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Integration of HIV Care & Substance Abuse Treatment

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Ruth Finkelstein, ScD
Vice President for Health Policy
The New York Academy of Medicine

Drug Abuse and HIV are Inextricably Linked

- According to a 2003 estimate, about 360,000 people with HIV in the United States actively use drugs.
- Reductions in injection drug use and needle sharing have weakened the link between illicit opioid use and HIV. Still, 25% of people with HIV use illicit opioids and recent CDC data suggest that in 2006, 16% of new HIV infections were IDU related.
- People with HIV that use illicit opioids have poorer health and worse treatment outcomes than those that don't use opioids. They are less likely to be engaged in HIV care. If in HIV care, untreated drug users are less likely to be adherent to provider recommendations; however, with adherence support many active drug users can attain adequate viral suppression.

Substance Abuse Treatment: Impact on HIV Care

- There is compelling evidence that substance abuse treatment positively impacts general health and HIV outcomes.
- People with HIV in substance abuse treatment have:
  - Better adherence to HIV clinical care (e.g. fewer missed appointments), including antiretroviral therapy
  - Fewer emergency department visits and hospitalizations
  - Slower HIV disease progression
  - Reductions in high risk behaviors

Linking HIV Care and Drug Treatment: Possible Methods and Modalities

1. No connection between drug treatment and HIV care. Patient maintains full responsibility for finding and accessing drug treatment and HIV care.

2. Substance abuse treatment program offers HIV primary care.

3. HIV clinic facilitates access to substance abuse treatment through:
   - Outreach
     - Case-finding
   - Referrals
     - Formal linkages between clinics and treatment programs
   - Ancillary services
     - Case management, escorts to drug treatment, follow up on services received
   - Formal On-site drug treatment services
     - Individual and/or group counseling, buprenorphine treatment

Buprenorphine Overview

- An opioid replacement therapy that has been shown to be as effective as methadone in reducing opioid use.
- Approved by the FDA in 2002 for office based treatment of addiction.
- Can be prescribed by physicians that complete buprenorphine training and register with the DEA.
- Offers a unique opportunity to integrate drug treatment for opioid use into HIV care settings.
- Provides an alternative to patients who are uninterested in or unsuccessful with methadone programs.

Integrated Buprenorphine and HIV Care

- Adherence to and outcomes of HIV care may be improved if substance abuse is controlled.
- Integration allows primary care provider to address the full range of health service needs and to coordinate patient care.
- Buprenorphine treatment provides an incentive for patients to come into the clinic on a regular basis, increasing the opportunities for engagement with and monitoring of HIV care.
- Treatment may reduce provider time and effort spent in treating the medical sequelae of opioid use and trying to control abuse of pain medications.
- Substance abuse treatment provided within the HIV primary care setting may delivered in a way that is more consistent with HIV provider and patient preference (e.g. using a harm reduction approach).

BHIVES Initiative

HRSA SPNS BHIVES INITIATIVE

- Starting in 2005, HRSA/SPNS funded 10 sites to design and implement programs that integrate primary HIV care and the office-based treatment of opioid addiction using buprenorphine.
- Sites designed their own integrated models consistent with clinic characteristics, including staffing and patient population.
- Initiative included an Evaluation and Support Center based at NYAM to coordinate a multi-site outcome evaluation, provide clinical and evaluation technical assistance, and promote dissemination of findings.

PURPOSE OF THE INITIATIVE

- Assess the feasibility and effectiveness of integrating buprenorphine treatment and HIV primary care.
- Identify best practice models of integrated care considering effectiveness, sustainability, and cost.
- Promote the replication of these models.

BHIVES Sites

Evaluation & Support Center (BHIVES)

- The New York Academy of Medicine
- Yale University Medical School
- Project website: www.bhives.org

Model Demonstration Sites

- EL Rio Santa Cruz Neighborhood Health Center (Tucson, AZ)
- OASIS (Oakland, CA)
- Oregon Health & Sciences University (Portland, OR)
- Montefiore Medical Center, (Bronx, NY)
- University of Miami Medical School (Miami, FL)
- The Miriam Hospital (Providence, RI)
- UCSF Positive Health Program (San Francisco, CA)
- Johns Hopkins University (Baltimore, MD)
- CORE Center (Chicago, IL)
- Yale University School of Medicine (New Haven, CT)

Staffing of Integrated Care Programs

- Buprenorphine treatment requires physician involvement for prescribing. The number, specialty, and time commitment of physicians varies according to overall clinic staffing pattern, time availability, physician comfort level, patient case load, and physician interest.
- Treatment is significantly enhanced by a “buprenorphine care coordinator.” The buprenorphine care coordinator may be a substance abuse counselor, nurse or pharmacist who is:
  - Available to patients on an as-needed basis
  - Able to provide or arrange comprehensive psychosocial services
  - Can act as liaison to the buprenorphine prescriber, HIV primary care provider, and providers of psychosocial services

Models for Physician Staffing and Responsibilities

1) Buprenorphine treatment provided onsite by psychiatrists or addiction medicine specialists.
   - Patients see two providers but within the same setting.
   - Providers coordinate care through electronic medical records, case conferences, informal communication, or buprenorphine care coordinator.
   - Care can be more specialized, but fewer providers may learn addiction treatment skills.
   - Specialists are often in short supply

2) Full buprenorphine treatment provided onsite by all or a subset of HIV primary care physicians.
   - Patients may see one provider for both buprenorphine and HIV care, OR
   - May see one provider for buprenorphine and another primary care

