Technical Assistance (TA) to a Pilot Treatment Adherence Program in the South Bronx: Lessons Learned

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Care, Treatment and Housing Program

Presentation Outline

- Agenda for presentation:
  - Learning Objectives
  - Overview
  - Lincoln's Treatment Adherence Program (LTAP) Model and Description
  - Summary Outcomes from LTAP
  - Technical Assistance (TA) Provided
  - Areas of Technical Assistance Focus and Impact
  - Conclusion
    - Role of TA in supporting Ryan White grant-funded initiatives

Learning Objectives

- Describe at least two (2) major changes among the following pilot program patient outcomes:
  - CD4 count
  - Viral load (VL)
  - Self-reported adherence
  - Pillbox adherence
- Discuss the four (4) major challenges faced by the pilot program and the lessons learned
- Learn practical lessons and tips from the experience of providing technical assistance to a treatment adherence program

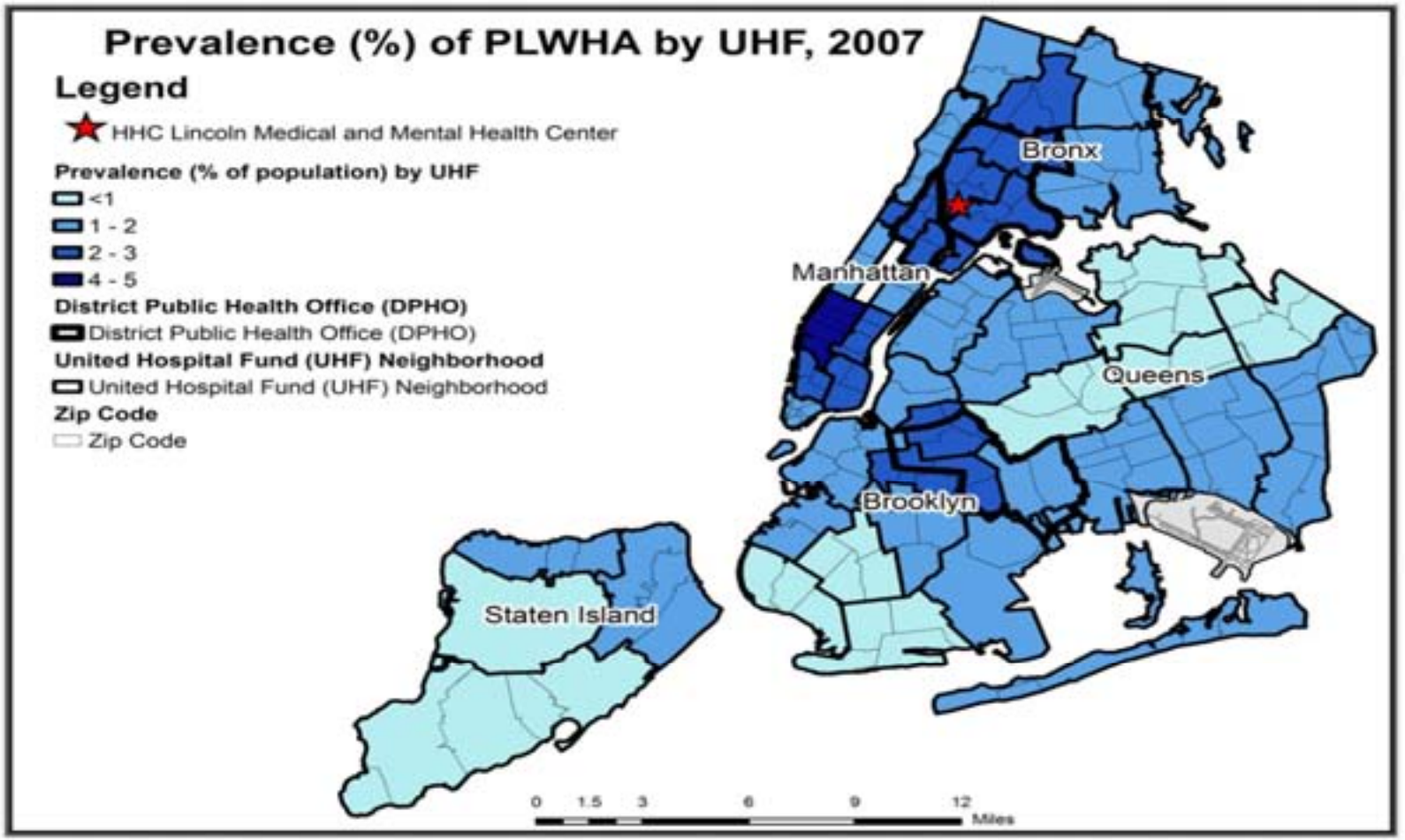
Overview: Eligible Metropolitan Area (EMA)

- EMA: New York, New York
- Grantee: Mayor of the City of New York
- Administrator: NYC Department of Health and Mental Hygiene (DOHMH)
  - Bureau of HIV/AIDS Prevention and Control
- New York EMA includes:
  - Five Boroughs of NYC
  - Three Counties North and East of NYC (Tri-County)
    - Westchester, Rockland, and Putnam Counties
- 2010 Part A Award is $121,088,606 (Base and MAI)
  - Support 182 Contracts (151 in New York City)

Overview: Epidemiology of EMA (NYC 2007)

- As of December 31, 2007, there were 103,454 active cases of HIV/AIDS in NYC
  - Including 62,976 living with AIDS
- 3,965 new HIV diagnoses were reported in New York City in 2007
  - 73% were male and 50% were black
  - Concurrent HIV/AIDS diagnoses accounted for 24% of all new HIV diagnoses in 2007
  - 917 of the new diagnosis were among people living in the Bronx
    - Incidence rate of 66 diagnoses per 100,000 population
- From January 1, 2007 through December 31, 2007, there were over 2,000 deaths (all-causes) among HIV/AIDS patients

Persons with HIV/AIDS by United Hospital Fund (UHF) Neighborhood (NYC 2007)



Overview: Care, Treatment and Housing Program

- Within the NYC DOHMH's Bureau of HIV/AIDS Prevention and Control (BHIV) is the Care, Treatment, and Housing Program (CTHP)
- Program established in 2007 under the leadership of Dr. Fabienne Laraque
- Includes the following divisions:
  - Health Care Services
    - Technical Assistance Unit
  - Research and Evaluation
  - Housing Services
  - Ryan White Planning Council Support

Overview: History and Objective

- In 2006, the NYC BHIV identified treatment adherence as a priority and developed a pilot to target this priority area
  - Limited controlled trials with consistently good outcomes

- The treatment adherence model chosen to replicate was the Prevention and Access to Care and Treatment (PACT) Project in the Boston, MA area
  - PACT is an initiative of The Division of Global Health Equity at Brigham and Women's Hospital and Partners In Health (PIH)
  - PACT is PIH's only domestic healthcare program
  - Utilizes the *accompagnateur* model developed in Haiti
  - PACT provided for guidance on model replication

