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.

Ending the Epidemic

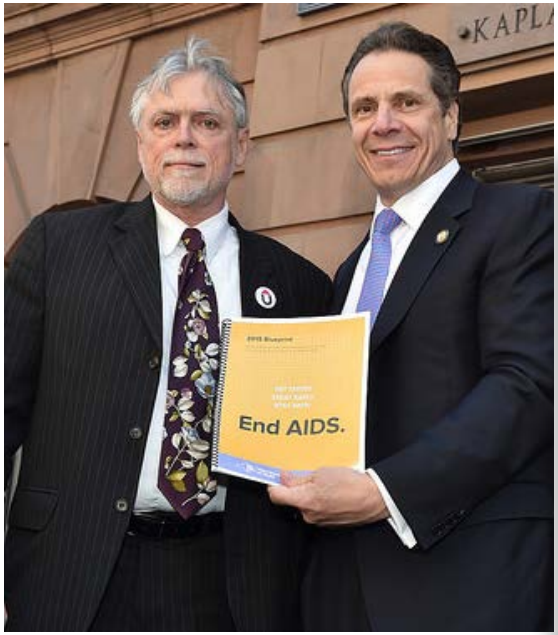
Defining the "End of AIDS"

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

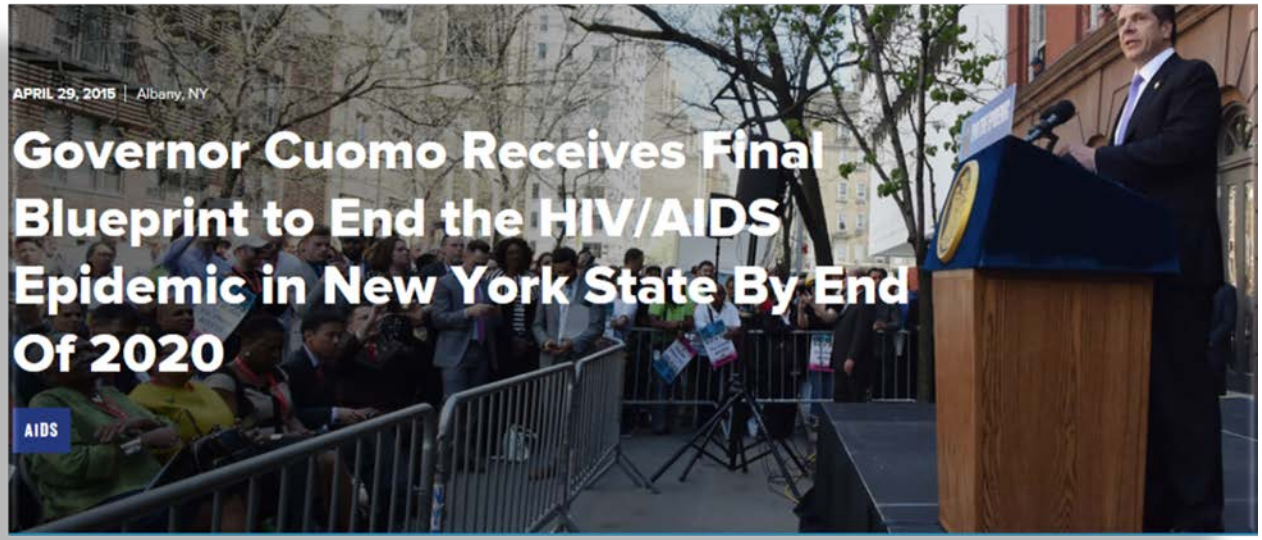
Reduce the number of new HIV infections to just 750 [from an estimated 3,000] by 2020

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

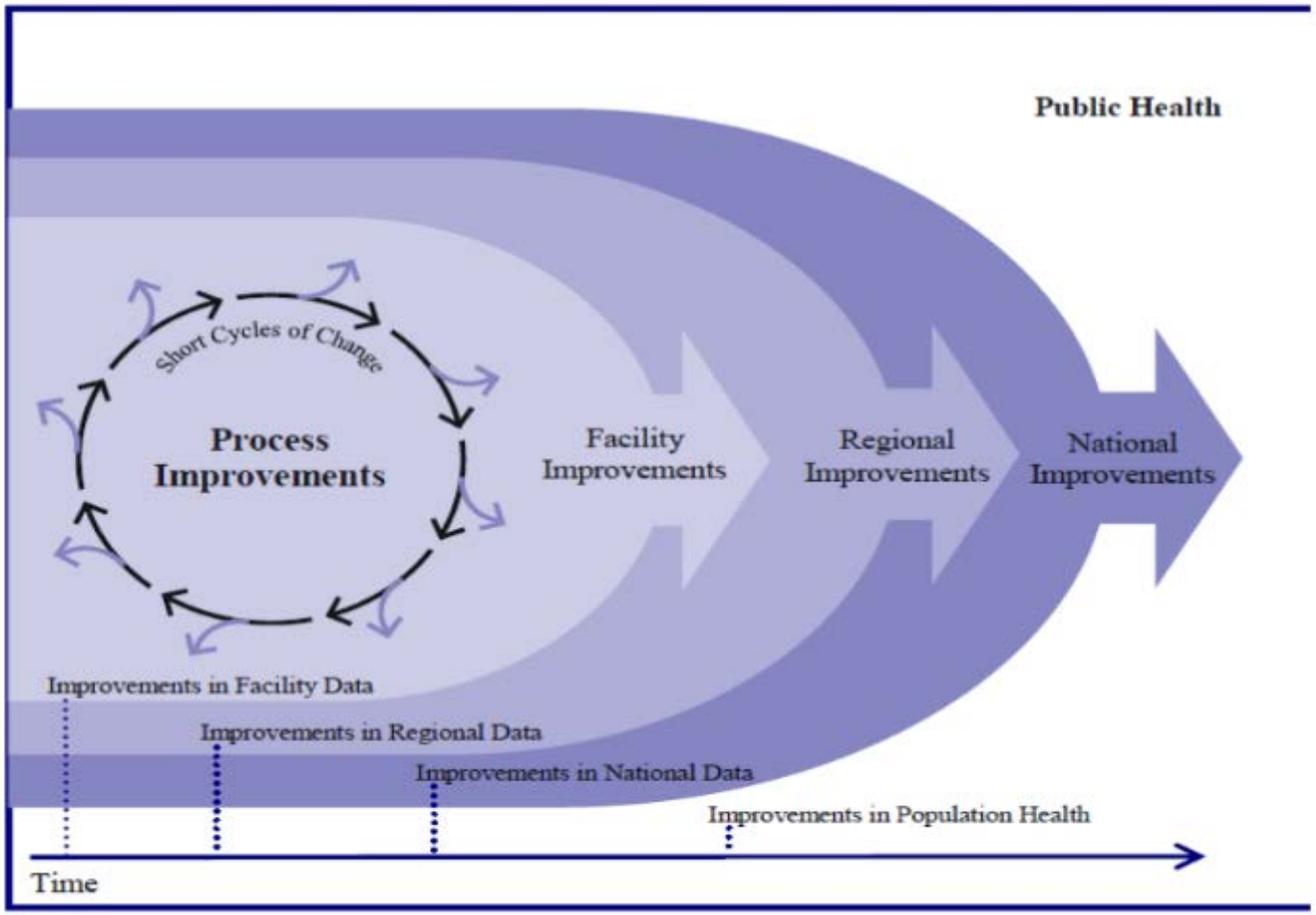


Data processes improved through stakeholder collaboration

Facility	NYLinks	Ryan White Region	NYS
✓Better ability to interpret & understand data	✓Improve HIV care outcomes though stakeholder collaboration	✓Data-driven HIV care	✓Few new infections by end of the decade
✓identification of gaps in care	✓Improve local ability to understand & interpret data	✓Improve HIV care outcomes	✓Promote data-driven HIV care
✓Increase data-driven HIV care	✓Collaboratively created data packages	✓Regional HIV Cascades	✓Statewide HIV care Cascades

✓ **Use of data for QI**

Linking QI with Public Health Outcomes



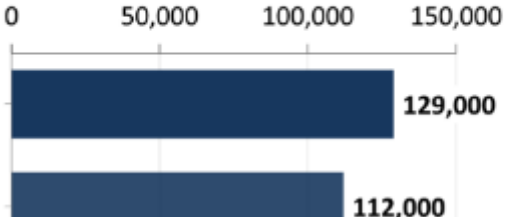
Facility Level Improvement: Using Robust Quality Improvement

- 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

Chassin & Loeb. Health Affairs April 2011 30

New York State Cascade of HIV Care, 2013

Persons Residing in NYS† at End of 2013

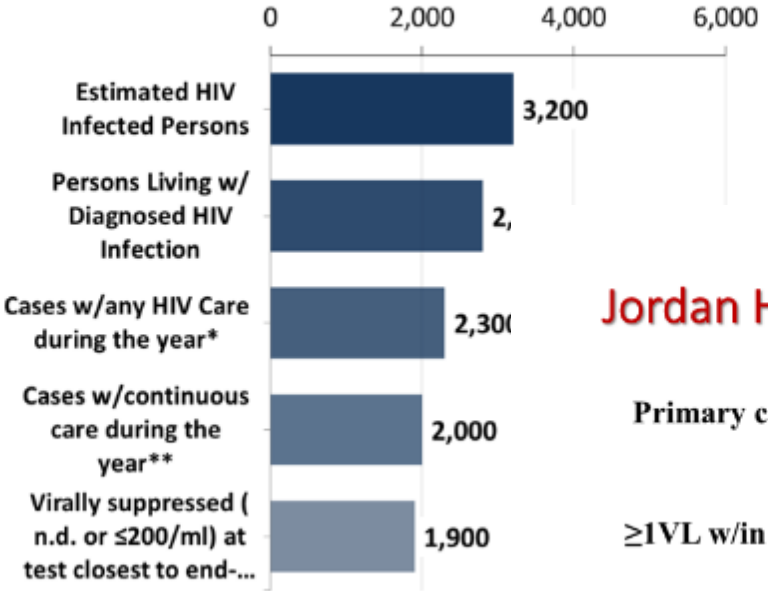


* Any VL or CD4 test during the year; ** At le

†Persons presumed to be residing in NYS bas AIDS with no evidence of care for 5 years an

Cascade of HIV Care: Rochester Ryan White Region

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

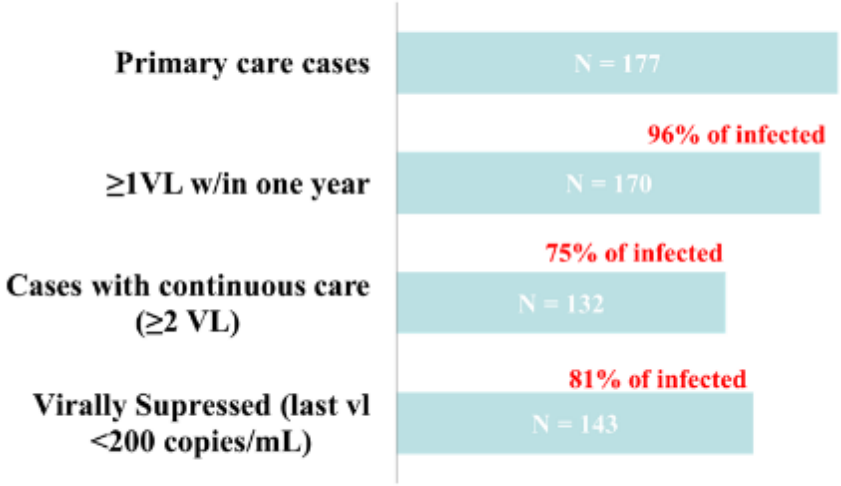


* Any VL or CD4 test during the year; ** At least 2 tests, at least 3 months apart

†Persons presumed to be residing in the Rochester RWR based on most recent addr with AIDS with no evidence of care for 5 years and persons with diagnosed HIV (n

Jordan Health

Jordan Health HIV Care Cascade*



*HIV care evaluated from August, 2014 to July, 2015

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 Sub-committee

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

H. Ending the Epidemic Initiative: (A New Domain From the NYSDOH – AIDS Institute Organizational Assessment)

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.

