

# THE STRUCTURAL INTERVENTIONS (SI) WORKING GROUP

An Affiliated Working Group of the Federal AIDS Policy  
Partnership (FAPP)

Recognizing the Role of Structural Drivers and the Need  
for Social and Economic Interventions in Improving  
Health Outcomes for PLHIV



# Policy Goal

Coordinate a national strategy to ensure access to quality and affordable:

- **HOUSING**
- **FOOD AND NUTRITION SERVICES**
- **EMPLOYMENT SERVICES**

for all PLWHA who are in need.

# Structural Interventions

Having a safe home, sufficient food and employment:

- Help reduce risk-taking behaviors
- Help people:
  - Connect to care
  - Adhere to treatment
  - Improve health

# Structural Interventions

Support services provide a safe home, sufficient food, and employment for people living with HIV/AIDS. These services help reduce risk-taking behaviors, help people connect to care, adhere to treatment and improve health.



## Housing Services

Compared to stably housed individuals, marginally housed individuals are:

Less likely to have regular access to care



More likely to delay treatment



Less likely to adhere to medication



HOPWA funding only supports 53,000 of the 1.1 million individuals living with HIV/AIDS in need of housing.



Housing assistance reduces the use of hospital services, saving \$7,000 per person housed.

Housing policies are needed to make safe, affordable housing available to all people living with HIV/AIDS. Policies should make housing assistance a priority and monitor housing status to indicate HIV treatment effectiveness.



## Food & Nutrition Services

Compared to food secure individuals, food insecure individuals:

Are less likely to have undetectable viral loads



Have lower CD4 counts



Report more missed primary care appointments



Proper food and nutrition help increase absorption of medication, reduce side effects, and maintain a healthy body weight



For each day in a hospital saved, you can feed a person medically tailored meals for half a year.

Food and Nutrition Services are key to accomplishing the triple aim of national healthcare reform. To achieve a more coordinated response to HIV and to reduce national healthcare expenditures they must be included in all efforts.



## Employment Services

For people living with HIV/AIDS, employment is associated with:

Improved self care



Improved behavioral and physical health



Reduced health risk



About 3 out of 5 people living with HIV/AIDS are unemployed.



Employment is a key component for stable housing and food security.

Coordination must be developed between sectors to meet the employment needs of people living with HIV/AIDS. Efforts should provide housing, vocational rehabilitation, workforce development, education, and reentry services.

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# HOUSING



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# HIV and Homelessness

At the end of 2010, the CDC reported there were  
**872,990 PLWH & 487,692 PLWA.**

## Homelessness is a major risk factor for HIV infection

- Rates of HIV infection are 3 times to 16 times higher among persons who are homeless or unstably housed, compared to similar persons with stable housing.

## HIV is a major risk factor for homelessness

- At least half of Americans living with HIV experience homelessness or housing instability following diagnosis.

# Housing is HIV Prevention

- PLWHA who are homeless or unstably housed who receive housing assistance are more likely to engage in medical care, reduce risk behaviors, & enjoy better health.
- When their housing situation improved, PLWHA reduced their drug related & sexual risk behaviors by as much as half & were more likely to adhere to ART.

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Wolitski, R.J., Kidder, D.P., Pals, S.L., et al. (2010). Randomized trial of the effects of housing assistance on the health and risk behaviors of homeless and unstably housed people living with HIV. *AIDS & Behavior*, 14(3): 493–503; Buchanan, D.R., Kee, R., Sadowski, L.S., & Garcia, D. (2009). The health impact of supportive housing for HIV-positive homeless patients: A randomized controlled trial. *American Journal of Public Health*, 99/Supp 3: S675-S680; Lima, V.D. (2008). Expanded access to highly active antiretroviral therapy: a potentially powerful strategy to curb the growth of the HIV epidemic. *Journal of Infectious Diseases*, 198(1): 59-67; Holtgrave, D. and Curran, J. (2006). What works, and what remains to be done, in HIV prevention in the United States. *Annual Review of Public Health*, 27: 261-275.

# Housing is HIV Healthcare

Lack of stable housing equals  
lack of treatment success.

