HIV Care Continuum

ANAC 2017
Association of Nurses in AIDS Care

Edward Gardner, MD

Denver Public Health

Denver, CO

Conflict of Interest Disclosure Statement

- No financial relationships to disclose
- No off-label discussions in presentation

Objectives

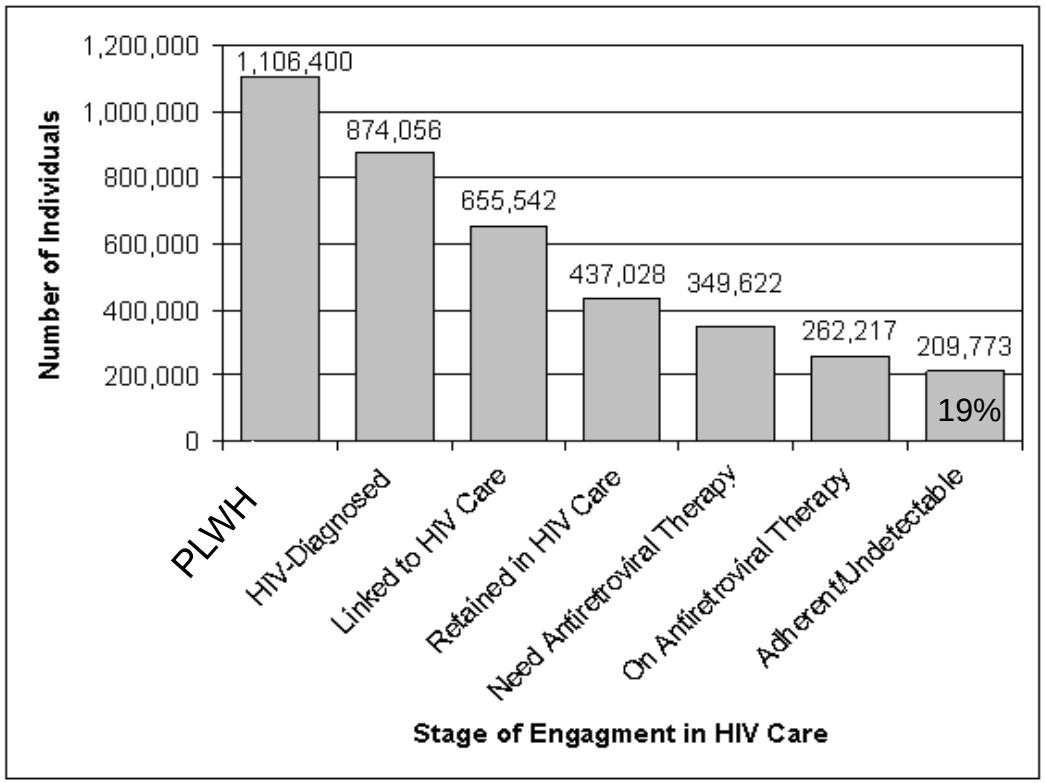
1. To understand the current state of engagement and retention in care for persons living with HIV
2. To discuss the challenges and barriers to engagement in HIV care
3. To review strategies for improving engagement and retention in the U.S.

The HIV Care Continuum

HIV CARE CONTINUUM:

THE SERIES OF STEPS A PERSON WITH HIV TAKES FROM INITIAL DIAGNOSIS THROUGH THEIR SUCCESSFUL TREATMENT WITH HIV MEDICATION

www.aids.gov



HIV CARE CONTINUUM:

THE SERIES OF STEPS A PERSON WITH HIV TAKES FROM INITIAL DIAGNOSIS THROUGH SUCCESSFUL TREATMENT OF HIV

+ Acquire HIV

DIAGNOSED WITH HIV

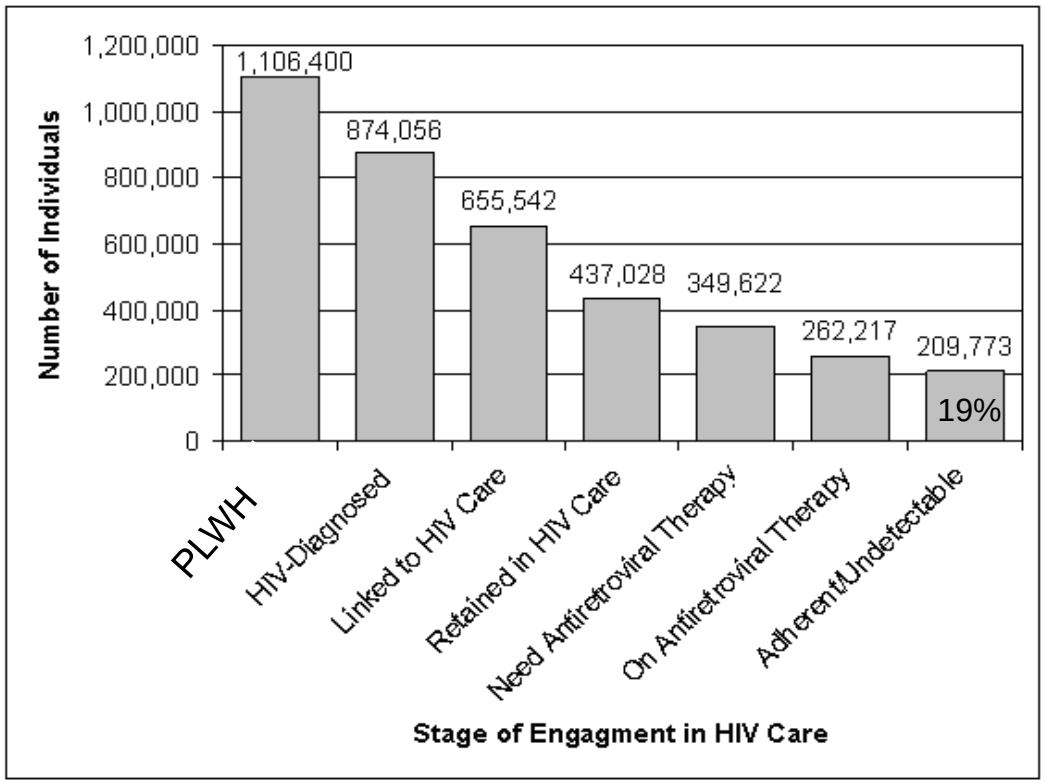
LINKED TO CARE

ENGAGED OR RETAINED IN CARE

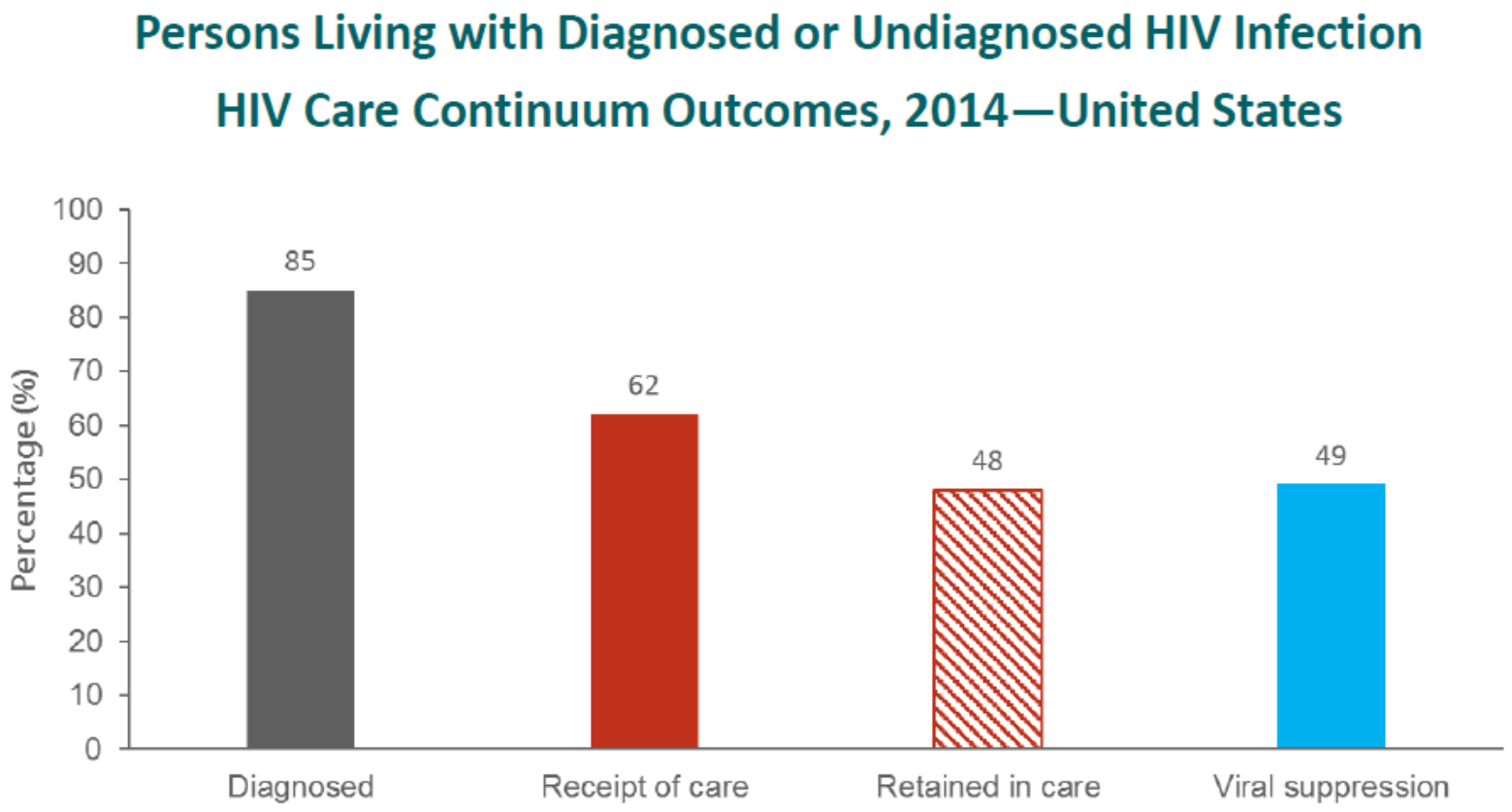
PRESCRIBED ANTIRETROVIRAL THERAPY

ACHIEVED VIRAL SUPPRESSION

www.hiv.gov



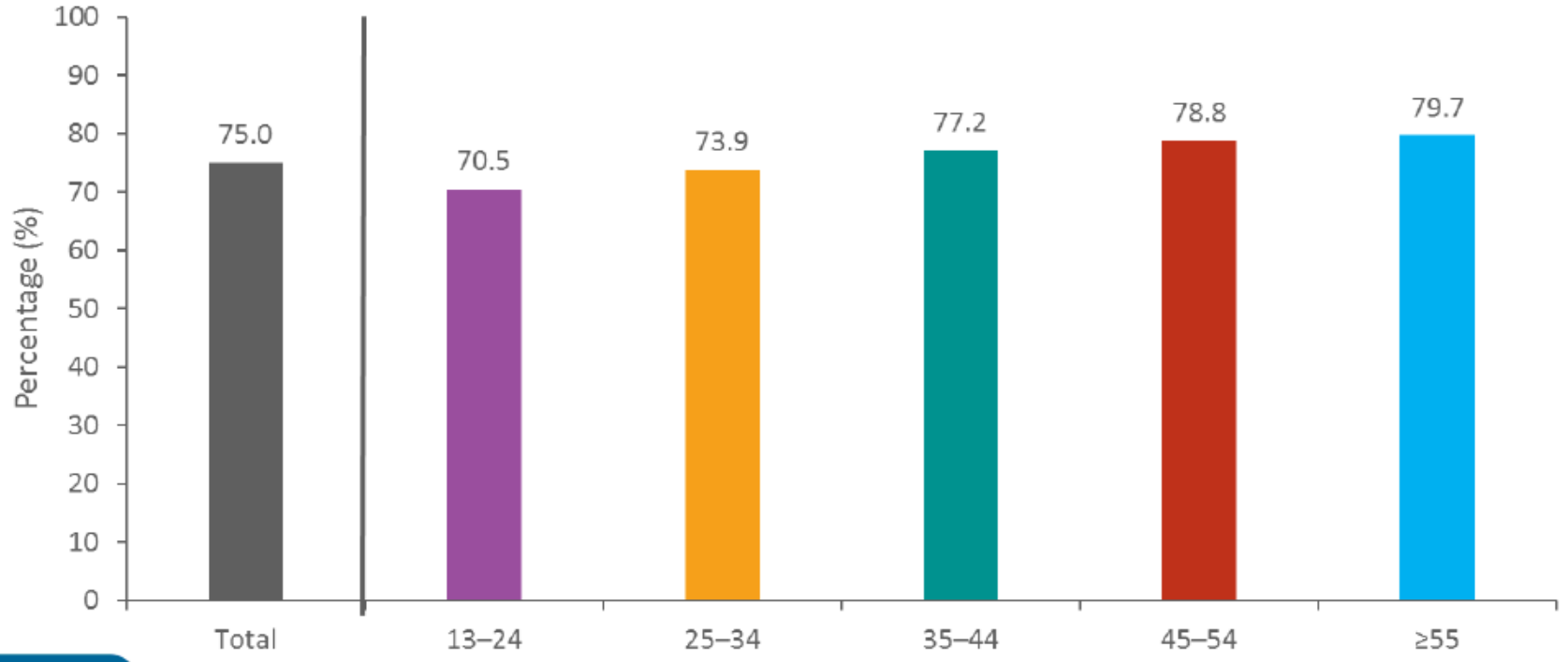
The U.S. 2014 HIV Care Continuum



Note. Receipt of medical care was defined as ≥1 test (CD4 or VL) in 2014. Retained in continuous medical care was defined as ≥2 tests (CD4 or VL) ≥3 months apart in 2014. Viral suppression was defined as <200 copies/mL on the most recent VL test in 2014.

https://www.cdc.gov/nchhstp/newsroom/2017/HIV-Continuum-of-Care.html

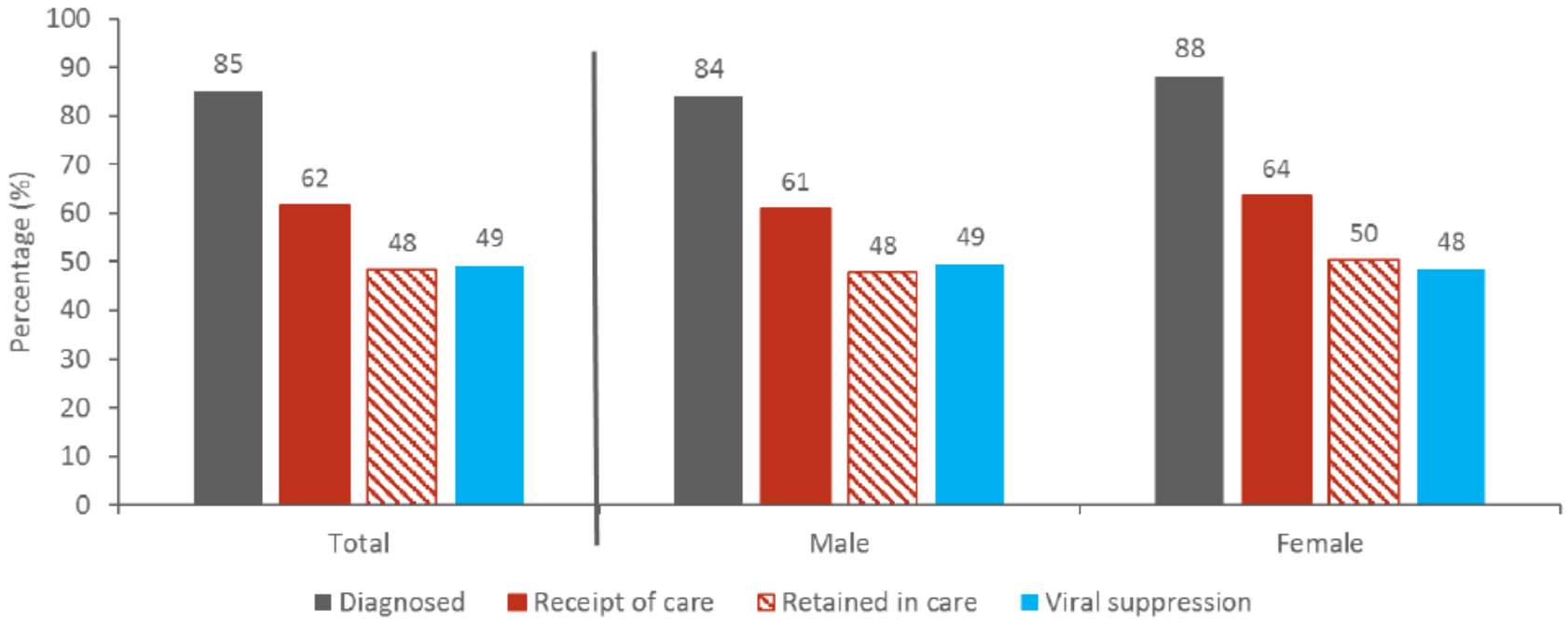
Linkage to HIV Medical Care within 1 Month after HIV Diagnosis during 2015, among Persons Aged ≥13 Years, by Age—37 States and the District of Columbia



Note. Linkage to HIV medical care was defined as having a CD4 or VL test ≤1 month after HIV diagnosis.

https://www.cdc.gov/nchhstp/newsroom/2017/HIV-Continuum-of-Care.html

Persons Living with Diagnosed or Undiagnosed HIV Infection
HIV Care Continuum Outcomes, by Sex, 2014—United States



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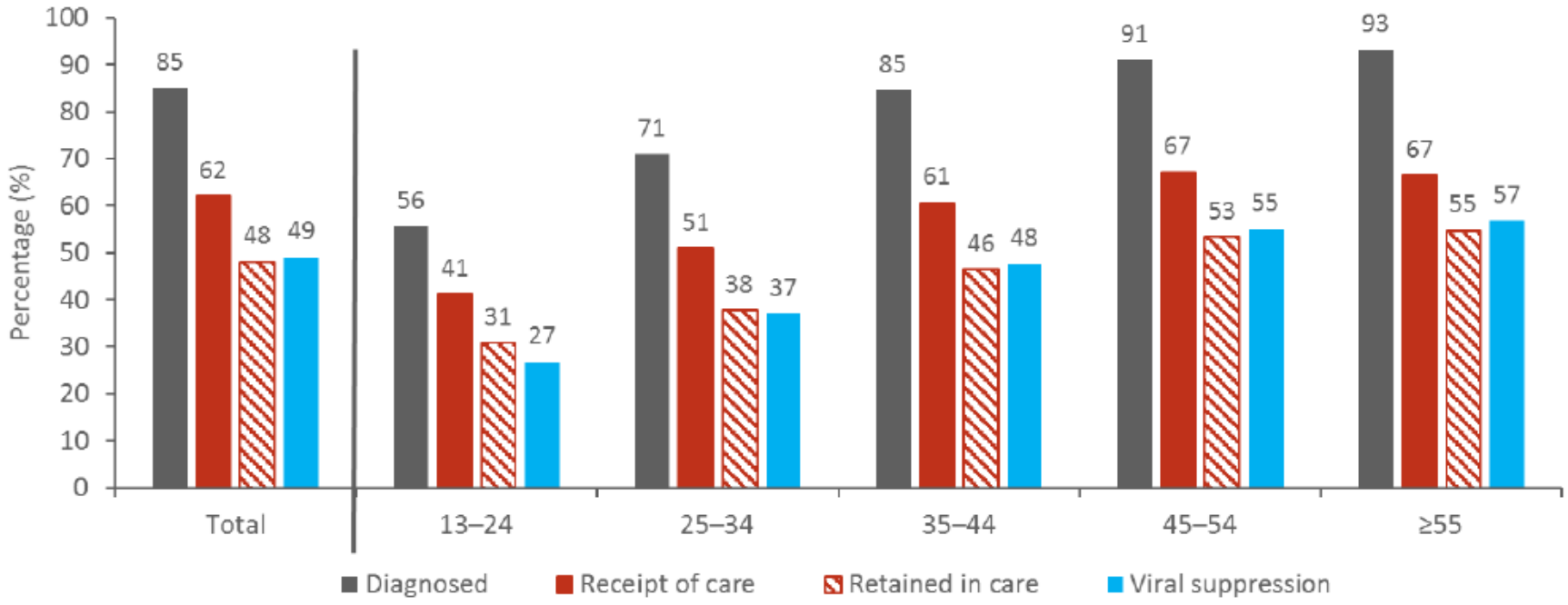
Persons Living with Diagnosed or Undiagnosed HIV Infection
HIV Care Continuum Outcomes, by Age, 2014—United States



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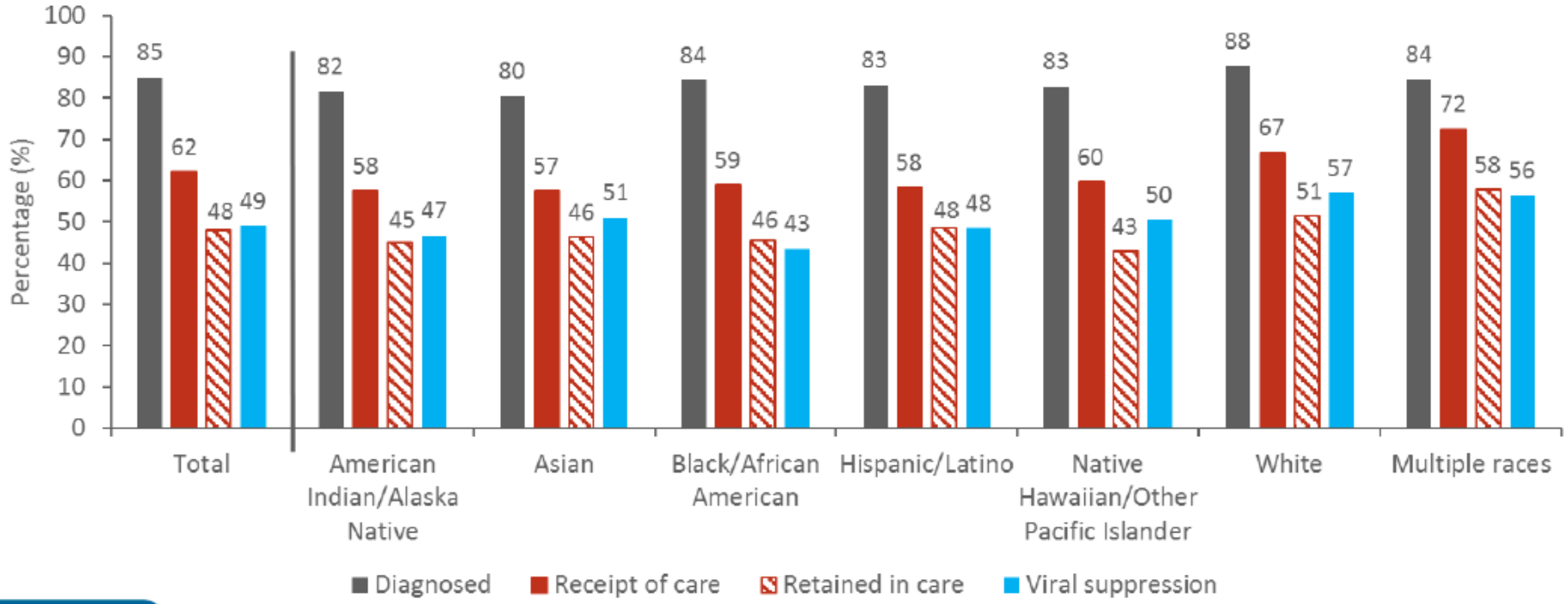
https://www.cdc.gov/nchhstp/newsroom/2017/HIV-Continuum-of-Care.html