Overview: Timeline and Lessons Learned

- Timeline:
  - Spring 2006—The DOHMH decided to develop and implement this evidence-based pilot treatment adherence intervention at NYC Health and Hospital Corporations' (NYC HHC) Lincoln Medical and Mental Health Center (Lincoln)
    - Lincoln is a large community hospital within the HHC public hospital system
  - August 2007—Lincoln Treatment Adherence Program (LTAP) contract officially begins
  - October 2007—Clients enrolled into LTAP
- Lessons Learned:
  - Information from the implementation of LTAP served as a pilot for the treatment adherence model recently implemented citywide
  - LTAP also served as a pilot for providing TA to a treatment adherence program based on PACT's model

Lincoln Treatment Adherence Program (LTAP) Goals and Objectives

- Goal:
  - Reduce HIV-related morbidity and mortality
- Objectives:
  - Improve adherence to Anti-Retroviral Treatment (ART)
  - Improve clinical outcomes—CD4 and Viral Load (VL)
  - Enhance resiliency and self–efficacy skills to better negotiate illness challenges
  - Improve use of community and health care system resources
  - Utilize harm reduction interventions to promote healthier behaviors

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LTAP Model

- To accomplish objectives, LTAP utilized community health workers, “Health Promoters” (HPs), to deliver a psycho-educational curriculum with clearly articulated learning objectives
  - Series of guided conversations designed to help the patient understand and overcome barriers to adherence
  - Provides basic health information and education
  - Incorporates harm reduction techniques
- Health promotion done in patients’ homes
  - Better understanding of contextual factors that affect adherence
- Interventions to support adherence include:
  - Organizing and explaining use of pillbox
  - Weekly monitoring of pillbox to determine intervention level
  - Directly Observed Therapy (DOT) as warranted

LTAP Model, Continued

- Baseline health promotion intervention level is weekly
  - Intensive intervention that cost approximately $6,000/patient/year
- Other services include:
  - Accompaniment and systems navigation
  - Individual social support
- Target population:
  - HIV-infected patients in the South Bronx
  - Residing within an approximate 30 minute commute to the Center
  - Recent non-adherence or VL > 1000 copies/cc with current treatment (or as indication for future treatment)
  - Use of a seven day pillbox organizer

Program Design

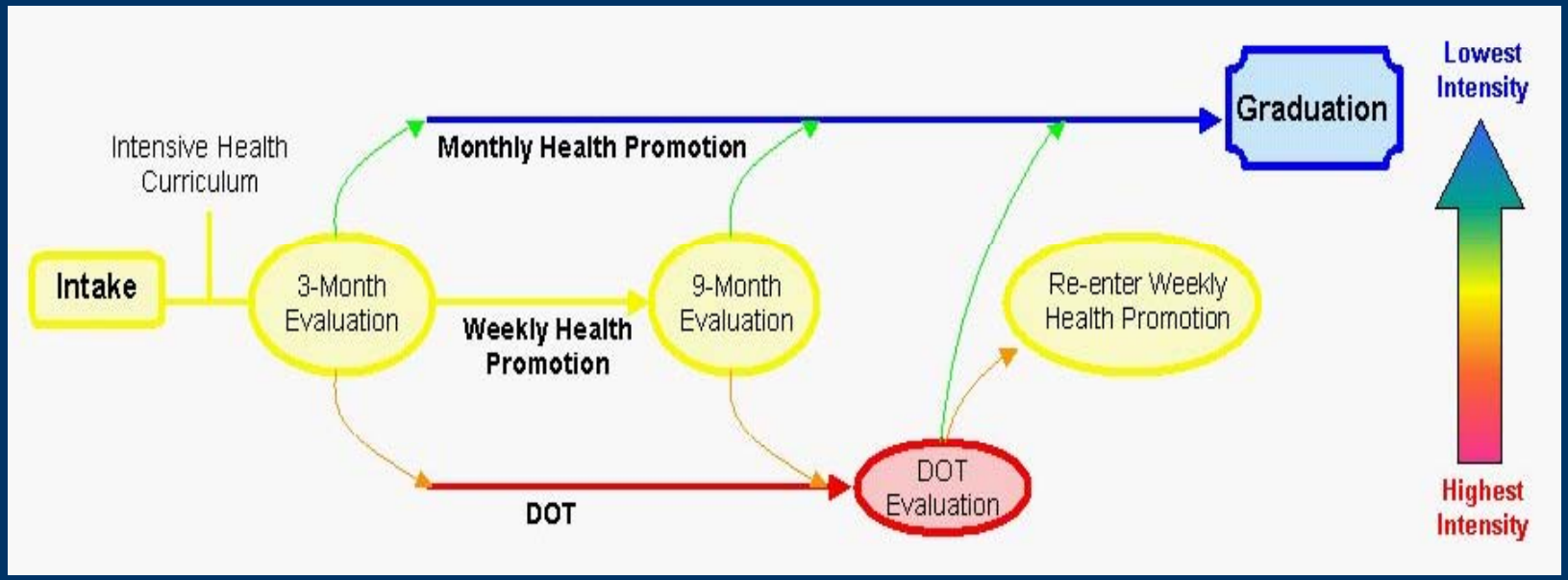
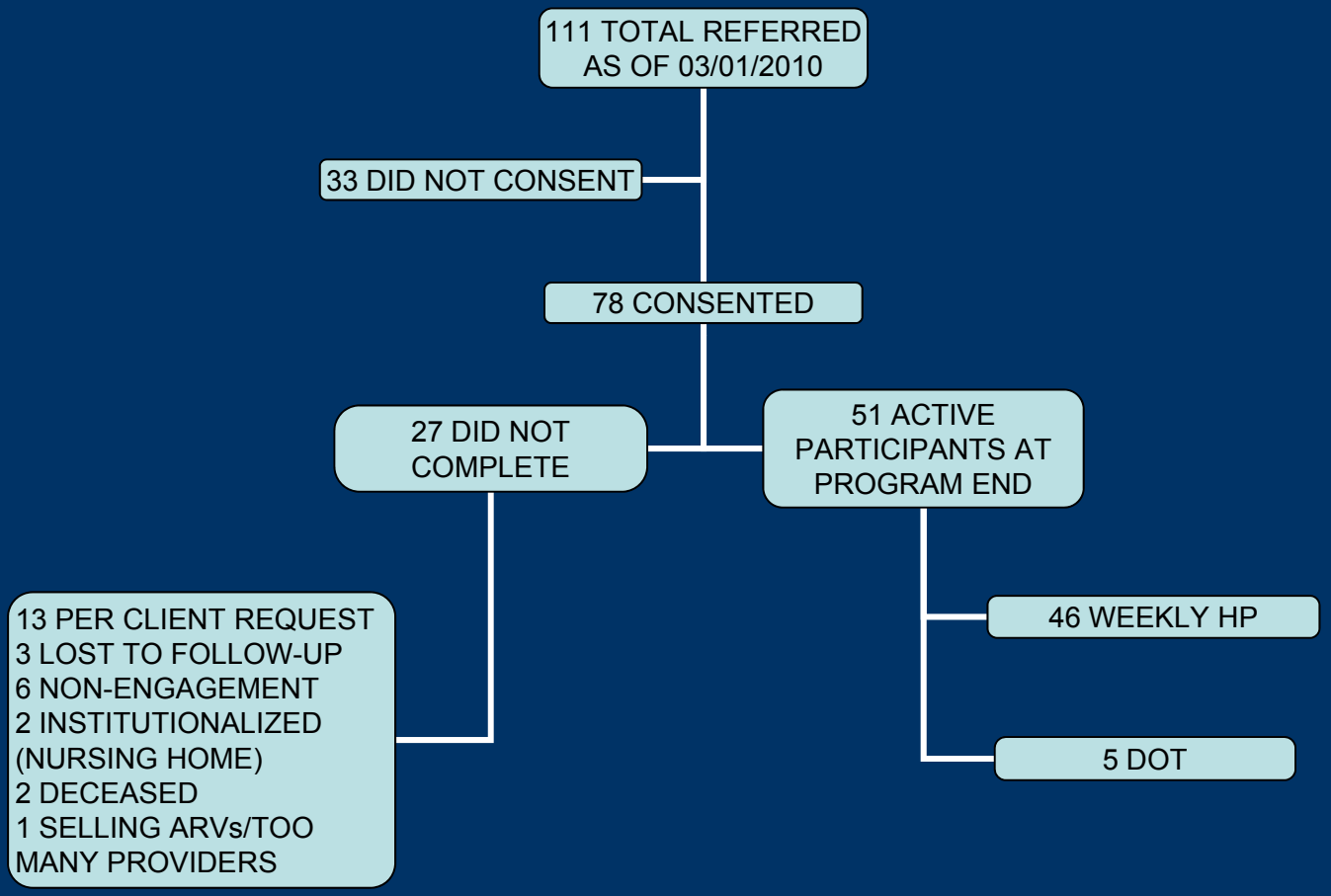