3) Induction and stabilization (considered the most challenging aspect of treatment) conducted by specialists, with buprenorphine maintenance provided by HIV primary care physicians.
   - May encourage more physicians to provide buprenorphine.
   - Transition from induction to maintenance treatment may be difficult

BHIVES Project: Participant Sample

Sample Demographics of Buprenorphine Participants (N=184)

	N (%)
Male	122 (66.3)
Age	
20-39	34 (18.5)
40-49	92 (50)
50+	58 (31.5)
Education	
< HS	76 (41.5)
HS	67 (36.4)
College	40 (21.9)
Race/Ethnicity	
African-American	86 (47.8)
Asian	1 (0.6)
Latino/a	45 (25)
White	38 (21.1)
Other	10 (5.6)

Effectiveness: Patient Perspectives & Experiences

- Participants expressed overwhelmingly positive attitudes toward buprenorphine treatment and its effectiveness in controlling opioid use.

  It's like a gift from God, Suboxone, it is. I love it.

  With buprenorphine you just feel like you're just normal…it's kind of like, it takes me back to before I had ever done opiates.

- Most patients had a positive perception of integrated care. Benefits included convenience, improved quality, and improved treatment environment.

  For me having it in the same place worked out well … I can get everything right here in this one facility, without having to run over here and over there.

  I'm more around people that are like me. You know…with the HIV and the drug addiction and then we can talk with each other about certain things. Especially on the Suboxone.

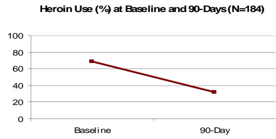
- Many participants also associated buprenorphine treatment with an increased engagement with their HIV care and overall health including increased adherence to HIV care appointments and antiretroviral regimes.

  I'm more concerned [since entering into buprenorphine treatment] about getting better, getting like…physical self better instead of the daily high.

  I take my medicine now. When I wasn't on buprenorphine I wasn't taking medicine. That's why I stayed sick. But on buprenorphine, me not being sick, makes me want to stay well and take my medicine like I'm supposed to. I make my appointments like I'm supposed to. I didn't do any of that until I got on buprenorphine.

Effectiveness: Patient Outcomes
Heroin & Other Substance Use

- Significantly fewer buprenorphine patients reported prior month heroin use at 90-days (32% as compared to 69% at baseline).



- There was a also a decline in overall drug (ASI drug composite score decreased to 18.7 at 90-days, compared to 32.0 at baseline, p>.000) and alcohol use (ASI alcohol composite score decreased to 6.0 from 8.9 at baseline, p=.001).

Effectiveness: Patient Outcomes
HIV

- The overall number of participants receiving antiretroviral therapy (ART) increased from 63.4% (n=118) at baseline to 69.4% (129) at 90-days (p=.094).

- Adherence to ART was high at baseline and at first quarter. There was no significant change in adherence to ART (as measured by the CASE Adherence Index over time, baseline mean=11.2, 90-day mean= 11.4).

Effectiveness: Patient Outcomes
Physical & Mental Health

- Participants reported significant improvements in mental and physical health.

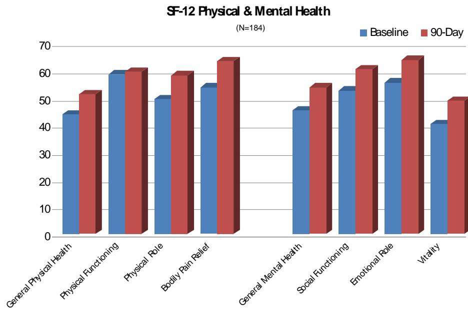
- They also reported significantly less severe HIV-related symptoms (according to the NAIDS HIV Symptom Distress Module).

Health and Substance Use Indicators at Baseline and 90-Days (N=184)

Characteristic	Baseline Mean	90-Day Mean	p value*
SF-12 General Physical Health	44.0	51.3	0.001
SF-12 General Mental Health	45.5	53.8	<0.001
HIV Symptom Distress (NAIDS)	2.6	2.3	<0.001

** Based on paired t-test*

Effectiveness: Patient Outcomes
Physical & Mental Health



Evidence of Acceptability

Provider level

- All providers agreed that this was an effective treatment for many of their opioid dependent patients.
- Nearly all providers reported that buprenorphine treatment was far less complicated than first anticipated.
- In many sites there was only the need for 1 or 2 physicians responsible for actual prescribing.
- Nearly all providers emphasized the need for a buprenorphine specialist and the importance of additional substance use counseling.
- There are, however, some ongoing needs, including physician back up to handle prescribing and access to a buprenorphine specialist.

Institutional level

- Many of the issues that were a concern at the outset, like disruption of clinic flow and bad responses from other patients, ended up not materializing.
- There are however some structural concerns that need to be addressed including payment for medication, treatment, and ancillary services.

Conclusions

- Integrated HIV care and buprenorphine treatment appears to improve substance use and health outcomes in opioid-dependent patients.
- BHIVES will have more biological evidence of HIV and substance use outcomes following analysis of chart abstraction data.
- Integrating buprenorphine treatment into HIV care settings is feasible with relatively modest investments in staff resources and training.
- Patient acceptance is very high, but demand is variable in different regions.
- Integrated care is not a panacea, and other drug use problems persist.
- Buprenorphine treatment is a valuable service HIV providers can and should offer, especially in areas with many opioid dependent HIV-positive individuals.

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