MULTI-YEAR, MULTIDISCIPLINARY TEAM QUALITY IMPROVEMENT APPROACH:

IMPROVING HIV TREATMENT ADHERENCE AT EAST CAROLINA UNIVERSITY HIV PROGRAM CLINIC

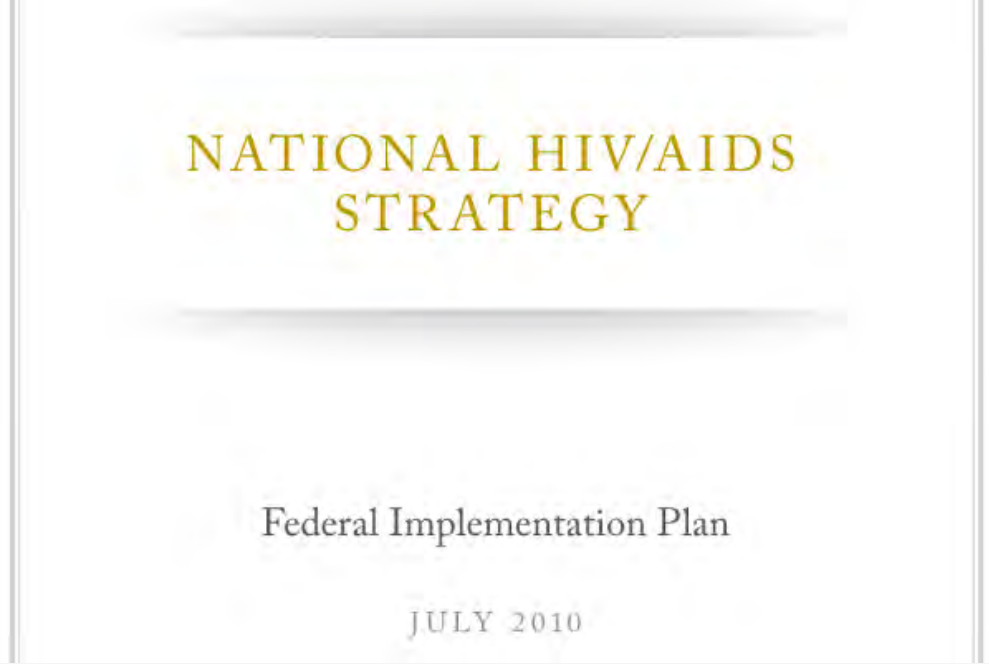
Diane Campbell, MD, MPH, RN
Unified Quality Improvement Symposium
January 31, 2018

ECU BRODY SCHOOL OF MEDICINE

VIDANT HEALTH

A Multidisciplinary, Team Approach was needed to Improve HIV Treatment Adherence

- Only 60% of clients getting care at ECUHIVP achieve viral load suppression (VLS).
- Clients who are viral load suppressed:
  - Have fewer complications related to HIV disease
  - Have normal life expectancy compared to HIV-negative persons
  - Do not spread HIV infection
- The HIV/AIDS Bureau (HAB) and the National HIV Strategic Plan 2010 set goals for 85% VLS, and ECUHIVP was not meeting goals.



Collaborative Work with Team Members

- **Dr. Diane Campbell** – Quality Management Administrator
- **Ciarra Dortche** – Quality Management Coordinator
- **Barry White** – Quality Management Data Manager
- **Dr. Nada Fadul** – HIV Clinic Medical Director
- **Quality Management Committee** – All ECUHIVP staff

Why is this QI goal Important?

- ECUHIVP receives Ryan White Federal and State funding to provide HIV care services and are required to meet HIV/AIDS Bureau (HAB) clinical performance measures including VLS and RIC.

- The National HIV/AIDS Strategy (NHAS) 2010 outlined goal for HIV disease management in US including improving health outcomes (i.e., VLS and RIC)

- ECUHIVP wanted to improve VLS and RIC rates to meet HAB and NHAS goals of 85% by 2016 from 60% VLS, 64% outpatient/ambulatory medical visits (O/A), and 50% viral load in 2011.