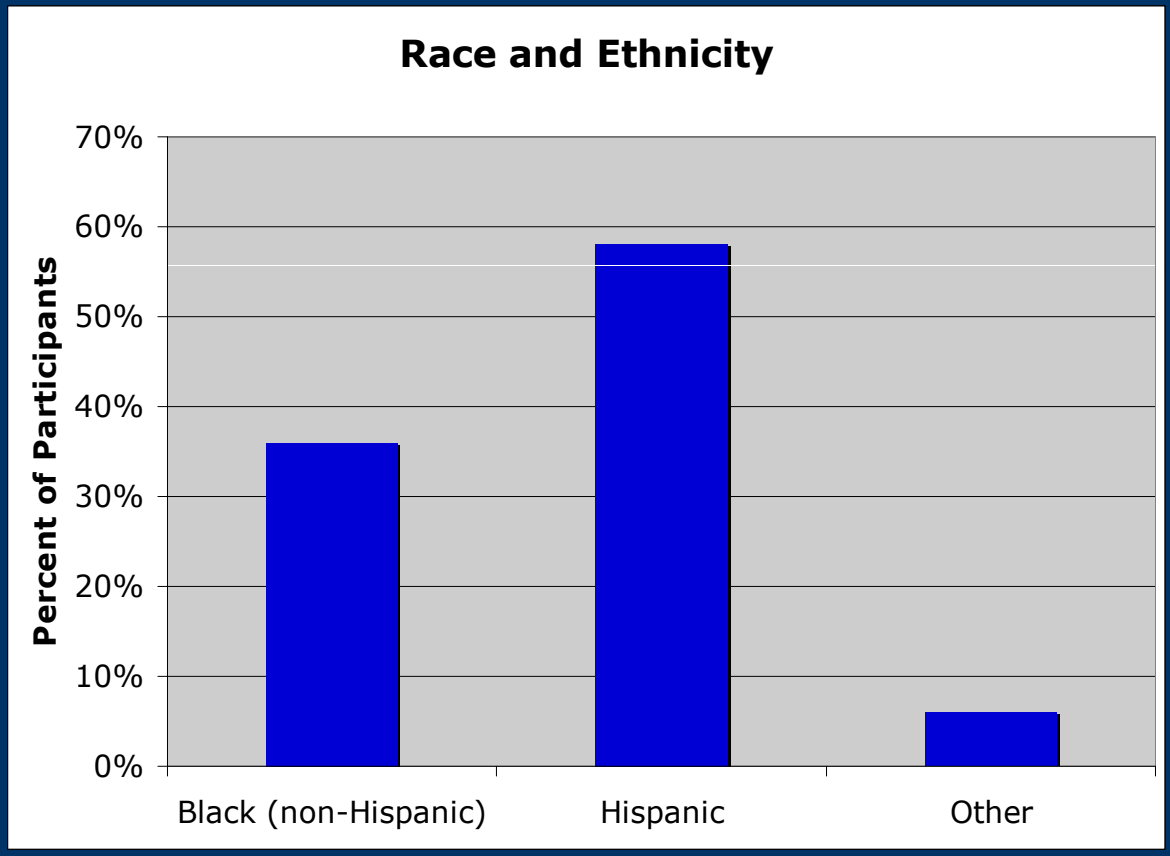
Figure Credit: PACT Project, Brigham and Women's Hospital and Partners in Health

LTAP Program Enrollment (NYC 2007—2010)

