

Project CONNECT: Evidence-Informed Linkage to HIV Care

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Knowledge that will change your world

Objectives

- Discuss the state of science around the HIV Continuum of Care (“treatment cascade”)
- Describe the crucial role of linkage to care (LTC) along the HIV Continuum
- Recount our experiences with LTC in a large, academic-based clinic
- Introduce Project CONNECT as an evidence-informed intervention for improving LTC
- Provide additional considerations for optimizing health outcomes along the HIV Care Continuum

ART: Improved HIV Outcomes

- Introduction of HAART
- Compelling benefits (prevention of disease progression, mortality, & transmission)
- Improvements in ART
 - Potency
 - Tolerability
 - Complexity
- Near normal life expectancies
- Drastic reduction in vertical transmissions

ART: Public Health Implications



HIV PREVENTION TRIALS NETWORK

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FOR IMMEDIATE RELEASE:

Thursday, 12 May 2011, 11 am EST

**Initiation of Antiretroviral Treatment
Protects Uninfected Sexual Partners from HIV Infection (HPTN Study 052)**

96% reduction in new HIV infections

ART: Public Health Implications

Antiretroviral Treatment of Adult HIV Infection 2010 Recommendations of the International AIDS Society–USA Panel

Melanie A. Thompson, MD

Judith A. Aberg, MD

Pedro Cahn, MD

Julio S. G. Montaner, MD

Giuliano Rizzardini, MD

Amalio Telenti, MD, PhD

José M. Gatell, MD, PhD

Huldrych F. Günthard, MD

Scott M. Hammer, MD

Martin S. Hirsch, MD

Donna M. Jacobsen, BS

Peter Reiss, MD, PhD

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Patrick Yeni, MD

Robert T. Schooley, MD

SUCCESSFUL ANTIRETROVIRAL therapy (ART) is associated with dramatic decreases in AIDS-defining conditions and their associated mortality. Expansion of treatment options and evolving knowledge require revision of guidelines for the ini-

Context Recent data regarding the consequences of untreated human immunodeficiency virus (HIV) infection and the expansion of treatment choices for antiretroviral-naïve and antiretroviral-experienced patients warrant an update of the International AIDS Society–USA guidelines for the use of antiretroviral therapy in adults with HIV infection.

Objectives To provide updated recommendations for management of HIV-infected adults, using antiretroviral drugs and laboratory monitoring tools available in the international, developed-world setting. This report provides guidelines for when to initiate antiretroviral therapy, selection of appropriate initial regimens, patient monitoring, when to change therapy, and what regimens to use when changing.

Data Sources and Study Selection A panel with expertise in HIV research and clinical care reviewed relevant data published or presented at selected scientific conferences since the last panel report through April 2010. Data were identified through a PubMed search, review of scientific conference abstracts, and requests to antiretroviral drug manufacturers for updated clinical trials and adverse event data.

Data Extraction and Synthesis New evidence was reviewed by the panel. Recommendations were drafted by section writing committees and reviewed and edited by the entire panel. The quality and strength of the evidence were rated and recommendations were made by full panel consensus.

Conclusions Patient readiness for treatment should be confirmed before initiation of antiretroviral treatment. Therapy is recommended for asymptomatic patients with a CD4 cell count $\leq 500/\mu\text{L}$, for all symptomatic patients, and those with specific conditions and comorbidities. Therapy should be considered for asymptomatic patients with CD4 cell count $>500/\mu\text{L}$. Components of the initial and subsequent regimens must be individualized, particularly in the context of concurrent conditions. Patients receiving antiretroviral treatment should be monitored regularly; treatment failure should be detected and managed early, with the goal of therapy, even in heavily pretreated patients, being HIV-1 RNA suppression below commercially available assay quantification limits.