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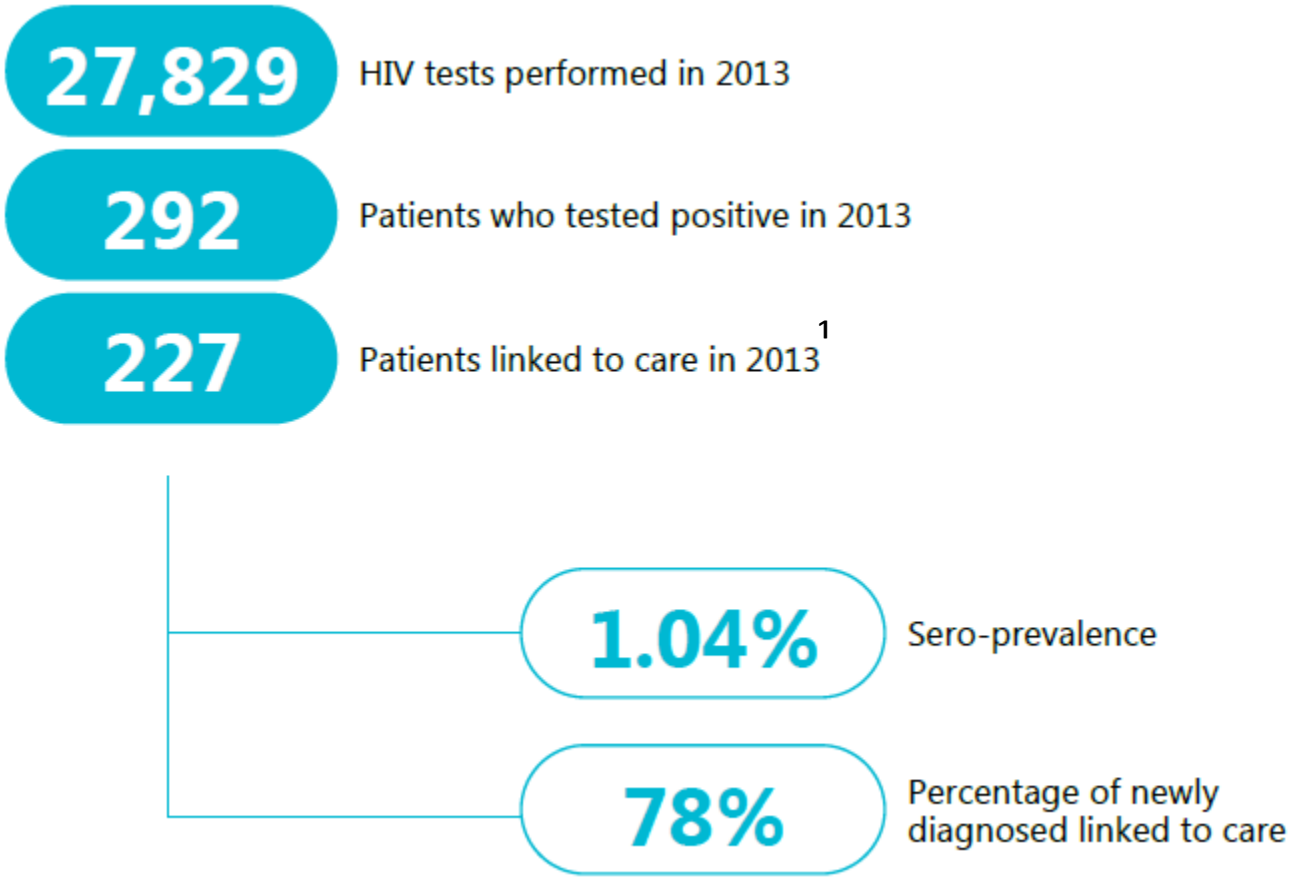
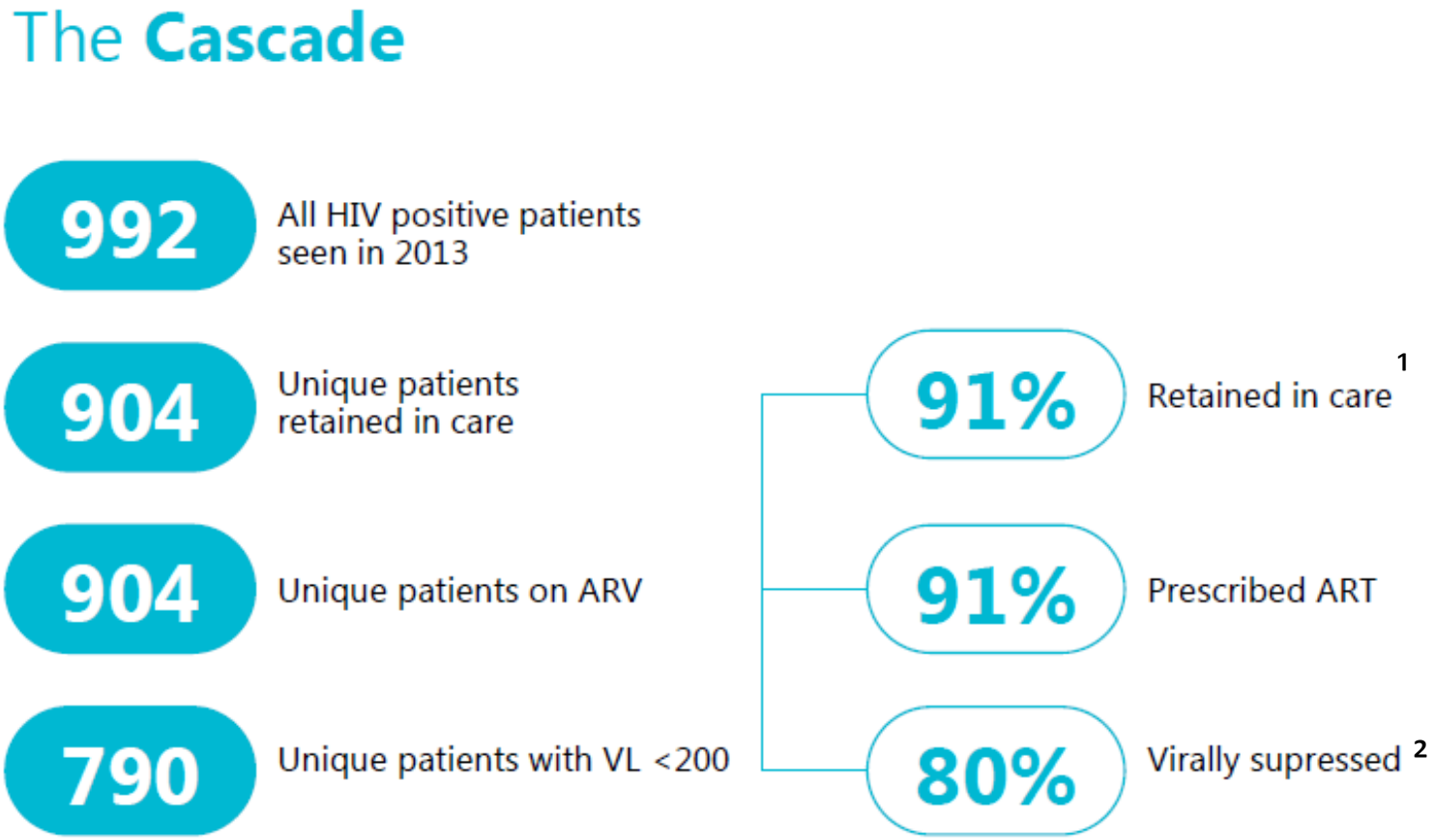
Comments:

Guidance Example: Community Health Care Network HIV Testing and **Linkage** to Care- 2013



[1] Linked to Care = # of newly diagnosed HIV + patients with 1st visit to PCP within 4-6 weeks of confirmatory HIV+ test

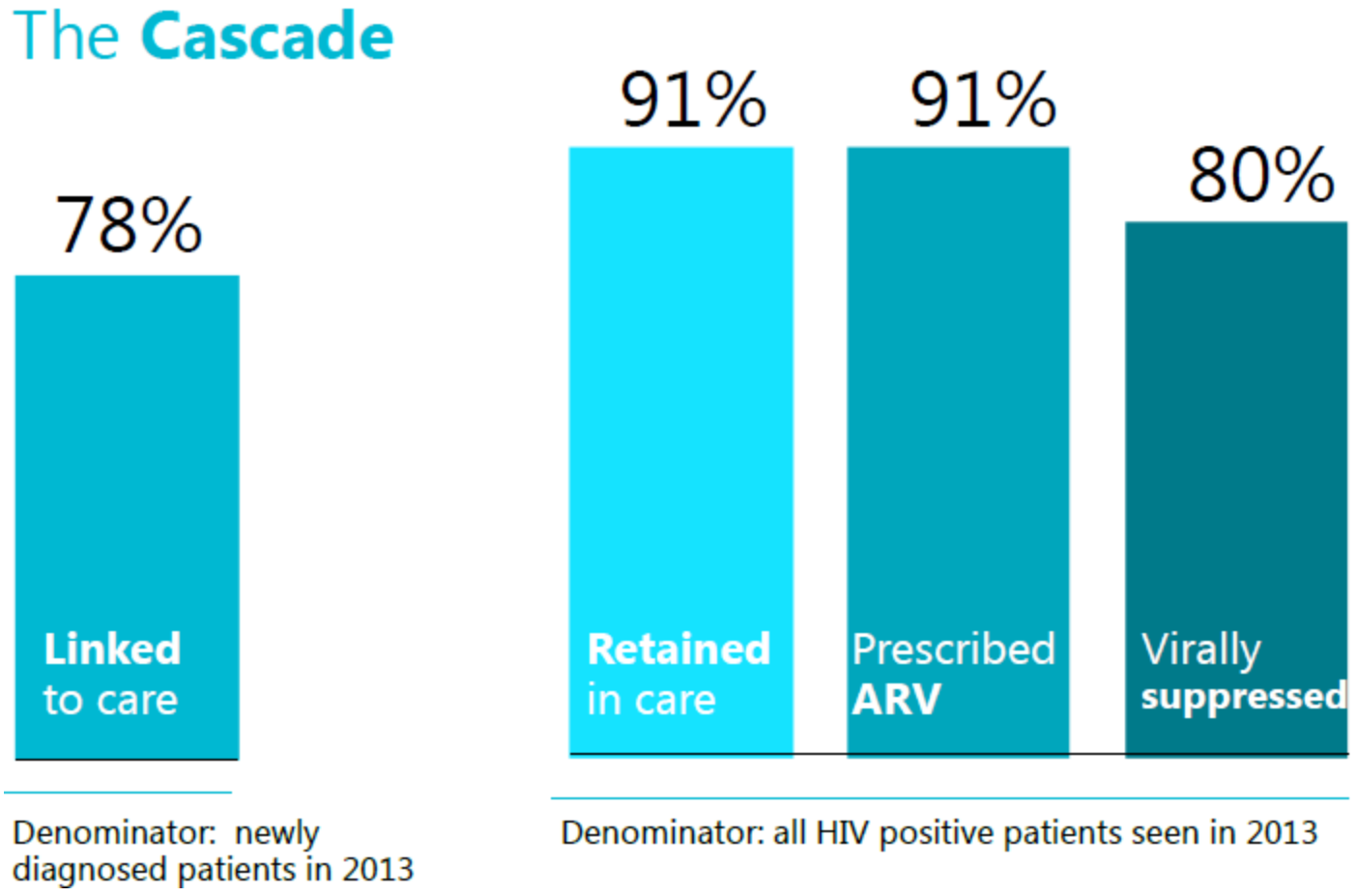
Guidance Example: Community Health Care Network HIV Treatment Cascade - 2013



