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Community Health Centers and Translational Clinical Research: The Fenway Health Experience

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Community Health Centers and Translational Clinical Research: The Fenway Health Experience

Kenneth Mayer, MD
Fenway Health
Beth Israel Deaconess Medical Center
Harvard Medical School

UMCCTS Community Engagement and Research Symposium
November 7th, 2014

WEB fenwayhealth.org
FENWAY HEALTH

- Independent 501(c)(3) FQHC
- Founded in 1971 in Boston, Massachusetts.
- Mission: To enhance the wellbeing of the LGBT community as well as people in our neighborhoods and beyond through access to the highest quality health care, education, research and advocacy.
FENWAY HEALTH: HISTORY

1971: Founded by volunteers who believed that access to health is a right. Staffed by medical students dedicated to serving the diverse Fenway neighborhood in Boston — a neighborhood that includes many seniors, gays, low-income residents, and students.


1984: HIV testing program initiated.
FENWAY HEALTH: SERVICES PROVIDED

• Primary health care
• Specialty care (HIV/AIDS, obstetrics, gynecology, podiatry, dermatology and nutritional counseling)
• Behavioral health and addiction services
• Family dental care
• Family eye care
• Full-service pharmacy
• Complementary therapies (chiropractic, massage, and acupuncture)
• HIV counseling & testing
• Health promotion and community outreach
• Violence prevention and recovery
• Family and parenting services, inc. alternative insemination
PATIENT PROFILE - FY2014

• 134,000 Patient visits
• 24,400 Total patients
• 2,000 Patients living with HIV
• 1,200 Transgender patients
• 3,800 Behavioral Health visits
• 620 staff
UN D UPLIC A T E D PAT I E N T T R E N D S
2006-2013

Number of Patients

Calendar Year

2006  2007  2008  2009  2010  2011  2012  2013
10,244 10,387 10,976 13,153 15,218 19,199 20,337 22,806
FENWAY LOCATIONS

• 4 locations throughout Boston
• 2013 – Partnered with AIDS Action Committee

The Ansin Building, a 10-story, 100,000 square foot health care and research facility. It is the largest building ever constructed by an organization with a specific mission to serve the LGBT community.

Fenway: South End, a private practice setting for medical and behavioral health care, women’s health, and pharmacy services conveniently located for those who live and work in Boston’s South End and Back Bay neighborhoods.

Fenway: Sixteen, housed in Fenway’s historic 16 Haviland space, offers programs and services geared towards enhancing the health and well-being of gay and bisexual men and transgender people.

The Sidney Borum, Jr. Health Center, quality health care for young people ages 12 to 29—many of whom are LGBT, HIV-positive, living on the streets, using drugs or alcohol, engaging in sex work or gang involved—who may not feel comfortable going anywhere else.
Fenway Health and The Fenway Institute

- Community Health Center, founded 1971
- Research began in 1983 AIDS-focused
- Over 50 active protocols currently; ~100 staff
- 1st local site to study HIV vaccines
- Involved in 4 NIH prevention trials networks
- 1st Population Center grant from NICHD dedicated to LGBT health (Bradford)
- HRSA: Training primary providers about LGBT health (Makadon)
- Electronic health record since 1997
- Policy and dissemination (Cahill)
Mission of The Fenway Institute

- Interdisciplinary center of excellence
- Local, national and international impact.
- Focus on health promotion, disease prevention
- Addresses the needs of diverse lesbian, gay bisexual, and transgender (LGBT) communities, people living with HIV/AIDS and others
- Approaches: Research and evaluation, professional development, community education, and health policy advocacy.
THE FACULTY (2014)...AND GROWING
CLINICAL TRIALS

• Long-term epidemiological research since 1983
• HIV Vaccine Trials Network
• HIV Prevention Trials Network
• Adolescent Trials Network
• Microbicide Trials Network
• Conducted iPrex Trial in 2010
NIAID NETWORK PREVENTION STUDIES

- **HPTN**
  - 061-Black MSM
  - 063: International + Prevention
  - 069-Maraviroc for PrEP
- **MTN**
  - 007: Rectal Tenofovir-safety 017-expansion
  - 013: Vaginal Ring containing DPV or MVC
- **HVTN**
  - Several early phase and efficacy trials
Adolescent Trials Network

- Studies for HIV-infected and at risk youth
- Studies of HPV vaccine in HIV+ young MSM
- Studies of oral HPV
- PrEP plus behavioral interventions for at risk MSM (ATN 110)
- CBPR: “Connect-to-Protect” community coalition focused on decreasing risk, with recent addition of an FTE to test and link youth to care
EDUCATION AND TRAINING

• NIH Population Research Center on LGBT Health
• National LGBT Health Education Center
• LGBT Aging Project
Data Management Center