JAMA. 2010;304(3):321-333

www.jama.com

Global Goals

THE TREATMENT TARGET



90%

diagnosed



90%

on treatment



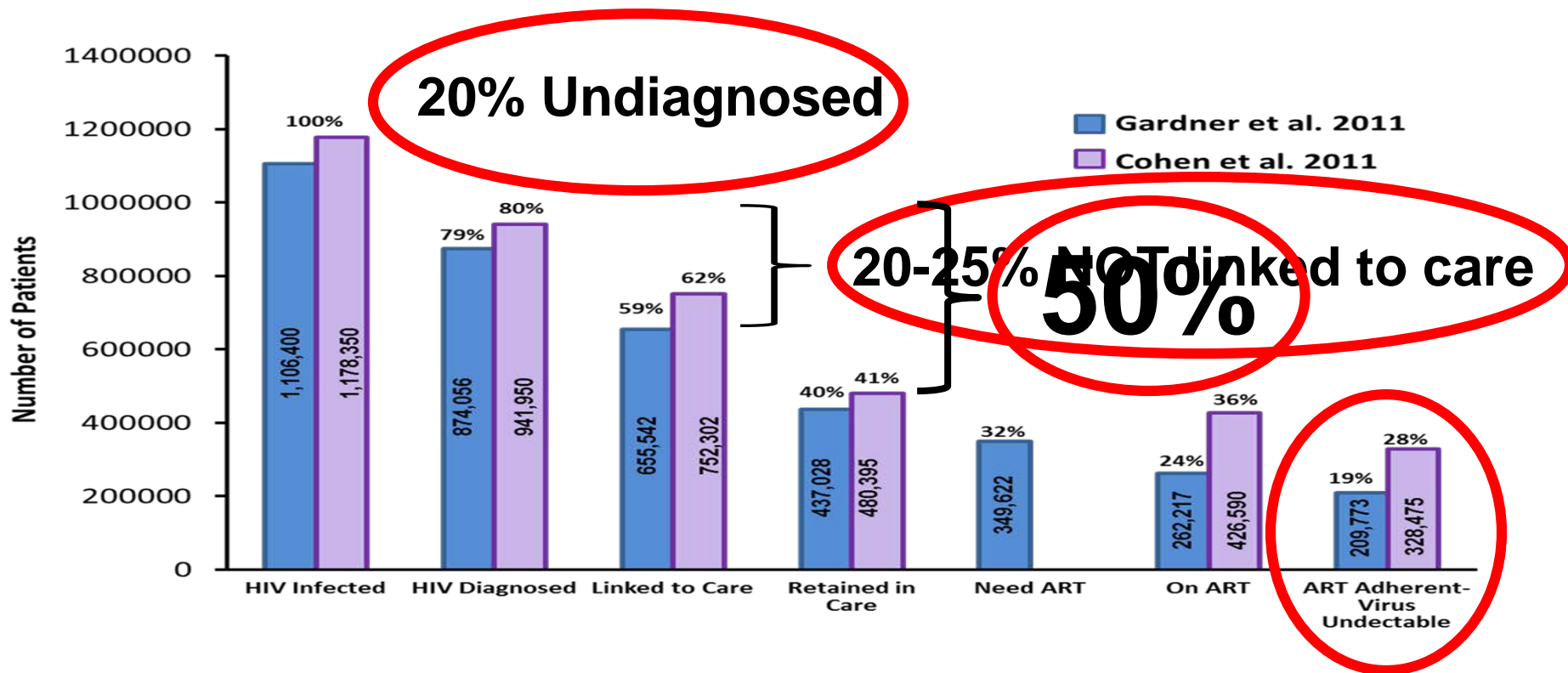
90%

virally suppressed



ART: Achilles' Heel?

- Patients must be linked to care.



HRSA Continuum of Care

Not in Care



Fully engaged

Unaware
of HIV
status

Aware of
HIV
status

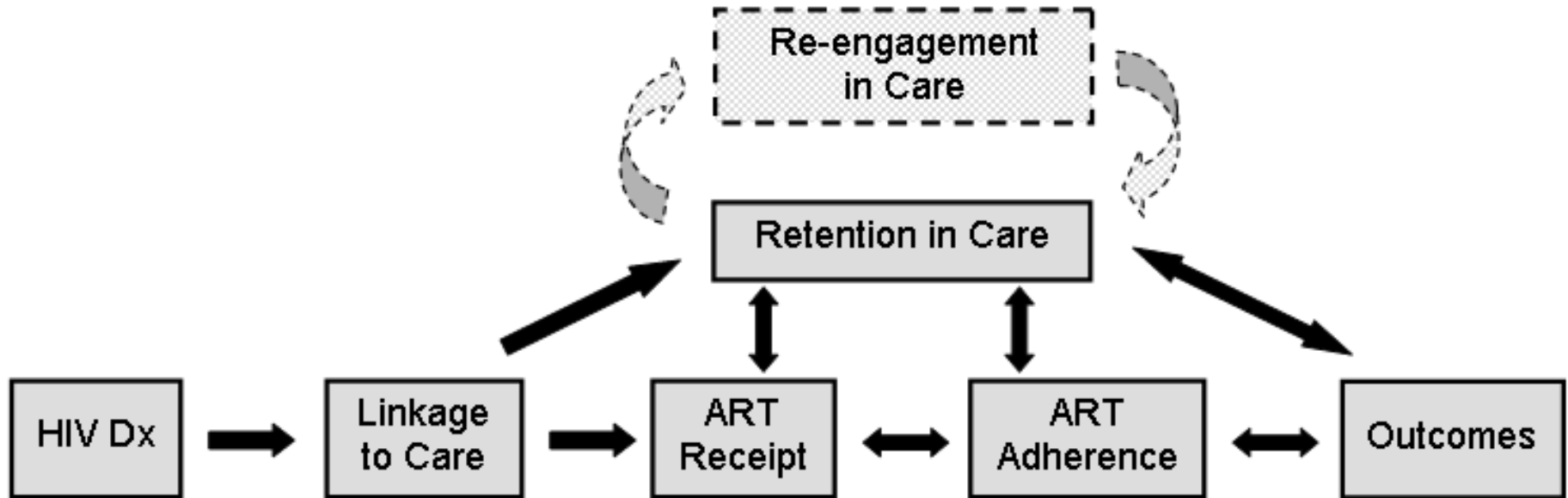
May be
receiving other
medical care
but not HIV
care