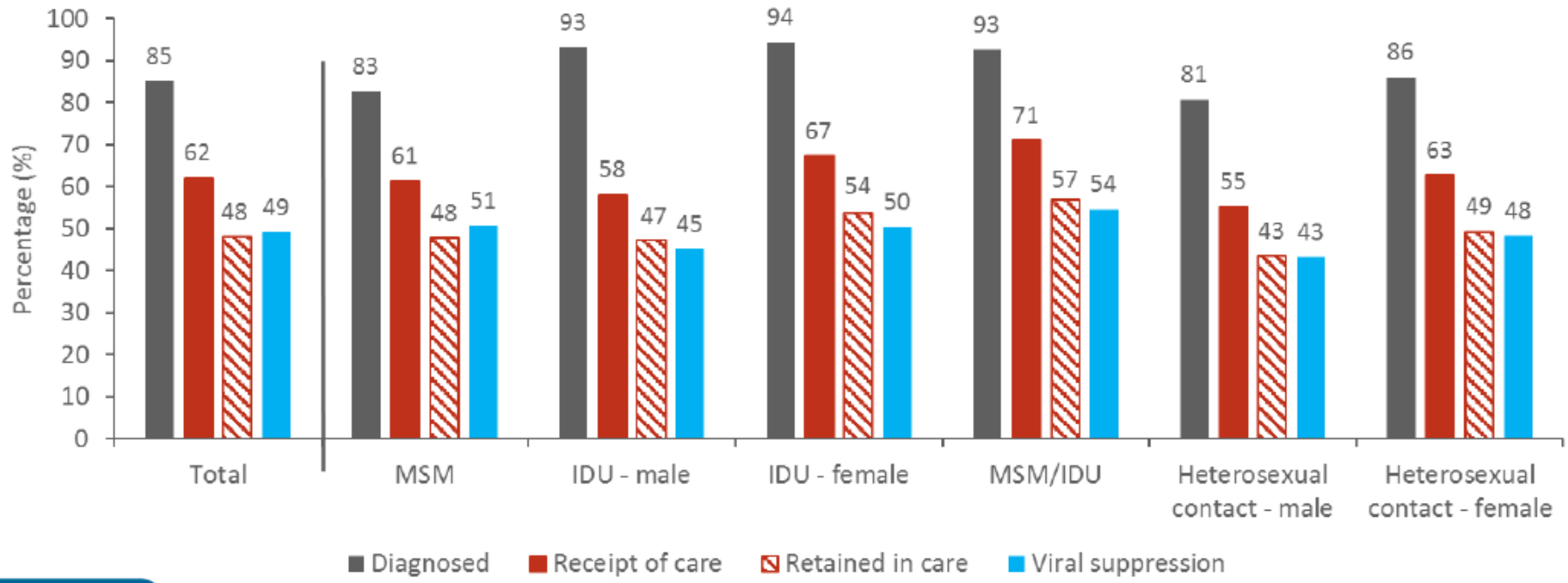
Persons Living with Diagnosed or Undiagnosed HIV Infection
HIV Care Continuum Outcomes, by Race/Ethnicity, 2014—United States



Note. Receipt of medical care was defined as ≥1 test (CD4 or VL) in 2014. Retained in continuous medical care was defined as ≥2 tests (CD4 or VL) ≥3 months apart in 2014. Viral suppression was defined as <200 copies/mL on the most recent VL test in 2014. Asian includes Asian/Pacific Islander legacy cases. Hispanics/Latinos can be of any race.

https://www.cdc.gov/nchhstp/newsroom/2017/HIV-Continuum-of-Care.html

Persons Living with Diagnosed or Undiagnosed HIV Infection
HIV Care Continuum Outcomes, by Transmission Category, 2014—United States



Note. Receipt of medical care was defined as ≥1 test (CD4 or VL) in 2014. Retained in continuous medical care was defined as ≥2 tests (CD4 or VL) ≥3 months apart in 2014. Viral suppression was defined as <200 copies/mL on the most recent VL test in 2014. Heterosexual contact is with a person known to have, or be at high risk for, HIV infection. MSM, male-to-male sexual contact; IDU, injection drug use

https://www.cdc.gov/nchhstp/newsroom/2017/HIV-Continuum-of-Care.html

Challenges and Barriers in the HIV Continuum

The Continuum has Helped Change the Way We View HIV Prevention and Care

- It is more readily apparent that prevention and treatment are part of the same spectrum
- Funding is becoming less siloed:
  - CDC – HIV testing and prevention
  - HRSA – HIV treatment and care
- Gives structure to our conversations
  - With funders, HCWs, PLWH, clients
- Allows us to measure and track our efforts

Barriers to Engagement in HIV Care

- Competing life activities
- Feeling sick
- Stigma
- Depression and mental illness
- Transportation
- Access/Health Insurance
- Forgetfulness
- Substance abuse
- Poor patient experience
- Challenges with appointment scheduling
- Poor staff/provider interactions
- Housing

Yehia et al. BMC Infect Dis. 2015;15:246

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Yehia et al. BMC Infect Dis. 2015;15:246

Facilitators to Engagement in HIV Care

- Good staff/provider relationship
- Social support
- Patient-friendly clinic services
- Patient initiated reminder strategies
- Flexible schedules

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Who Contributes to Continuum Success?

- PLWH/Clients
- Activists
- Health Care Workers
- Community Based Organizations
- Community members
- Health departments
- Funders

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Everyone

Strategies to Improve Engagement in HIV Care

How do we improve the Continuum?

- Improving social support for PLWH
- Improve handoffs for new diagnoses
- Outreach and navigation
- Improve messaging on the importance of engagement
- Substance abuse counseling and treatment
- Mental Health diagnosis and care
- Universal Health Care (?)
- Improve housing and decrease homelessness
- Decrease competing needs (food, clothing, etc.)
- Adherence Support
- Improve the system of health care delivery

Linkage to HIV Care

Linkage Basics

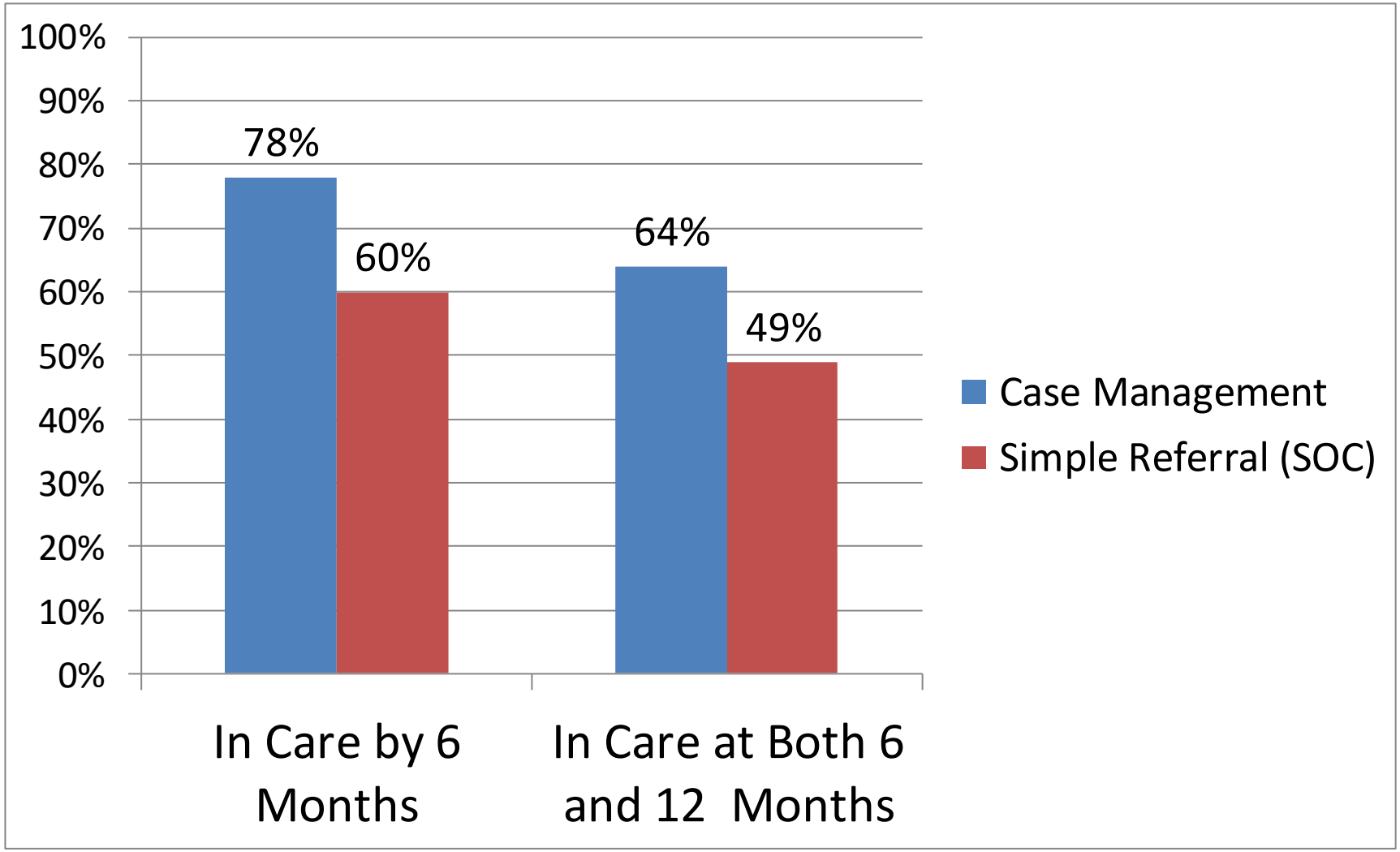
- Getting a new diagnosis can be traumatic
- Linkage services have to be sensitive and persistent
- Factors to assess: socioeconomics, insurance, substance use, social support, mental health, stigma, and clinical stage (and others)
- Consideration for same-day HAART
- Monitoring Linkage is everyone's job including the testing site, public health, and HIV Clinics
- Linkage should be active not passive

