

**Direct Observed Therapy
Program (DOTP)**

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August 27, 2008

Mission Statement

- To promote and increase treatment adherence among persons living with HIV/AIDS by managing the participants' medication and observing them while taking their medications according to their treatment regimen.
- The DOTP also strives to increase attendance at physician visits among participants.

Our Participants

- Reside within city limits.
- High-risk for non-adherence (HAART naïve, substance abuse issues, etc.)
- Generally 18+, but minors can be accepted

DOTP Participant Selection

- Referrals are made by the Baltimore City Health Department, Chase Brexton Health Services, Health Care for the Homeless, The Imani Center, Park West Medical Center and any other agency that identifies a person with HIV in need of services.
- PCP coordinates all medical services.

Participant Selection, continued

- Prospective participants interviewed
- Program explained with emphasis on roles and responsibilities
- All enrollment forms completed

Our Staff: Patient Advocates (PA)

- Dedicated health educators with several years of public health experience
- Varying levels of education and degrees
- Varying degrees of experience
- Trained extensively in HIV education, risk reduction, phlebotomy, counseling, testing and referral, domestic violence, substance abuse/addiction, mental health, etc.

Our Staff, continued

- Patient advocates are liaisons between the program participant and PCP. The PCP provides case management.
- The DOTP advocates assist with transportation to and from physician visits or specialty/subspecialty provider appointments.
- The DOTP advocates often make referrals for ancillary services such as substance abuse treatment, housing assistance, legal assistance, family reunification services, etc.

Other Patient Advocate Responsibilities

- Counsel participants regarding antiretroviral therapy and disease progression
- Provide participants with bus tokens and cab fares
- Constant assessment and reassessment of participant needs
- Provide assistance as appropriate to ensure participant continues treatment and adherence

Maryland Board of Pharmacy Regulations

- Maryland law prohibits the administration of medications without proper licensure. Therefore, DOTP Patient Advocates may deliver medications from the pharmacy to program participants, but can only observe them ingesting medications or encourage them to take their prescribed medications.

How Do Participants Get Their Medications?

- Pill boxes: Prepared by providers or with patients. Made bi-weekly and monthly (may also include medications for hypertension, diabetes, mental health disorders, etc.)
- Medication delivery by PA: The DOTP collaborates with a local city pharmacy. The pharmacy fills a participant's prescription once or twice daily depending on the participant's regimen and the PA delivers the medications to their home.

Medication Observation

- Participants are physically observed consuming medications at their home.
- Participants are to follow prescription instructions provided by their prescribing physician.
- Treatment regimens are once or twice dosage daily.
- PCPs who change participant regimens must submit changes in writing to the DOTP medical advisor before changes can be implemented.

Advocate Arrives: No One Is Home

- PAs do try to track clients who are not home for their scheduled visit. Participants provide contact information for other friends and family members at the intake interview. PAs use this information to try to find a participant so he/she can receive medications and/or be observed consuming their medications.
- PCPs are notified when a participant misses 3 or more consecutive doses or refuses to take his/her medications as they agreed to do when they signed the participant agreement form.

Program Management

- DOT advocates document all participant activities daily including medication observations and visits to providers or other specialty service providers. All documentation is entered in the DOT database and in the participant's hard copy file.
- The DOTP has a medical advisory team that consists of the City Health Department's STD clinic Medical Director as well as the Deputy Commissioner of Health.

Program Monitoring

- The DOT Coordinator reports directly to the Bureau of Risk Reduction's Program Manager. Both the Coordinator and Program Manager meet bi-weekly with the DOT program's medical advisor.
- Meetings are held to discuss individual participant concerns DOTP staff may have, participant lab work and plans for participant Step Down or program discharge.

Step Down Process

- Implemented to assist participants in becoming self sufficient.
- Participants must have:
- Undetectable viral load
 - Consent from their PCP
 - A willingness, understanding and desire to comply

The Step Down Process

- Phase I: (lasts about one month) entails medicating participants on a once-per-day regimen in the morning or evening and leaving them their next day's medication to be taken on their own the next day.
- Those participants on a twice-per-day regimen take their morning dose with the PA observing them and their evening dosage is left with them so they may take them on their own. The PA gives a reminder call to participants at the time they are to take their medication.