Entered HIV
medical care
but dropped
out

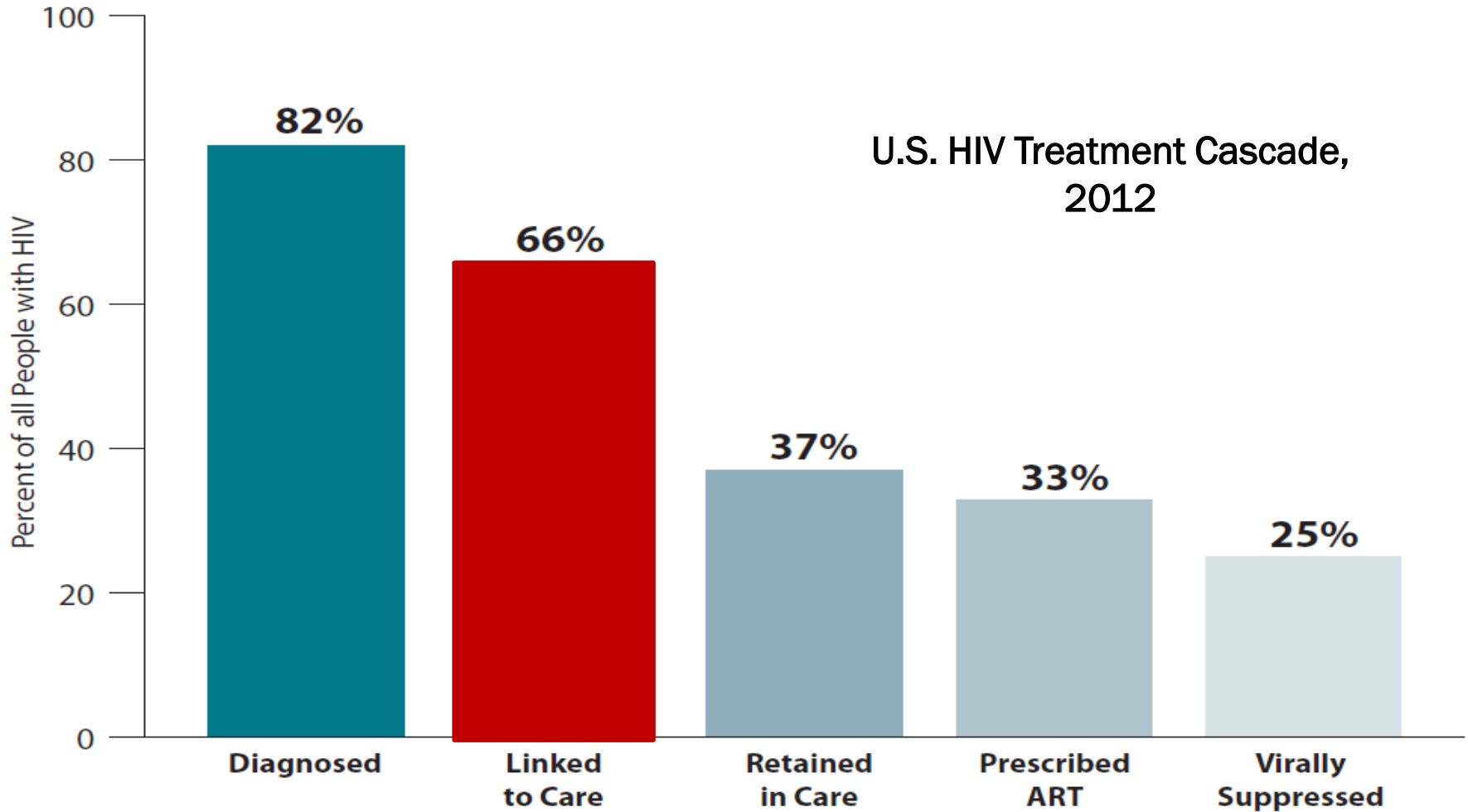
In and out
of HIV care
or
infrequent
user

Fully
engaged
in HIV
medical
care

Blueprint for HIV Tx Success



Defining Linkage to Care



Linkage to Care: UAB 1917 Clinic

- Problem identified: Scheduled new patient appointments often not attended (“no show”)
- Study of patients calling to establish HIV care at UAB 1917 Clinic, 2004-2006
- 31% of patients (160 of 522) failed to attend a clinic visit within 6 mos. of initial call