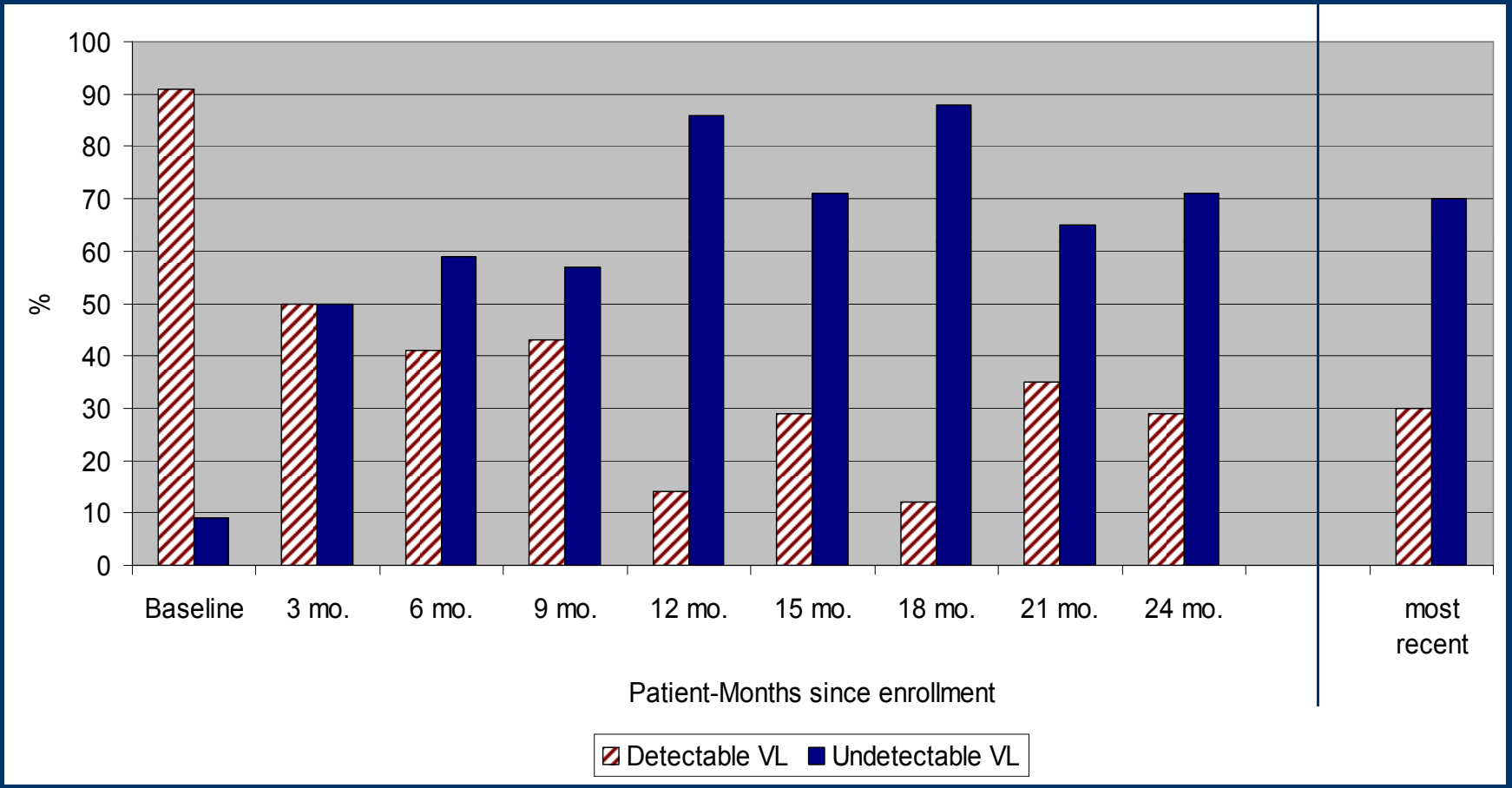


LTAP Enrollee Details (NYC 2007—2010)

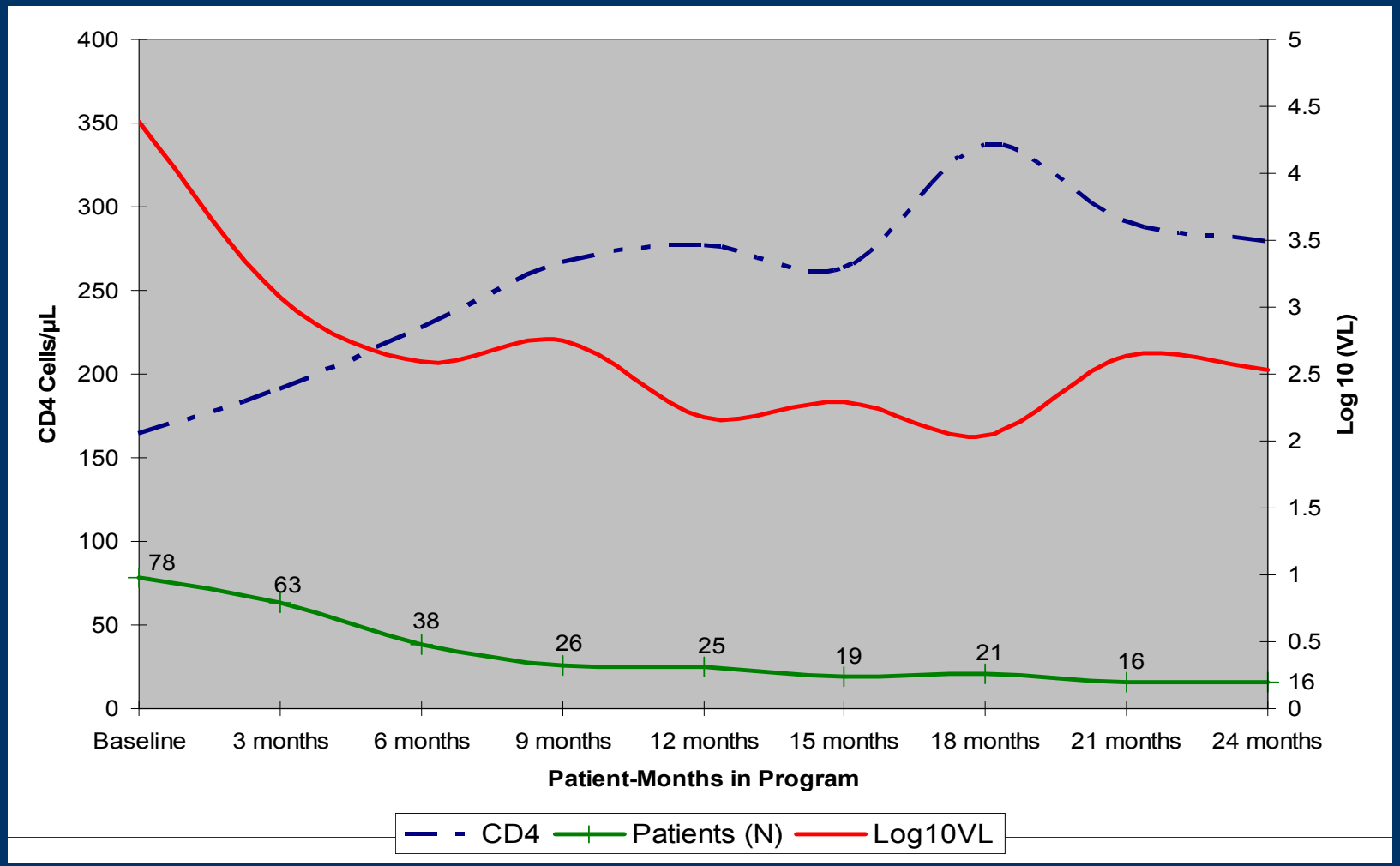
- N = 78
- Sex
  - Male: 40%
  - Female: 60%
- Mean age = 45 years
- Approximately 94% referred due to non-adherence
- 60% had diagnosis of AIDS upon referral