The Step Down Process, continued

- Phase II: Provided the viral load of the participant remains undetectable the participant will be observed twice per week with reminder calls and then to once weekly with reminder calls. Finally participants are permitted to self medicate without reminder calls.

Participant Discharge after Step Down

- The decision to discharge a participant after successful Step Down process is made by the participants PCP and the medical advisor for the DOTP.

End Point for Providing DOT Other than the Step Down Process

- Voluntary participant withdrawal
- Relocation of residence
- Incarceration
- Long-term hospitalization
- Inconsistent adherence or non-adherence to DOTP
- Development of medical conditions
- Medication regimens that are too complex for staff to monitor
- Environmental or social conditions

How Funding Worked for Program Re-establishment

- Ryan White dollars allowed the Baltimore City Health Department to re-establish the DOTP.
- During the months Ryan White supported the DOT Program with funds, our caseload was 9 participants, today we have 18 clients and are still accepting participants. We now have the capacity for 40 patients.
- The Baltimore City Health Department now supports and sustains the program with City funding.

Program Barriers Encountered during Program Re-implementation

- Participants experience many co-morbidities, most commonly issues with substance abuse and mental health disorders. Other barriers for adherence advocates addressed were:
 - Poverty-need for food/money,
 - housing issues,
 - need for SSDI assistance,
 - issues with application processes for entitlements,
 - lifestyle-some participants were engaging in prostitution,
 - transportation to and from necessary appointments,
 - legal troubles

Addressing Barriers for Adherence

DOT staff help many participants:

- Apply for entitlement benefits or enlist other agencies who assisted in helping citizens with application for SSDI, food stamps, TCA, SSI, etc.
- Provide nutritional supplements to participants.
- Help participants access substance abuse treatment and mental health treatment.
- Provide transportation or bus tokens/cab fare to help participants attend necessary appointments.

Finding Solutions

- Many participants considered HAART naïve need education. DOTP staff educate participants about HIV/AIDS, disease progression, medications benefits and side as well as the importance of a healthy lifestyle.
- DOTP staff emphasize that communication is the KEY, without it DOT does not work.

Other Lessons Learned-Since our Inception

- Participants who are pregnant don't necessarily desire adherence. The motivation to be adherent for them and or their unborn baby must come from them.

Participant Tracking Information Is Important

- The intake interview is vital for successful outcomes. Getting participant information at the beginning is key. Going back for pertinent information doesn't and can't always happen.
- Sometimes an opportunity missed never presents itself again.

Substance Abuse Can Derail a Positive Outcome

- DOT staff make numerous referrals for treatment weekly.
- Participants who have an addiction(s) and are not engaged in substance abuse treatment almost always fail to be adherent.

Why Program Restructuring?

- Providers historically had used DOT to place their most difficult and needy patients to whom they could not give adequate attention. Often providers would fail to monitor their patient regularly and the actual patient case management was left to the DOT staff.
- The DOT staff, although eager and able to make referrals for wrap-around services, were not adequately trained or even licensed to perform full service case management duties.

Program Restructuring continued

- Many of the former DOT participants were placed on DOT with no plans for an endpoint, a graduation to self sufficiency, or plans for other structured care.

Providers Need to Be a BIG Part of the Process

- With the new structure put in place, due to the additional funding provided by Ryan White, DOT became the observation program it was meant to be.
- The program also permitted staff to provide additional services, like transportation to medical appointments and lab appointments. These benefits were more of a bonus than a given.
- Families and friends stepped up to assist in bridging the gap that once existed between the providers and DOT and vice-versa.

Success-Program Evaluation

- Viral Load at intake, within 1 month of DOTP start, continued monitoring.
- CD4 count: Has the CD4 count increased and to what extent?
- Process measures: Did the participant keep their appointments? Did the participant miss doses of medication? Why? Is the participant adherent to their drug treatment program?