Antiretroviral Treatment and Access Study (ARTAS): Linkage to Care Intervention

- Recently HIV-Diagnosed Individuals
- Randomized to
  - Standard of Care = passive referral to HIV Care
    - Received information about HIV and local resources
  - Strengths Based Case Management
    - Up to five case manager contacts over 90 days
    - Relationship building
    - Identifying client resources, needs and barriers to care
    - Help clients identify their strengths and assets
    - If needed, accompany the client to their first appointment

Gardner L et al. AIDS 2005;19:423-31

ARTAS: Percentage of Clients Linked to Care by 6 Months and Who Persisted in Care at 12 Months



Gardner L et al. AIDS 2005;19:423-31

Other Linkage Strategies

- Outreach and Navigation
- Post-test couselling/education
- Motivational interviewing
- Peer Support
- Engaging the newly diagnosed individual with the clinic prior to the provider visit

- Strategies that have not worked:
  - Financial Incentives

Retention in HIV Care

Retention Basics

- Poor retention is associated with a higher risk of death
- Monitoring retention in the clinic setting should be done routinely
- System level factors are sometimes critically important for promoting retention:
  - Patient-provider relationship
  - Better patient experience
  - Appointment availability
  - Scheduling convenience

Intensive Outreach Improves Retention in HIV Care

- Underserved, recently diagnosed individuals
  - women, youth, substance abuse, mental illness
- Intensive outreach defined as HIV education, addressing stigma, helping individuals access resources, addressing structural barriers to care
- 104 participants:
  - 81% had two visits over the first year
  - 45% undetectable viral load at 12 months
  - 50% of uninsured gained insurance at 12 months
  - 50% reduction in self-reported stigma as barrier

Naar-King et al. AIDS Pat Care STDs 2007;21 (Suppl1): S40-8

HIV Systems Navigation Improves Retention in HIV Care

- Another SPNS publication
- Peer patient Navigation supported:
  - Coaching patients
  - Health system navigation
  - Community linkages
- 437 individuals followed
  - Engagement at 6 months improved 64% to 87%
  - 79% were still engaged at 12 months
  - 50% increase in rates of viral suppression

Bradford et al. AIDS Pat Care STDs 2007;21 (Suppl1): S49-58

Retention Messaging Improves Retention "Stay Connected"

- Clinic-wide (not just nurses/prescribers)
- Low cost, low effort
- Messages were written and verbal
- Clinic staff received formal training on the messaging
- Study included a pre-intervention/post-intervention comparison
- Took place at 6 U.S. clinics

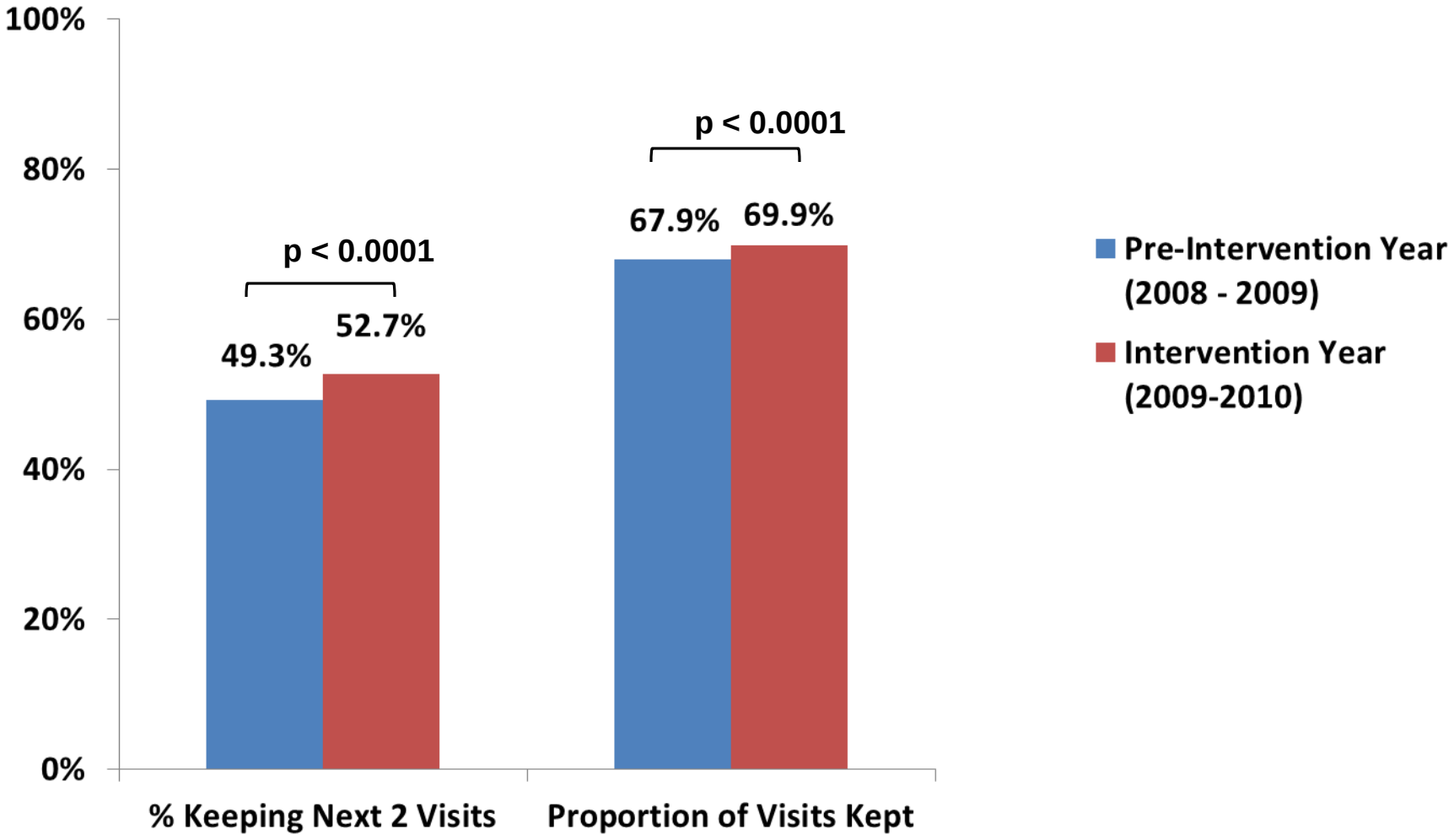
Gardner L et al. Clin Infect Dis 2012;55:1124-34

Retention Messaging Improves Retention "Stay Connected"

- The messaging intervention included:
  - Print reminder material including brochures and posters that encouraged staying in care and contained information on:
    - The importance of staying in care
    - Clinic contact numbers
    - Research showing better health with regular care
  - Brief verbal messages used by all clinic staff
    - "Thank you for doing such a good job of keeping your appointments. It makes it easier for all of us to work together to keep you healthy."

Gardner L et al. Clin Infect Dis 2012;55:1124-34

Stay Connected – Clinic Wide Intervention



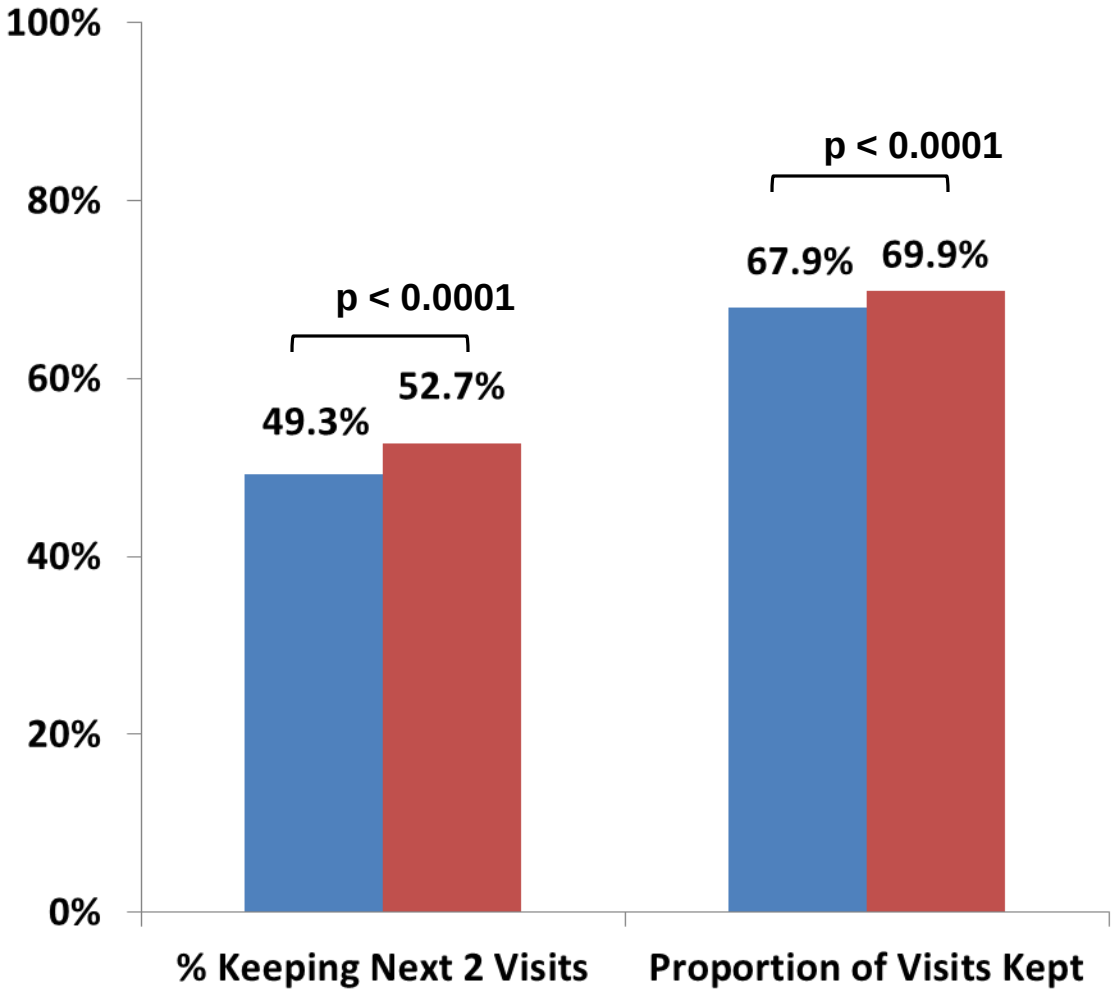
7% Relative Improvement

3% Relative Improvement

*Data adjusted for baseline variables

Gardner LI et al. *Clin Infect Dis.* 2012;55:1124-34

Stay Connected – Clinic Wide Intervention



Keeping 2 appointments was 28% better for individuals new or returning to care and 16% better for those with detectable viremia at baseline

