Assessing Clinic-Level Factors that Impact Viral Load Suppression

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Background

- Viral load suppression is one of the prime pillars of the EtE Blueprint
- The steps required for a HIV-infected patient to reach a primary care provider after diagnosis can be complex
- Once a patient reaches the clinic, many factors can influence whether that patient achieves viral load suppression (VLS)
Contextual Factors

- Neighborhood context
  - Housing availability and economic inequality
  - % of residents living below federal poverty level
  - Food-desert status
  - Transportation accessibility
  - HIV prevalence
  - HIV testing coverage
  - Spatial density of HIV services

Health Services System Factors

- Service site characteristics and capacity
  - Community vs. clinic-based setting
  - History of providing HIV specialty care
  - Health home transition
  - Program/clinic days and hours
  - Quality of care
  - Insurance accepted/payers reimbursing (RWPA, Medicaid)
  - Co-located med./social services
  - Types of supportive services offered
  - Non-HIV primary care integration
  - Types of medical providers (MD, NP)
  - Types of social service providers
  - Provider-client ratio
  - Staff turnover, transition management

Individual Factors (includes some client-level measures of structural differences)

- Predisposing characteristics
  - Socioeconomic status: education, income, and employment
  - Other demographic characteristics
  - Physical comorbidities (e.g., diabetes)

- Enablers/barriers (support services need)
  - Insurance status (RWPA/ Medicaid)
  - Distance from home to healthcare facility
  - Mental health functioning
  - Housing stability
  - Substance use
  - Recent incarceration
  - Food insecurity

Sustained Viral Load Suppression

Service Model Exposure

- Receipt of support services (RWPA and/or Medicaid)
  - Basic-needs support: housing and food
  - Behavioral health services: mental health, substance use counseling
  - Care coordination model of medical case management

HIV Medical Care Utilization

- ART Initiation

- Patterns of Engagement with HIV Care
  - (e.g., Continuity or changes in HIV medical care provider)

- ART Adherence

R01 MH111384-01 “Taking care to the end of the continuum: Can safety net services close the gap between retention and viral suppression?”
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- Need for HIV medical care
  - Clinical status (CD4, VL)
  - Years since HIV diagnosis

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- Policy environment
  - Health Homes implementation under ACA
  - RWPA service model revisions/adaptations
  - Implementation of newer HIV treatment guidelines

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Sustained Viral Load Suppression

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Background

• Bureau of HIV/AIDS at NYC DOHMH developed a new program - Clinical Operations and Provider Communication
  ➢ To better understand the role of various clinic-level factors on VLS
  ➢ To improve the quality of clinical care delivered to PLWH by interfacing directly with the healthcare delivery system
• Working collaboratively with AIDS Institute
Comprehensive Assessment of HIV-Focused Clinics

- Adherence to clinical guidelines
- QI/QM Infrastructure
- Comprehensive VL data
- Clinical Operations/Capacity
eHIVQUAL
OA
Care Continuum Dashboards
Clinic Survey

Adherence to clinical guidelines
QI/QM Infrastructure
Comprehensive VL data
Clinical Operations/Capacity

Comprehensive Assessment of HIV-Focused Clinics

Goals of HIV Clinic Survey:
- Identify site-level predictors for poor VLS
- Identify best practices
- Better understand resource utilization
- Establish comprehensive repository of services
- Facilitate referrals
- Improve connectivity between clinics
- Provide more targeted TA

Resources:
NYC: Ryan White Part A
NYS: Ryan White Part B
Org: Ryan White Part C
Others: CDC, Foundations
HIV Clinic Survey

• **Purpose:** To better understand the challenges that clinics face in achieving high rates of VLS and to identify innovative solutions

  ➢ Vast majority of PLWH achieve VLS
  ➢ Patient populations with substantial barriers to VLS (e.g., unstable housing, mental illness, ongoing substance use)
  ➢ Clinics can help to address some barriers
HIV Clinic Survey – Dissemination Plan

• Series of revisions to ensure validity, focus while reducing audience burden
• Six sections of theory-based* questions crafted to facilitate analysis and interpretation