Homeless or  
unstably  
housed PLWHA  
are more likely  
to

- To enter HIV care late
- Have lower CD4 counts and higher viral loads
- To be hospitalized and use emergency rooms
- Experience higher rates of premature death

# Housing is HIV Healthcare (cont.)

Provision of safe housing to PLWHA at risk of homelessness has been shown to more than double the odds that the individual will have an undetectable viral load & reduces AIDS-related mortality by 80% over 5 years.

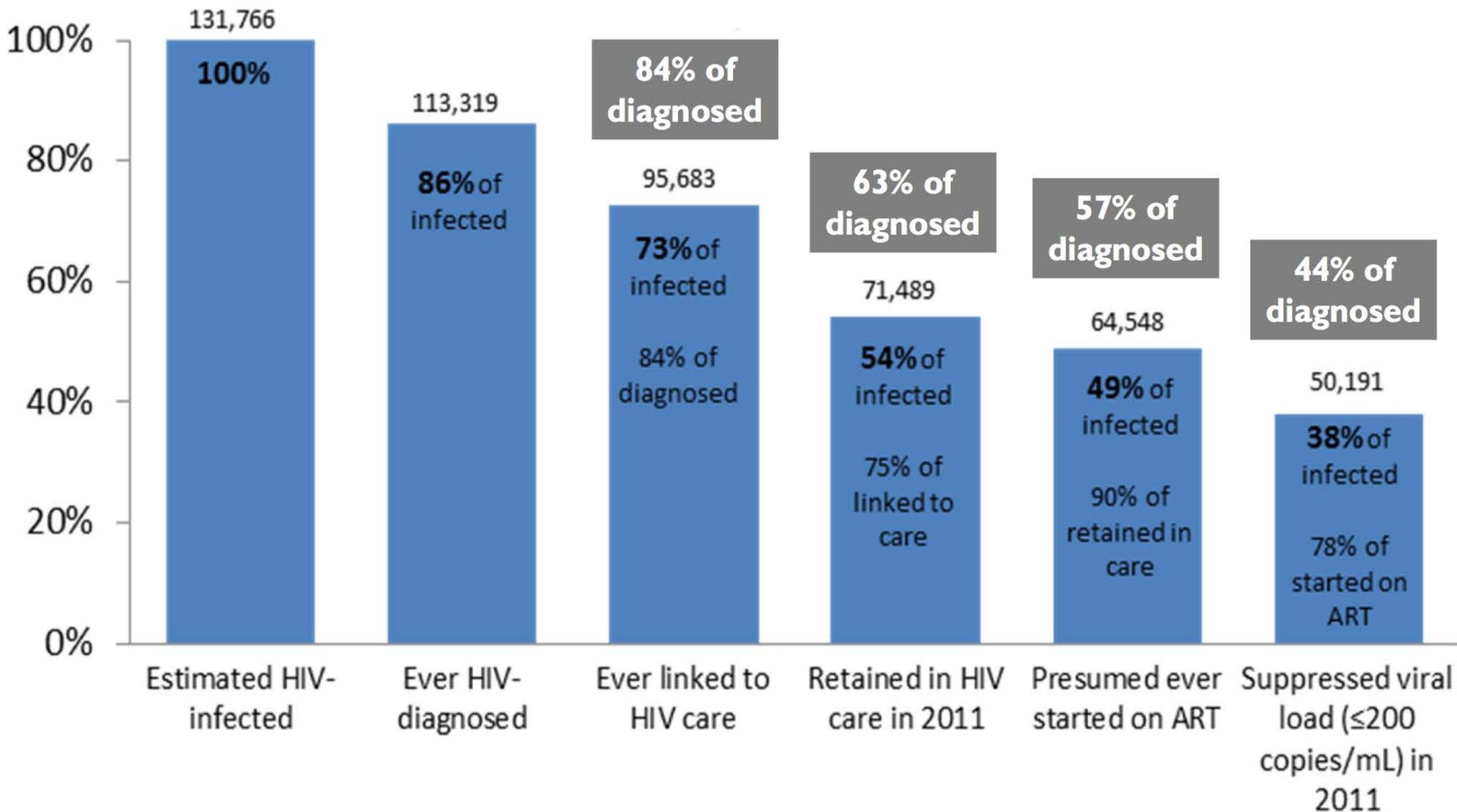
PLWHA who are stably housed are more likely