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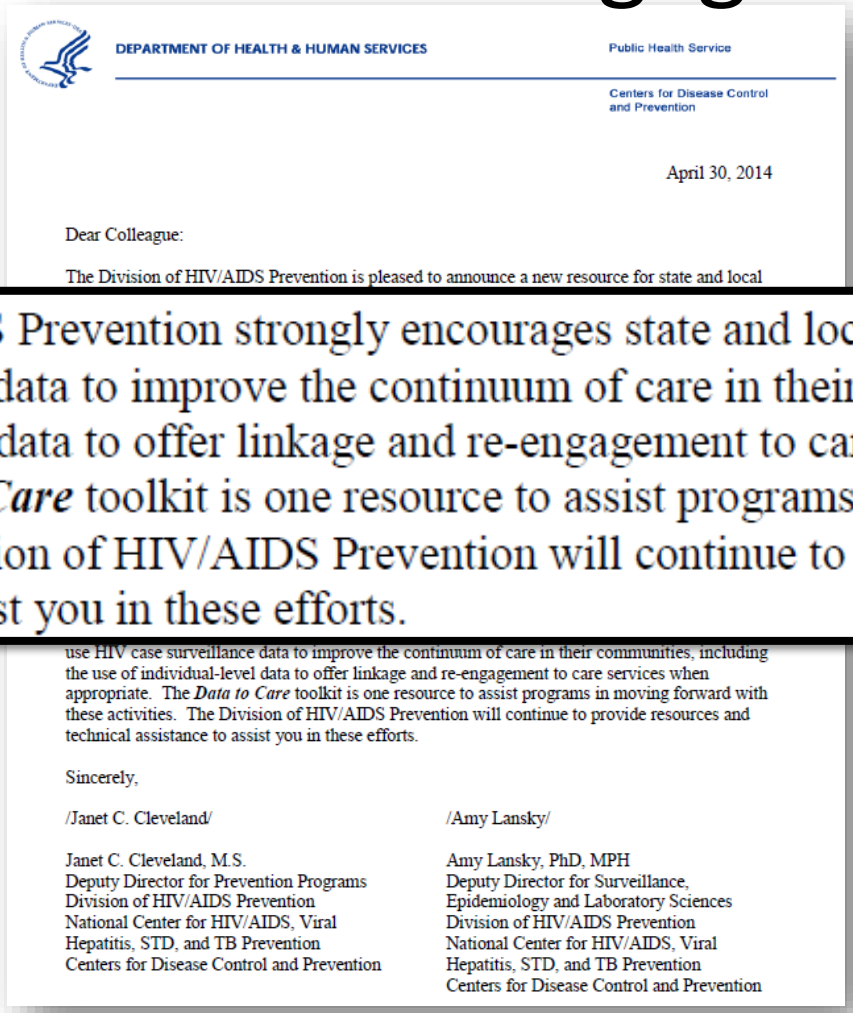
*Data adjusted for baseline variables

Gardner LI et al. *Clin Infect Dis.* 2012;55:1124-34

Data to Care (D2C): Surveillance for Engagement



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Centers for Disease Control and Prevention

April 30, 2014

Dear Colleague:

The Division of HIV/AIDS Prevention is pleased to announce a new resource for state and local

use HIV case surveillance data to improve the continuum of care in their communities, including the use of individual-level data to offer linkage and re-engagement to care services when appropriate. The ***Data to Care*** toolkit is one resource to assist programs in moving forward with these activities. The Division of HIV/AIDS Prevention will continue to provide resources and technical assistance to assist you in these efforts.

Sincerely,

/Janet C. Cleveland/

Janet C. Cleveland, M.S.
Deputy Director for Prevention Programs
Division of HIV/AIDS Prevention
National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Centers for Disease Control and Prevention

/Amy Lansky/

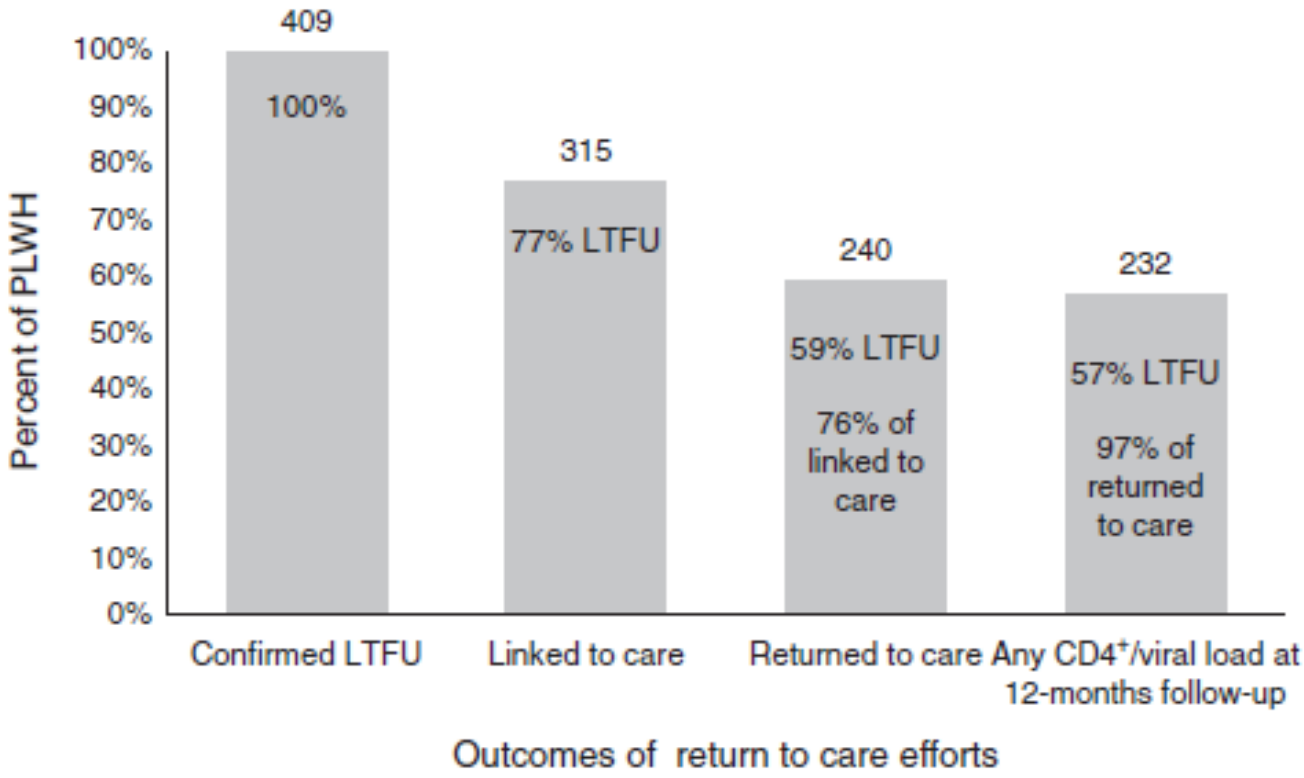
Amy Lansky, PhD, MPH
Deputy Director for Surveillance, Epidemiology and Laboratory Sciences
Division of HIV/AIDS Prevention
National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Centers for Disease Control and Prevention

The Division of HIV/AIDS Prevention strongly encourages state and local health departments to use HIV case surveillance data to improve the continuum of care in their communities, including the use of individual-level data to offer linkage and re-engagement to care services when appropriate. The ***Data to Care*** toolkit is one resource to assist programs in moving forward with these activities. The Division of HIV/AIDS Prevention will continue to provide resources and technical assistance to assist you in these efforts.

CDC. High impact prevention: data to care.
www.effectiveinterventions.org/en/highimpactprevention/publichealthstrategies/DatatoCare.aspx - accessed 10/24/17

Using HIV Surveillance Data to Re-engage Out-of-Care HIV-infected individuals

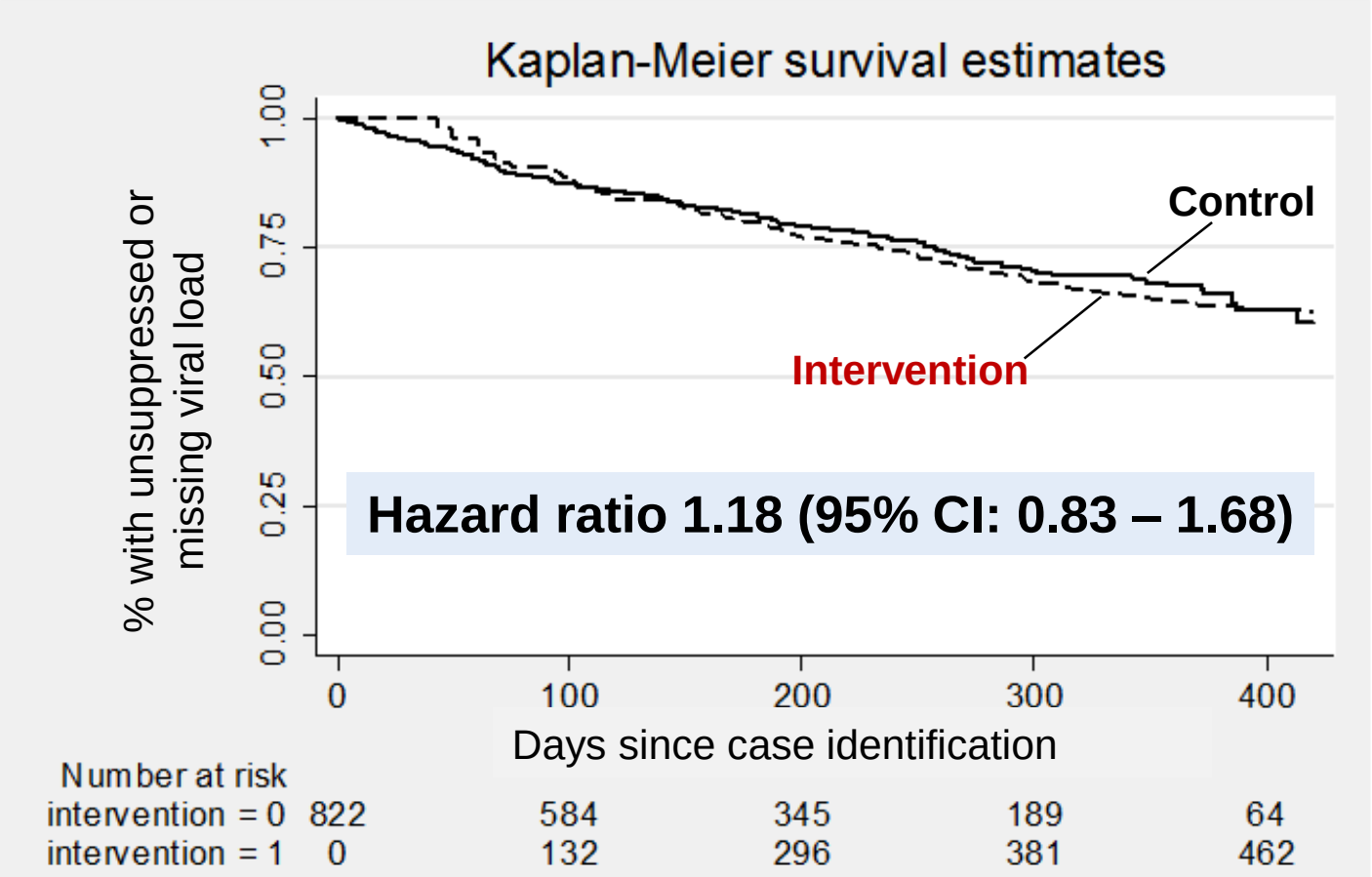
- 229 (33%) with 'no care' in 9 months were active and in care
- 409 (60%) were confirmed lost to follow-up with these outcomes:



Udeagu et al. AIDS 2013;27:2271-9.