Literature Review

Theme 1: Health-care Provider Expertise and Composition

• Health-care provider experience improves outcomes PLWH
• Additional research is needed to specify the number of patients required to gain and maintain expertise
• The study by Wilson et al., in which the quality of care by non-physician clinicians provides additional support for the effectiveness of task shifting (e.g., assigning tasks such as cART prescription by nurses) (Wilson, Landon, Hirschhorn, et al., 2005)
• One study evaluated the involvement of other disciplines (Horberg et al., 2007) and supports the involvement of a clinical pharmacist in HIV outpatient care
Literature Review

Theme 2: Facility Setting/Volume

• Results from more recent studies on the impact of facility volume on VLS was less convincing than those in previously published reviews (Handford et al., 2012; Handford, Tynan, Rackal, & Glazier, 2006)

• Cannot make recommendations regarding facility volume requirements for outpatient care on the basis of the identified studies (Backus et al. 2010; Fatti et al., 2011)

• Studies took place in different settings (the USA and South Africa), used different definitions of large hospitals (>300 and >950), and had contrasting results
HIV Clinic Survey – Outline

• Comprehensive assessment of HIV Care and Infrastructure
• Survey tool designed to assess clinical capacity in several categories, including but not limited to:
  A. Facility Information
  B. Staffing and Duties
  C. Patient Characteristics
  D. Client Access, Retention, and Adherence
  E. Data Management Capacity
  F. Open-ended Questions
A) Clinic and Facility Information

- Facility setting and designation (e.g. Community-based, Hospital-based, FQHC etc.)
- Breadth of services, including:
  - Medical services
  - HIV adherence services
  - Mental health/substance abuse services
  - Other services (e.g., childcare, employment assistance, etc.)
- Facility budget and funding
- Hours of operation
B) Staffing and Duties

- Number of staff by profession and roles
- Care continuity with primary provider
- Involvement of medical trainees
- Utilization of peers to support HIV patient and linkage care outcomes
- Formal strategies to ensure cultural competency of clinic staff
- Involvement in HIV related activities
- Staff turnover
C) Patient Characteristics

- Total number of unique patients served, regardless of HIV status
- HIV care cascade
- Number of HIV and Hepatitis C co-infected patients
- Number of clients prescribed pre-exposure prophylaxis (PrEP) and non-occupational post-exposure prophylaxis (nPEP)
C) Patient Characteristics (cont.)

- Number of HIV-positive patients
  - By age and sex
  - By race and ethnicity
  - By sexual and gender identity
  - By insurance type
  - By risk/exposure category
  - Involved in medical case management

- Frequency of select characteristics, behaviors (e.g., substance abuse)
D) Client Access, Retention, & Adherence

• Appointment wait time (in days) and appointment time allocated (in minutes) for new patients, follow-up appointments, and initial PrEP appointments
• Monthly no show rate
• Follow-up strategies for patients who miss medical visits
• Communication with patients (e.g., reminders, e-communications)
• Strategies to locate out of care patients
E) Data Management Capacity

- EHR vendor
- Functionality of EHR system, including but not limited to:
  - Providing computerized, clinical decision support
  - Automatic missed visit reminders and follow-up outreach
  - Ability to query system to obtain HIV outcomes statistics (e.g., average % with VLS)
- Participation in a regional health information organization (RHIO)
F) Open-ended Questions

- Biggest challenges in efforts to achieve VLS among patients?
- Most effective strategies for achieving VLS in patients, particularly among patients with substantial barriers?
- What set of resources and technical assistance would be most helpful?
- What kind of information and in what format would be best to receive regularly from the City and State departments of health?
**HIV Clinic Survey – Dissemination Plan**

- **Survey Development**
  - Series of revisions to ensure validity, focus while reducing audience burden
  - Six sections of theory-based* questions crafted to facilitate analysis and interpretation

- **Piloting & Revision**
  - Beginning December 2016
  - Five pilot sites city-wide
  - Distributed as a self-administered paper survey with in-person follow-up

- **Data Collection**

- **Analyze Results**

- **Targeted Support**

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Discussion

• General thoughts?
• Who is the best initial point of contact/survey recipient?
• What is the best way to administer the survey? In-person interview vs. computerized or paper self-administered survey?
• Suggestions to increase response rate?
• Would you propose any additional topics for inclusion?
• Questions/Suggestions:
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