- To access health services
- Attend primary care visits
- Receive ongoing care that meets clinical practical standards

Stable housing is positively associated with

- Viral suppression
- Lack of co-infection with hepatitis C or tuberculosis
- Significant reductions in avoidable emergency and acute health care
- Reduced mortality

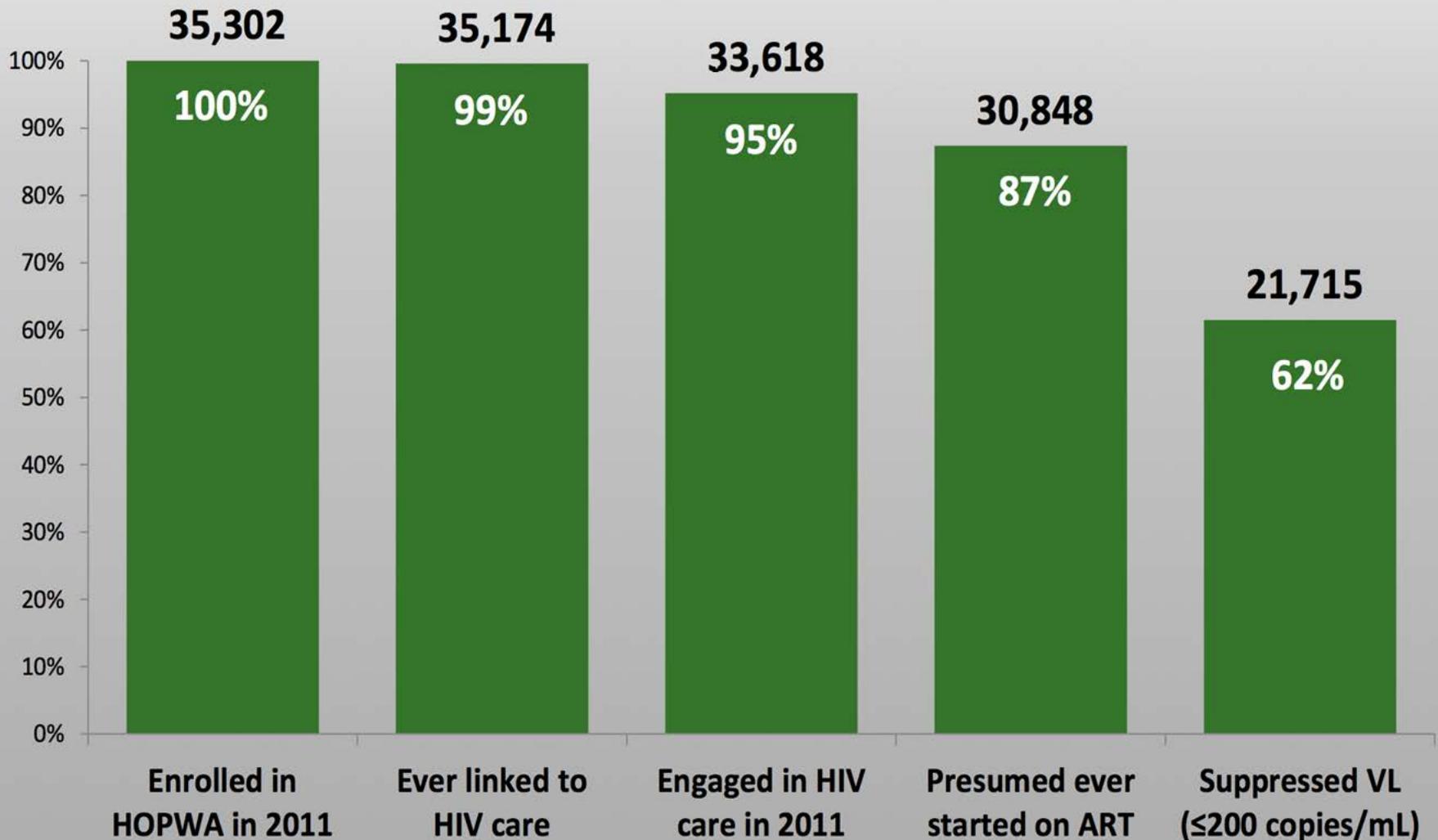
# NYC Care Cascade, 2011



Source: New York City HIV/AIDS Surveillance Slide Sets. New York: New York City Department of Health and Mental Hygiene, 2011. Updated February 2013. <http://www.nyc.gov/html.doh/html/date/epi-surveillance.shtml>.

\*Slides taken from Laura McAllister-Hollod, MPH, John Rojas, MPA, NEW YORK CITY DEPARTMENT OF HEALTH AND MENTAL HYGIENE

# NYC HOPWA Care Cascade, 2011



As reported to the New York City Department of Health and Mental Hygiene by September 30, 2012

