International
- Community Based ART Programs
- Community Based Adherence Clubs
- Counselling and Alarm Devices
- Counselling and Reminder Text Messages
- Directly Administered Antiretroviral Therapy (DAART)
- Health Workers
- Individually Tailored DOT with economic and
  psychosocial support 10
- Online Self-Management Programs
- Phone Calls and Home Visits 33
- Task Shifting and Involvement of Community
  - Text Message Reminders

Population Key
1 African American
2 All high risk
3 All partners of HIV+ individuals
4 ARV naive
5 First-time testers
6 Incarcerated
7 Latina/Latino
8 Low education
9 Pregnant women
10 Low income
11 Marginalized
12 Married
13 Men
14 MSM
15 Newly diagnosed
16 No insurance
17 People w/depression
18 Substance use
19 Unspecified
20 Women
21 YMSM
22 Youth
23 Strong (A)
24 Moderate (B)
25 Weak (C)
26 Exceedant (I)
27 High (II)
28 Medium (III)
29 Low (IV)

Glossary
Active choice testing
Notifying patients orally or in writing that an HIV test
will be performed unless patient declines

Multi-disease prevention community health campaigns
Testing patients in non-infrastructure settings, e.g., mobile
vans, in combination with other interventions
Next Steps:

• Finalize facility level cascade data collection tool and guidance

• Provide webinars, technical assistance and learning communities to strengthen capacity at agencies across the state.
Acknowledgements

Susan Weigl
Jacob Lowy
Steve Sawicki
Stephen Crowe
Dan Belanger
Dan Ikeda
Demetre Daskalakis, Bisrat Abraham & NYCDOHMH HIV CSU
Quality of Care Advisory Committee
Consumer Advisory Committee
NY Presbyterian Hospital’s Facility Level Care Cascade: Development, Presentation, QI Use, and Next Steps

Randi Scott, MA

Data Coordinator, NY Presbyterian Hospital
Why Build a Care Cascade?

- Assess progress in HIV care, identify gaps in care, and drive efforts to improve care in a variety of populations\(^1\)
- Address institutional gaps in real-time as opposed to using claims data
- Coordinate cross-institutional and regional response to gaps in care

\(^1\)NYS DOH AIDS Institute
Cascade Design

- NYP HIV screening rate: 19% (105,772 patients ever screened out of 569,165 total patients seen in prior 24 months)
- Institutional cascade universe of patients: seen at NYP in past 24 months and ever diagnosed HIV+ (N=5,377)
- Housed in Tableau, with capability to view data graphically and create individualized visualizations
- Ability to click to drill down to table data for individual patients, with fields including:
  - Demographics
  - Location/date and provider at last NYP visit
  - Primary care data (if applicable)
  - Recent ED & Inpatient Utilization
  - Viral load and CD4 Data
# Measure Definitions

<table>
<thead>
<tr>
<th>Measure</th>
<th>Time Period</th>
<th>Definition</th>
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<tbody>
<tr>
<td>HIV+ Caseload*</td>
<td>Prior 24 months</td>
<td>Any HIV confirmatory test positive or ICD9 &amp; ICD10 codes c/w HIV infection in either billing or EMR</td>
</tr>
<tr>
<td>Engaged in Care†</td>
<td>Prior 12 months</td>
<td>HIV+ with primary care visit</td>
</tr>
<tr>
<td>Retained in Care†</td>
<td>Prior 12 months</td>
<td>HIV+ with primary visit in each 6 month period</td>
</tr>
<tr>
<td>Retained in Care†</td>
<td>Prior 24 months</td>
<td>HIV+ with primary visit in each 6 month period</td>
</tr>
<tr>
<td>Prescribed ART†</td>
<td>Prior 12 months</td>
<td>HIV+ with any record of ARV in EMR</td>
</tr>
<tr>
<td>Virally Suppressed†</td>
<td>Prior 12 months</td>
<td>HIV+ and most recent viral load test drawn in the past year &lt;200 copies/ml</td>
</tr>
</tbody>
</table>

Universe of patients = seen at NYP in past 24 months and ever diagnosed HIV+  
All lab and visit data is **NYP only**