- Data support and reporting for TFI and clinical programs
- Site for three multi-site database projects designed to improve the lives of people living with HIV (C-NICS, NA-ACCORD, and HIVRN)
- Managing public data sets to assist with LGBT health research
- Training other community health centers to use EHRs for research (CHARN)
Syphilis, Gonorrhea, & Chlamydia Trends in MSM
Fenway Health, Boston, 2002-2012

First 4 months of 2013:
46 patients positive for Syphilis; 63 positive for Gonorrhea, 116 positive for Chlamydia
# Fenway Data Registry Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Fenway Participants</th>
<th>Study-wide Participants</th>
<th>Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-NICS (NIH)</td>
<td>2,903</td>
<td>&gt;30,000</td>
<td>9</td>
</tr>
<tr>
<td>CFAR Network of</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Integrated Clinical</td>
<td></td>
<td></td>
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<tr>
<td>Systems</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>NA-ACCORD (NIH)</td>
<td>2,392</td>
<td>&gt; 117,000</td>
<td>25</td>
</tr>
<tr>
<td>North American AIDS</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Cohort Collaboration on</td>
<td></td>
<td></td>
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<tr>
<td>Research Design</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIVRN (AHRQ)</td>
<td>2,922</td>
<td>&gt; 22,000</td>
<td>17</td>
</tr>
<tr>
<td>HIV Research Network</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHARN (HRSA)</td>
<td>41,884</td>
<td>&gt; 600,000</td>
<td>4 Nodes</td>
</tr>
<tr>
<td>Community Health Center</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applied Research Network</td>
<td></td>
<td></td>
<td>17 CHC’s</td>
</tr>
</tbody>
</table>
New Technologies may provide tools for more efficient risk screening

In the past 6 months, how often have you had anal sex with someone whose HIV status you did not know?

- Never
- A few times or less
- A few times each month
- A few times each week

Electronic Patient Reported Outcomes, CNICS     H. Crane
Data Projects

- CNICS: 30,000 pts in 9 CFAR sites
  Data, repository, PROs
- Fenway foci: Substance use (Mimiaga)
  Body Dysmorphia (Blashill)
  HCV (Taylor/Linas)

- NA ACCORD: larger, less detail
- HIVRN: more focus on HSR
Community Health Applied Research Network

- Outgrowth of new thinking in ACA: EHRs used in CHCs may be the best place to understand the uptake of evidence-based clinical practice
- Partners are: Chase-Brexton in Maryland and Beaufort-Jasper-Hampton in South Carolina, and U. of Washington (Kitahata and Crane)
- Daunting, given other nodes not HIV-focused
- Plus: Patient-Reported Outcomes project through supplement from OBSSR
External academic collaborations

- Deborah Anderson (BU): HIV in semen, HPV immunology
- Lisa Cavacini (BIDMC): antibodies and immunity
- Bruce Walker, Marcus Altfeld, Todd Allen (MGH): acute HIV, host immune defenses
  Fenway 500 including home testing
- Chris Kahler (Brown): Alcohol and HIV prevention
- Lynn Taylor (Brown), Ben Linas (BU): HCV
- Ian McGowan (Pitt) and Alex Carballo-Dieuguez: rectal microbicides in high risk youth
Global Fenway

- Training health providers in Malawi, South Africa, Nigeria, Peru
- Advising the Kenyan Ministry of Health on MSM care and research issues
- Research in South Africa, Vietnam, Peru
- India collaborations for > 15 years
HIV Prevention: Increasing Choices

Decrease Source of HIV Infection
- Barrier protection
- Blood screening
- Harm reduction
- ART
  - Maternal-to-child transmission
  - Decrease partner’s viral load
  - Treatment of acute HIV infection

Decrease Host Susceptibility to HIV Infection
- Barrier protection
- Circumcision
- Vaccines
- Immunoprophylaxis
- ART
  - Oral
  - Topical (Gel, Film, Ring)
  - Injectable

Alter Behavior: Exposure, Adherence
- Condom promotion
- Individual-level interventions
- Couples interventions
- Community-based interventions
- Structural interventions
Fenway Health and Antiretrovirals

1981: First diagnoses of AIDS
1984: MDPH 1st grant to study HIV spread
1985: CDC funding to study gay couples
1991: Studies of HIV in semen
1994: First HIV vaccine trial in New England
1995: Behavioral health research
2002: Tenofovir gel safety study
2008: CDC PrEP Safety study
2010: iPrEX shows that PrEP works
2012: Rectal gel and vaginal ring studies
PreP works, if used regularly, but why didn’t all studies succeed?

- Adherence
- Engaged in study, but not interested in PrEP
- Medical Mistrust
- Pharmacology
- Genital inflammation (STI, sexual violence?)

Trials of oral and topical tenofovir-based PrEP show that these strategies reduce risk of HIV infection if they are used correctly and consistently. Higher adherence is directly linked to greater levels of protection.