\*Slides taken from Laura McAllister-Hollod, MPH, John Rojas, MPA, NEW YORK CITY DEPARTMENT OF HEALTH AND MENTAL HYGIENE

# FOOD AND NUTRITION SERVICES



# Food is Medicine

While adequate food and nutrition is important for all people, proper nutrition is **critical** for the management of HIV/AIDS.



# The Food is Medicine Coalition

A volunteer association of nonprofit food and nutrition services (FNS) providers all across the country seeking to preserve and expand coverage for the vulnerable clients that we serve.

## FIMC POLICY GOALS:

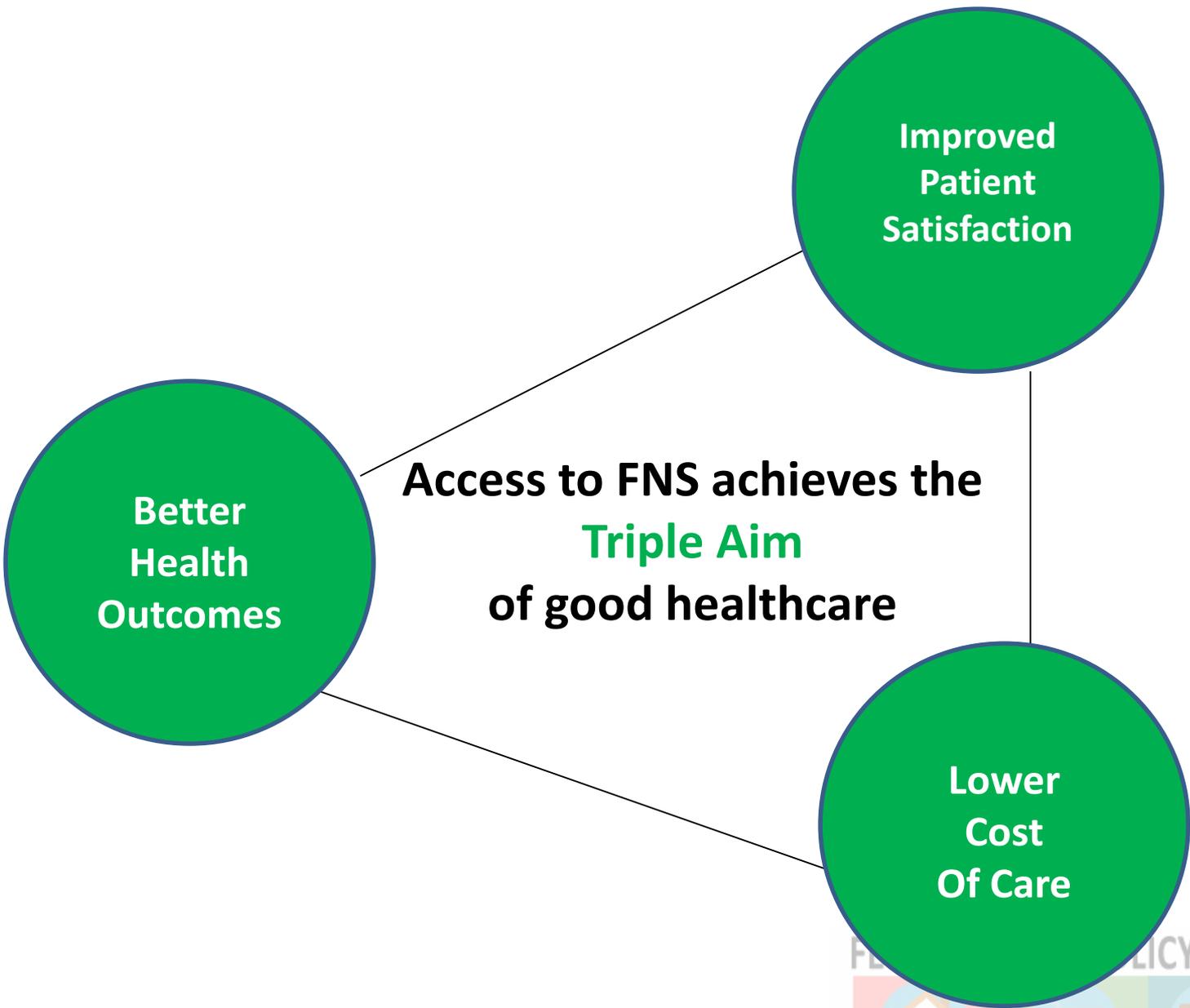
- To advocate for the incorporation of food and nutrition services (FNS) for people with severe illness in the major programs of the Affordable Care Act (ACA)
- To preserve coverage of the same in the Ryan White program for people living with HIV/AIDS