*NYP  
†NYS DOH
NYP Institutional Care Cascade

**Inclusion Criteria:** seen at NYP from 7/19/2014-7/19/2016 (24 months), ever diagnosed HIV+

- **NYP HIV+ caseload in past 24 months:** 5377 (100%)
- **Engaged last 12 months:** 2679 (50%)
- **Retained last 12 months:** 2015 (37%)
- **Retained last 24 months:** 1538 (29%)
- **On ART in last 12 months:** 2675 (50%)
- **Suppressed <200:** 2462 (46%)

Click to Filter:
- Last NYP Contact
  - Ambulatory Clinic
  - Emergency Department
  - Inpatient
- Primary Care Site
  - HIV Clinic
  - Other Clinic
NYP HIV Clinic Care Cascade

**Inclusion Criteria:** seen at NYP from 7/19/2014-7/19/2016 (24 months), ever diagnosed HIV+, most recent ambulatory visit at an NYP HIV clinic

Click to Filter:
- Last NYP Contact
  - □ Ambulatory Clinic
  - □ Emergency Department
  - □ Inpatient
- Primary Care Site
  - ✓ HIV Clinic
  - □ Other Clinic
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Notes and Tips on Cascade Development:

- Development of measure definitions – from group consensus based on examining state and city cascades and other state measure definitions (e.g. eHIVQUAL; HRSA)
- Working with IT department
  - Include IT in development discussions from the very beginning – important to know what is possible from a data perspective before getting too far into the process
  - Importance of checking in regularly after examining each iteration of the data, as sometimes there is miscommunication about what data is needed and how to extract it
- Start graphing rough versions of the data early in the process – this makes it easier to see patterns as well as data errors
- Need tight collaboration from many roles in the institution in order to develop accurate cascade and generate interest – e.g. data coordinator, program coordinator, analytics, medical providers, etc.
Lessons Learned

• Interventions will be difficult without integration of institutional cascades through health exchange (e.g. Healthix)

• Data incomplete and inaccurate unless proven otherwise:
  • Fragmented IT systems
  • Extraction from multiple data sources
  • Field types
  • Maintaining updated data dictionary and lab/diagnostic codes

• DON’T WAIT FOR PERFECTION – act on the patients you know about right away
Next Steps before Facility Wide Implementation

• Refine measure parameters and extraction process to improve data accuracy
• Determine best ways of presenting cascade information, both graphically and in table form
• Consult key stakeholders, such as patients, providers, care coordinators, and administrators
• Ensure use of the cascade is in line with institutional and legal guidelines
• Develop workflows based on identified gaps in care
Closing the Gaps

• Pilot interventions to close gaps in HIV Clinic first
  • Notification of all positive HIV test results at NYP to facilitate linkage of newly diagnosed patients
  • Working with navigators in ED and inpatient for real time linkage of PLWH not engaged in care
  • Development of care plans for virally unsuppressed patients in multidisciplinary care teams

• Take lessons learned from pilot to help inform institution wide interventions to close gaps
Acknowledgments

• Gabriel Aldana
• Susan Weigl
• Peter Gordon, MD
• Samuel T. Merrick, MD
• Steven Chang
• Mila González
Facility Level Cascades for Quality Improvement

Rebecca Green, LMSW
Institute for Family Health
Regional Director of HIV Programs
TREATMENT CASCADE FOR THE FAMILY HEALTH CENTER OF HARLEM

IFH Harlem HIV Care Cascade 2014

- 100% Ever Linked to HIV Care at IFH Harlem
- 90% Retained in HIV Care in 2014
- 91% Started ART
- 73% Suppressed Viral Load in 2014
Inclusion/exclusion criteria

- **Universe of patients**: Patients receiving HIV primary care at the Family Health Center of Harlem
- **Linked to care**: Any patient with at least 1 HIV primary care visit in 2014, without documentation of outside provider 384
  - HIV Primary Care Visit: Discussion/treatment of HIV; HIV related labs; ART prescription
- **Retained in care**: Patients with at least 1 HIV primary care visit in the first 6 months of the year and in the second 6 months of the year 346
- **Started on ART**: Patients with at least 1 ART prescription in 2014 324
- **Suppressed Viral load**: Patients with a viral load ≤200 at last lab in 2014 280
Retaining Patients Living with HIV/AIDS Through Friendly Outreach Cards
Felicity Tsikiwa, LPN, Jesse Feinman, Rebecca Green, LMSW, Ross Hewitt MD
The Institute for Family Health, New York, NY

Introduction and Background
The Institute for Family Health is a Federally Qualified Health Center serving over 90,000 patients at 27 locations throughout New York State. Annually, approximately 1,000 people living with HIV/AIDS (PLWHA) receive primary care and psychosocial services through the Comprehensive Outpatient Medical Practice And Support Services Program (COMPASS). This intervention took place at Family Health Center of Harlem, where COMPASS serves about 375 PLWHA.