Source: Salim S. Abdool Karim, CAPRISA

(Auerbach, Marrazzo, VanDamme, Van der Straten, Stadler, Tolley, Hendrix, Abdool Karim, Saethre, Corneli)
Project PrEPare (NIMH-Funded Study)

• Modeled after “Life-Steps,” (Safren et al)
  ART adherence intervention
• Modular intervention: 4 weekly visits and 2 booster sessions (nurse-delivered).
• Intervention content:
  • Adherence problem-solving
  • Brief motivational interviewing
  • Identification of barriers and solutions
  • Sexual risk-reduction strategies
• Optional modules:
  • Mental health and substance use concerns

• Adherence to PrEP was measured daily electronically
• Sexual risk taking was assessed by text messages (Lester, 2010)
HIV among MSM: A *Syndemic* Theory (Stall et al)

- Mental Health
- Internalized Homophobia
- Childhood Sexual Abuse
- Substance/Alcohol Abuse
- Tobacco Use
- STIs
- Hate Crimes/Homophobia
- Intimate Partner Violence

HIV and STD
Resilience in the Face of Stress?

Majority of MSM are not infected or at increased risk

<table>
<thead>
<tr>
<th>No. of Psychosocial Health Problems</th>
<th>0 (n = 1,392)</th>
<th>1 (n = 812)</th>
<th>2 (n = 341)</th>
<th>3 or 4 (n = 129)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recent high risk sex</td>
<td>7%</td>
<td>11%</td>
<td>16%</td>
<td>23%</td>
</tr>
<tr>
<td>HIV prevalence</td>
<td>13%</td>
<td>21%</td>
<td>27%</td>
<td>22%</td>
</tr>
</tbody>
</table>

All associations have $p$'s < 0.001.  
All $p$ values are two-tailed.  
From Stall et al., 2003
“MSM” is an epidemiological term
Reality is more complex

One size does not fit all

MSM Cosmology in Mumbai

“No, we are not twins.”
Supporting MSM Resilience
(Safren, Thomas, et al)

- Stigmatized group
- Hidden population
- Pressure to marry/have children
- Psychosocial stressors
  - Victimization
  - Harassment
  - Fear of rejection from friends and family
  - Discrimination
  - Depression/Suicidality

Need to supplant social isolation with support programs and skills building
A Long History of Bias in Healthcare

- **Survey of California physicians (1982 and 1999):**
  - 1982: 39% were sometimes or often uncomfortable providing care to gay patients (Mathews et al., 1986)
  - 1999: 18.7% were sometimes or often uncomfortable providing care to gay patients (Smith and Mathews, 2007)

- **National survey 2007 of general public:**
  - 30.4% would change providers upon finding out their provider was gay/lesbian (Lee et al., 2008)
  - 35% would change practices if found out that gay/lesbian providers worked there

- **2005/6 surveys of medical students** (AAMC reporter, 2007)
  - 15% aware of the mistreatment of LGBT students
  - 17% of LGBT students reported hostile environments
Culturally Competent Care

- MSM have often received suboptimal care and have been reticent to disclose to providers because of fears of stigmatization.
- Many health care providers are unaware of the diversity of MSM and their different health conditions.
- Ironically, health care providers may be uniquely able to assist MSM in their coming out process because of their social role.
- Culturally-competent care is a basic human right, and is essential for optimal clinical management.

(Gonser, J Cult Divers, 2000; Meyer, AJPH, 2001; Mayer, AJPH, 2008; Bettancourt, Cultural Competence in Health Care, 2002)
Online survey in 2009 of 4620 HIV- MSM recruited from social networking site

76% previously tested for HIV

Only 30% reported being offered HIV testing by provider in previous year

Only 44% disclosed their sexuality to provider—those who disclosed more likely to be offered HIV testing

Providers need more training to elicit sexual histories from sexual and gender minority pts

Wall et al. *JIAPAC*, Sept/Oct 2010
Educational Resources for Providers and Consumers

WHAT IS PrEP?

INTRODUCING THE “PrEP PACKAGE” FOR ENHANCED HIV PREVENTION:
A Practical Guide for Clinicians
October 2012

THE FENWAY INSTITUTE

PROTECTING YOURSELF FROM HIV THROUGH PRE-EXPOSURE PROPHYLAXIS (PrEP):
What You Need to Know
October 2012

THE FENWAY INSTITUTE
Purview paradox: contradictory beliefs about which providers will prescribe PrEP

(Krakower, AIDS and Behavior, 2014)

**HIV providers:**
Primary care providers are in the best position to prescribe PrEP

**Primary care providers:**
It would not be feasible to prescribe PrEP
The Future

- Expand research capacity
- Focus on understudied populations and health disparities
- Develop new collaborations and partners
- Disseminate findings to inform clinical practice and influence policy
- Disseminate new model of community-based research and develop training programs for the next generation of community-based researchers
Thank You

The Fenway Institute Staff

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