[1] Retained in Care = % of patients with 1 visit per quarter within 2013

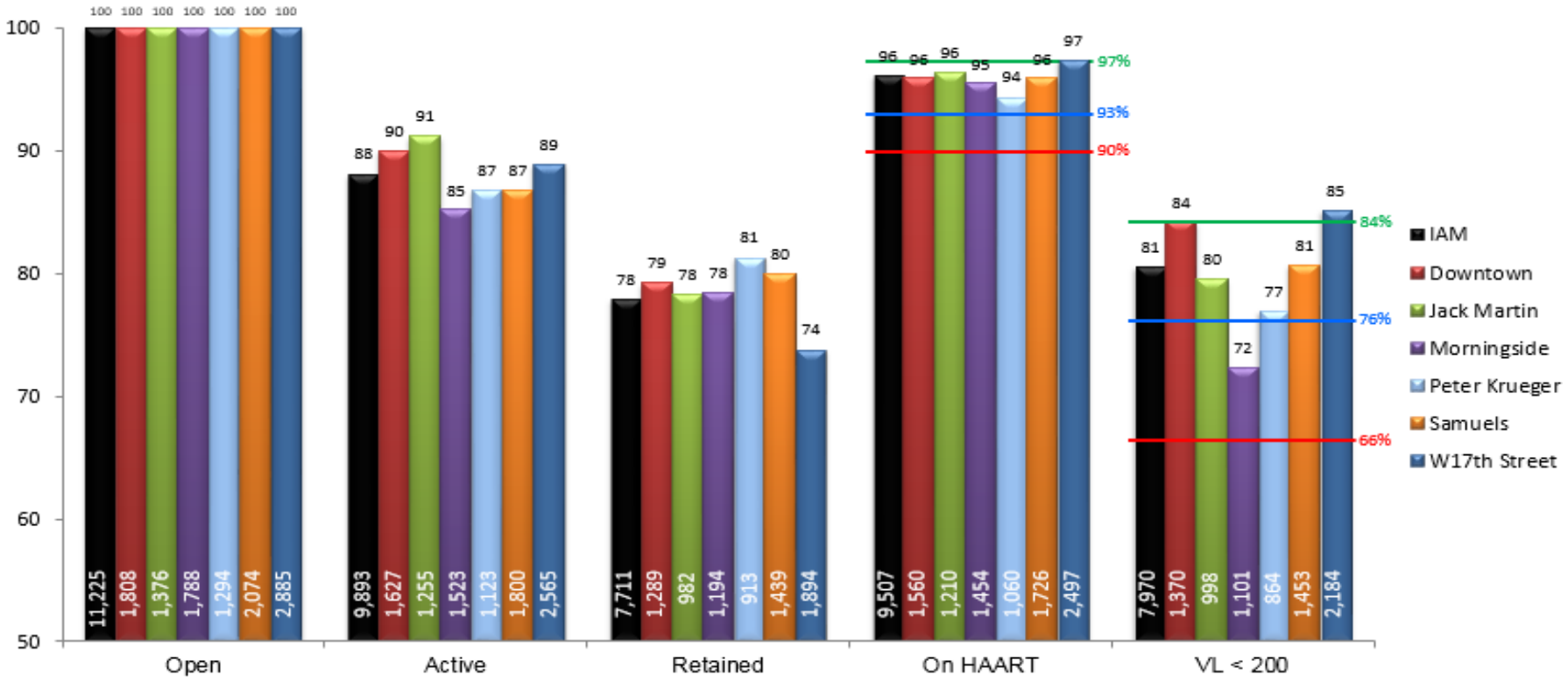
[2] Virally Suppressed = % of patients with VL <200 cps/ml at last VL test in 2013

Guidance Example: Community Health Care Network HIV Treatment Cascade - 2013



HIV CARE CASCADE 2014

INSTITUTE FOR ADVANCED MEDICINE



Mount Sinai *Institute for Advanced Medicine*

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

Data Source: Calendar Year 2014 Epic + Climacs
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 I) [20]
- Active choice testing [2]
- Community based testing: Multi-disease prevention community health campaigns (IAPAC: A I) [1, 5, 6, 8, 13, 14, 23, 19]
- Partner notification and referral to testing (IAPAC: A I) [3]
- Self-testing (IAPAC: B II) [20]
- Testing in workplace and institutional settings, including prison, military, police, mining/trucking companies, and educational venues (IAPAC: B III) [5, 6, 7, 13, 14, 23]

Domestic
- Pharmacy-based testing [1, 8, 19]

International
- Community based testing: Home-based (IAPAC: A I) [5, 6, 13, 14, 18, 23]
- Community based testing: Mobile testing (IAPAC: A I) [5, 6, 13, 14, 23]
- Peer-led testing [14]
- Routine testing for pregnant women [18]

Linkage

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

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

International
- Extended home visit counseling [9, 10]
- Food Incentives [19]
- Immediate inpatient HIV counseling and testing (IAPAC: A I) [9, 12, 13, 21]
- Peer home visits post-diagnosis [20]

Retention

Universal
- Reminders (SMS, call, post mail) within 48 hours (IAPAC: B I) [20]

Domestic
- Clinic-wide messaging (IAPAC: A I) [20]
- Enhanced Personal contact [1, 8, 13, 21]
- Computer decision-support systems (Virology Fast Track) [20]
- Medical case management [1, 14]
- Buprenorphine Treatment [19]

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 & and 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
- Counseling 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 [19]
- 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 naïve
[6] First-time testers
[7] Incarcerated
[8] Latina/Latino
[9] Low education
[10] Low income
[11] Marginally housed
[12] Married
[13] Men
[14] MSM
[15] Newly diagnosed
[16] No insurance
[17] People w/depression
[18] Pregnant women
[19] Substance use
[20] Unspecified
[21] Women
[22] YMSM
[23] Youth

IAPAC Key

Strength of the Recommendation	Quality of the Body of Evidence
Strong (A)	Excellent (I)
Moderate (B)	High (II)
Weak (C)	Medium (III)
	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-facility based settings, eg. 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.

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Quality of Care Advisory Committee

Consumer Advisory Committee

NEW INTERACTIVE DATA: Visit the Dashboard's new NYC HIV testing data visualization

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

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

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+

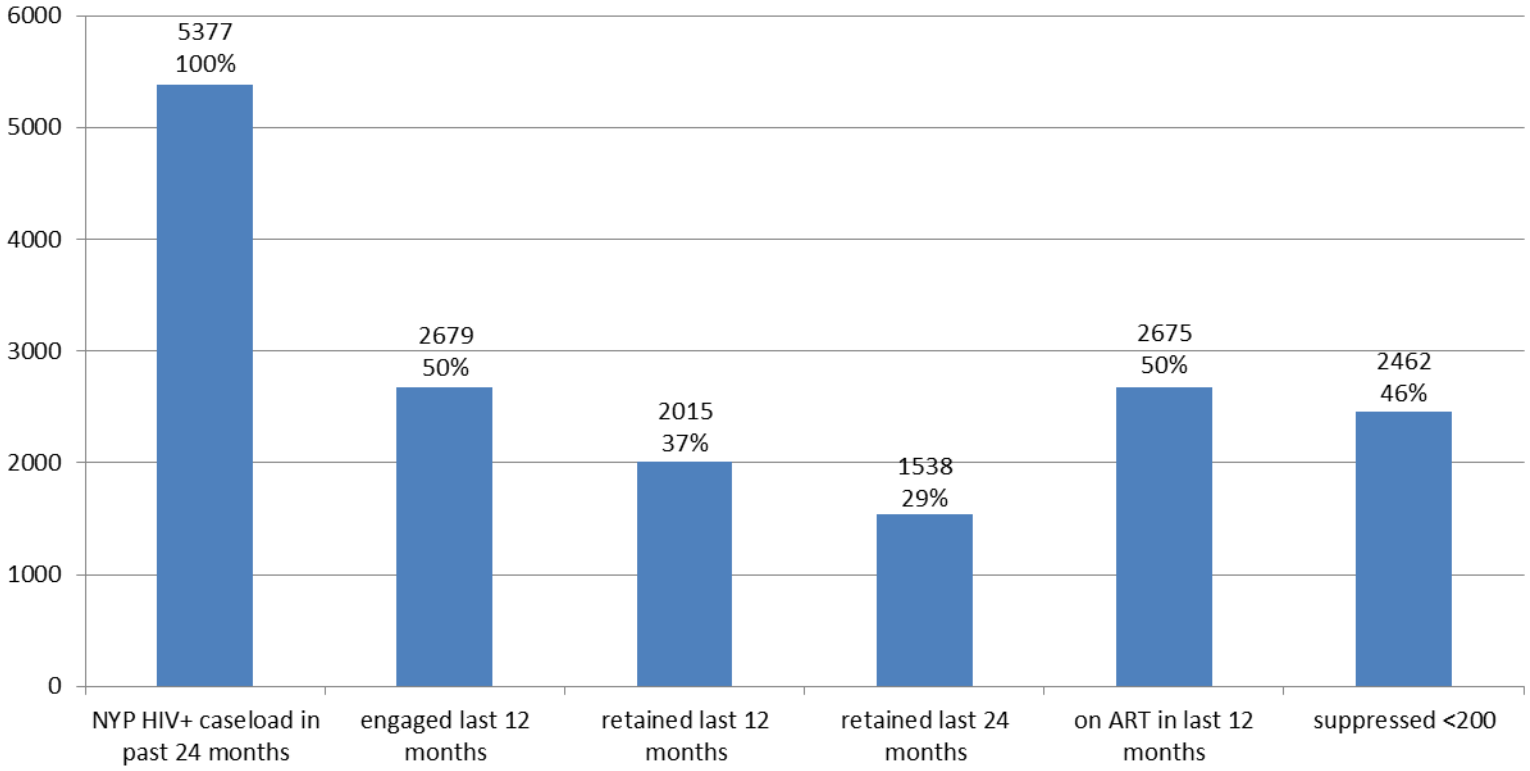
Click to Filter:

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

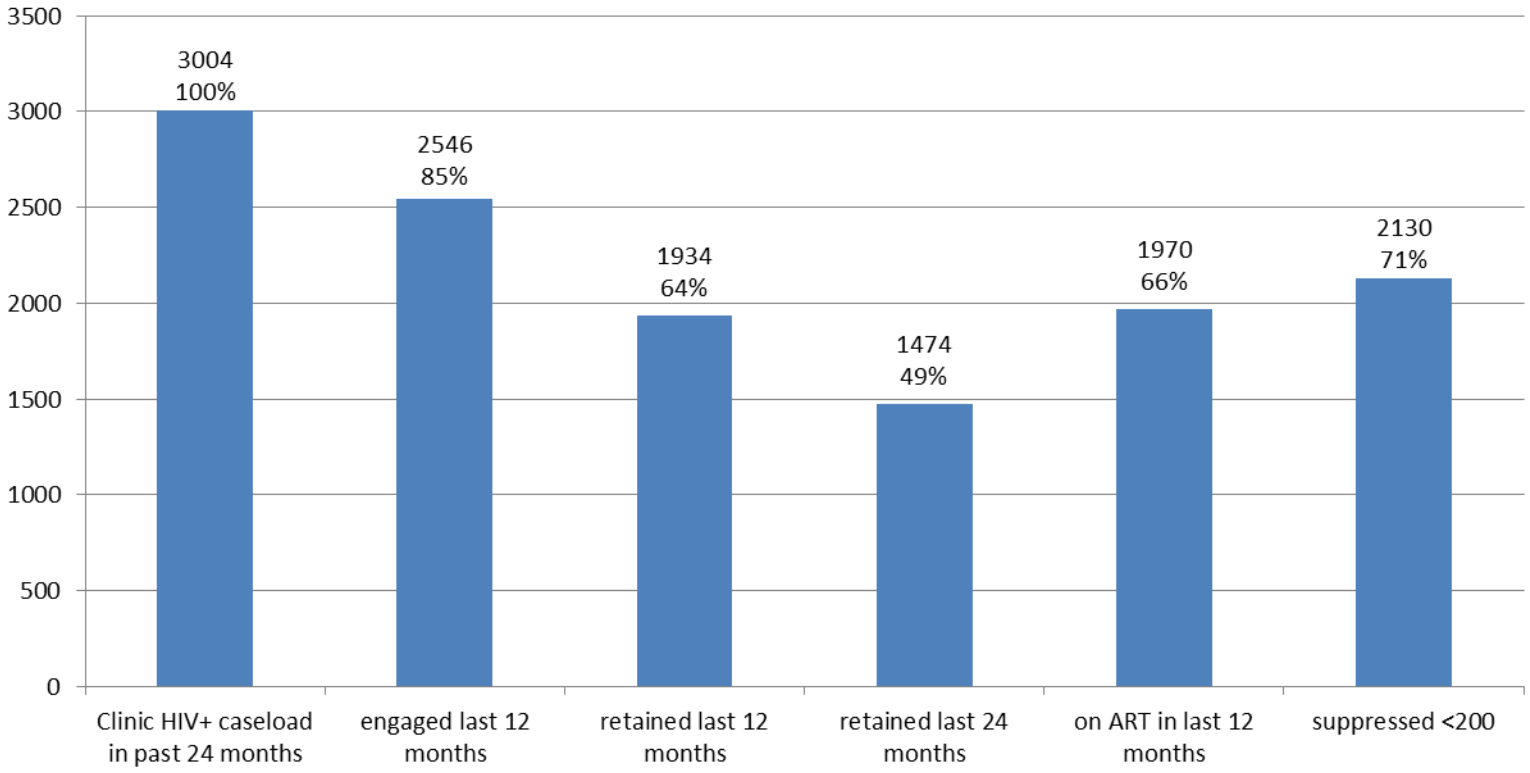
Click to Filter:

Last NYP Contact

- ☐ Ambulatory Clinic
- ☐ Emergency Department
- ☐ Inpatient

Primary Care Site

- ☑ HIV Clinic
- ☐ Other Clinic



Data Drilldown

Last_Name	First_Name	DOB	Age	Sex	Race	Ethnicity	HPhone	Primary_Insurance	PCMH_Primary	Last_Primary_Visit_Provider	Last_Primary_Visit_Dtm	Last_NYP_Campus_Location	Last_NYP_Clinic
SMITH	JOHN	5/25/1958	58	F	WHITE	H	(917)521-9349	LOCAL 1199	NULL	NULL	NULL	REF	NULL
DOE	JANE	5/4/1939	77	M	WHITE	N	(917)613-0413	MEDICARE	NULL	NULL	NULL	ACN	HP
SMITH	JOHN	8/24/1983	32	F	WHITE	N	(347)726-1407	AETNA (EL PASO,TX)	NULL	NULL	NULL	REF	NULL
DOE	JANE	12/22/1951	64	M	WHITE	N	(201)348-8268	EMPIRE HEALTHCHOICE ASSURANCE,	NULL	NULL	NULL	REF	NULL
SMITH	JANE	12/23/1981	34	F	UNKNOWN	U	(646)838-8976	HEALTHPLUS AMERIGROUP	NULL	NULL	NULL	Milstein	Milstein
DOE	JOHN	7/22/1965	50	F	UNKNOWN	U	(212)283-3392	SELF-PAY	NULL	NULL	NULL	Milstein	Milstein
SMITH	JANE	8/30/1934	81	F	BLACK/AFRICAN AMERICAN	N	(718)991-7344	MEDICARE	NULL	NULL	NULL	REF	NULL
DOE	JOHN	8/20/1992	23	F	WHITE	H	(212)942-2372	HEALTH FIRST	NULL	NULL	NULL	ACN	Broadway
SMITH	JANE	6/24/1962	54	M	UNKNOWN	U	(646)314-3249	AFFINITY HLTH PLAN - MCAID	HP6	MATTHEW SCHERER	10/22/2015	Milstein	Milstein
DOE	JOHN	4/22/1976	40	F	UNKNOWN	U	(347)257-2065	EMPIRE BC HEALTHPLUS MCD	Farrell	ANITA SOFTNESS	5/31/2016	ACN	Farrell
BROWN	LUCY	7/10/1947	69	M	UNKNOWN	U	(212)927-3184	HEALTHFIRST 65/MHI MCR	NULL	NULL	NULL	Milstein	Milstein
SMITH	ROBERT	3/27/1979	37	F	DECLINED	U	(917)838-1157	CIGNA HEALTH CARE	NULL	NULL	NULL	NYHL	NULL
DOE	JANE	7/26/1995	20	F	UNKNOWN	U	(917)865-2970	HEALTH FIRST	NULL	NULL	NULL	Milstein	Milstein
BROWN	JOHN	10/16/1955	60	M	OTHER NOT DESCRIBED	U	(201)463-0888	EMPIRE BC PPO NYC/NYS EMP	NULL	NULL	NULL	NYHL	NULL
SMITH	LUCY	11/23/1977	38	F	UNKNOWN	U	(973)356-2157	HEALTH FIRST	NULL	NULL	NULL	ACN	Broadway
DOE	ROBERT	12/24/1995	20	F	UNKNOWN	U	(917)592-1803	HEALTHFIRST NY MCD	NULL	NULL	NULL	ACN	Audubon
SMITH	JANE	1/26/1985	31	F	OTHER NOT DESCRIBED	H	(347)364-3910	NATIONAL BENEFIT FUND 1199	Washington Heights	MARY CABICO	8/7/2015	ACN	Washington Heights
DOE	JOHN	10/31/1981	34	F	WHITE	U	(412)680-9579	AETNA HMO/POS/EPO	NULL	NULL	NULL	NYHL	NULL
BROWN	LUCY	5/9/1944	72	M	WHITE	HO	(646)882-4762	MEDICARE	NULL	NULL	NULL	REF	NULL
SMITH	ROBERT	1/1/1982	34	M	UNKNOWN	U	(212)999-9999	SELF-PAY	NULL	NULL	NULL	Milstein	Milstein
DOE	JANE	10/16/1987	28	F	UNKNOWN	H	(929)213-2956	YOUNG ADULT/YOUNG MALE	NULL	NULL	NULL	ACN	Audubon
BROWN	JOHN	11/25/1984	31	F	UNKNOWN	H	(646)715-5615	AETNA (EL PASO,TX)	NULL	NULL	NULL	B05C	NULL
SMITH	LUCY	7/21/1989	26	F	UNKNOWN	U	(347)995-8274	FIDELIS MGD CARE MCD	NULL	NULL	NULL	Milstein	Milstein
DOE	ROBERT	9/5/1960	55	F	DECLINED	N	(212)877-0742	OXFORD	NULL	NULL	NULL	NYHL	NULL
BROWN	JANE	10/1/1989	26	M	UNKNOWN	U	(718)708-3264	SELF-PAY	NULL	NULL	NULL	Allen	Allen
SMITH	JOHN	3/2/1986	30	F	UNKNOWN	HO	(999)999-9999	AMERICHOICE BY UNITEDHEALTHCAR	NULL	NULL	NULL	ACN	Audubon
DOE	LUCY	10/3/1990	25	F	BLACK/AFRICAN AMERICAN	H	(646)891-0086	HEALTHPLUS AMERIGROUP	NULL	NULL	NULL	ACN	Washington Heights
BROWN	ROBERT	10/26/1992	23	F	WHITE	H	(646)645-3974	FIDELIS MGD CARE MCD	NULL	NULL	NULL	Allen	Allen
SMITH	JANE	2/22/1949	67	M	WHITE	U	(914)471-1535	MEDICARE	NULL	NULL	NULL	Milstein	Milstein
DOE	JOHN	3/5/1987	29	F	BLACK/AFRICAN AMERICAN	N	(917)501-1640	HIP WESTCHESTER	NULL	NULL	NULL	ACN	Audubon
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DOE	JANE	9/11/1974	41	F	WHITE	N	(646)320-8053	UNITED HEALTHCARE	NULL	NULL	NULL	REF	NULL
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Notes and Tips on Cascade Development:

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Acknowledgments

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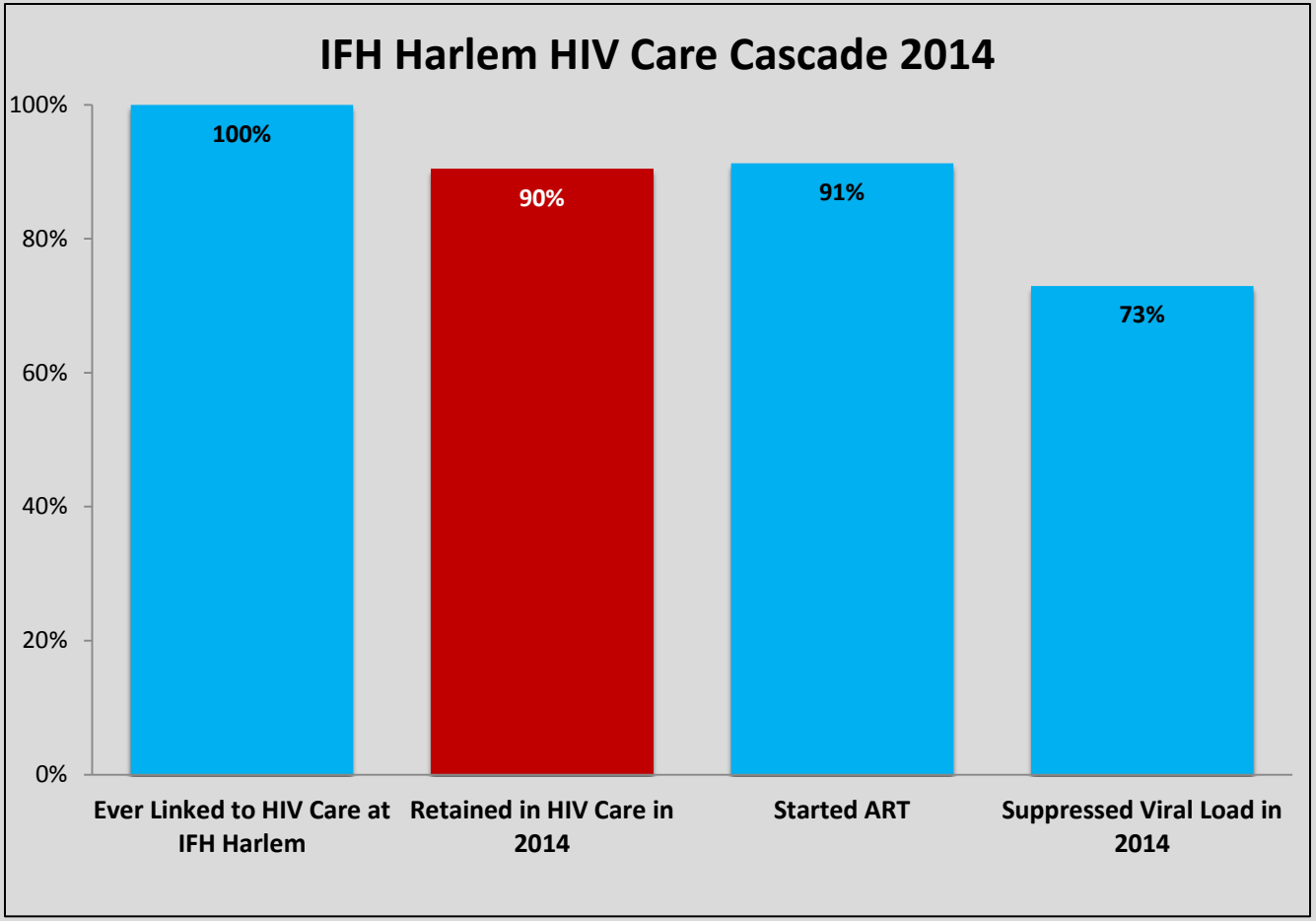
- Peter Gordon, MD
- Samuel T. Merrick, MD
- Steven Chang
- Mila González

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

THE INSTITUTE FOR FAMILY HEALTH



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%[1] of people living with HIV/AIDS are considered retained in care. In New York State, 49%[2]; in New York City, 54%[3]; 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 outreached with 3 call attempts followed by a final letter as well. For these patients at risk for 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 has 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 into our 2014 CQI project.

Methods

- Engaged patients at December 2013 Consumer Advisory Board (CAB) meeting to re-evaluate outreach and retention strategies.
- CAB members requested outreach materials that were less clinical and more "loving" containing "terms of endearment."
- Initial drafts of the 2014 outreach card were completed by a collaboration between a patient and staff member.
- The final card was developed by COMPASS staff and the Institute Communications Department

Methods

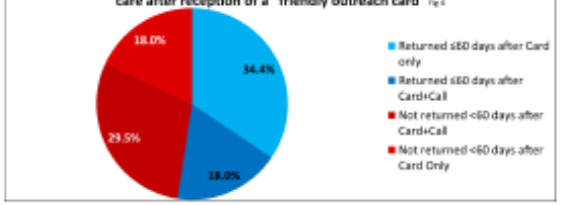
- Based on CAB member feedback, the "friendly outreach card" was created.

fig 3. "Friendly outreach card" sent to patients; front, inside, and back views

- On a rolling monthly basis, the Electronic Medical Record (EMR) generated a report listing patients at risk of falling out of care.
- Identified patients were mailed the "friendly outreach card."
- We reviewed patients sent "friendly outreach cards" at 60 days to see if they had returned to care.
- List of patients sent "friendly outreach card" was sent to program staff to encourage collection of qualitative data (patients response to card).