Retention in care improves the health of PLWHA and reduces the number of new HIV infections. The National HIV/AIDS Strategy and national, state, and local treatment cascades highlight retention activities as vital in our fight against HIV/AIDS. Nationally, 40% of people living with HIV/AIDS are considered retained in care, in New York State, 49%; in New York City, 54%; and at the Family Health Center of Harlem, our 2013 retention rate was 84%.

In 2013 our routine retention efforts involved attempting 3 consecutive calls followed by a final letter to all patients who missed appointments.

For our 2013 Continuous Quality Improvement (CQI) project we identified patients at risk of falling out of care (those seen by our medical providers in past 6 months but not seen in the past 3 months.) We reengaged with 3 call attempts followed by a final letter as well. For those patients at risk of falling out of care who were contacted through our 2013 CQI project, 24% kept their next scheduled appointment or scheduled and then kept a new appointment.

Definitions
- New York State HIV clinical guidelines: Clinicians should schedule routine monitoring visits at least every 4 months for clinically stable PLWHA.
- Centers for Disease Control Retention Measure: Patient attended 2 or more HIV medical care visits in the 12 months following initial care. (Fig. 1)
- New York State Retention Measure: Patient received 2 HIV related lab tests at least 3 months apart. (Fig. 2)
- Institute Retention Measure (as defined by HIVQUAL) patient attended at least 1 HIV medical care visit in the first 6 months of the year, and at least 1 in the second 6 months of the year, and those visits are at least 60 days apart. New patients seen after July 1st are removed from analysis.

Objective
In 2014, 90% of COMPASS patients receiving primary care at the Family Health Center of Harlem will be considered retained. This objective was made in our 2014 CQI project.

Methods
- Engaged patients at December 2013 Consumer Advisory Board (CAB) meeting to hear about outreach and retention strategies.
- CAB members requested that messages be more clear and more "loving" containing "terms of endearment.
- Initial drafts of the outreach card were completed by a collaboration between patients and staff member.
- The final card was developed by COMPASS staff and the Institute Communications Department.

Methods
Based on CAB member feedback, the "friendly outreach card" was created.

On a rolling monthly basis, the Electronic Medical Record (EMR) generated a report listing patients at risk of falling out of care.

Based on the report, the "friendly outreach card" was created and handed out to patients at risk of falling out of care.

We reviewed patients sent "friendly outreach card" at 60 days to see if they had returned to care.

A list of patients sent the "friendly outreach card" was sent to program staff to encourage collection of qualitative data (patients' response to card).

Findings

Return to care (at 60 days) rates for patients at risk of falling out of care after reception of a "friendly outreach card":
- Returned 60 days after Card only: 18.0%
- Returned 60 days after Card + CAB: 34.4%
- Returned 60 days after Card + CAB + Card Only: 34.4%

33% of patients at risk of falling out of care were involved in 2014 CQI Project.

- 41 ineligible for analysis due to not having an "early" card returned before sending an "early" card.
- 61 remaining patients at risk of falling out of care were analyzed.
- On average there was 62 days between when the card was sent and return to care of those patients who returned to care 60 days after sending a "friendly outreach card.
- 31% of patients returned to care 60 days after receiving a "friendly outreach card.
- 31 patients returned to care 60 days after receiving a "friendly outreach card.
- 31 patients returned to care 60 days after receiving a "friendly outreach card.

Discussion & Implications for Practice
How we could have improved the 2014 CQI project:
- Starting sooner: The patient request for more frequent communication was in development until the early third quarter when the first round of cards were sent.
- Using consistent process metrics across 2013 & 2014 CQI projects: Our 2013 CQI project measured if patients kept their next appointment or scheduled and kept an appointment. Our 2014 CQI project looked at if the patient returned to the clinic within 60 days.
- Having a control group: If we continued the 2013 retention effort for a random control group throughout 2014 and used the 2014 metrics for return to care, or looked historically and gathered our 2014 metrics on the 2013 data, we would have greater ability to compare our efforts.
- Greater consistency with other outreach efforts: Our general outreach and retention efforts for patients who missed appointments changed on 20 October 2014, in the middle of our project.