Many People Re-Engage in Care in the Absence of an Intervention

Time to Viral Suppression According to Intervention vs. Control Period (excluding deaths and relocations, N=822)

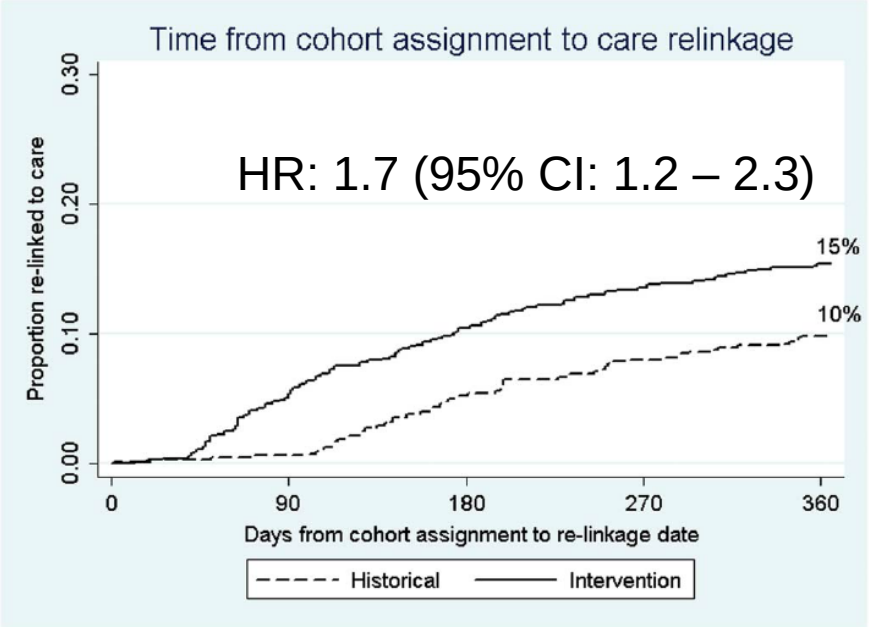


CI = confidence interval

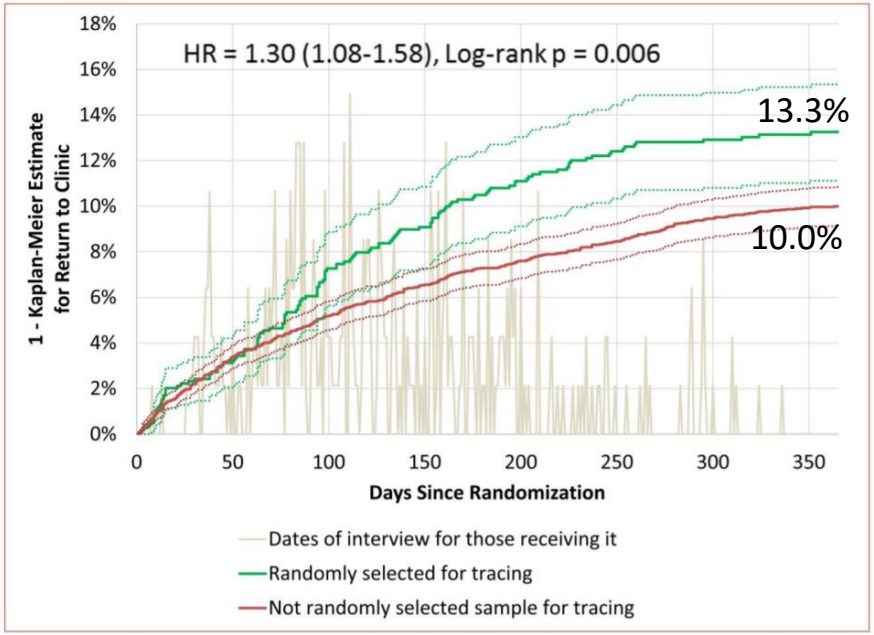
Dombrowski JC et al, IAS 2015. Abstract TUAD0105LB.

Clinic-Based Data to Care: Effective, but Effect Size is Small

Madison Clinic, Seattle
Time to first return clinic visit: intervention vs. historical controls
(N=1399)



Uganda, Kenya, Tanzania
Time to first return clinic visit in a randomized, controlled trial
(N=5781)



HR = hazard ratio

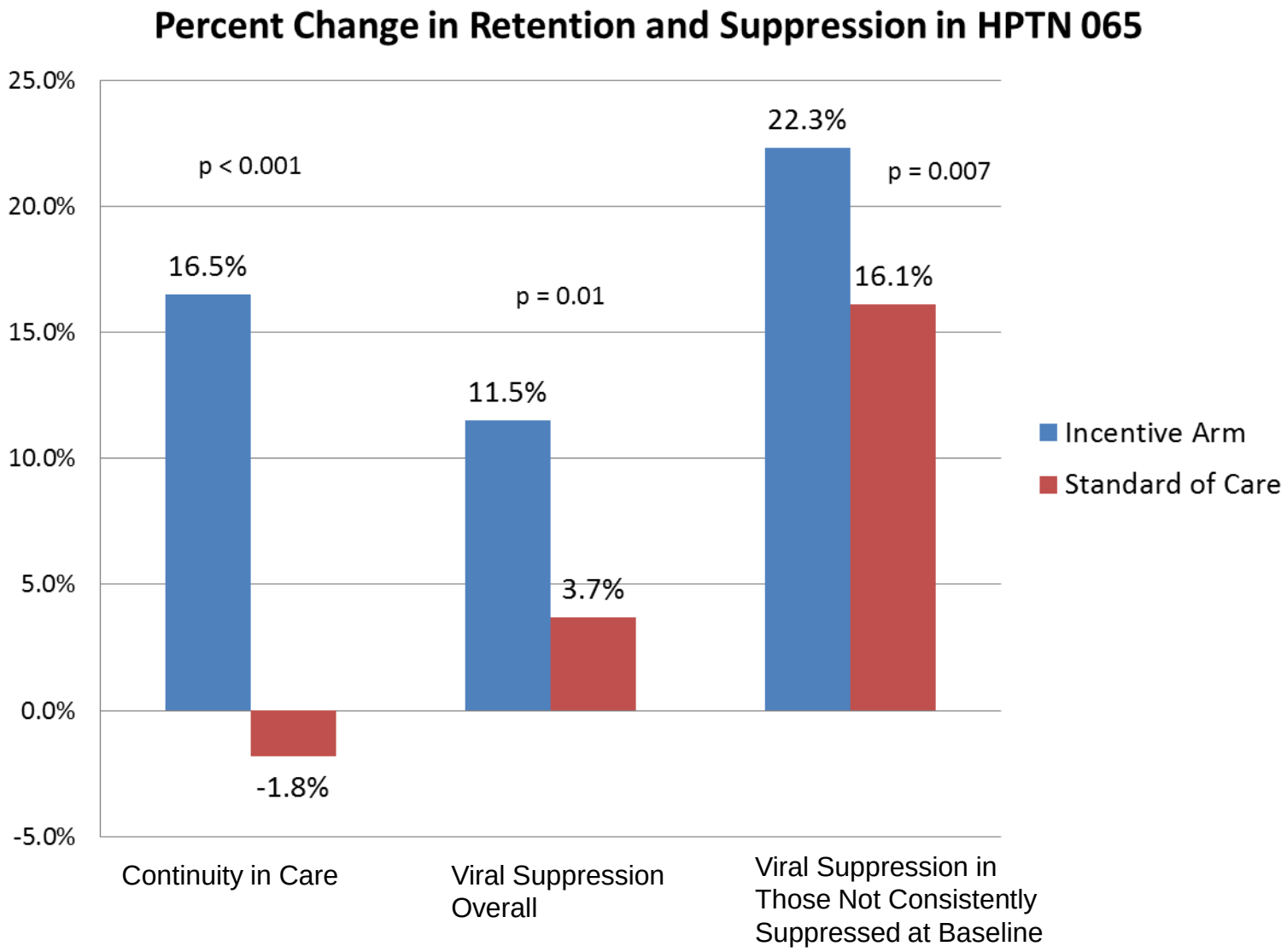
Bove J, et al. *J Acquir Immune Defic Syndr*. 2015;70(1):262-268; Bershetyn A, et al. *Clin Infect Dis*. 2017;64(11):1547-1554.

What About Incentives? HPTN 065

- Randomized by site, Bronx and D.C.
- Patients (all patients at about 40 clinics)
- Received $70 for a suppressed viral load up to once every quarter
  - 40,000 gift cards were given to 10,000 PLWH at intervention sites
  - About $2.8 Million

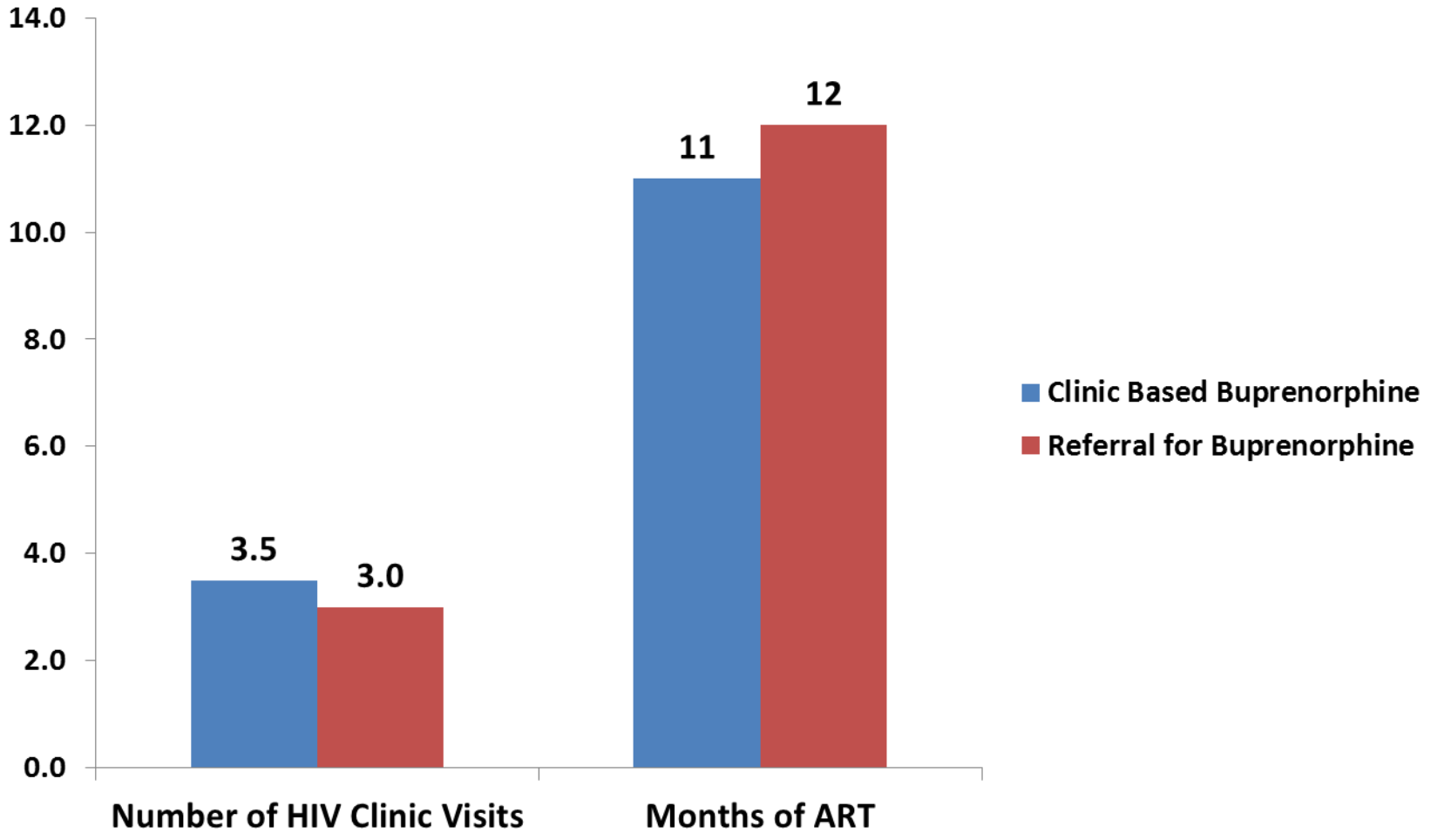
El-Sadr et al. *JAMA Int Med* 2017;177:1083-92.