Findings

Return to care (≤60 days) rates for patients at risk of falling out of care after reception of a "friendly outreach card" fig 4



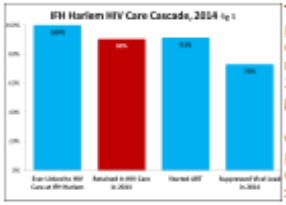
- 83 Patients at risk of falling out of care were involved in 2014 CQI Project.
  - 14 ineligible for analysis due to <60 days elapsing after card was sent
  - 8 ineligible for analysis cards returned to sender
- 61 remaining patients at risk of falling out of care were analyzed.
  - On average there was 23 days between when the card is sent and return to care of those patients who returned to care ≤60 days after sending a "friendly outreach card."
  - 54% of patients returned to care ≤60 days after receiving a "friendly outreach card."
- The 61 patients were broken into two groups, those who received a call from the clinic unrelated to the 2014 CQI and those who did not.
  - Of those that only received a card, 66% returned to care ≤60days after sending a "friendly outreach card."
  - Of those that received a card and a call 38% returned to care ≤60days after sending a "friendly outreach card."
- 7 patients returned to the clinic >60 days after sending the "friendly outreach card." They are counted as not returned to care in the above analysis.
  - Combined return to care rate (≤60 days & >60 days) was 64%
- Some of the positive qualitative data includes these comments made by the patients and their families:

  "Dr. Hewitt sent me a card, so I came in!" The patient also brought the card in with them.

  "Yes, I like the card and that's what made me come in."

  A 50 year old patient's mother called to schedule him an appointment , she stated it was because she received the card.

Conclusions



This 2014 CQI outreach and retention project targeted patients at risk of falling out of care. In 2014 we saw our overall retention rate improved from 84% from 2013 to 90.4% for 2014, surpassing our goal.

Our return to care rates (≤60 days) for our patients who were at risk of falling out of care reaching 54% and a combined (≤60 & >60 days) return to care rate of 64%.

Working off of suggestions from our Consumer Advisory Board (CAB) we were able to institute an effective retention program that was more "loving" and less clinical than previous outreach methods.

Our patients responded positively to the cards indicated by both our qualitative and quantitative data. We had an increase in our overall retention rate, as well as a high and swift return to care following mailing of the "friendly outreach card."

Discussion & Implications for Practice

How we could have improved the 2014 CQI project:

- Starting sooner. The patient request for more caring 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 use the 2014 metrics for returned 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

1. *Vital Signs: HIV Diagnosis, Care, and Treatment Among Persons Living with HIV - United States, 2011.* (2014). CDC.
2. *National HIV/AIDS Strategy Measures and the Cascade of Engagement in Care, 2012.* (2014). Aids Institute - New York State Department of Health.
3. *New York City HIV/AIDS Surveillance Slide Sets, 2012.* (2014). New York: New York City Department of Health and Mental Hygiene.

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

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=5,984)
- 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

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

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+

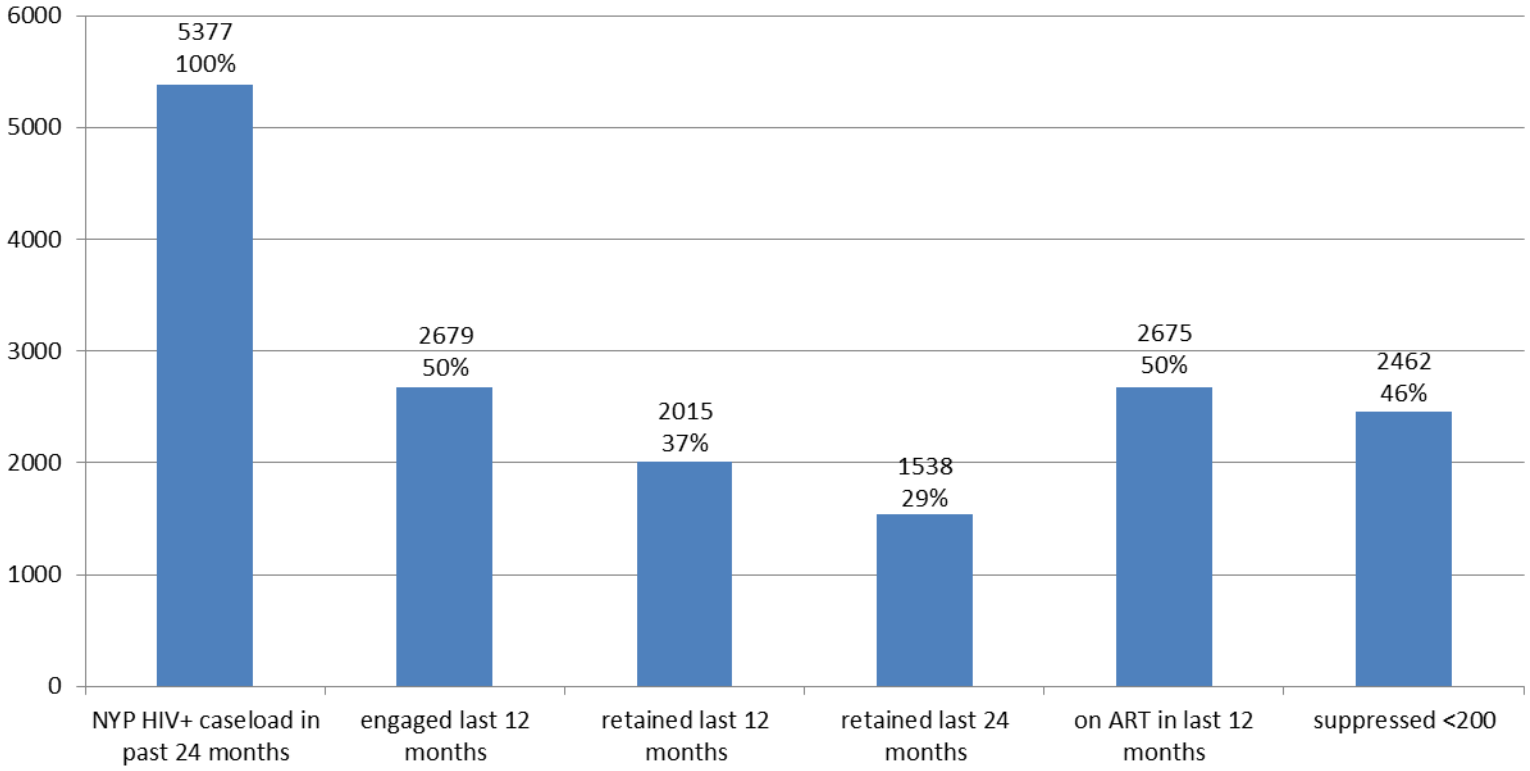
Click to Filter:

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

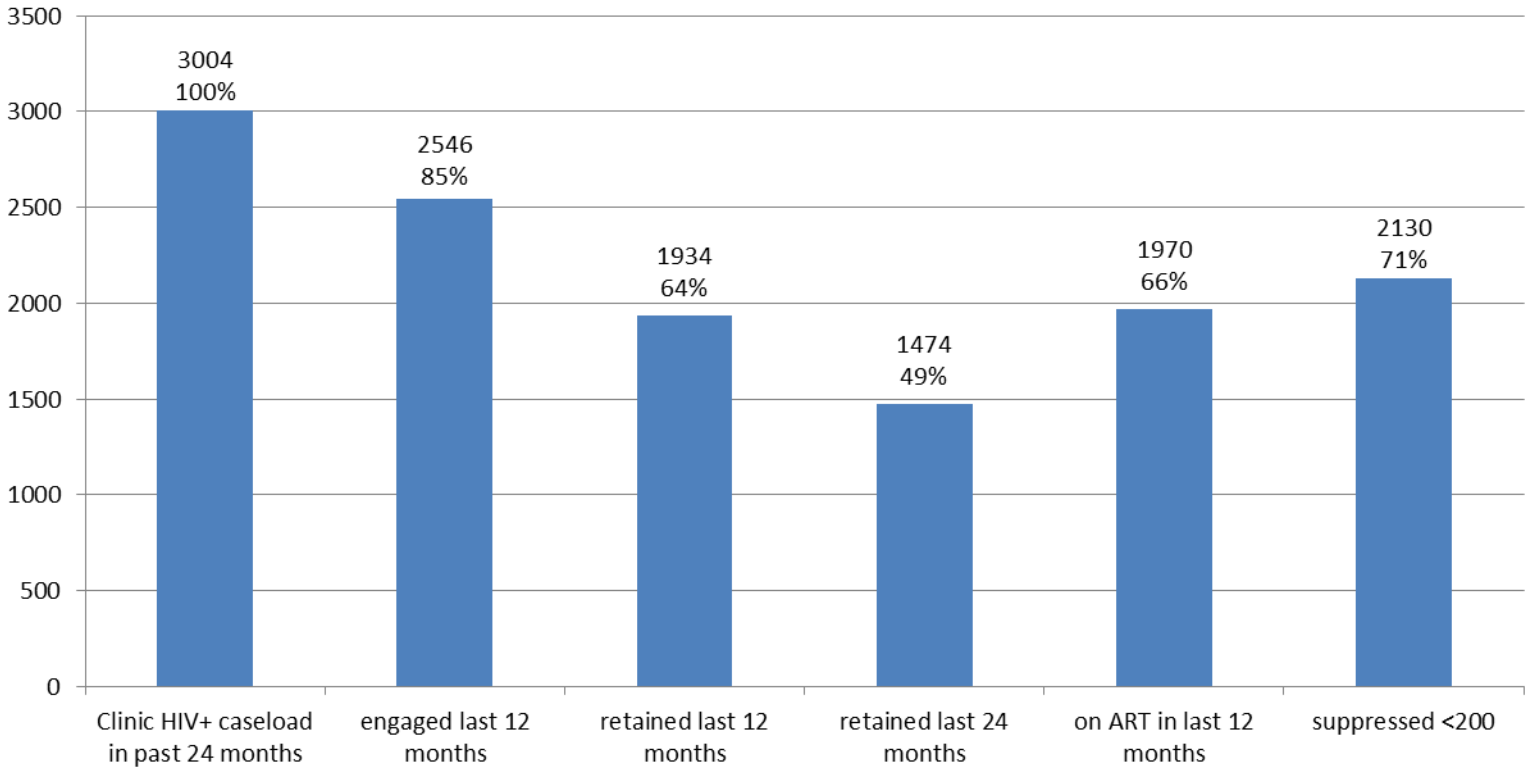
Click to Filter:

Last NYP Contact

- ☐ Ambulatory Clinic
- ☐ Emergency Department
- ☐ Inpatient

Primary Care Site

- ☑ HIV Clinic
- ☐ Other Clinic



Data Drilldown

Last_Name	First_Name	DOB	Age	Sex	Race	Ethnicity	HPhone	Primary_Insurance	PCMH_Primary	Last_Primary_Visit_Provider	Last_Primary_Visit_Dtm	Last_NYP_Campus_Location	Last_NYP_Clinic
SMITH	JOHN	5/25/1958	58	F	WHITE	H	(917)521-9349	LOCAL 1199	NULL	NULL	NULL	REF	NULL
DOE	JANE	5/4/1939	77	M	WHITE	N	(917)613-0413	MEDICARE	NULL	NULL	NULL	ACN	HP
SMITH	JOHN	8/24/1983	32	F	WHITE	N	(347)726-1407	AETNA (EL PASO,TX)	NULL	NULL	NULL	REF	NULL
DOE	JANE	12/22/1951	64	M	WHITE	N	(201)348-8268	EMPIRE HEALTHCHOICE ASSURANCE,	NULL	NULL	NULL	REF	NULL
SMITH	JANE	12/23/1981	34	F	UNKNOWN	U	(646)838-8976	HEALTHPLUS AMERIGROUP	NULL	NULL	NULL	Milstein	Milstein
DOE	JOHN	7/22/1965	50	F	UNKNOWN	U	(212)283-3392	SELF-PAY	NULL	NULL	NULL	Milstein	Milstein
SMITH	JANE	8/30/1934	81	F	BLACK/AFRICAN AMERICAN	N	(718)991-7344	MEDICARE	NULL	NULL	NULL	REF	NULL
DOE	JOHN	8/20/1992	23	F	WHITE	H	(212)942-2372	HEALTH FIRST	NULL	NULL	NULL	ACN	Broadway
SMITH	JANE	6/24/1962	54	M	UNKNOWN	U	(646)314-3249	AFFINITY HLTH PLAN - MCAID	HP6	MATTHEW SCHERER	10/22/2015	Milstein	Milstein
DOE	JOHN	4/22/1976	40	F	UNKNOWN	U	(347)257-2065	EMPIRE BC HEALTHPLUS MCD	Farrell	ANITA SOFTNESS	5/31/2016	ACN	Farrell
BROWN	LUCY	7/10/1947	69	M	UNKNOWN	U	(212)927-3184	HEALTHFIRST 65/MHI MCR	NULL	NULL	NULL	Milstein	Milstein
SMITH	ROBERT	3/27/1979	37	F	DECLINED	U	(917)838-1157	CIGNA HEALTH CARE	NULL	NULL	NULL	NYHL	NULL
DOE	JANE	7/26/1995	20	F	UNKNOWN	U	(917)865-2970	HEALTH FIRST	NULL	NULL	NULL	Milstein	Milstein
BROWN	JOHN	10/16/1955	60	M	OTHER NOT DESCRIBED	U	(201)463-0888	EMPIRE BC PPO NYC/NYS EMP	NULL	NULL	NULL	NYHL	NULL
SMITH	LUCY	11/23/1977	38	F	UNKNOWN	U	(973)356-2157	HEALTH FIRST	NULL	NULL	NULL	ACN	Broadway
DOE	ROBERT	12/24/1995	20	F	UNKNOWN	U	(917)592-1803	HEALTHFIRST NY MCD	NULL	NULL	NULL	ACN	Audubon
SMITH	JANE	1/26/1985	31	F	OTHER NOT DESCRIBED	H	(347)364-3910	NATIONAL BENEFIT FUND 1199	Washington Heights	MARY CABICO	8/7/2015	ACN	Washington Heights
DOE	JOHN	10/31/1981	34	F	WHITE	U	(412)680-9579	AETNA HMO/POS/EPO	NULL	NULL	NULL	NYHL	NULL
BROWN	LUCY	5/9/1944	72	M	WHITE	HO	(646)882-4762	MEDICARE	NULL	NULL	NULL	REF	NULL
SMITH	ROBERT	1/1/1982	34	M	UNKNOWN	U	(212)999-9999	SELF-PAY	NULL	NULL	NULL	Milstein	Milstein
DOE	JANE	10/16/1987	28	F	UNKNOWN	H	(929)213-2956	YOUNG ADULT/YOUNG MALE	NULL	NULL	NULL	ACN	Audubon
BROWN	JOHN	11/25/1984	31	F	UNKNOWN	H	(646)715-5615	AETNA (EL PASO,TX)	NULL	NULL	NULL	B05C	NULL
SMITH	LUCY	7/21/1989	26	F	UNKNOWN	U	(347)995-8274	FIDELIS MGD CARE MCD	NULL	NULL	NULL	Milstein	Milstein
DOE	ROBERT	9/5/1960	55	F	DECLINED	N	(212)877-0742	OXFORD	NULL	NULL	NULL	NYHL	NULL
BROWN	JANE	10/1/1989	26	M	UNKNOWN	U	(718)708-3264	SELF-PAY	NULL	NULL	NULL	Allen	Allen
SMITH	JOHN	3/2/1986	30	F	UNKNOWN	HO	(999)999-9999	AMERICHOICE BY UNITEDHEALTHCAR	NULL	NULL	NULL	ACN	Audubon
DOE	LUCY	10/3/1990	25	F	BLACK/AFRICAN AMERICAN	H	(646)891-0086	HEALTHPLUS AMERIGROUP	NULL	NULL	NULL	ACN	Washington Heights
BROWN	ROBERT	10/26/1992	23	F	WHITE	H	(646)645-3974	FIDELIS MGD CARE MCD	NULL	NULL	NULL	Allen	Allen
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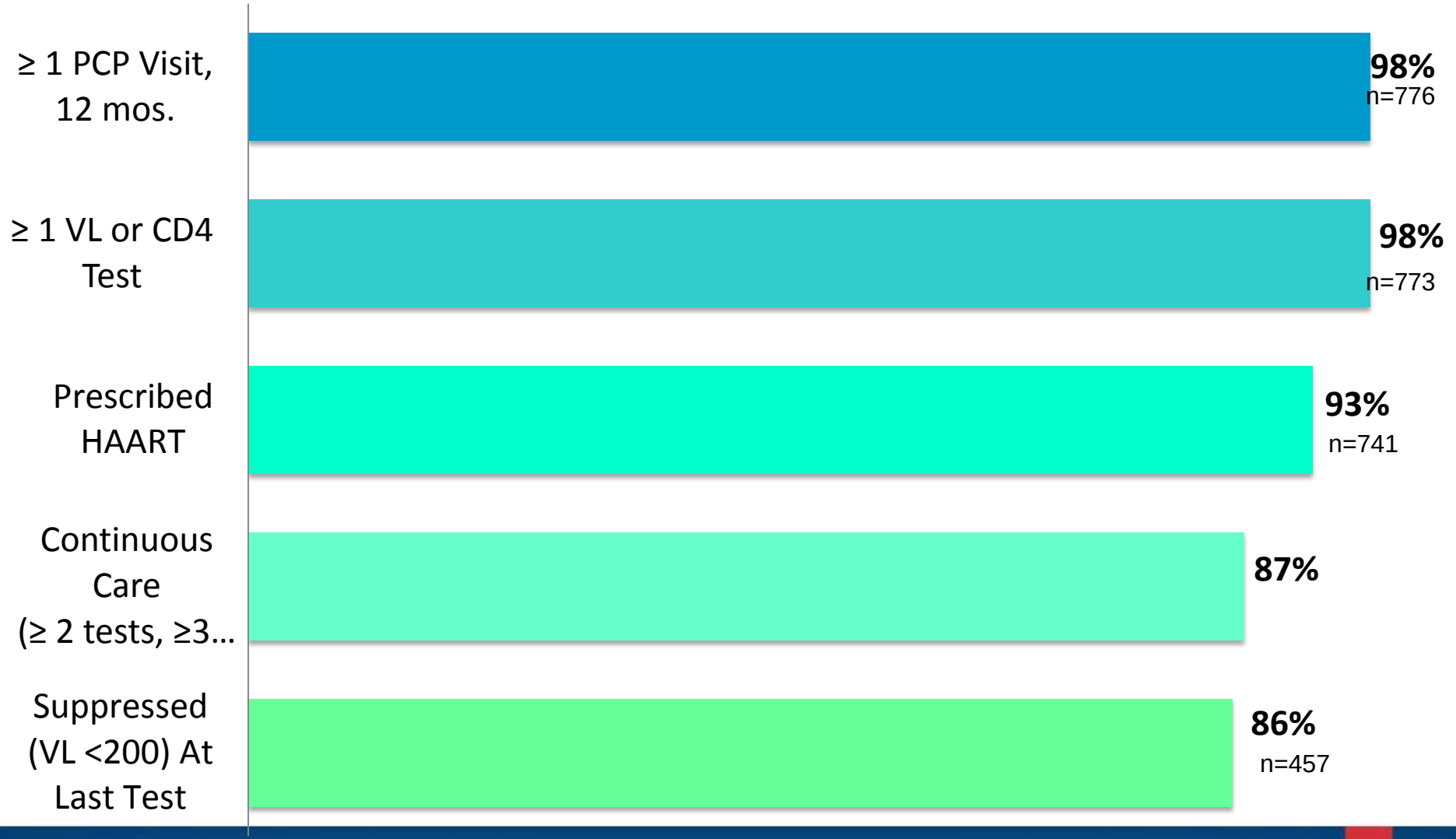
- Samuel T. Merrick, MD
- Steven Chang
- Mila González

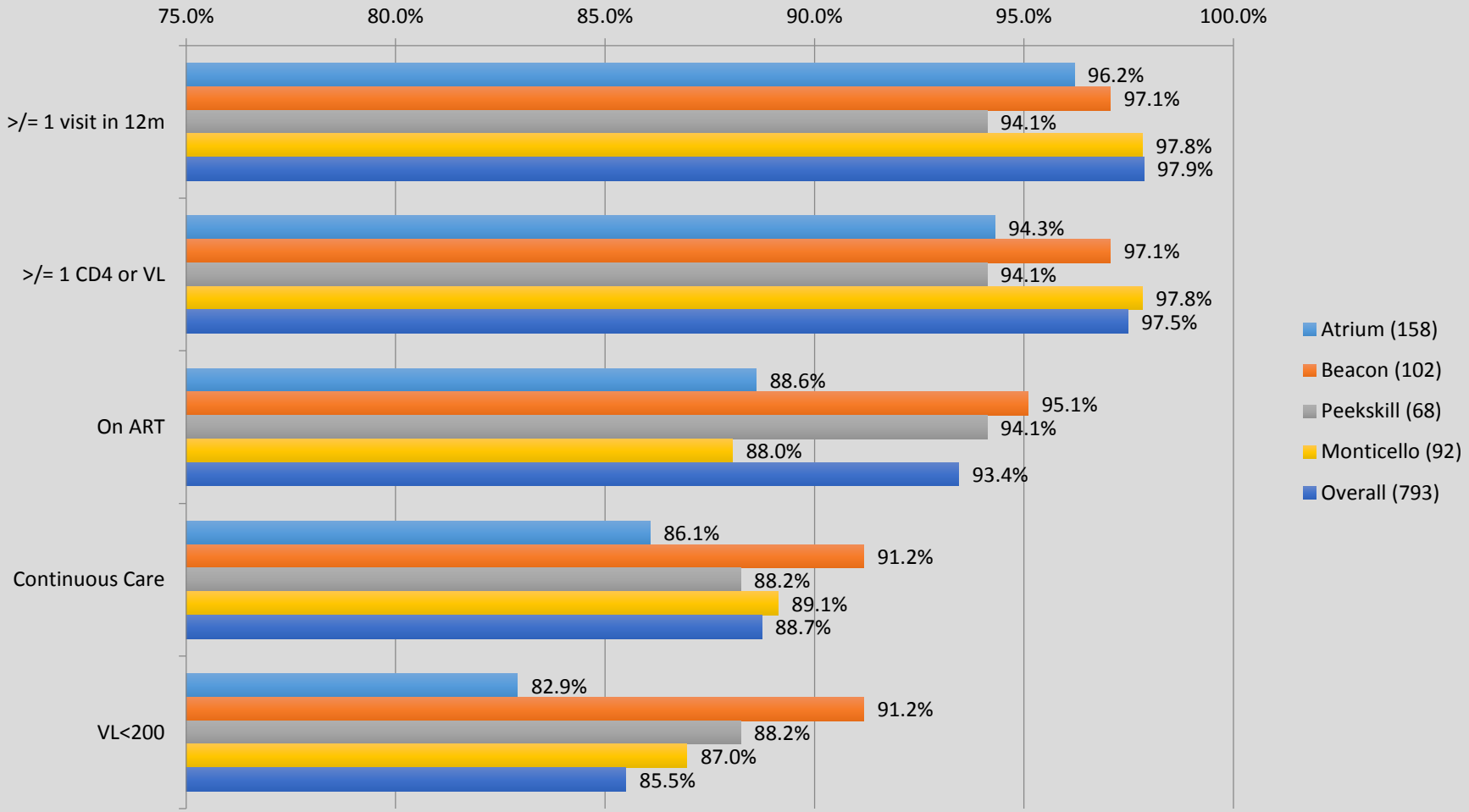
Treatment Cascades

Lisa Reid, LCSW, Director of Genesis Primary Care & Supportive Services
Christine Kerr, M.D,
Clinical Director of HIV & Hepatitis C