“No Show” Phenomenon

Characteristic	“Show” Group (n=362)	“No Show” Group (n=160)	OR (95%CI)
Age (years)	39.3 ± 9.6	37.1 ± 9.5	0.84 (0.68-1.04)
White male	125 (34.5)	32 (20.0)	1.0 (Reference)
Minority male	154 (42.5)	76 (47.5)	1.75 (1.05-2.91)
White female	31 (8.6)	20 (12.5)	2.72 (1.30-5.68)
Minority female	52 (14.4)	32 (20.0)	2.39 (1.27-4.52)
Private insurance	127 (35.1)	26 (16.2)	1.0 (Reference)
Public insurance	77 (21.3)	34 (21.3)	1.91 (1.03-3.54)
Uninsured	158 (43.6)	100 (62.5)	2.62 (1.56-4.39)
Days from call to appointment	25.6 ± 13.8	30.2 ± 13.4	1.32 (1.14-1.53)

Data presented as mean ± SD or n (column %)

Age OR per 10 years, Days from call OR per 10 days

Project CONNECT

Client-
Oriented
New Patient
Navigation to
Encourage
Connection to
Treatment



Project CONNECT

- Program launched January 1, 2007
- New patients have orientation visit within 5 days of their initial call to the clinic
- Semi-structured interview, psychosocial questionnaire & baseline labs
- Uninsured patients meet with clinic SW
- Prophylactic antibiotics initiated more quickly
- Expedited referral for SA / MH services

Introduction

Phase I:

1. Scheduling within 5 days (± 12 days)
2. Demographics
 - a) Name
 - b) DOB
 - c) Age
 - d) Race
 - e) Insurance
 - f) SSN
 - g) Telephone number
 - h) Employer
 - i) Current HIV meds
 - j) Baseline income
 - k) Date of diagnosis
 - l) Translation
3. Rapport building
4. Reminder call day before

Phase II: The CONNECT Visit

	Questionnaire	Interview (time started/ended & interviewer)	Other
Standardize Measures/ Behavioral	•Depression/ SA/Anxiety/ Social Support, Stigma, HIV Risk, QOL, Barriers, IPV	* Health Literacy	*Domestic Violence (clinic would need a protocol)
Circumstances Oriented/ Needs		Housing, Voc Rehab , skills, education, previous/ current employment, income, disability, social support, disclosure, basic HIV education , read/write assessment, (non standardized) incarceration	Ryan White, barriers, contact info, ADAP forms, medical releases, Info on clinic policies/ procedures - Take home info (telephone #'s, directions, etc)
Medical/ Baseline	Adherence	Medical knowledge, drug history, other meds, CD4, VL, disease history	Labs

Phase III:

1. "Referral"
2. Rapport building
3. Tour
4. Follow-up/ through
5. Check Labs
6. Mtg at 1st appointment
7. Reminder call
8. Data Entry/ Record Keeping

Linkage

* Review & follow-up as appropriate

Phases & Core Elements

- **Phase I: Introduction**

- Core Element Ia. *Scheduling New Patient Orientation (NPO) appointment within five (5) days*
- Core Element Ib. *Building rapport*
- Core Element Ic. *Making reminder call(s)*

Phases & Core Elements

- **Phase II: The CONNECT Visit**

- Core Element IIa. *Completing biopsychosocial assessments*
- Core Element IIb. *Scheduling and confirming first Primary Care Provider (PCP) appointment*
- Core Element IIc. *Referring to ancillary support services*

Phases & Core Elements

- **Phase III: The First PCP Appointment**
 - Core Element IIIa. *Linkage Coordinator meets with patient at first PCP appointment*
 - Core Element IIIb. *Follow-up/Reassessment of patient's biopsychosocial status*

CONNECT: Program Evaluation

- Pre-Post Study Design
- Study Period
 - Data from Pre-CONNECT era was collected between
 - August 1, 2004 – July 31, 2006 (“No Show” Study)
 - Post-CONNECT data: clients who called to make an appointment between Jan 1 – Dec 31 2007
- Statistical Analyses
 - Multivariable logistic regression analysis

CONNECT: Program Evaluation

Characteristic	Pre-CONNECT (n=522)	Post-CONNECT (n=361)	Unadjusted p-value
Age	38.7 ± 9.7	39.6 ± 10.3	0.18
White male	157 (30.1)	131 (36.3)	0.25
Minority male	230 (44.1)	149 (41.3)	
White female	51 (9.8)	28 (7.8)	
Minority female	84 (16.1)	53 (14.7)	
Private Insurance	153 (29.3)	105 (29.1)	
Public Insurance	111 (21.3)	121 (33.5)	
Uninsured	258 (49.4)	135 (37.4)	
Days from call to appointment	27.0 ± 13.8	25.6 ± 10.1	0.08