# FNS Care Continuum

Addresses HIV/AIDS from prevention through management and treatment.



Intensity of symptoms and illness →





# Better Health Outcomes with FNS

## PLWHA who are food insecure have:

- **Poor health outcomes** (statistically significant)
  - Lower CD4 counts
  - Less likely to have undetectable viral loads
  - Increased morbidity and mortality
  - Poorer mental health functioning
- **Poor medical care outcomes** (statistically significant)
  - More missed primary care appointments
  - More emergency room visits
  - Less use of ART

## Medical Nutrition Therapy (MNT) is associated with

- improved outcomes related to energy intake and/or decreased symptoms
- improved outcomes related to weight gain, CD4 count, and quality of life



## Receipt of Effective FNS

PLWHA who were food insecure who then received effective food and nutrition services were:

- Less likely to miss scheduled medical appointments
- More likely to be on ARVs
- Less likely to report ER visit
- Lower risk for inpatient /nursing home stay
- Score higher on measures of health functioning
- More likely to be viral suppressed

Compared to PLWHA who continue to be food insecure.

**Access to FNS is key to PREVENTION, as undetectable viral loads reduce transmission**



## Lower Cost of Care with FNS

**Research shows that adding medically tailored food to a care plan dramatically reduces healthcare costs for PLWHA from \$50,000/month to \$17,000/month\*.**

Members who are adequately nourished have:

- Fewer emergency room visits
- Fewer missed primary care appointments
- If hospitalized:
  - costs were 30% lower\*
  - length of stay reduced by 37%\*

\*Gurvey J, Rand K, Daugherty S, Dinger C, [Schmeling J](#), Lavery N. Examining Health Care Costs Among MANNA Clients and a Comparison Group. OMG Center for Collaborative Learning, Philadelphia, PA, USA. [J Prim Care CoMMCunity Health](#). 2013 Jun 3. [Epub ahead of print].



# Impact of Malnutrition on Hospitalization

**Clinical Nutrition:** malnutrition was evident in up to one-third of inpatients and led to poor hospitalization outcomes and survival, and increased cost of care

## For malnourished patients:

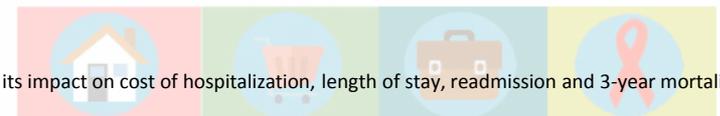
- Hospital length of stay was 1.5 times longer
- Average inpatient hospitalization costs were 24% higher
- Stay was on average 2 days longer (independent of gender, age, race and matching for diagnostic code)
- Readmission in 15 days was almost twice as likely

Additionally, research shows that nutrition-specific Diagnosis Related Groups (DRGs) are among the top 10 reasons that Medicare beneficiaries are readmitted to the hospital.