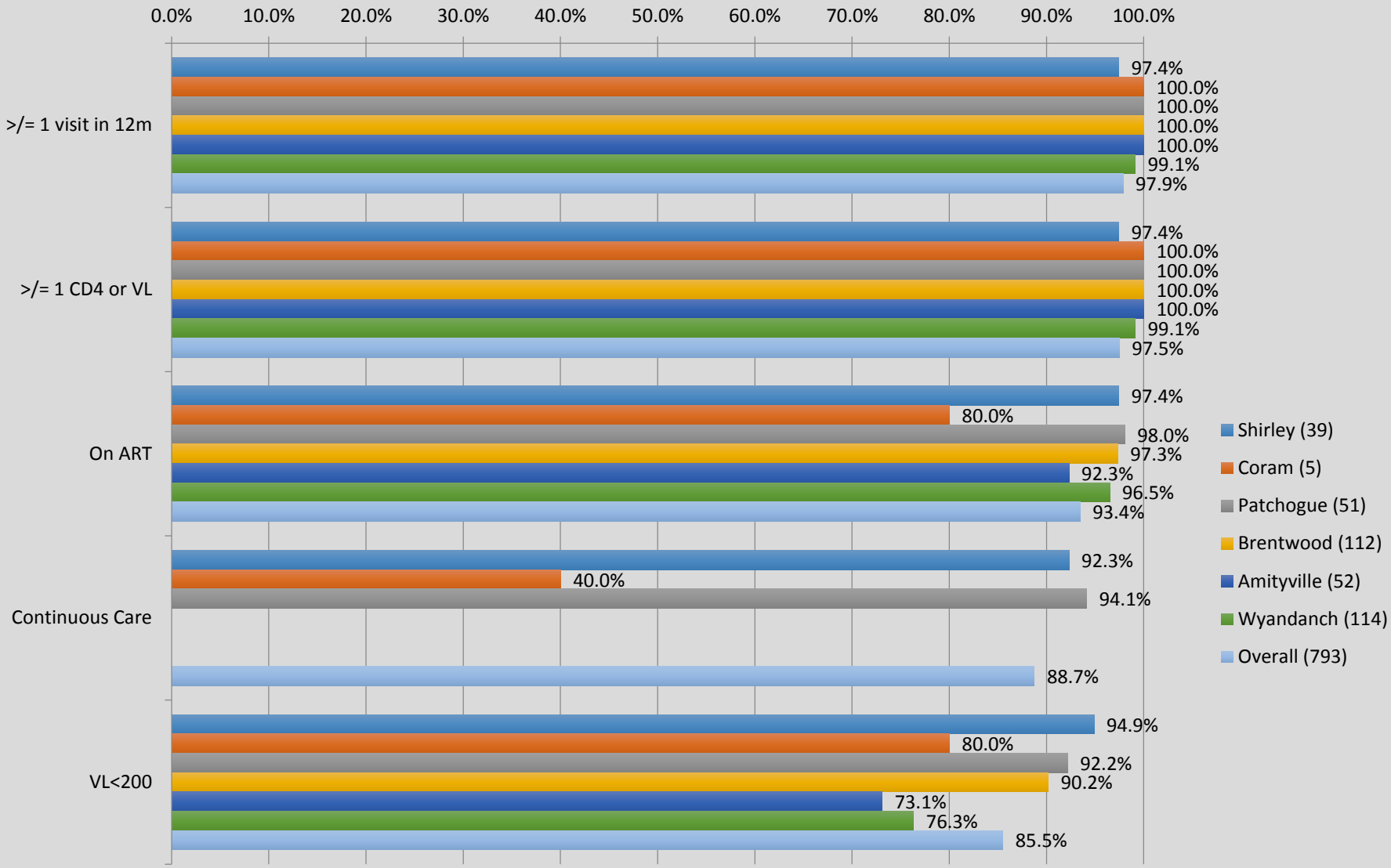
Hudson River Healthcare Institutional Cascade of HIV Care 2015:
Eleven Community Health Centers in Hudson Valley and Suffolk County



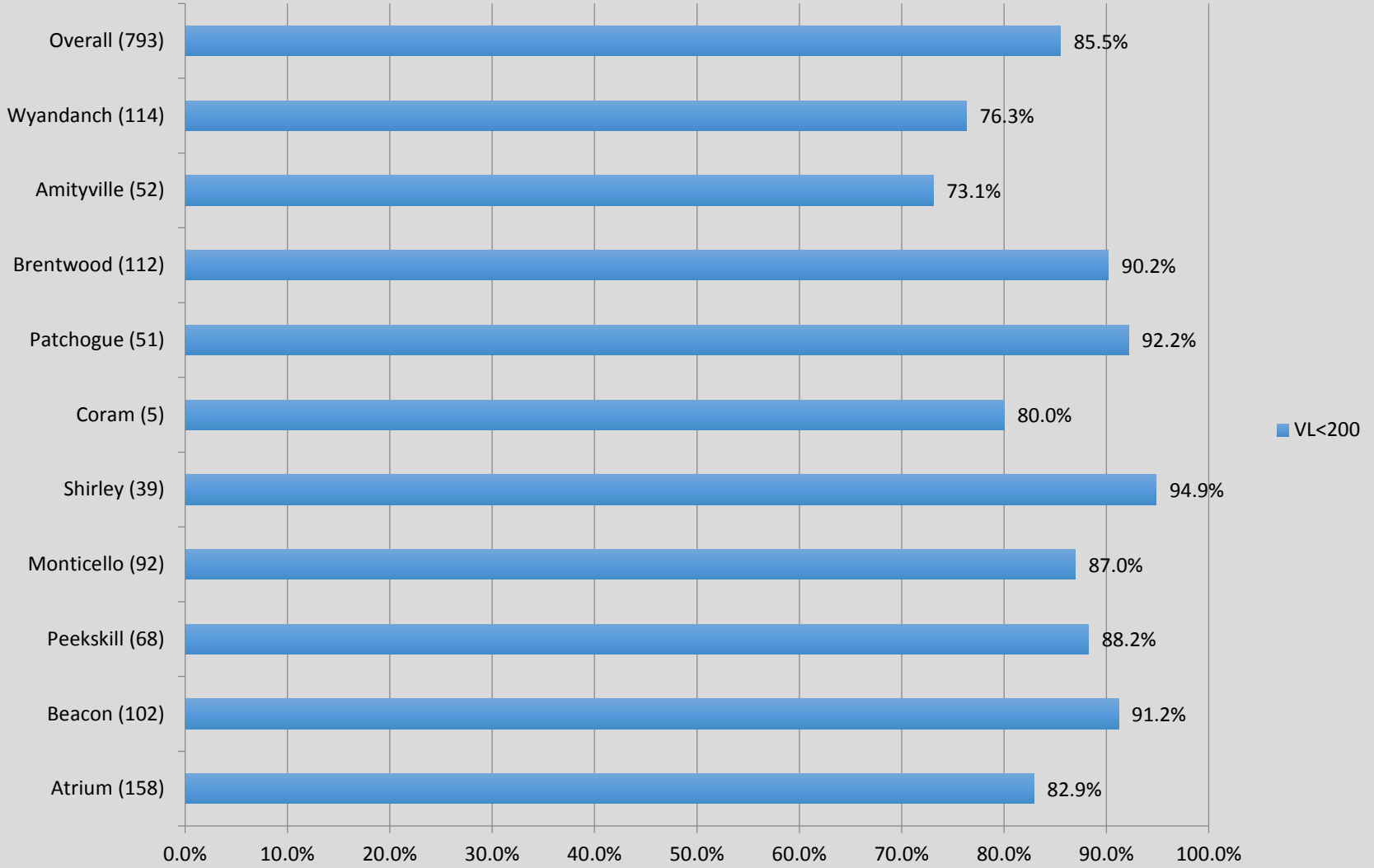
Hudson Valley Cascade 2015



Suffolk County Cascade 2015



Viral load <200 at last Viral Load - 2015



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

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Christine Kerr, MD (ckerr@hrhcare.org)

Providing Quality HIV/AIDS Care with Limited Resources

Sonia Preston, CRNP

Clinical Director at Health Services Center, Inc.

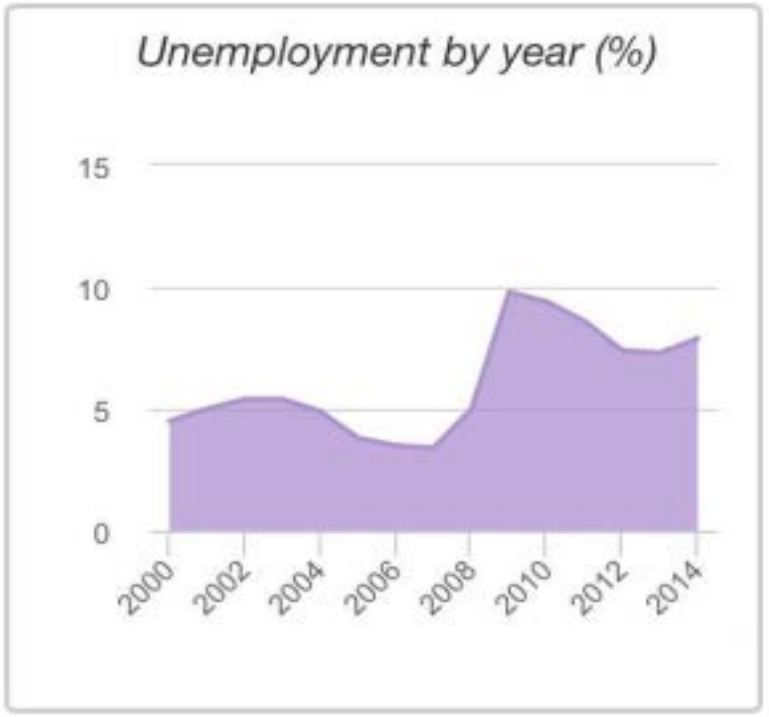
HSC History

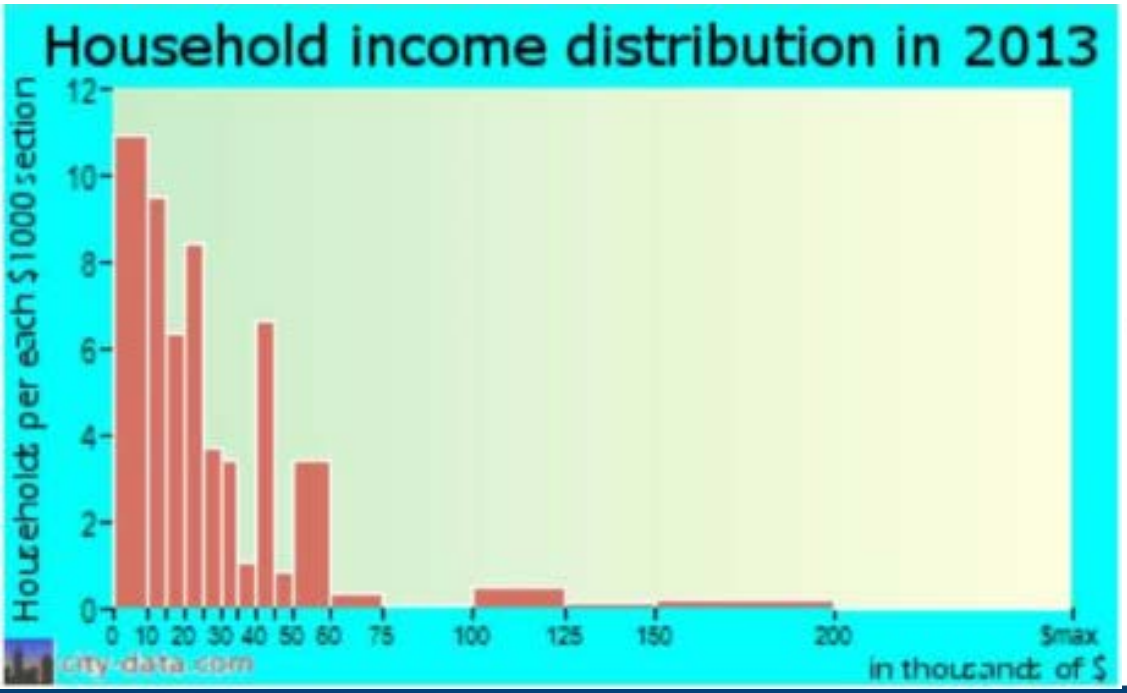
HSC began in 1987 as a grassroots CBO

Medical clinic added in 1990


Welcome To
HOBSON CITY
ALABAMA
• Incorporated 1899 •

Hobson City is the oldest incorporated African-American township in Alabama and the second oldest in the United States.

