

Engagement in Care



**THE NEXT STEP IN COMPREHENSIVE AND
EFFECTIVE HIV CARE**

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Presentation to San Francisco DPH HIV Prevention Section Staff

September 14, 2010

Engagement in Care

Definition



Describes a continuum that ranges from initial diagnosis to full involvement in care

- Complex concept that is a component of any health care delivery system
- Of special interest in certain healthcare scenarios
 - Particular populations
 - Particular diseases

Engagement in Care Theory



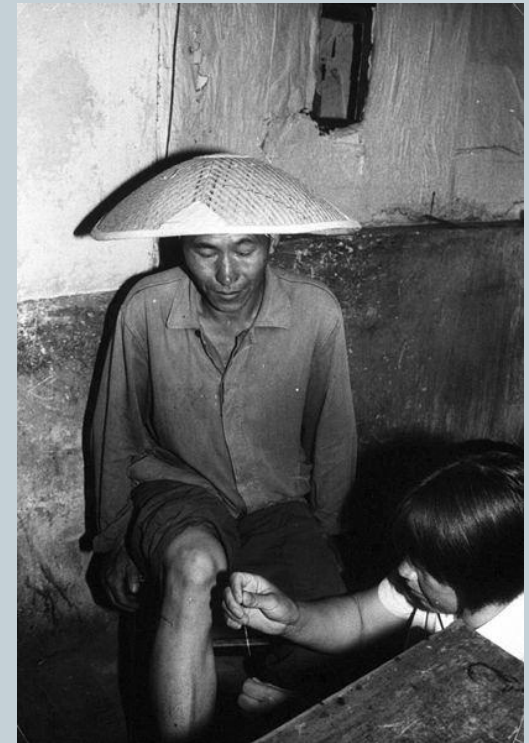
- Disparities exist in healthcare
- Disparities are partly due to the ability of different subgroups to access health care services
- Interventions to link and retain underserved populations in medical care are essential to ensure access to medical care and to reduce disparities in health outcomes.

Evolution of Interventions

Community Health Worker (ie. Barefoot doctors)



- China, 1960s
- Realized that those most in need often lived in areas without doctors
- Trained a cohort of CHW to
 - Perform preventative medical services
 - monitor the community's health
 - Identify at risk patients
 - Act as liaisons between the community and the health system
 - Interpret the social climate
 - Provide basic curative services

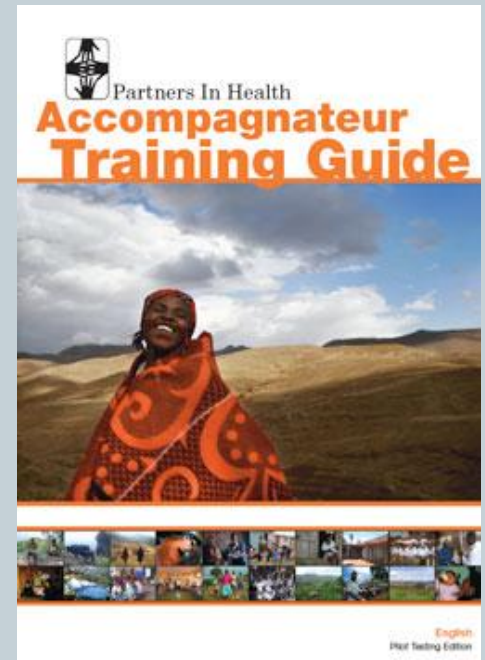


Evolution of Interventions

Accompagnateur



- Partners in Health, Haiti
- Act as a bridge between health clinics and the community
- Community health workers trained to
 - Provide medical and psychosocial support for their neighbors
 - Case-find for diseases and social needs
 - Instill a sense of solidarity and social justice in supporting patients, households and the community



Evolution of Interventions

Patient Navigator



- Dr. Freeman in Harlem, New York. 1990
- Now a well recognized part of cancer care in the US
- Cancer patient navigation works with a patient from pre-diagnosis through all phases of the cancer experience
- Duties
 - Help overcome health care system barriers
 - Facilitate timely access to quality medical and psychosocial care.



Engagement in Care & HIV



- Describes a continuum that ranges from initial diagnosis of HIV to full involvement in care.

Health Resources and Service Administration (HRSA) Engagement in Care Continuum

Not in care	Continuum				In care
Unaware of HIV Status (not tested or never received results)	Know HIV Status (not referred to care; didn't keep referral)	May Be Receiving Other Medical Care But Not HIV Care	Entered HIV Primary Medical Care But Dropped Out (lost to follow-up)	In and Out of HIV Care or Infrequent User	Fully Engaged in HIV Primary Medical Care

Engagement in Care & HIV

Components



- HIV is undergoing a transition from a rapidly fatal disease to a serious chronic illness
- Current HIV funding is heavily biased toward paying for medication etc
- But successful treatment of this chronic illness depends on several other factors:
 - Testing
 - Initial linkage
 - Retention

Testing



- Identifying HIV infection is a cornerstone to prevention efforts
 - 21% of HIV cases in the US are undiagnosed
- CDC now recommends universal, opt-out testing for HIV