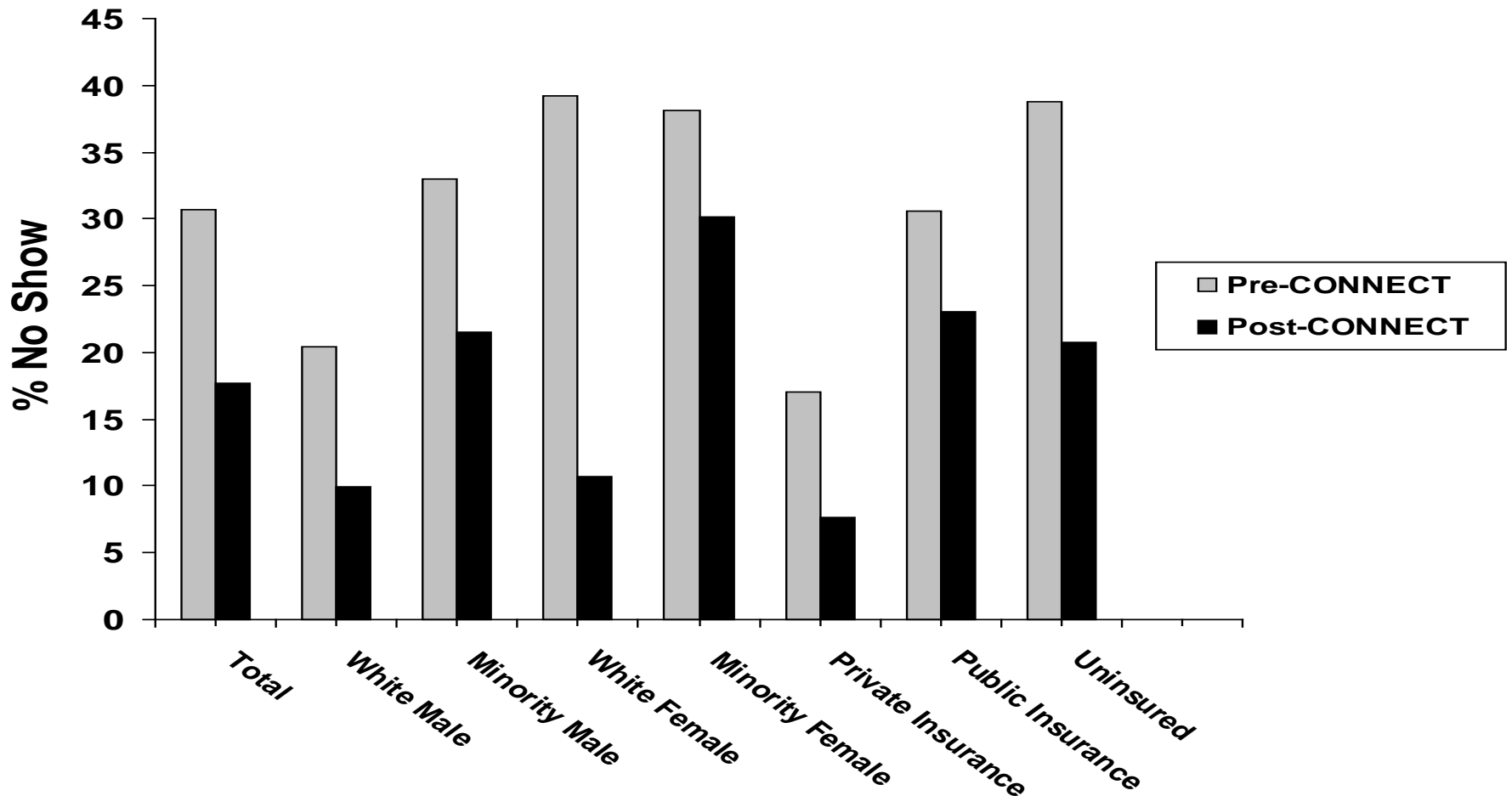
Data presented as mean ± SD or n (column %)

CONNECT: Program Evaluation

Time Period	“No Show”	Unadjusted OR (95%CI)	Adjusted OR (95%CI) ^a
Pre-CONNECT (n=522)	30.7%	1.0	1.0
Post-CONNECT (n=361)	17.7%	0.48 (0.35-0.68)	0.54 (0.38-0.76)

^a Multivariable model controls for age, race, sex, insurance, location of residence and time from call to scheduled visit.

CONNECT: Program Evaluation



Note: Percentages above the bars in each category represents delta between the Pre and Post-CONNECT groups.

* $p < 0.01$, ** $p < 0.05$

CONNECT: Staff Survey

- What was liked most about Project CONNECT?
 - *“Improved quality of care”*
 - *“Patients feel more welcome and at-ease”*
 - *“A decreased no show rate”*
- What was liked least?
 - *“Patients receiving too much data prior to their first visit” and “feel overwhelmed”*
 - *“Concern over the increased patient load and the resulting stress on the staff”*
 - *“Nothing is wrong” with the program*

CONNECT: Staff Survey

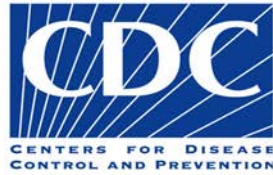
- Other Feedback?
 - Overwhelming support
 - *“Increased team-approach to care”*
 - *“I think it has been extremely successful and helpful”*
 - *“This is one of the most effective / important new additions to the 1917 Clinic in a decade”*
 - Criticisms
 - *“Negative impact on staff time and increased staff exhaustion”*
 - *“I think project Connect is a great program that has had successes in achieving quicker visits and improved adherence to care, but has opened many Pandora’s boxes regarding staff time, pt’s emotions, and continued adherence to care”*

After CONNECT:

What does the future hold?