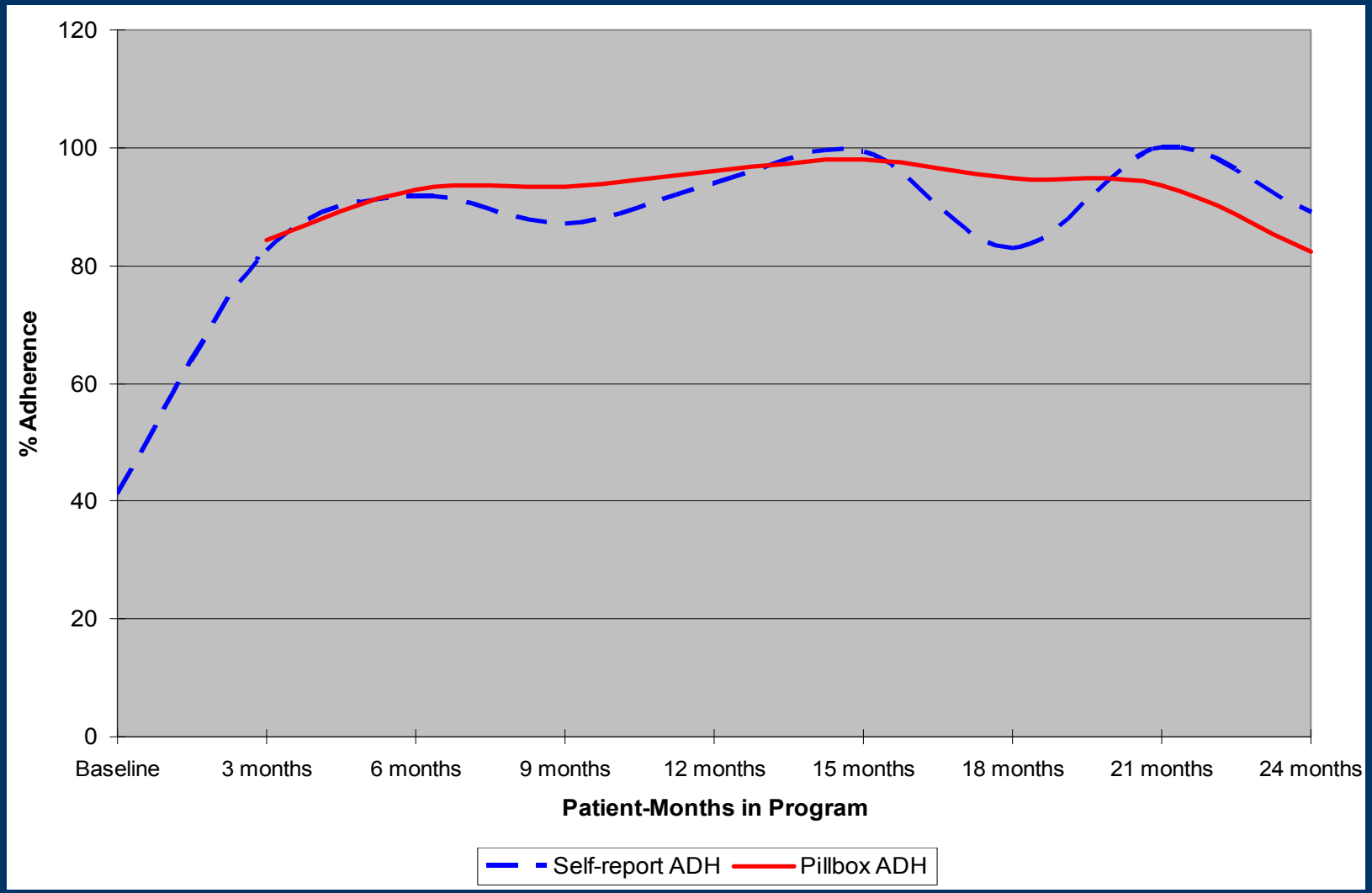
LTAP Patient Outcomes: Virologic Suppression (<400 copies/µL) (NYC 2007—2010)



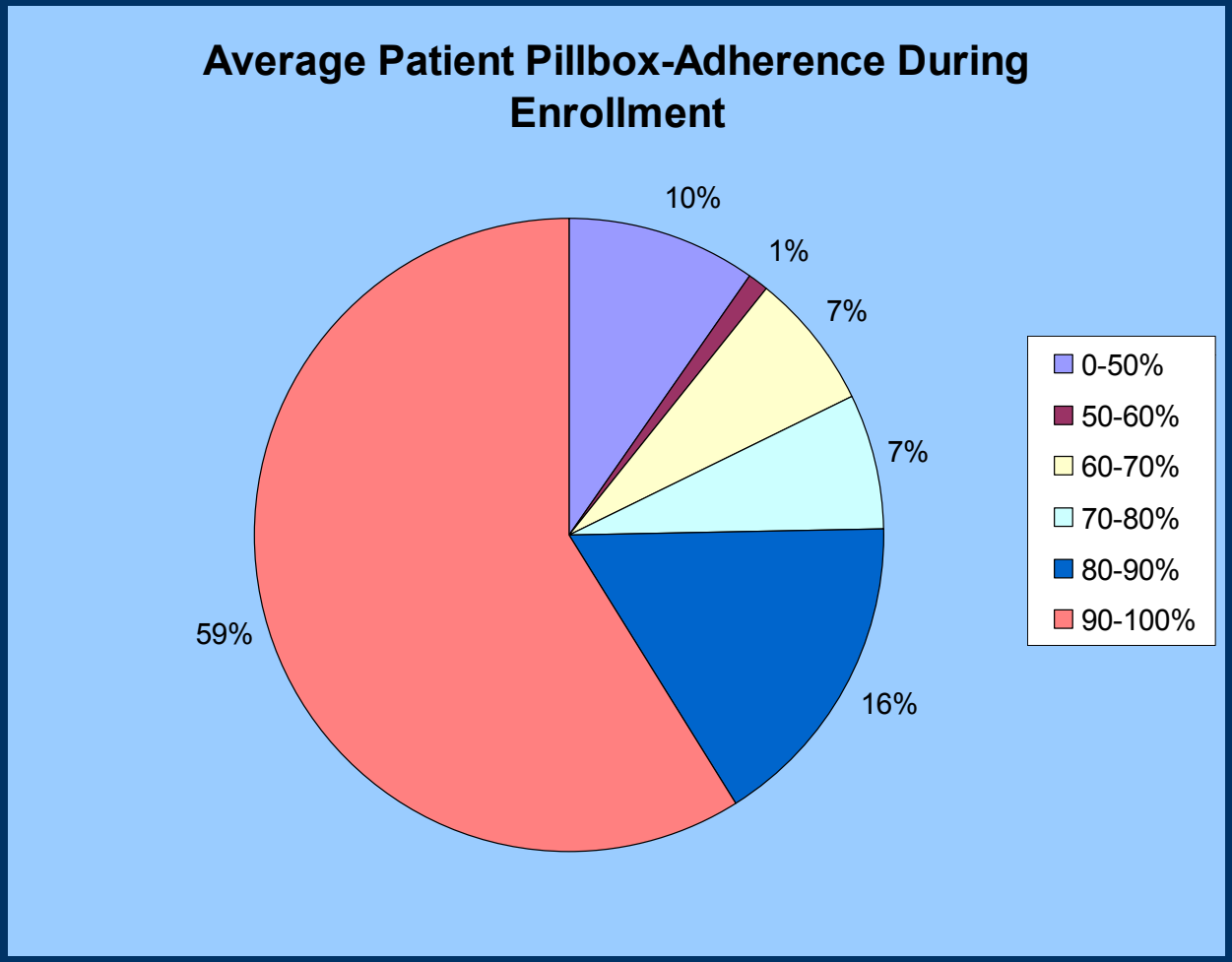
Patient Outcomes: Laboratory Indicators (CD4/VL)



