

# Research Overview: Employment as a Social Determinant of HIV Health and Prevention

Liza Conyers, Ph.D. CRC  
Penn State University  
Chair National Working Positive Coalition Research Working Group

Ken Hergenrather, Ph.D., CRC  
George Washington University

USCA Pre-Conference Institute on HIV and Employment  
Wednesday September 9, 2015

# Employment as a Social Determinant of Health

## The Blueprint to End the AIDS Epidemic by 2020

- *“Employment is an important facilitator of long-term adherence and viral suppression”*
- Recommends increase access to employment opportunities and services for people living with HIV

## World Health Organization (WHO) Commission on Social Determinants of Health

- described the social determinants of health as related to child development, globalization, health care systems, work (employment), gender equity, and social exclusion.

Employment status and working conditions may present as fundamental determinants of risk for disease because of the relationship to income, housing, and health care access.



Table 2

Summary of Findings Across Trajectories

	Employed	Unemployed	Job loss	Reemployed	Retirement
Mental Health (↑ = better)	↑	↓	↓	↑	↑
Psychological Distress <sup>a</sup> (↓ = better)	↓	↑	↑	↓	↑
Depression <sup>b</sup> (↓ = better)	↓	↑	↑	↓	↓
Anxiety <sup>c</sup> (↓ = better)	↓	↑		↓	
Mood (↑ = better)	↑		↓		
Quality of Life <sup>d</sup> (↑ = better)	↑	↓			
Drug/Alcohol Use (↓ = better)		↑			

Notes: <sup>a</sup>Psychological distress also includes psychological symptoms. <sup>b</sup>Depression also includes depressive affect, depressive symptoms, and suicidal ideation. <sup>c</sup>Anxiety also includes nervous symptoms. <sup>d</sup>Quality of life also includes life satisfaction.

Table 2

*Summary finding across trajectories*

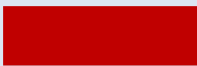
	Employment	Un-employment	Job loss	Re-employment	Retirement
Physical health (↑ = better)	↑	↓	↑ <sup>g</sup>		↓
Physical activity (↑ = better)	↑	↓			
Physical limitations (↓ = better)	↓	↑	↑	↓	
Chronic disease (↓ = better)	↑ <sup>a,b</sup>	↑	↑		
Physical functioning (↑ = better)		↓	↓	↑	↓
Perceived health (↑ = better)	↓ <sup>c</sup>	↓		↑	
Functional health (↑ = better)	↓ <sup>b</sup>	↓			
Hospitalizations (↓ = better)	↑ <sup>d</sup>	↑ <sup>e</sup>			
Mortality (↓ = better)	↑ <sup>d</sup>	↑			
Biomarkers (↓ = better)		↑ <sup>f</sup>	↑ <sup>h</sup>	↓ <sup>i</sup>	
Somatization (↓ = better)		↑	↑	↓	

*Notes:* <sup>a</sup>overemployed; <sup>b</sup>underemployed; <sup>c</sup>part-time; <sup>d</sup>temporary; <sup>e</sup>stroke, self-harm (suicide attempt), alcohol-related diagnoses, injuries from traffic incidents; <sup>f</sup>decreased PHA and PPD lymphocyte reactivity, increased blood pressure and cortisol level; <sup>g</sup>voluntary; <sup>h</sup>increased blood pressure, decreased body weight; <sup>i</sup>decreased blood pressure, reduced weight gain, decreased cholesterol.

# National HIV/AIDS Strategy (NHAS) Updates Identify Employment as a Social Determinant of Health



Increasing access to health care and  
improving health outcomes



Reducing the number of new  
HIV infections

Reducing HIV-related disparities and  
health inequities



**Linkage to employment and rehabilitation services**  
**Address policies to promote access to basic needs**  
**Implement structural approaches to HIV prevention & care**

# 2015 NHAS Executive Order

EEOC

- Within 100 days:
  - Submit recommendations for increasing employment opportunities for PLWH
  - Submit a plan for addressing employment discrimination against PLWH

DOE

- Newly named as a lead federal agency responsible for contributing to NHAS
- Home of the \$3 billion state-federal vocational rehabilitation services system for people with disabilities

DOL, SSA, DOJ,  
HHS

- Other key agencies required to continue to consider ways to help PLWH access income supports, including job skills and employment

# Retaining people living with HIV in care is a significant public health challenge

## HIV Care Continuum (CDC, 2011)

In the U.S., 1.2 million people are living with HIV:

86% are aware that they are HIV positive

40% are engaged in care

37% are prescribed antiretroviral therapy (ART)