Su Lin Lim, Kian Chung Benjamin Ong, Yiong Huak Chan, Wai Chiong Loke, Maree Ferguson, Lynne Daniels. Malnutrition and its impact on cost of hospitalization, length of stay, readmission and 3-year mortality. *Clinical Nutrition* 31 (2012) 345-350. 345

Jencks, SF, Williams MV, Coleman EA. (2009) Rehospitalizations among Patients in the Medicare Fee-for Service Program. *N Engl J Med* 360:1418-28.

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# Improved Patient Satisfaction

Members overwhelmingly report that our services help them:

- Live more independently
- Eat more nutritiously
- Manage their medical treatment more effectively



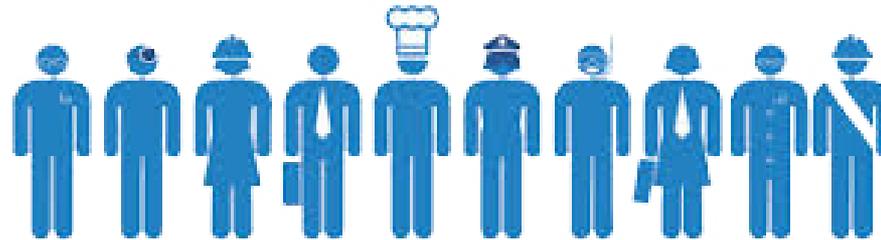
# Nutrition is an Inexpensive Intervention



Feed someone for 1/2 a year  
for the same cost as 1 day in the hospital

[#foodismedicine](#)

# Employment



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# Employment and HIV Health and Prevention

- Meta-analysis of 23 studies involving 6,674 people (ILO, 2013)
  - Employed participants were 39% more likely to have achieved optimal adherence to antiretroviral meds (>95% adherence)
- NWPC Vocational Development and Employment Needs Survey (2506 PLHIV 2008-2009)
  - 63% employed when diagnosed; 32% employed when surveyed
  - Majority of employed (after period of not working) survey participants reported no change, or
    - decreases in: viral load (38%), alcohol use (35%), drug use (34%), condom-less sex (30%)
    - increases in: self care (49%), CD4 count (37%), medication adherence (21%)

# Federal Employment Programs: Services in Most Communities

- State Vocational Rehabilitation Agencies – services for people with disabilities
  - Under the Dept. of Education, Rehabilitation Services Administration
  - \$3 billion system
  - Services provided in local district offices
  - Funding source for community-based HIV employment programs (as Community Rehabilitation Providers, or CRPs)
- The American Job Centers – services for all jobseekers
  - Under the Dept. of Labor, Employment and Training Administration
  - \$10 billion FY 2016 budget request
  - Were "One-Stop" Career Centers – goal: all services under one roof
  - Funding source for community-based HIV employment programs (through local Workforce Investment Boards, or WIBs)

# Structural Interventions Focused on Employment and Employment Services

- Poverty, unemployment, and underemployment are key social and economic determinants of health, and critically influence outcomes along the HIV care continuum.
- Achievement of the goals of the NHAS (improving HIV health outcomes, reducing health disparities and reducing new HIV infections) requires both medical and structural interventions, including strategies to:
  - prevent unnecessary loss of employment, and
  - reduce poverty, unemployment and underemployment among people living with and most at risk for HIV

# To Increase Employment Opportunities for People Living with HIV

- Linkages and coordination need to be established between HIV, workforce development, vocational rehabilitation, and housing service systems
  - Federal, state and community level
  - HHS, DOL, DoEd, and HUD among lead federal agencies
- This should include the development of effective partnerships among key partners
  - state HIV directors/local health department commissioners, and planning bodies,
  - state/local workforce development directors and planning bodies,
  - state vocational rehabilitation (VR) directors/local district VR office managers, and planning bodies, and
  - state/local housing authorities and planning bodies.