ECUHIVP Baseline Data

N.C. HIV/AIDS Bureau (HAB) Measures and Goals

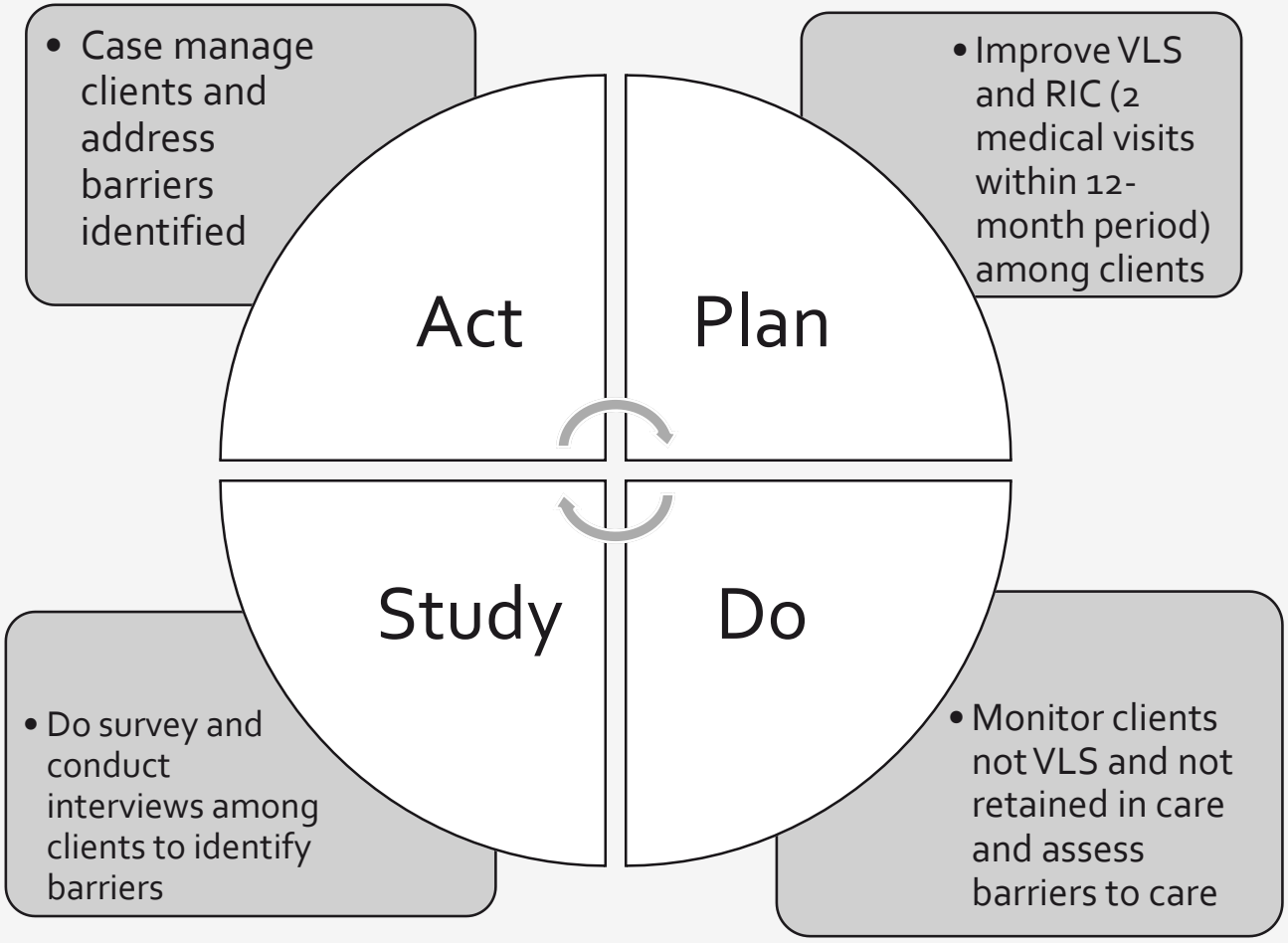
HAB Measure #	State and National Goal	ECUHIVP HAB 12/2011	ECUHIVP Goal by 2016
HAB 01 2 medical visits in 12 months monitored period	85%	64%	85%
HAB 02 2 VL/CD4 tests in 12 months monitored period	85%	50%	85%
HAB 04 Viral Load Suppression	85%	60%	85%

AIM Statement

"By the end of 2016, 85% of clients receiving HIV care at ECUHIVP clinic will have achieved viral load suppression *(i.e., ≤200 copies)* remain retained *(i.e., 2 O/A medical visits and viral load lab in 12-month period)* in HIV care."