HPTN 065: Incentives for Retention In Care



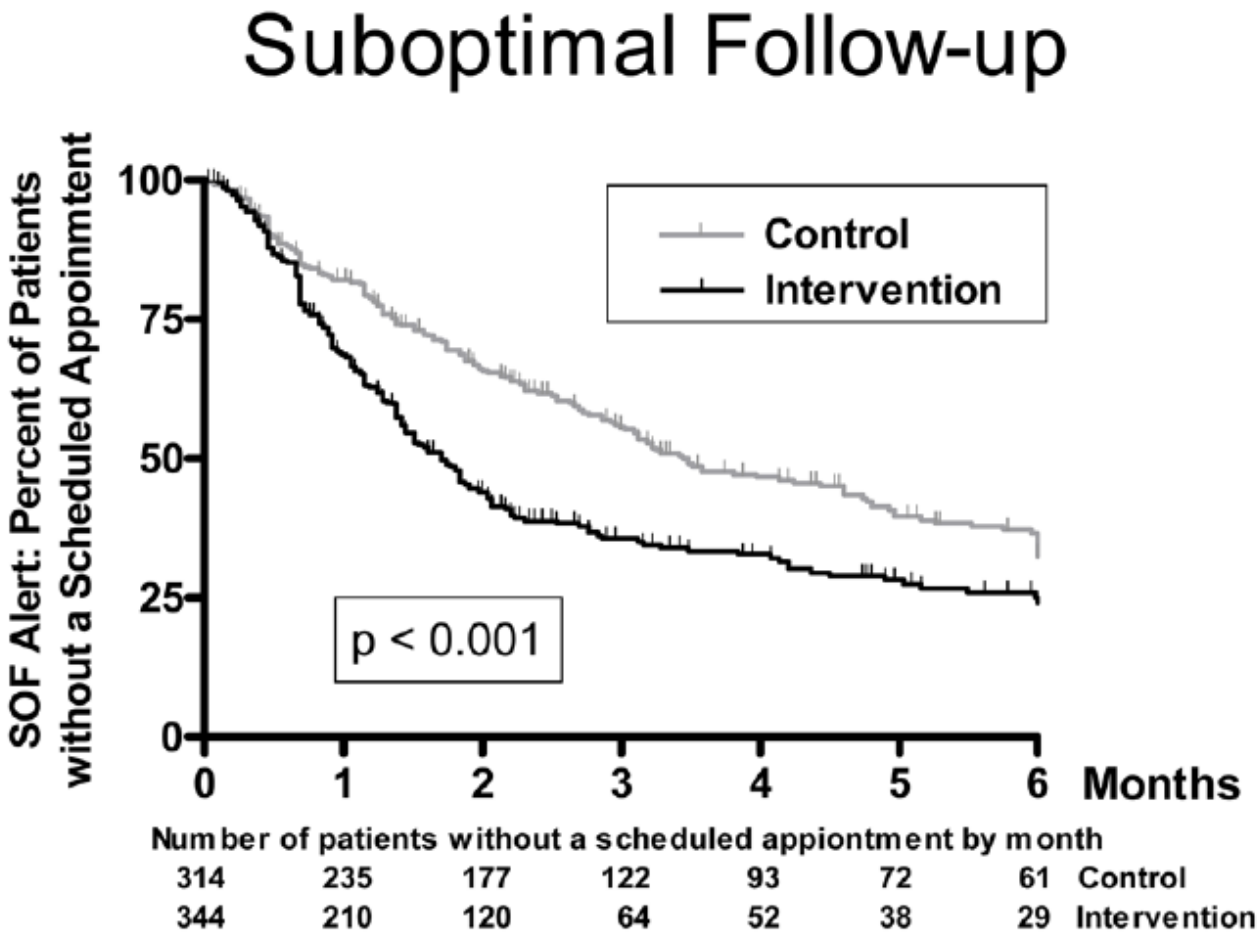
El-Sadr et al. *JAMA Int Med* 2017;177:1083-92.

HIV Clinic-Based Buprenorphine Improved Clinic Retention Compared to Referral for Buprenorphine



Lucas GM et al. *Ann Intern Med* 2010;152:704-11.

EMR-Based Retention Reminders to Providers Improves Retention (to an extent)



Robbins et al. *Ann Intern Med* .2012;157:757-66.

Barriers to Care among Participants in a Public Health HIV Care Relinkage Program

Barriers to HIV Care (N=247)	N (%)
No insurance	124 (50)
Forget appointments	83 (34)
Trouble getting appointments	79 (32)
Costs not covered by insurance are too high	75 (30)
No transportation	70 (28)
At least one healthcare organization and delivery barrier	**184 (74)**
Homelessness	59 (24)
Using drugs	56 (23)
Don't need a doctor	48 (19)

*69% screened positive for depression, 54% reported substance use

Healthcare organization & delivery barriers are the most common "important" barriers

Dombrowski JC, *AIDS Patient Care STDS*. 2015;29(5): 279-287.


Sometimes, even if I stand in the middle of the room, no one acknowledges me.
Facebook.com/BizarroComics
PIRARO.
9-2-12
BIZARROCOMICS.COM

Center for Positive Health Denver Same Day Visit Expansion

- Difficulties in retaining patients who had competing issues and making appointments
- Developed daily slots reserved for ‘same-day’ visits
  - Started with 4 per day in 2010
  - Increased to 10 per day in 2012
  - Increased to 14 per day in 2014
- Encouraged use for urgent issues at first
  - To avoid ER and Urgent Care visits
- Routine care was quickly added
- Covered by existing clinic providers
  - Each provider has one day of same-day each week which doesn’t change week to week
- Has also been very helpful for our PrEP clients

High Need, Complex Patients

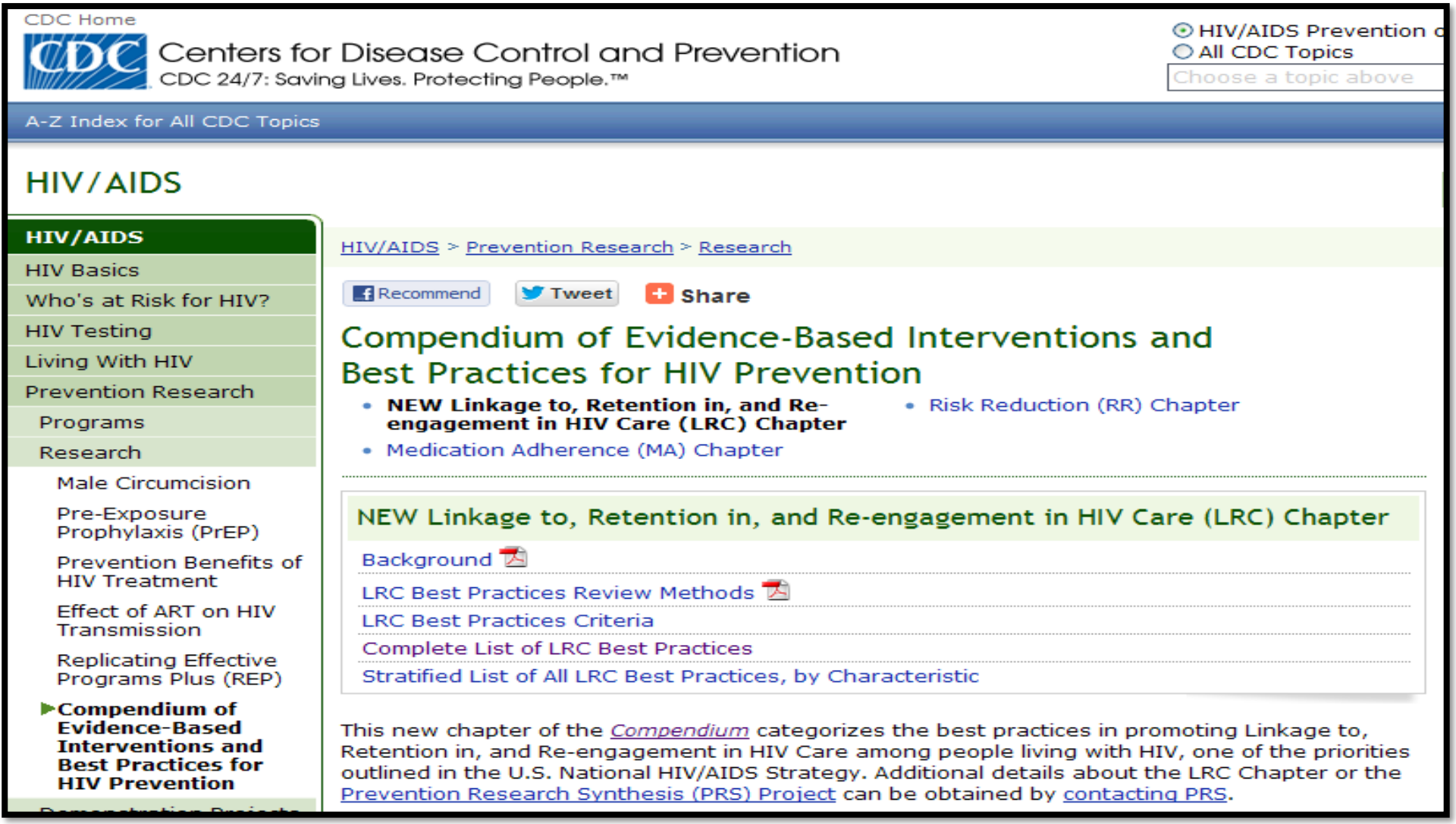
The MAX ("MAXimum Assistance") Clinic

Low-Threshold Care	Incentives	High Intensity Outreach Support	Coordinated Care & Case Management
Walk-in access to medical care - 5 afternoons/wk - case managers 5 days/wk	Snacks each visit, $10 meal vouchers 1x/wk	Non-medical case managers (Public Health)	Madison Clinic and Public Health – Seattle & King County STD Clinic
Direct phone line to MAX case managers (no phone tree)	Cell phone	Medical case managers (Madison)	Bailey Boushay Day Program
Text message communication	Bus pass		Lifelong, DESC, supportive housing facilities
Harm reduction approach	$25 - visit + blood draw q 2 months		Jail release planners
	$50 – VL<200 q 2 months		HMC Office-Based Opioid Treatment Team

- Enrolled 95 patients in first 2 years; **80%** achieved **viral suppression at least once**, **~65% currently virally suppressed**

Dombrowski JC, et al. Adherence 2016. Abstract 125.