Initial Link



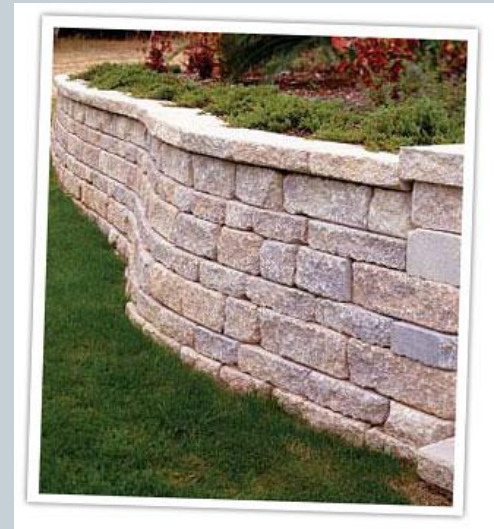
- A successful connection to the HIV clinic must occur before patients can be retained in care over time
 - Yet 1/3 of those testing positive fail to establish care within 6 months
- Varying goals cited in the literature for time to linkage post diagnosis (3 months? 6 months?)



Retention



- Once linked, patients must be retained in order to treat effectively
 - Only 56% of people eligible for ARV treatment in the US are receiving it
- Concept poorly defined in literature



Engagement in Care & HIV



- That said, linkage and retention matter
 - Program where 80% test and 20% have consistent care
 - ✦ is less cost-effective than
 - Program where 20% test and 80% have consistent care
 - FOR HIV PREVALENCE OF 1%

Engagement in Care Research

UAB 1917 Cohort





- **University of Alabama at Birmingham 1917 HIV/AIDS Clinic**
 - Prospective cohort study established in 1992
 - HIV positive individuals who receive primary and subspecialty care at the University of Alabama at Birmingham (UAB) 1917 Clinic
 - IRB approved protocol for the conduct of retrospective and prospective studies
 - Generates innovative social, behavioral, and biomedical knowledge related to psychosocial and clinical processes and outcomes of care

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UAB 1917 Cohort



	Year	Data Capture
Interval Cohort 	1988	Standardized patient visit forms manually entered into computer database
	1995	Chart abstraction by trained clinic personnel including medications, problem list, and common labs with monthly quality control
	1999	Database expands to include health services utilization
Clinical Cohort 	2004	Deployment of EMR with “real-time” data entry by providers at point-of-care marks transition from interval to clinical cohort
	2006	Implementation of 100% continuous quality control with recognition for excellence in information integrity
	2008	Database expands to include patient based metrics (PBMs); Depression (PHQ), Anxiety (PHQ), ARV Adherence (ACTU-4), Alcohol use (AUDIT-C), Drug use (ASSIST), Symptoms (HIV-SI), Quality of life (EuroQOL-5D), Body Morphology (FRAM)

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UAB 1917 Cohort



- **Study: Missed Visits and Mortality among Patients Establishing Initial Outpatient HIV Treatment**
 - Clinic orientation → Drop in no-show rate from 31% to 19%
 - Patients who missed visits within the first year after initiating outpatient treatment for HIV infection had more than twice the rate of long-term mortality, compared with those patients who attended all scheduled appointments.

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UAB 1917 Cohort



- Study: The Therapeutic Implications of Timely Linkage and Early Retention in HIV Care
 - Delayed linkage was associated with
 - ✦ Older age – OR 1.31 per 10 years (1.06-1.62)
 - ✦ African American race - OR = 2.45 (1.60-3.74).
 - Early linkage
 - ✦ Attending all clinic visits HR - 6.45 (4.47-9.31)
 - ✦ Lower initial CD4 counts
 - Worse retention in the first 2 years was associated with
 - ✦ Younger age - OR = 0.68 per 10 years (0.56-0.83),
 - ✦ Higher baseline CD4 count
 - ✦ Substance abuse - OR = 1.78 (1.16-2.73).

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UAB 1917 Cohort



- **Study: Racial Disparities in HIV Virologic Failure: Do Missed Visits Matter?**
 - 40% of patients missed at least 1 in every 4 scheduled visits.
 - Non-adherence for AA > Whites – OR 1.85 (1.61–2.14).
 - Non-adherence was associated virologic failure - OR 1.78 (1.48–2.13)
 - Virologic failure for African Americans > whites – OR 1.30 (0.98–1.72) when controlling for non-adherence

Engagement in Care Research

ARTAS



- **CDC-funded Antiretroviral Treatment Access Study**
- **Objective:**
 - Assessed a case management intervention to improve linkage to care for persons recently receiving an HIV diagnosis.
- **Methods:**
 - Recently diagnosed HIV-infected persons in Atlanta, Baltimore, Los Angeles and Miami.
 - Randomized to either passive referral or case management for linkage
 - ✦ The PR arm received information about HIV and local care resources
 - ✦ CM intervention arm included up to five contacts with a case manager over a 90-day period.
 - The outcome measure was self-reported attendance at an HIV care clinic at least twice over a 12-month period.