Improvement Strategies

Use PDSA Cycles to Improve Outcomes



Client-Identified Barriers and Resolutions

Client-Identified Barriers

- Lack of HIV disease education and importance of HIV medication
- Lack of transportation to providers appointments
- Substance abuse and mental health (SA/MH) illness
- Many social barriers to care: lack of stable housing; rent and food insecurities; and other medical co-morbidities

Resolutions Implemented

- Structured HIV/medication education modules developed
- Funding and processes developed to provide transportation assistance
- Hired full-time on-site SA/MH counselor hired
- Medical Case Management developed to help clients with chronic disease self management

Client-Identified Barriers and Resolutions

Client-Identified Barriers

- Clients leave office without next appointment
- Side effects of HIV medications
- Lack of motivation to keep appointments or take medications

Resolutions Implemented

- Client contacted to make appointment within 48-72 hours of past provide appointment
- Hired Medication Adherence Clinical Pharmacist
- Trained staff in Motivational Interviewing and Chronic Disease Self-Management

Structural Barriers Identified and Addressed

Structural Barriers	*Resolutions Implemented*
▶ Provider appointment schedules open only 6 months in advance	▶ Provider appointment schedule open up to 14 months in advance
▶ HAB - Provider appointments Q6 month	▶ Front desk schedules appointments 5 and 11 months from medical visit
▶ Not getting labs drawn after provider visit	▶ Full-time on-site phlebotomist

Structural Barriers Identified and Addressed

Structural Barriers

- Clients getting HIV medication without follow-up provider appointment
- Clients have multiple no-shows to provider appointments
- Appointment bumps made by provider are rescheduled without client's input

Resolutions Implemented

- Nursing Protocol developed to limit HIV medication refills
- Client flagged as 'high risk for no show' in EMR; only MCM can schedule appt.; client called multiple times with appt. reminders
- Clinic Productivity Coordinator position developed to reschedule these appointments

ECU 2011-2016 O/A VISITS, VIRAL LOAD LABS, AND VIRAL LOAD SUPPRESSION

	2011	2012	2013	2014	2015	2016
O/A Visits	64.83	71.22	74.03	73.98	75.12	77.34
2 VL labs 90 days apart	50.49	59.47	67.88	68.79	68.76	71.94
Viral Load Suppressed	60.45	72.98	76.75	80.97	81.01	84.12

Challenges Encountered in QI Process

- Some staff did not want to participate in QI activities. QI participation was made part of everyone's job description.
- Clients not-VLS have multiple barriers that need to be addressed to priorities their health care: A team of medical case managers was developed to help clients address barriers.
- Staff needed QM/QI training: QI Training at our monthly meeting provided
- Staff needed tools to help client's change behavior: Administration invested in staff motivational interviewing training: now in 3rd year

Lessons Learned Through QI Efforts

Greatest Lessons Learned:

- Even QI teams can become frustrated with the slow pace of change and need QI process education, input from administrative team, and acknowledgement that their QI effort is valuable.

- Staff can be resistant to clinic structure changes. Change process can be slow and there is no short cuts or quick fixes.

Greatest Failure:

- Although we achieved 85% VLS for all clients, sub-populations of Black/African American men who have sex with men have less VLS achievement (82%)

Next Steps

2018-2020 QI Goals

- Increase VLS of all clients in clinic to 90% by 2020 from 85% in 2017
- Increase VLS of Black/African Americans to 85% by 2020 from 82% in 2017
- Improve VL suppression of young Black MSM to 85% from 81% in 2017

Sustainability

- Structured QM Plan include monitoring QI activities monthly
- Generate quarterly QI progress report to be submitted to State and Federal Grantors, ECUHIVP QI team, and regional stakeholders

Questions?

Presenter Contact Information:

Diane Campbell, MD, MPH, RN
Phone: 252-744-4500
E-mail: campbelldi@ecu.edu