### With viral suppression:

- nearly normal life expectancy
- HIV transmission risk reduced by 96%

**Only 30% are virally suppressed**

# Negative Impact of HIV Diagnosis on Employment Status

- Many PLWH leave work post-diagnosis
  - Findings may change with early intervention
  - Annequin, Lert, Spire, and Dray-Spira (2015) conducted repeated cross-sectional surveys among PLWH in France in 2003 (N=2932) and 2011 (3022) to investigate changes in employment. The percentage of working-age PLWH who were employed decreased from 60.9% in 2003 to 59.6% in 2011. The inactivity rate also significantly decreased. Annequin et al. found that more individuals were unemployed following HIV diagnosis. France has National Health Insurance.
- Varied Reasons for job loss post diagnosis
  - Poor health
  - Traumatic nature of diagnosis/mental health
  - Perceptions of shorter life span
  - Dray-Spira et al. (2012) worked with 376 working-aged participants and found that comorbidities affected the chances of maintaining employment.
  - Serrano (2015) worked with 30 immigrant and refugee, HIV positive, Latino men and women living in Toronto to research barriers to employment, and found that barriers included language difficulties, lack of migrant status, lack of work experience, anti-immigrant feelings, ageism, HIV related stigma, and side effects due to medication.



# Job loss is associated with falling out of care

- Example from recession:
  - During the period of 2006 to 2009 the number of PLWH applying to the New York State AIDS Drug Assistance program (ADAP) claiming unemployment benefits increased from 179 to 723
  - In June 2013, ADAP utilization reached its highest level serving over 152,000 clients

# Impact of Employment Transitions

- Employment transitions are associated with changes in health-related lifestyle and health risk behaviors in the general population
  - Health risk behaviors increase with job loss
  - Gaining employment is associated with no change or healthy lifestyles

# Meta-Analysis of Reduced Viral Load

- Review of 28 studies involving 8,743 PLWH
- When studies are pooled statistically
  - Employed respondents had 27% higher odds of optimal adherence to antiretroviral meds (>95% adherence) compare to those not employed
  - Individual studies ranged from 13% to 71%
  - No relationship between these outcomes and
    - Year of publication, country income, type of adherence measure, percentage of males in study

# Ontario HIV Treatment Network

- Employment status positively associated with both physical and mental health.
- Steeper decline in health following loss of employment for those with poorer health
- Healthier individuals may be more resilient to job loss
- A greater level of job security for men offered greater mental health benefits above just having a job

## Findings Support Important Initiatives (i.e., Pennsylvania Department of Health)

- This initiative, conducted by the Pennsylvania Department of Health, administers a service provider survey to address employment related needs of PLWHA by expanding their services to include relevant disability, vocational rehabilitation, workforce participation services with whom the HIV program can partner.

# PA Expansion of Unmet Needs Assessment

- PA DOH is working to expand an intake and continuing care unmet needs assessment (UNAs) for their Part B and C program partnerships in such a way that UNAs will include continuous monitoring of disability status and vocational rehabilitation needs eligibility and workforce participation needs.
- This will enable the program to address the identified needs through appropriate support services and referrals for persons who are disabled and need vocational rehabilitation services and those who are fit to return to the workforce.

# Impact of State Vocational Rehabilitation Services on NHAS Goals

- One study, grounded in a model of health care utilization, investigated the impact of vocational rehabilitation as an enabling factor
  - increase use of medical and mental health services
  - increase supplemental employment services
  - reduce health-risk behaviors associated with HIV transmission.

The findings of this study supported the hypothesis that use of vocational rehabilitation services plays an important role in the implementation of the NHAS

# Benefits of State Vocational Rehabilitation

- The state-federal vocational rehabilitation services system is the most comprehensive employment resource for people with disabilities meeting the ADA criteria, including people with HIV.
- These services include comprehensive rehabilitation evaluation to determine skills, interests, and abilities, as well as case management, vocational counseling, employment services, assistance with finding and keeping a job, and on the job training, apprenticeships and non-paid work experiences.
- Rehabilitation counselors can also authorize medical referrals and supportive rehabilitation services, including mental health counseling, if these services will remove barriers to employment. Research findings indicate that use of Vocational Rehabilitation services increases the chances of successful employment among those who use these services.
- Agency specifically referenced by President Obama to actively participate in the HIV/AIDS initiative led by six federal partners charged with implementing the NHAS.



# Challenges Related to VR Eligibility

- Many PLWHA are not determined to be eligible, despite significant barriers to work (stigma, gaps in work history, poverty) due to lack of current documented functional limitation/illness severity
- HIV stigma, and its consequences, can often be the most painful and debilitating aspect of living with HIV but are not considered in VR disability assessment
  - *“AIDS has created a new concept of illness, where a patient is ‘ill’ as soon as they are infected, whether or not they show any symptoms.” (Sontag, 1989)*
- The Workforce Innovation and Opportunity Act (WIOA) prioritizes services for transition-age youth, with no added funding allocation
  - PLWHA could face more constricted access to services; increased likelihood to be placed on Order of Selection and not to receive services at all.