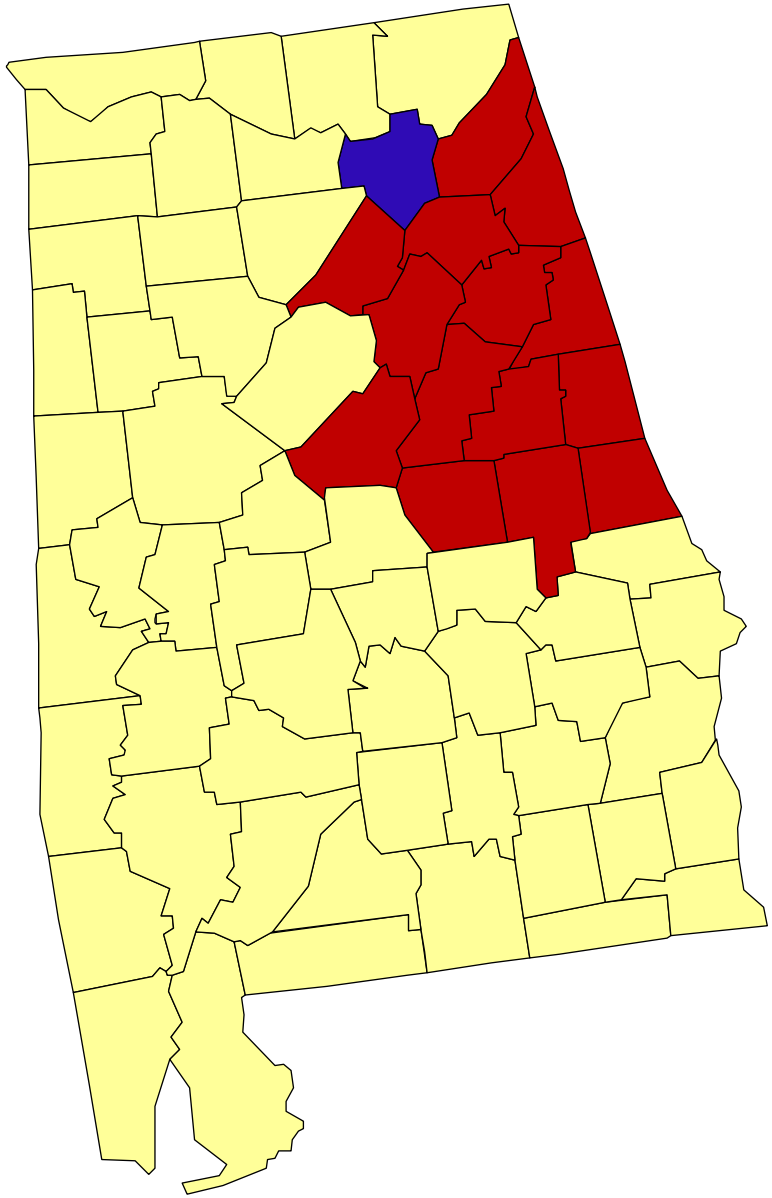




In 1991, the population was 902 and was 95% communities of color. By 2014, the population had declined to 756. The annual per capita income is $8,892.

HSC SERVICE AREA

- A 14 county area in northeast Alabama covering 9001 sq. mi. (18% of the state)
- This area is larger than D.C., Connecticut, and Rhode Island combined
- Part D services are also provided in Marshall County



The Anniston Star

Alabama's largest home-owned newspaper

50 cents

Fire destroys AIDS clinic

Steve Gross/The Anniston Star

Dr. Barbara Hanna looks over the ruins of the Hobson City AIDS clinic, destroyed by fire.

By George J. Tanber
Star Staff Writer

HOBSON CITY — The call from police came to Dr. Barbara Hanna at 3:30 this morning. From a dead sleep, it took a minute before she understood there had been a fire at the AIDS Services Center in Hobson City, where she serves as medical director.

She called and woke Deborah Wade, the clinic's director, and the two raced in the dark to Hobson City.

By the time they arrived, the place where so many hours had been spent, so many battles fought and so much care and comfort given lay in smoldering ruins.

This morning, Oxford firefighter Gary Sparks said it was too early to determine the cause of the fire and that there were no obvious indications of foul play. Nevertheless, Mike Haynes, the deputy state fire marshall, will investigate.

"It is a (Hobson City) building, and it is the AIDS clinic," explained Sparks, who said Oxford firefighters will bring in dogs Tuesday morning to sniff for indicators of arson.

While Sparks finished packing his equipment, Mrs. Wade and Dr. Hanna rested in the shade of a large oak tree, sharing breakfast with their staff and lamenting their sudden misfortune.

"This is just awful, " said Dr. Hanna.

"We have to find a new home," said Mrs. Wade, who noted the clinic has about 200 regular patients.

Both Dr. Hanna and Mrs. Wade were covered in

■ See Clinic/2A

HSC HISTORY

HSC began in 1987 as a CBO

A medical clinic was added in 1990.

Ryan White Title III (Part C) funding - 1991.

Original clinic was burned in 1995 – rebuilt 1998.

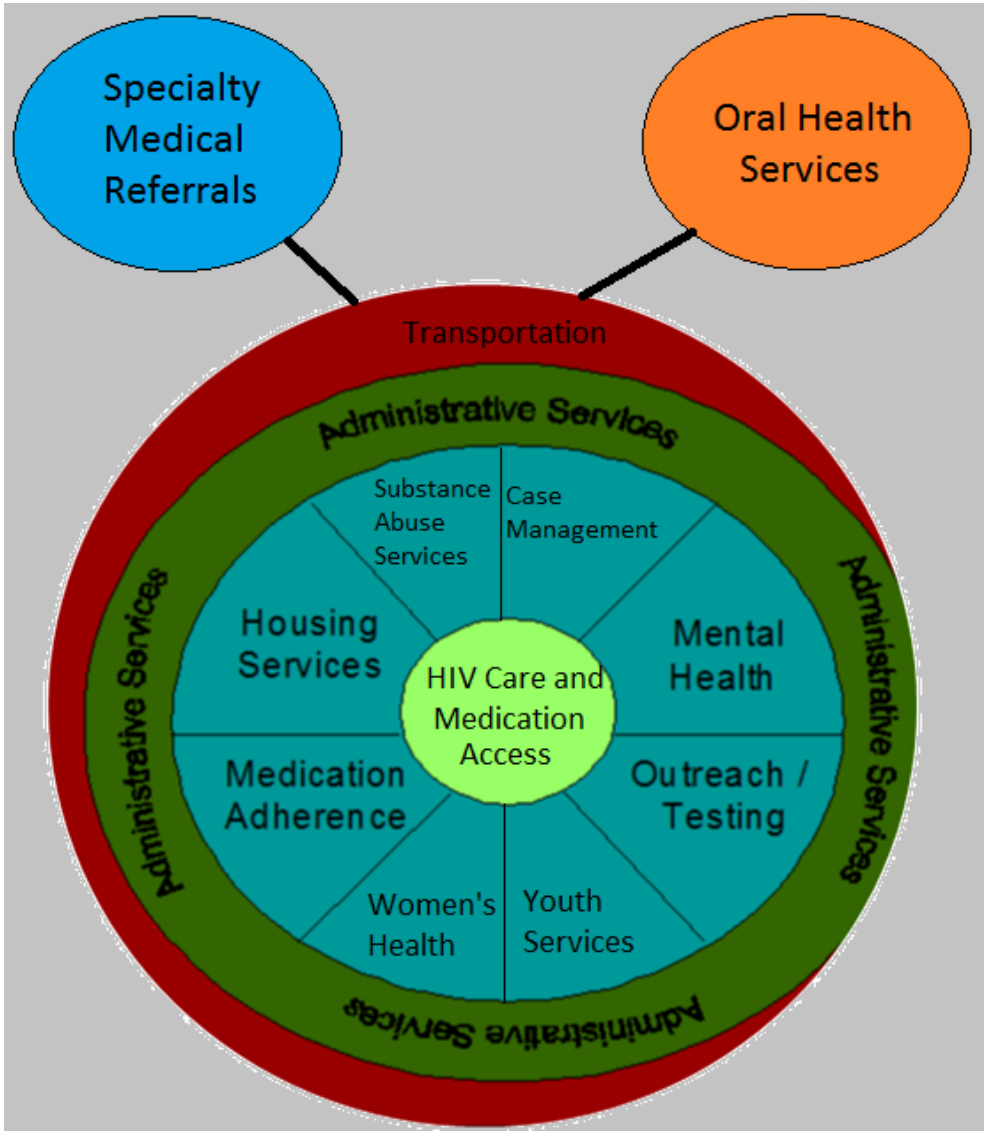
Substance abuse and mental health – 2000 (SAMHSA)

Prevention services -2001 (CDC)

Housing – 2005 (HUD)

Ryan White Part D - 2009

WHERE ARE WE TODAY?



HSC TODAY

- Provide HIV care to more than 500 patients annually utilizing a “one-stop-shop” approach for HIV services with the exception of oral health care.
- >98% of patients on ARV therapy
- >85% have a viral load < 200 copies/ml.
- >65% of patients have a CD4 count > 500, with only 9% < 200.

Healthcare in the United States

- In the 1950s, United States healthcare was among the best in the world. In 1990, the WHO ranked it 27th and in 2000 37th. The Commonwealth Fund has ranked the U.S. healthcare system last compared to Australia, Canada, and most European countries in their reports from 2004-2014.[1]
- These rankings are based on responsiveness, health, equity, and cost.[1]
- U.S. spends more than 17.5% of the GDP on healthcare; other developed nations with better health outcomes spend around 10%[2]

Healthcare Equity

❖ In the US being poor removes approximately 14.6 years from your life expectancy.[3]

❖ Early deaths are attributable to poor diet, tobacco, obesity, lack of exercise, alcohol, and drug use.

❖ A WHO study suggests that only controlling blood pressure may have a significant long term survival impact.

LIFE IN ALABAMA

- Alabamians live in poverty: Income = 48th; GDP and taxes paid per capita = 47th. Unemployment = 6.2%[4]

- Alabama ranks 50/51 on Quality of Life measures such as access to services, health, education, and safety.[4]

- Educational levels are relatively low. In persons over age 25, high school diploma rates are 70-80% and bachelor's degrees are 22% (24% for whites and 14% for blacks)[4]

Alabama Population

In 2014, population declined in 40/67 counties – most declines in rural areas[4]

40% of Alabama youth are from communities of color[4]

44.4% of the population resides in rural communities where:[4]

- Cervical cancer deaths are 56% higher than U.S.[5]
- Prostate cancer deaths are 40% higher than U.S.[5]
- MVA deaths are 128% higher than U.S.[5]

ACA in ALABAMA

- Alabama did not expand Medicaid. Only 74,778 Alabamians have gained Medicaid since the beginning of Marketplace availability as opposed to the estimated 235,000 who would have with the Medicaid expansion.[5]
- There were 3 Marketplace issuers in 2015 and 16 but only one in our service area. Blue Cross has functionally increased rates by 28% in 2016 and a new state law protects insurance company executives from reporting their income.[5]
- Alabama Health Insurance by source: Employer (46%), Non-Group (6%), Medicaid (19%), Medicare (15%), Other Public (3%), Uninsured (11%).[5]

ALABAMA BUDGET CRISIS

- 85 million dollar shortfall in Medicaid[6]
- Legislature overrode Governor's veto – they are considering impeachment proceedings and are searching for a special counsel.
- Governor wants to eliminate prescription drug benefits, dialysis benefits, prosthetics, and cut MD payments for Medicaid.[6]
- Already impacting pediatricians
- Will likely impact rural hospitals

HOW DOES THIS IMPACT HSC?

WHAT PROBLEMS DO WE FACE NOW?

HOW CAN WE BEST PREPARE FOR THE FUTURE?

ELECTRONIC HEALTH RECORD
WHAT NOT TO DO

- Purchased first system in 1998, second in 2000.
- Forced to purchase a third system in 2011.
- Results with SuccessEHS:
  - Tripled wait times
  - Increased cost – Technology staff and equipment, time
  - Constant changes
  - Failed to realize benefits – Meaningful Use, ADPH lab interface, specifying information for our patient portal, RSR
  - Forced other providers into retirement
  - Has increased billing revenues and slowly improved accuracy and information value of data collection but likely could have been achieved more efficiently

HEALTHCARE SYSTEM IN FLUX

- For this clinic, it is impossible to reliably predict the future direction of healthcare.
- Possible new opportunities will create new markets in the future
- We can only continue to do what we do well and be prepared to change when change is required of us. We have demonstrated a quarter century of ability to do just that.

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