Adherence Summary (NYC 2007—2010)



Adherence Summary, Continued (NYC 2007—2010)



Technical Assistance: DOHMH—LTAP Relationship Over Time

- Phase One: Spring 2006—Spring 2007
  - DOHMH as program designer and contract holder
  - Maintained administrative oversight but had little direct involvement in program operations
- Phase Two: Summer 2007—Fall 2007
  - Delays in contract execution, which led to regular DOHMH—LTAP Management meeting
  - Informal Technical Assistance (TA) began
- Phase Three: Fall 2007—Spring 2008
  - Delays in implementation led DOHMH to:
    - Design program forms
    - Design LTAP Access database
    - Contract with PACT to train LTAP staff
    - Hold regular meetings with program staff

Technical Assistance: DOHMH—LTAP Relationship Over Time, Continued

- Phase Four: Summer 2008—Winter 2010
  - Difficulty with program execution led to Dedicated Project Officer (PO) and Evaluation Specialist (ES) who went through an intensive PACT training
  - PO and ES attendance of bi-weekly clinical case conferences
  - PO shadowing Health Promoters during their field/home visits
  - Targeted management reviews and consultations
  - Additional efforts to include LTAP Medical Director and Clinical Supervisor/ Director of Social Work
  - Monitoring activities, including chart reviews and in-clinic evaluations

Technical Assistance: Four (4) Primary Challenges

- Migrating to a model substantially different from the prevailing norm
- Managerial oversight
- Relationship between medical and ancillary service providers
- Client recruitment and enrollment

Priority Area One (1): Program Model Uptake

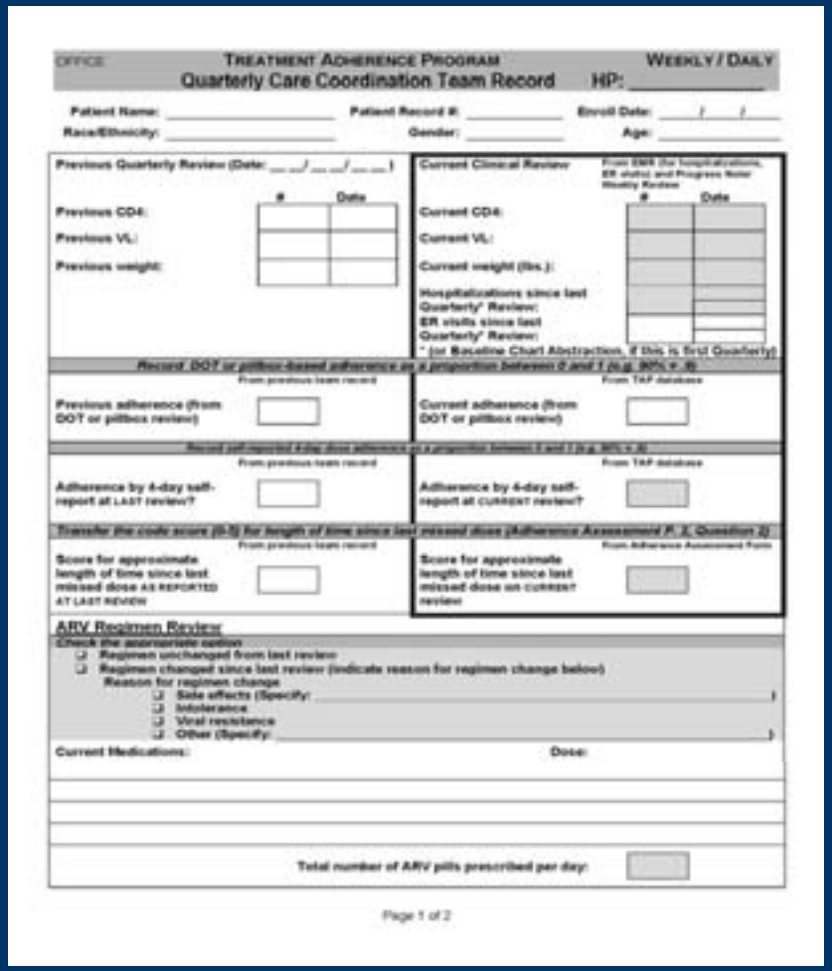
- Issue: Adopted a much more intensive programmatic model
  - Resistance to weekly home-based health promotion visits
  - Challenge delivering the educational modules to clients
  - Understanding the purpose and implementing DOT
  - Importance of interdisciplinary case conferencing sessions

- To Address:
  - Continuously reinforced importance of meeting in the patient's home visits on a consistent (weekly) basis
  - PO coached individual HPs to improve scripting and delivery of the curriculum topics
  - PO worked with PACT's Technical Assistance team to develop scripting on the importance of and how to sell DOT services

TA Accomplishments: Improved Case Conferencing Sessions

- Issue: Initial sessions' content and organization had limited benefit for patient management and determination of future patient care
  - Irregularly scheduled sessions
  - Inconsistent attendance of PCPs
  - CD4/VL values were outdated
  - Limited interdisciplinary participant involvement
  - Non-relevant information shared
- To Address:
  - Conferences were scheduled biweekly (Wednesdays at 8:00 am)
  - DOHMH communicated the need for PCPs to be present
  - Agendas shared in advance
  - Encouraged non-LTAP staff to participate
  - Refined case conference form to organize pertinent patient information

Quarterly Case Conferencing Form



OFFICE

TREATMENT ADHERENCE PROGRAM — **WEEKLY / DAILY**

Quarterly Care Coordination Team Record — HP: _____

Patient Name: _____ Patient Record #: _____ Enroll Date: ___/___/___

Race/Ethnicity: _____ Gender: _____ Age: _____

Previous Quarterly Review (Date: ___/___/___/___)	#	Date
Previous CD4:		
Previous VL:		
Previous weight:		

Current Clinical Review (From EMR (for hospitalizations, ER visits) and Progress Note Weekly Review)	#	Date
Current CD4:		
Current VL:		
Current weight (lbs.):		
Hospitalizations since last Quarterly* Review:		
ER visits since last Quarterly* Review:		