# Challenges Related to State VR Use

- Many PLWHA do not qualify due to lack of documented functional limitations/ illness severity
- System is under funded with waiting lists
- Passage of WIOA prioritized transition age youth with no additional funding
  - What will happen to adults meeting ADA disability criteria?

# Many PLWH want to, and or, need to work because:

- They may not be eligible for disability or other income supports
- Gain income
- Feel useful and productive
- Access work-related benefits (life insurance, health insurance)
- Be a role model to other PLWH and children
- People engage socially with co-workers
- Learn new skills that increase productivity and competence
- Establish routines
- Participate in purposeful and meaningful activities
- Stimulates positive neuroplasticity and affects the neurocognitive reserve to enhance executive functioning skills

# Many Barriers to Considering Work

- Limited knowledge of employment services and resources
- Employers fear of contagion and fear of employee incompetence
- Lack of access to trained professionals
  - Limited funding for vocational services, exclusion of vocational rehabilitation services from form reimbursement mechanisms (e.g. Ryan White, Medicaid)
- Residual deficits despite improved health
- Fear of loss of income supports/disability benefits
- Negative health beliefs
  - Fear of impact of work on health



# Illicit Drug Users (IDUs)

- Richardson et al. (2013) used data from the AIDS Care Cohort to evaluate Exposure to Survival Services (ACCESS), an ongoing, community-recruited prospective cohort of HIV seropositive IDUs in Vancouver, Canada.
- Results demonstrate that participants who reported regular, temporary or self-employment income were at significantly lower risk of death than those reporting no employment.
- This association remained when relevant behavioral, clinical, social and structural indicators, including age, Aboriginal ancestry, drug use and disease state were considered.
- These findings suggest that employment may be an important dimension in the overall mortality risk of HIV-seropositive. (Richardson et al. 2013)

# Centers for Medicare and Medicaid Services Research

- Stay Well, Stay Working is an innovative Minnesota demonstration implemented by the Department of Human Services and funded under a grant from the Centers for Medicare and Medicaid Services.
- This demonstration studies the effects of providing a comprehensive set of health and behavioral health care services and employment-related supports to employed people with serious mental illness. A randomized study examines whether these supports delay or prevent an individual's entry into the Social Security disability system.
- <http://www.staywellstayworking.com/>

# Stay Well Stay Working

- This demonstration project found that the intervention group who received integrated health and employment services achieved
  - (a) increased access and utilization of needed employment and health services,
  - (b) improved mental health status,
  - (c) greater connection to regular medical provider or clinic for routine care and prevention services,
  - (d) lower rates of medical debt,
  - (e) improved functioning/reductions in activities of daily living,
  - (f) fewer applications to SSDI,
  - (g) higher earnings and greater job stability, and were
  - (h) less likely to delay or skip needed care because of cost
- (Linkins, Brya, McFeeters, Schutze, Oelschlaeger & Jonas, 2010, p. 55).

# Employment Discrimination Rarely Reported

- Conyers (2006) reported that when PLWHA filed HIV discrimination charges with the EEOC, compared to charges of discrimination filed by people with other types of disability, a higher proportion of those charges were found to have merit after independent review (Conyers et al. 2006).
- Employers are a key partner in reducing HIV and other forms of disability stigma.
- Clearly there is a need for more employer-based education to both reduce levels of discrimination and increase efforts to hire people with HIV/AIDS.
- We need to enlist the support of employers to develop HIV work policies and combat HIV stigma and discrimination.
- More updated studies needed to evaluate any improved outcomes since 2006.