After CONNECT:



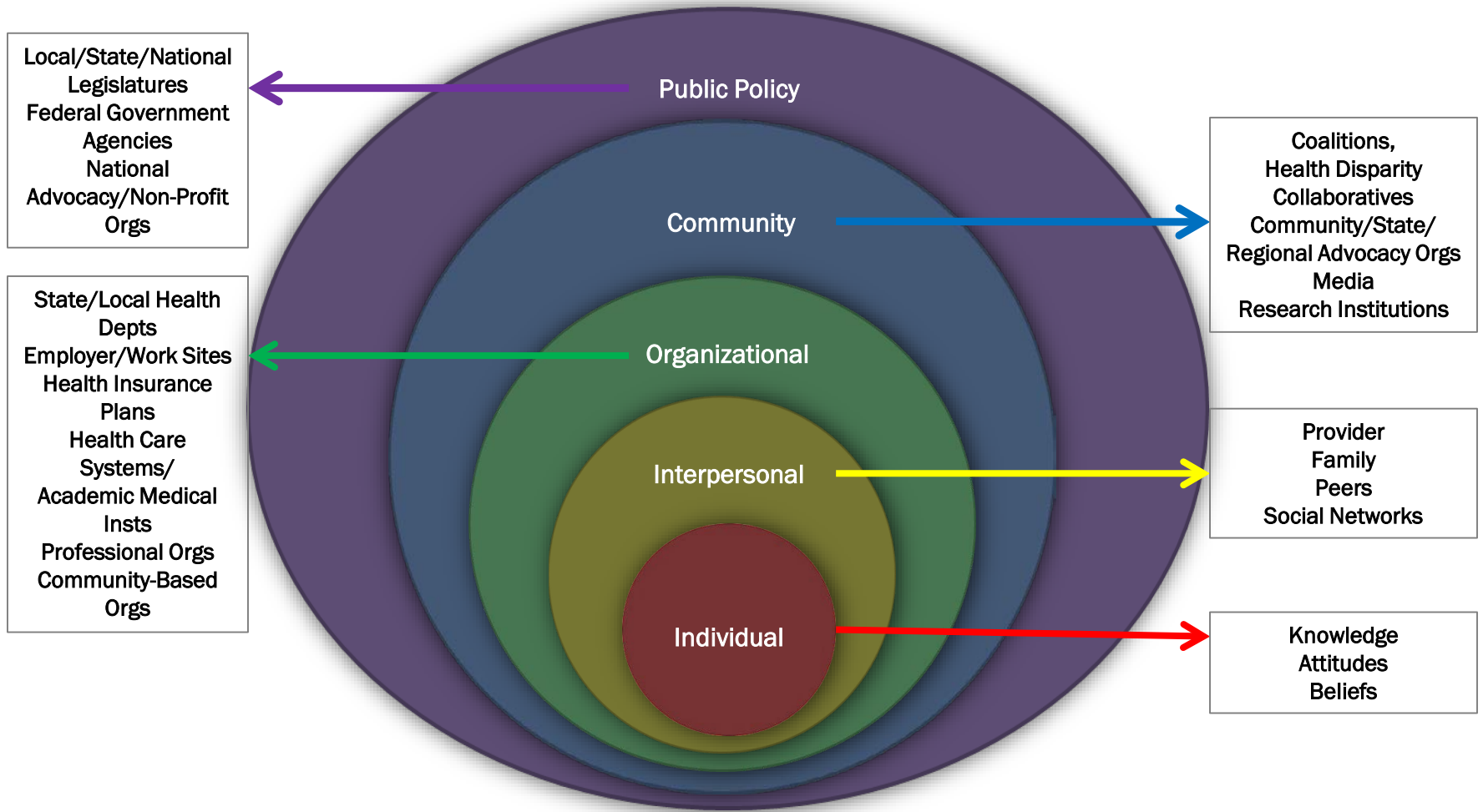
COMPENDIUM OF EVIDENCE-BASED INTERVENTIONS AND BEST PRACTICES FOR HIV PREVENTION

PROJECT CONNECT (CLIENT-ORIENTED NEW PATIENT NAVIGATION TO ENCOURAGE CONNECTION TO TREATMENT)

Evidence-Informed for Linkage to HIV Care

- Added as Evidence-Informed Intervention (2014)
 - Study conducted in U.S.
 - Pre- and Post-Design, No comparison group
 - Analysis based on 2-sided test with a p value of $<.05$
 - Significant positive effects
 - No significant negative effects
 - Promising strategy

Socioecological Perspective



NATIONAL HIV/AIDS STRATEGY FOR THE UNITED STATES

JULY 2010

Our country is at a crossroads. Right now, we are experiencing a domestic epidemic that demands a renewed commitment, increased public attention, and leadership. Early in my Administration, I tasked the Office of National AIDS Policy with developing a *National HIV/AIDS Strategy* with three primary goals: 1) reducing the number of people who become infected with HIV; 2) increasing access to care and improving health outcomes for people living with HIV; and, 3) reducing HIV-related health disparities.