# Lead Federal Agencies Need to Provide Training and Technical Assistance

- Staff and grantees need education to develop knowledge and skills to
  - Reduce HIV stigma and discrimination, and
  - Meet employment/vocational information and service needs of people living with HIV or at high risk of HIV infection
- Education must include medical advances in HIV treatment and prevention, and ensure effective services for key populations, including
  - young Black and Latino MSM
  - transgender women of color, and
  - individuals who are formerly incarcerated

# Access to Accurate Information: Work Earnings While Receiving Benefits

- Service providers and people living with HIV have inadequate access to accurate information about work earnings-related policies for key programs including
  - SSI/SSDI
  - Medicaid, Medicare and other health coverage, and
  - subsidized housing (HOPWA, Section 8)
- Well-informed decision-making about working and transitions to employment depends on information accessibility
  - maintain or improve access to health care, housing and economic stability
- Service providers and people living with HIV need training
  - individual benefits advisement is needed by people living with HIV
  - education about community-level resources available for vocational training, education and employment services.

# HIV Employment Services: Rare and Minimally Supported

- Ryan White grantees are not encouraged, trained or allocated RW funds to assess or meet employment needs of people living with HIV
  - Service providers currently most able to work effectively with people living with HIV are not equipped to identify or respond to employment needs
  - Needs are not being met under other programs
  - Many people living with HIV struggle with poverty and social marginalization in extended unemployment or underemployment
- If primary HIV programs don't address employment needs, resources for HIV employment services need to be developed within other Federal programs

# Increasing Employment Opportunities for People Living with HIV

- Existing and planned employment initiatives targeted for people living with or at high risk for HIV need to be identified, with:
  - linkage for sharing of best practices
  - needs assessment for and provision of capacity building training and technical assistance, and
  - data collection support to build knowledge of
    - HIV health and prevention outcomes for program participants, and
    - effective HIV employment service strategies

# Multi-state HIV Employment Demonstration Project

- Establishment of a multi-state HIV employment demonstration project in diverse high prevalence communities is needed, that will
  - integrate employment services in HIV service organizations
  - coordinate with state/local vocational rehabilitation and workforce development programs
- Assessment is needed of multiple forms of employment outcomes in addition to job placement rates, including
  - engagement/retention in care
  - Biomarkers (i.e., viral load/suppression), and
  - self care

# Data Collection and Evaluation

- Employment status and needs assessment, along with economic status, should be integrated into data collection
- Evaluation is needed of HIV health and prevention outcomes in relation to employment and economic status
  - Evaluate diverse outcomes, including for those who: do or don't use employment/vocational services; work full time or part time; are engaged in self-employment/microenterprise development
  - Apply knowledge about social and economic determinants of health in structural interventions

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- **CHAIN Study:**
  1. [http://www.nyhiv.com/pdfs/chain/Food%20Need%20Medical%20Care\\_factsheet%20v8.pdf](http://www.nyhiv.com/pdfs/chain/Food%20Need%20Medical%20Care_factsheet%20v8.pdf)
  2. [http://www.nyhiv.com/pdfs/chain/Food%20Svc\\_Factsheet%202\\_2013.pdf](http://www.nyhiv.com/pdfs/chain/Food%20Svc_Factsheet%202_2013.pdf)
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- Anema A, Chan K, Yip B, Weiser S, Montaner JSG, Hogg RS. Impact of food insecurity on survival among HIV-positive injection drug users receiving antiretroviral therapy in a Canadian cohort. 141<sup>st</sup> APHA Annual Meeting, Nov. 2-6, 2013. Boston, MA. Abstract #: 290277.

# FOR MORE INFORMATION

NAHC: [www.nationalaidshousing.org](http://www.nationalaidshousing.org)

Housing and HIV Research Summit: [www.hivhousingsummit.org](http://www.hivhousingsummit.org)

God's Love, We Deliver: [www.glwd.org](http://www.glwd.org)

National Working Positive Coalition: [www.workingpositive.net](http://www.workingpositive.net)





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