# Successful Interventions Exist

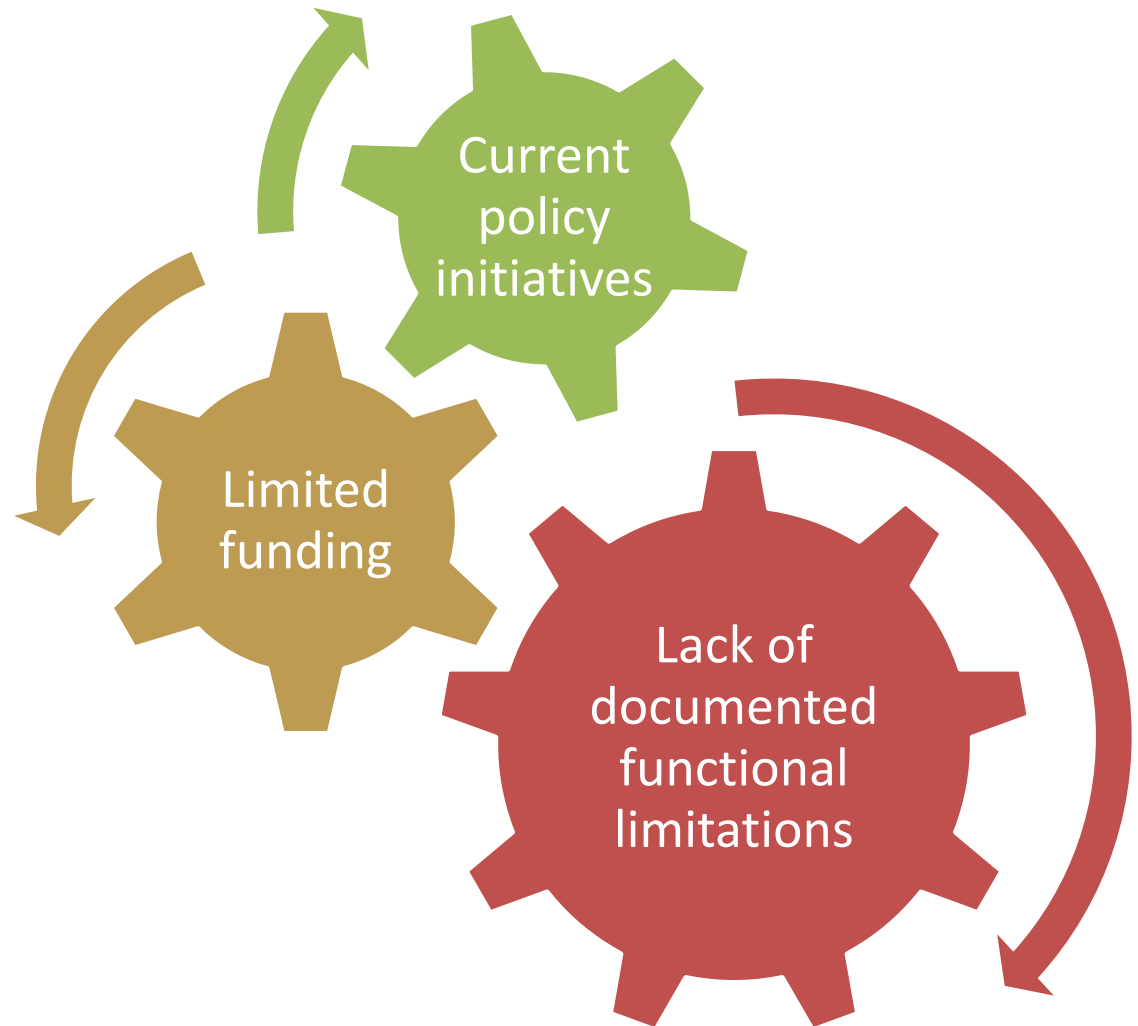
- Current interventions:
  - vocational groups
  - prevocational services (Common Threads)
  - applying models from psychiatric rehabilitation
  - individual counseling approaches
  - integrating programs within housing services



Projects funded by federal sources need to be integrated into current service systems and further research needs to be done to establish additional evidence-based practices.

# Impact of Health Status on Access to Employment Services

Challenges of people with HIV access to vocational resources and support during the employment transition:



# Need for Coordinated Response

The high rates of unemployment (68%) noted among the participants in the NWPC-VDENS is fairly consistent with outcomes from other studies. This rate of unemployment is alarmingly high when compared to individuals with disabilities (14.3%) and those without disability (6.8%, USDOL, BLS, 2014).

Evidence suggests that vocational services and employment are associated with positive health and prevention outcomes defined in the NHAS. Many are unsure of their ability to work.

# High Cost of Inaction

Lack of early intervention to prevent unnecessary HIV related job loss can be very costly to the individual and to society. Research indicates that less than half of one percent of SSI and SSDI recipients actually exit these programs each year to work (Marini, 2001).

In light of the negative impact of interrupted employment trajectories, it is essential to develop policies that may limit premature departure from the workforce (Williamson & McNamara, 2003) and to provide services to help people reconnect with employment as soon as possible. The longer a person is out of the work force, the less likely it is that they will transition back to employment and perhaps extend the opportunities for linkage to care and other personal and health-related benefits.

# Summary

- In summary, although research findings provide support for the positive association of work and health, it is also clear that we cannot expect positive outcomes for everyone.
- The psychosocial aspect of the work environment and degree of employment permanence are key factors that impact the extent to which varied employment settings are conducive to positive health outcomes for people living with HIV.
- More research is needed to better understand the positive effects of employment as well as the psychosocial aspects of the work environment that lead to more or less positive health outcomes.

# Conclusion