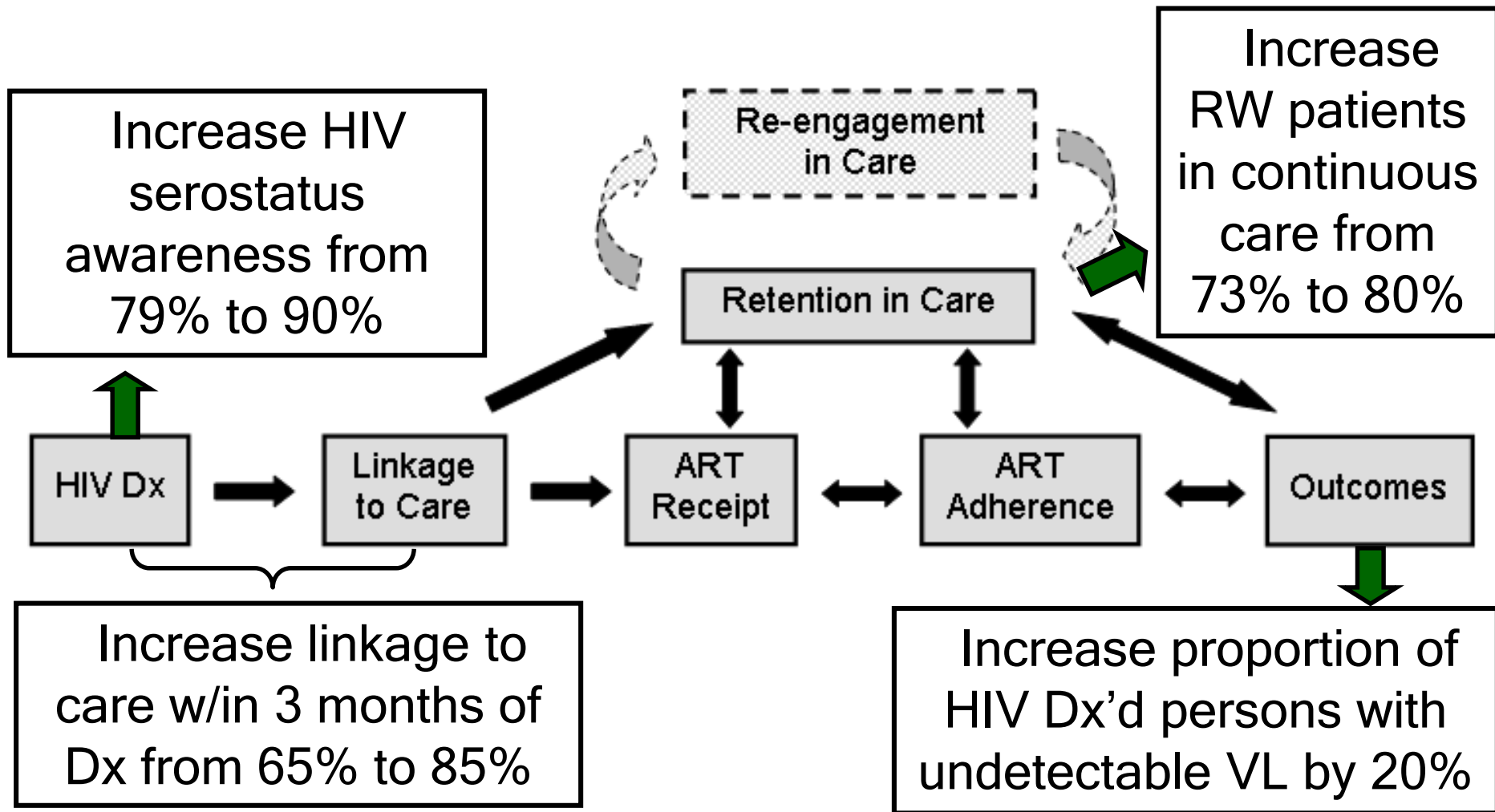


Jeff Crowley, MPH
Past Director, ONAP
White House

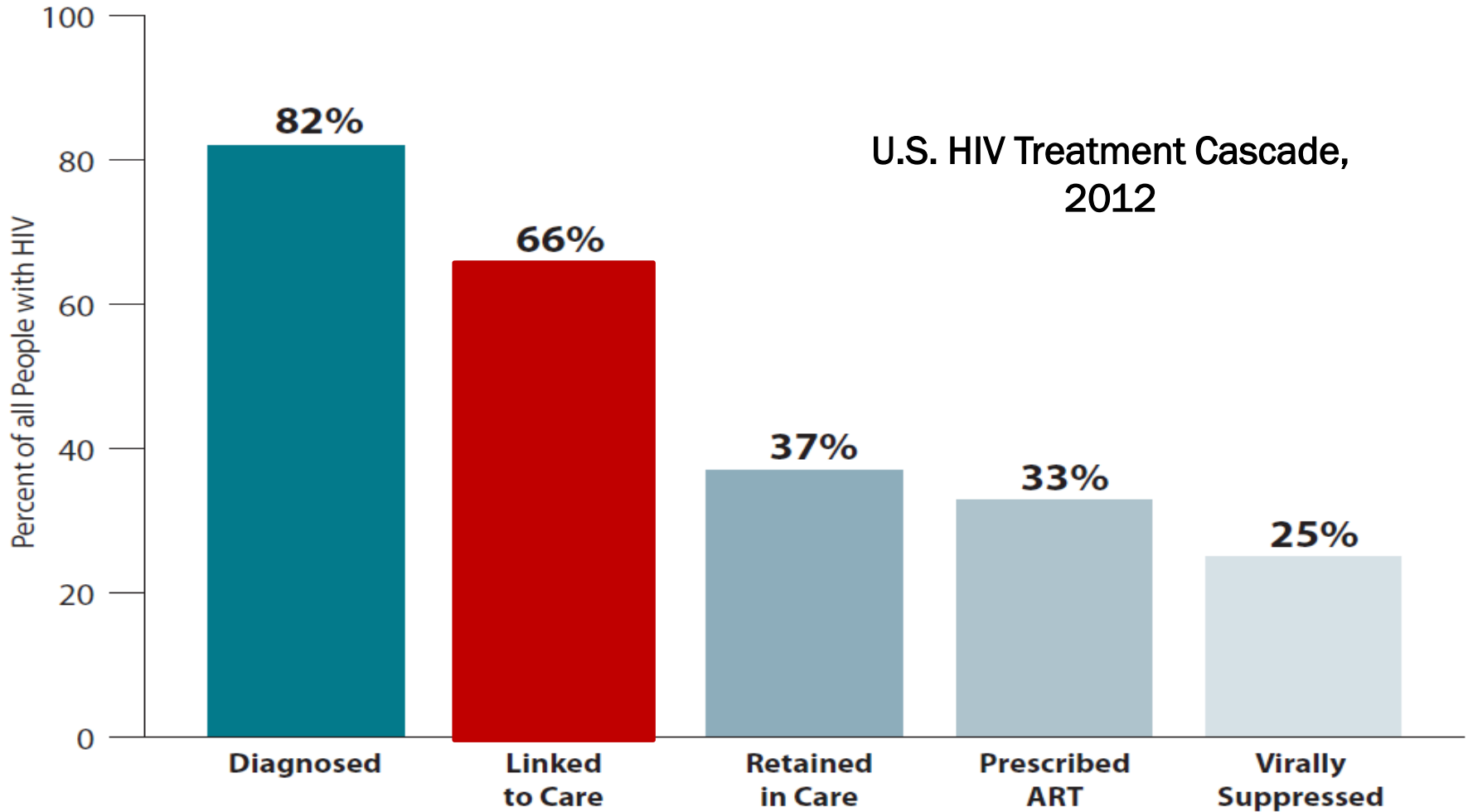
A handwritten signature in black ink, which appears to be the signature of Barack Obama.



Blueprint for HIV Tx Success



LTC is just one opportunity...



Conclusions

- Effective & efficient linkage to care (LTC) for PLWH is necessary to achieve ART adherence & viral suppression (UNAIDS' 90-90-90 goal).
- Project CONNECT is one evidence-informed intervention (EI) to improve LTC.
- When implemented with fidelity to its core elements, Project CONNECT may also provide the foundation for a supportive relationship between PLWH & their medical home that spans the HIV Care Continuum.

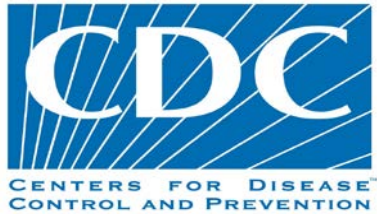
Questions?

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Or visit:



<https://www.cdc.gov/hiv/research/interventionresearch/compendium/lrc/index.html>

Acknowledgements

Dr. Michael Mugavero

Emma Kay

Kathy Gaddis

Ashley Bartee

Tiffany Hall

Rachel Hanle

Rashundra Hopkins

UAB 1917 Clinic Project CONNECT Team

Patients of the UAB 1917 Clinic