* (or Baseline Chart Abstraction, if this is first Quarterly)

Record DOT or pillbox-based adherence as a proportion between 0 and 1 (e.g. 90% = .9)

Previous adherence (from DOT or pillbox review) (From previous team record)	Current adherence (from DOT or pillbox review) (From TAP database)

Record self-reported 4-day dose adherence as a proportion between 0 and 1 (e.g. 90% = .9)

Adherence by 4-day self-report at LAST review? (From previous team record)	Adherence by 4-day self-report at CURRENT review? (From TAP database)

Transfer the code score (0-5) for length of time since last missed dose (Adherence Assessment P. 2, Question 2)

Score for approximate length of time since last missed dose AS REPORTED AT LAST REVIEW (From previous team record)	Score for approximate length of time since last missed dose on CURRENT review (From Adherence Assessment Form)

ARV Regimen Review

Check the appropriate option

- ❑ Regimen unchanged from last review
- ❑ Regimen changed since last review (indicate reason for regimen change below)

Reason for regimen change

- ❑ Side effects (Specify: _____)
- ❑ Intolerance
- ❑ Viral resistance
- ❑ Other (Specify: _____)

Current Medications: Dose:

Total number of ARV pills prescribed per day: _____

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Medical Appointments completed: _____ out of _____	Completed HP Visits: _____ out of _____
Modules covered in previous quarter:	Total # of modules covered to this point:

Overall assessment of client's status, adherence barriers and current needs (include Risk Group, Marital Status, Housing Arrangement and Disclosure Issues):

Notes on GCCT discussion:

Plan/Action:	Responsible Party	Time Frame
Action 1:		
Action 2:		
Action 3:		

Client Disposition Summary

Check the appropriate option

- ❑ Continue current program/track
- ❑ Switch from weekly track to daily (DOT)
- ❑ Switch from daily track (DOT) to weekly
- ❑ Discharge from program (see Discharge Record)

Care team members in attendance	Name	Signature	Date
Health Promoter			___/___/___
TAP Program Manager			___/___/___
Physician/PA/NP			___/___/___
Social Worker/Clinical Supervisor			
Nurse			
Other (Specify title)			

TAP Staff Member Completing Form: _____ (Name) _____ (Signature) Date: ___/___/___ (m m / d d / y y)

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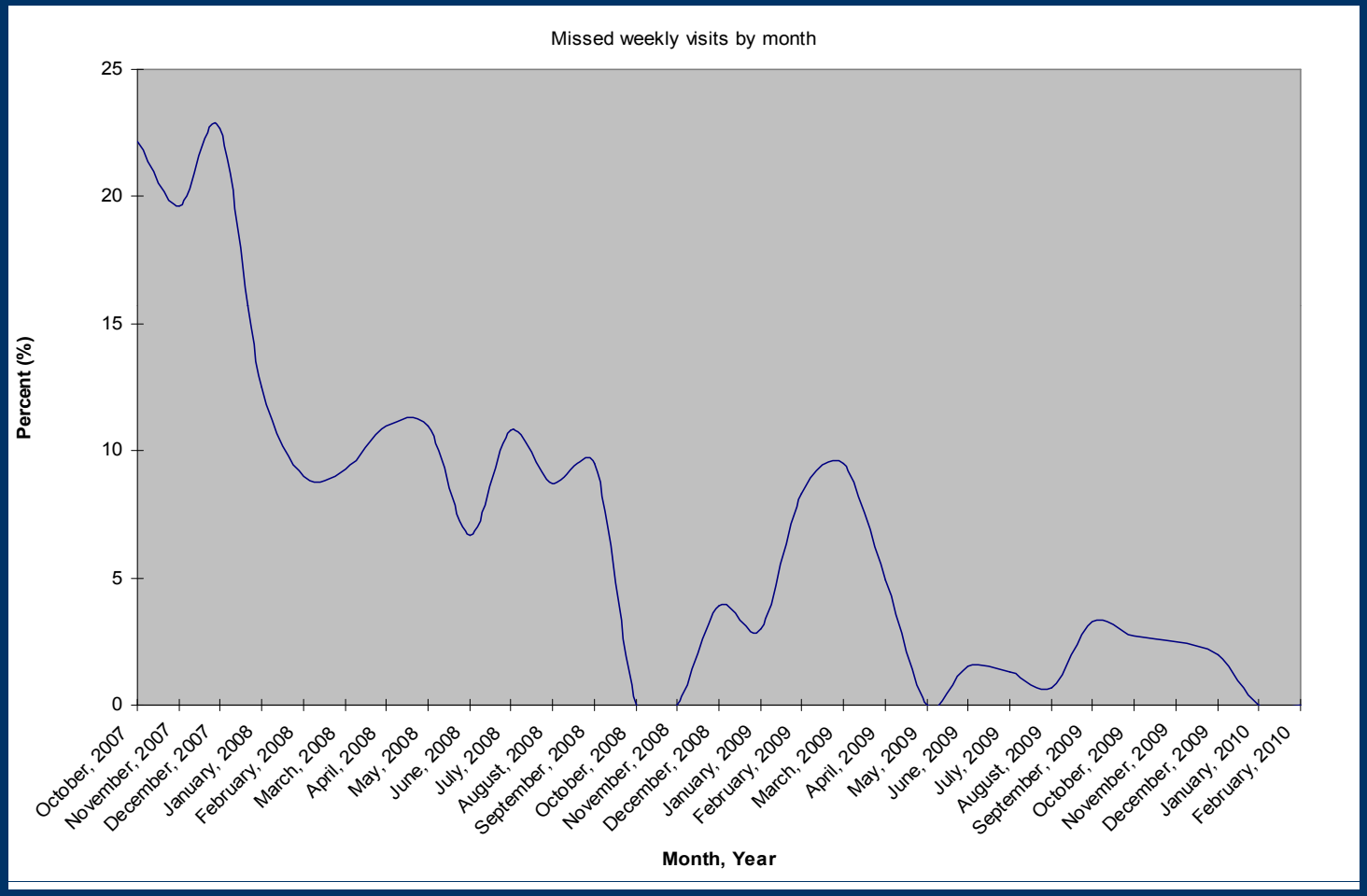
TA Accomplishment: Missed Weekly Pillbox Review (NYC 2007—2010)



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Priority Area Two (2): Managerial Oversight

- Issue:
  - Program operations management
    - Ensuring expected activities are occurring according to schedule
  - Conducting quality management activities
    - Lacking a systematic process to review the quality of program activities
  - Improving time management skills
  - Scheduling regular programmatic and clinical supervision sessions
- To address:
  - PO and ES conducted monitoring activities, including chart reviews and in clinic evaluations
  - ES developed program summary report tool within Access database
  - Staff developed lab draw scheduling tool based on consistent feedback
  - Recruitment of LTAP Medical Director and Clinical Supervisor to assist with managerial responsibilities