CDC Compendium of Best Practices in Linkage, Retention, and Re-Engagement in HIV Care

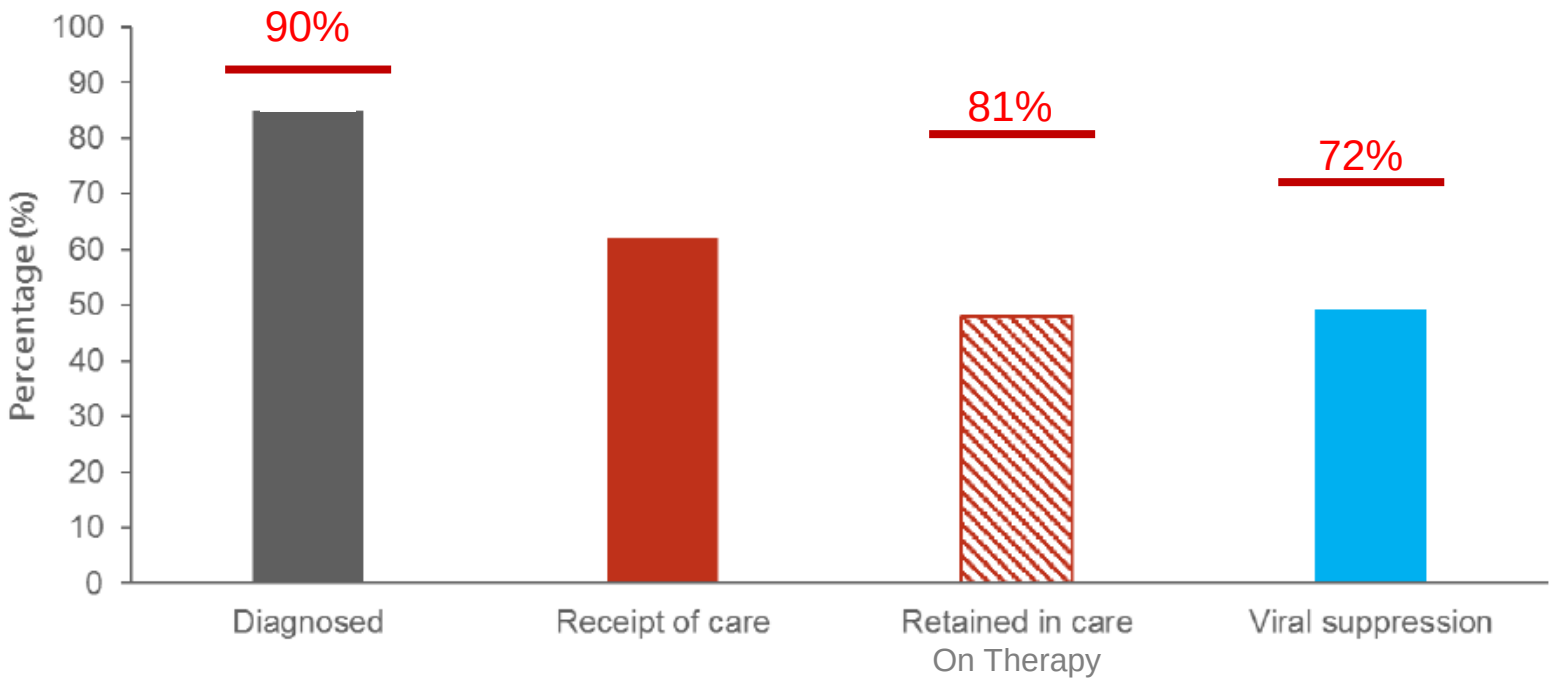


CDC. Compendium of evidence-based interventions and best practices for HIV prevention. www.cdc.gov/hiv/prevention/research/compendium/lrc/index.html. Accessed 8/18/16.

Key Messages

- Streamline linkage to care, handoffs need to be active
- Respond to no-show visits, track retention
- Change clinic structure: open access approach for the hardest to reach patients
- Improve the system of care – remove barriers
- Focus on the patient/client
- Implement low-cost, low-effort interventions, when appropriate (with or without clinical trial data)
- Be pre-emptive, it is easier to find people when they are marginally engaged than when they are not engaged

The U.S. HIV Continuum 90:90:90 Goals

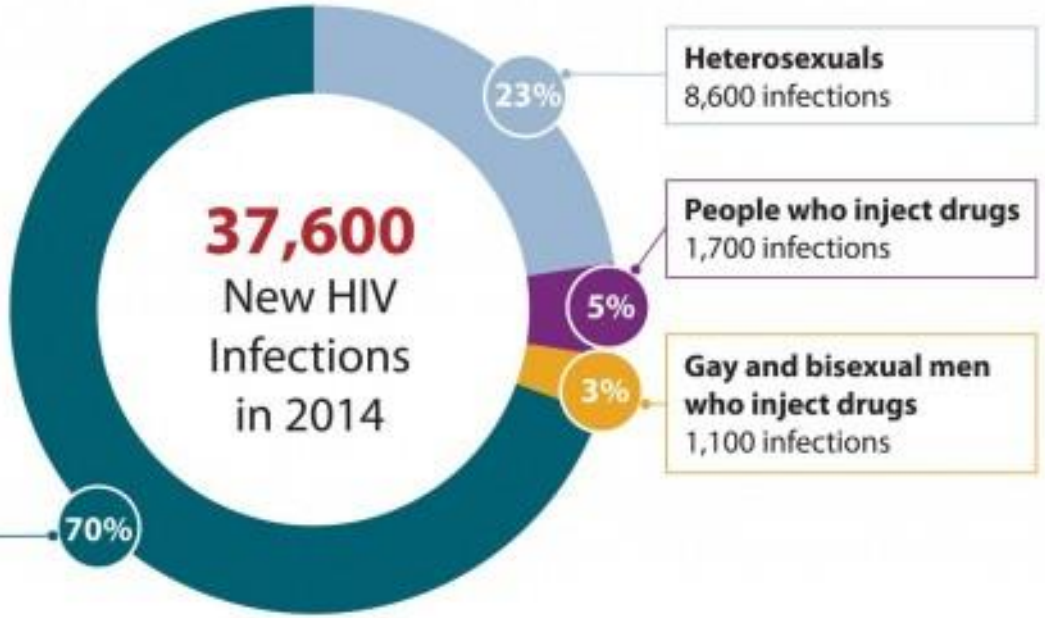


Estimated annual HIV infections in the U.S. declined 18%

Between 2008 - 2014 infections fell from 45,700 to 37,600

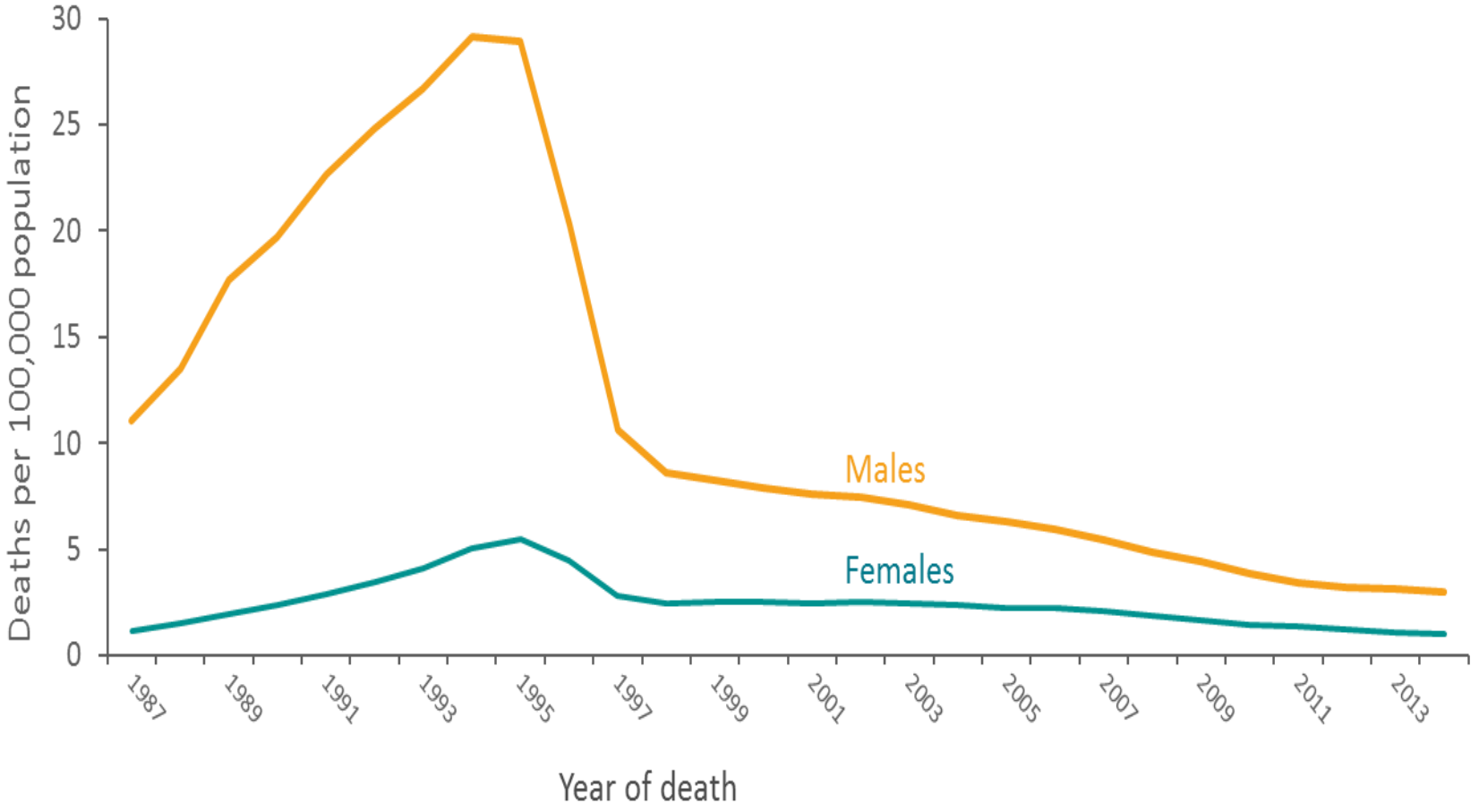
56% decline	36% decline	26% decline	18% decline
among **people who inject drugs**	among **heterosexuals**	among **gay and bisexual men aged 35-44 years**	among **gay and bisexual men aged 13-24 years**

Gay and bisexual men remain most affected



www.cdc.gov

Trends in annual Age-Adjusted* Rate of Death Due to HIV Infection by sex, United States, 1987-2014



Note. For comparison with data for 1999 and later years, data for 1987–1998 were modified to account for *ICD-10* rules instead of *ICD-9* rules.

*Standard: age distribution of 2000 US population

Keep up the great work!

Thank You

Questions?

Contact Email:
edward.m.gardner@dhha.org