For future projects we may look at the group of patients not retained and see if they have shared characteristics that will accurately predict who is most at risk.

Implications for practice:
- Continue sending "friendly outreach cards" to patients at risk of falling out of care.
- Continue asking for feedback from patients and our CAB to generate ideas for continuous quality improvement.
- Consolidate all of our retention and outreach efforts into a unified series of steps with consistent documentation at each step.

Sources
How have we used the treatment cascade?

• Identify areas for CQI improvements
  • Retention
  • Viral load suppression
• Publicize work
• Motivate/engage front line staff
• Motivate/engage patients
• Next steps: Institute wide cascade
Lisa Reid, LCSW, Director of Genesis Primary Care & Supportive Services
Christine Kerr, M.D.,
Clinical Director of HIV & Hepatitis C
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*n=678*
Hudson Valley Cascade 2015

- >/= 1 visit in 12m
  - Atrium (158): 96.2%
  - Beacon (102): 97.1%
  - Peekskill (68): 97.8%
  - Monticello (92): 97.9%
  - Overall (793): 97.5%

- >/= 1 CD4 or VL
  - Atrium (158): 94.1%
  - Beacon (102): 97.1%
  - Peekskill (68): 97.8%
  - Monticello (92): 97.1%
  - Overall (793): 97.5%

- On ART
  - Atrium (158): 88.6%
  - Beacon (102): 95.1%
  - Peekskill (68): 94.1%
  - Monticello (92): 93.4%
  - Overall (793): 94.1%

- Continuous Care
  - Atrium (158): 86.1%
  - Beacon (102): 88.2%
  - Peekskill (68): 89.1%
  - Monticello (92): 88.7%
  - Overall (793): 88.7%

- VL<200
  - Atrium (158): 82.9%
  - Beacon (102): 88.2%
  - Peekskill (68): 87.0%
  - Monticello (92): 85.5%
  - Overall (793): 91.2%
Suffolk County Cascade 2015

- >= 1 visit in 12m
  - Shirley (39) 97.4%
  - Coram (5) 100.0%
  - Patchogue (51) 100.0%
  - Brentwood (112) 100.0%
  - Amityville (52) 100.0%
  - Wyandanch (114) 100.0%
  - Overall (793) 100.0%

- >= 1 CD4 or VL
  - Shirley (39) 97.4%
  - Coram (5) 100.0%
  - Patchogue (51) 100.0%
  - Brentwood (112) 100.0%
  - Amityville (52) 100.0%
  - Wyandanch (114) 100.0%
  - Overall (793) 100.0%

- On ART
  - Shirley (39) 97.4%
  - Coram (5) 98.0%
  - Patchogue (51) 97.3%
  - Brentwood (112) 97.3%
  - Amityville (52) 96.5%
  - Wyandanch (114) 93.4%
  - Overall (793) 92.3%

- Continuous Care
  - Shirley (39) 80.0%
  - Coram (5) 80.0%
  - Patchogue (51) 92.3%
  - Brentwood (112) 92.3%
  - Amityville (52) 94.1%
  - Wyandanch (114) 88.7%
  - Overall (793) 85.5%

- VL<200
  - Shirley (39) 73.1%
  - Coram (5) 80.0%
  - Patchogue (51) 90.2%
  - Brentwood (112) 90.2%
  - Amityville (52) 92.2%
  - Wyandanch (114) 85.5%
  - Overall (793) 76.3%
HRHCare VLS Project

- Standardized lab review process
- Adherence education script
- Referral to intensive Retention and Adherence Program (RAP)
  - 82% suppressed in 9 months
- Case manager present in medical visit
- Replicate RAP in other sites
Use of the Treatment Cascade

• Quality Improvement
  • Viral load suppression
  • Retention in care

• Program Development
  • Adherence strategies
  • Evidence based approaches:
    • Peer Support Intervention

• Site specific Cascades
  • Educate staff and patients on QI
  • Celebrating success
Thanks!

Q & A

Contact Us:
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Christine Kerr, MD (ckerr@hrhcare.org)