TA Accomplishment: Improved Managerial Oversight

- Used collection of laboratory data (CD4 and VL) within 30 days of a quarterly case conference (QCC) as an indicator of managerial preparedness and organization
- For program to be effective both medical and program staff need updated laboratory and behavioral indicators to make valuable treatment decisions
- TA discovered that the collection of laboratory data within 30 days of a QCC significantly improved over time:
  - During first half of program, 52% were drawn more than 30 days prior
  - Following the winter 2009, 38% were drawn more than 30 days prior
  - After June 2009, only 31% were taken more than 30 days prior

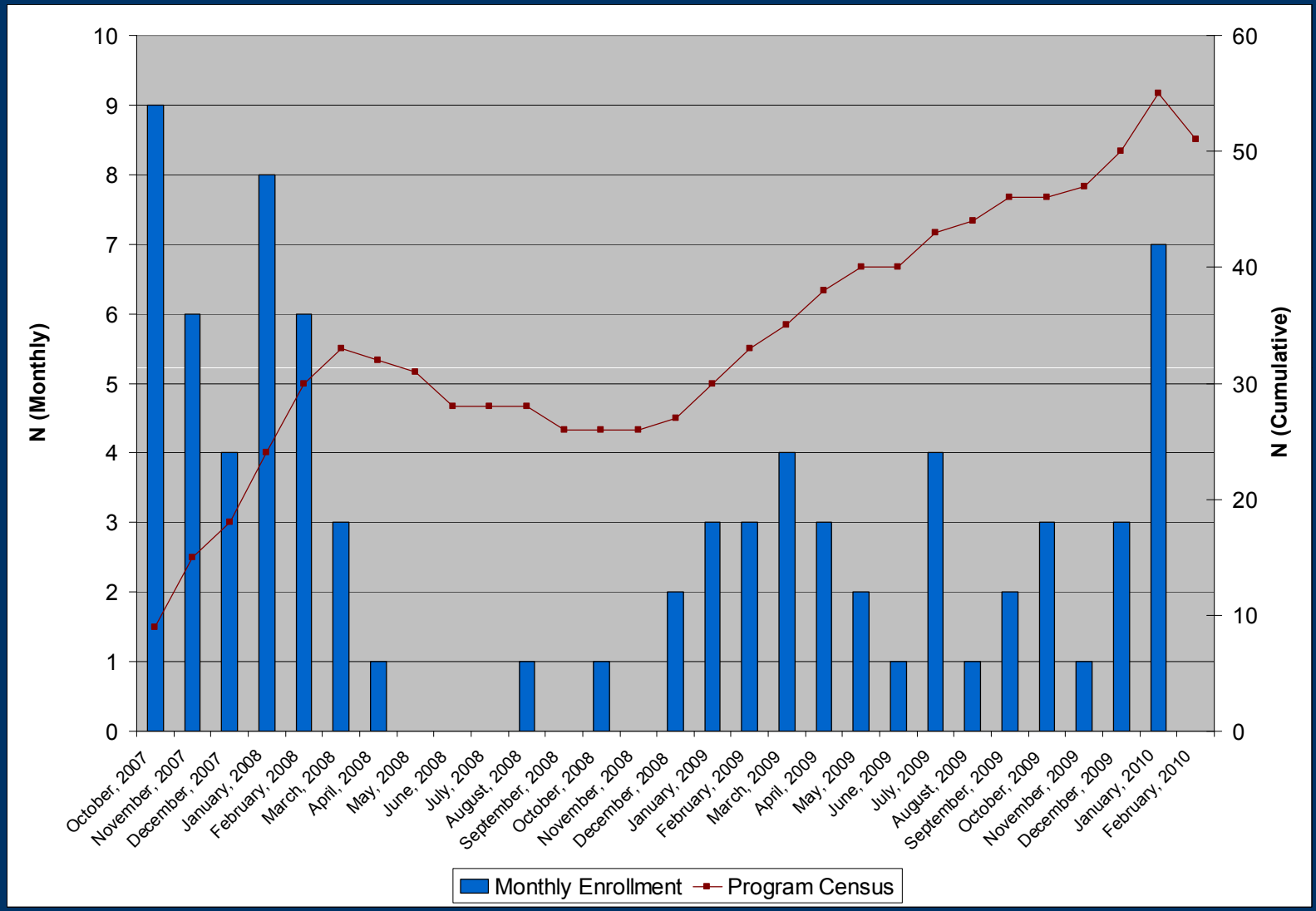
Priority Area Three (3): Relationship Between Medical and Ancillary Service Providers

- Issue:
  - Program visibility among different programs with multiple funding streams
  - Buy-in among MDs and LTAP staff regarding program model and the flow of communication
  - Needed to shift mindset that provider involvement would be a costly investment
  - Cultural barriers between PCPs and staff
- To address:
  - Clarified responsibilities of staff involved with LTAP patients and helped facilitate a flow of communication
  - Increased the role of the clinical supervisor
  - Reinforced cultural awareness in real time

Priority Area Four (4): Client Recruitment and Enrollment

- Issue:
  - Prioritization of enrollment based on capacity vs. patient need
  - PCP-program director-patient handoff were not regularly occurring
  - Lack of visibility about LTAP among providers and patients
  - Over-filtering patient referrals
- To Address:
  - Continuous encouragement and discussion of barriers to enrollment during monthly conference calls
    - Required a change in mindset
    - Encouraged staff to make referral suggestions to the PCPs
  - Suggested advertizing LTAP (including brochures, handouts, weekly emails, etc.)
  - Reminded PCPs that eligibility requirements were much more inclusive
    - Resulted in Enrollment of patients with broader range of CD4 counts

LTAP Enrollment by Month (NYC 2007—2010)



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Conclusion

- Successfully replicated PACT model in NYC at Lincoln Hospital
  - TA helped overcome significant management and organizational culture challenges
- This information informed the creation and implementation of a Ryan White-funded $25 million Medical Case Management (MCM) program which incorporates the major tenants of LTAP
- Learned hands-on experience about providing programmatic TA to similar programs
  - TA Process formalized over the 2.5 years of program implementation
  - Currently expanded the provision of TA to new MCM programs
- Because of LTAP's success after TA implementation, can indirectly conclude that TA helped obtain improved patient and process outcomes

Implications for Ryan White Grantees

- TA can improve program performance
- If your EMA conducts evaluation and quality management activities, the inclusion of technical assistance is an incremental change
- TA utilizes the information gathered by evaluation and monitoring techniques to inform targeted interventions*
- Needs:
  - Standardized intervention
  - Uniform data system to collect necessary information
  - Time commitment of Project Officers
    - Need approximately 1 FTE per 250 patients during scale up phase
    - Need approximately 1 FTE per >1,000 patients in program maintenance phase

*Must have reliable and accurate information

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  - Daniel Weglein, MD, MPH, Principal Investigator
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