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ARTAS



- **Results:**
 - A higher proportion of case-managed participants visited an HIV clinician:
 - ✦ at least once within 6 months: 78 versus 60%
 - ✦ at least twice within 12 months: 64 versus 49%
 - Subgroups more likely to visit
 - ✦ older than 40 years, hispanic, enrolled within 6 months of positive test, no crack/cocaine use
 - Estimated the cost of such case management to be US\$ 600–1200 per client.

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ARTAS



- **Conclusion:**

- A brief intervention by a case manager was associated with a significantly higher rate of successful linkage to HIV care.
- Brief case management is an affordable and effective resource that can be offered to HIV-infected clients soon after their HIV diagnosis.

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VA Registry



- **The VA Immunology Case Registry**
 - Nationwide HIV registry established in 1992
 - Contains EMRs of the nearly 60,000 HIV-infected patients cared for by the VA since the registry's inception
 - Registry includes all demographic, laboratory, pharmacy, outpatient clinic visit, and hospitalization data, as well as dates of death

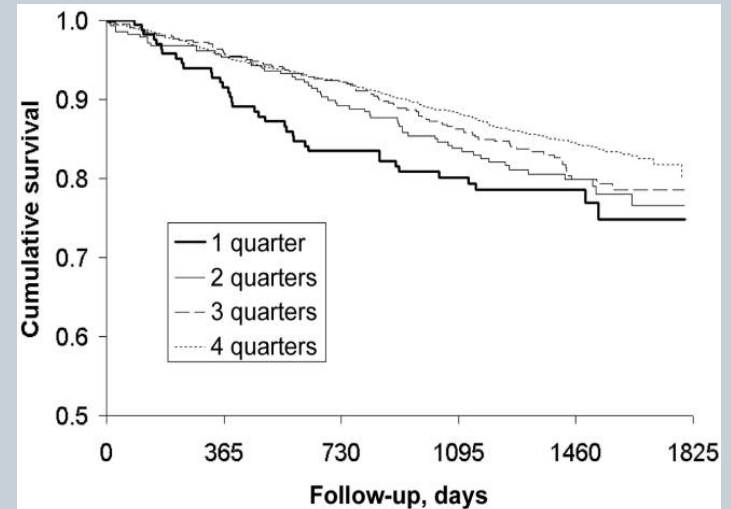
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VA Registry



• Results

- 2619 men followed for a mean of 4 years
- 36% visited in less than 4 quarters
- 16% died in follow up
- Hazard ratios
 - 3 quarters = 1.42 (1.11–1.83)
 - 2 quarters = 1.67 (1.24–2.25)
 - 1 quarter = 1.95 (1.37–2.78)



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VA Registry



- **Conclusions**
 - Even in a system with few financial barriers to care, a substantial portion of HIV-infected patients have poor retention in care.
 - Poor retention in care predicts poorer survival with HIV infection.
 - Retention in care may improve survival, and optimal methods to retain patients need to be defined.

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Take Home Points



- Linkage and retention are distinct processes
- Missed visits can identify patients at high risk for poor health outcomes
- Engagement is often worst in highest risk populations
- Ancillary services play a crucial role in improving linkage to and retention in care.

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Take Home Points



- Improved engagement in HIV care may improve outcomes at both individual and population levels.
- Individual level:
 - Better engagement is associated with better antiretroviral therapy receipt and adherence, reduced risk behaviors, better immunologic and virologic outcomes, and improved survival
- Population level:
 - May help address observed racial and socioeconomic disparities in HIV outcomes
 - Can have a substantial role in reducing transmission of disease

Current Model Programs

HRSA



- **Health Resources and Services Administration- Special Projects of National Significance (SPNS)**
 - Outreach Initiative started in 2001 (5 years)
 - 10 demonstration sites
 - Engage people in HIV care, turn sporadic users of care into regular users, and promote retention in care.
 - Evaluated different outreach, motivational, and case management interventions for marginalized urban HIV populations

Current Model Programs

HRSA



● Goals

- Increase access and health status of incarcerated/at-risk
 - ✦ 1) Increasing access to HIV/AIDS primary care & prevention
 - ✦ 2) Improving HIV transitional services
 - ✦ 3) Developing organizational supports & linked networks of comprehensive HIV health & social services.
- Develop and evaluate models of linked health-service networks
- Create a continuous stream of intervention, primary care, prevention, and psychosocial support & referral systems that link correctional and community settings to improve the health seeking behaviors and health outcomes of populations/individuals most affected by HIV/AIDS

Current Model Programs

HRSA



- Initial Results
 - Sub-analysis at the 4 sites with newly diagnosed persons found that 81% had a primary care appointment in each of two consecutive six-month periods.
 - Even with intensive outreach, one in five individuals was not retained in care.

Current Program Models

PACT



- **PACT = Prevention & Access to Care and Treatment**
 - Adapted *accompagnateur* model developed in Haiti to treat sickest and most marginalized HIV patients in Boston
 - Trains and employs community members to
 - ✦ Check in on HIV patients on a daily or weekly basis,
 - ✦ Making sure they attend medical appointments,
 - ✦ Take their medications
 - ✦ Have access to other essential needs and social services.



Partners
In Health

Engagement in Care

The Future



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