

Retention in HIV Care and Treatment Adherence

ACTHIV 2013

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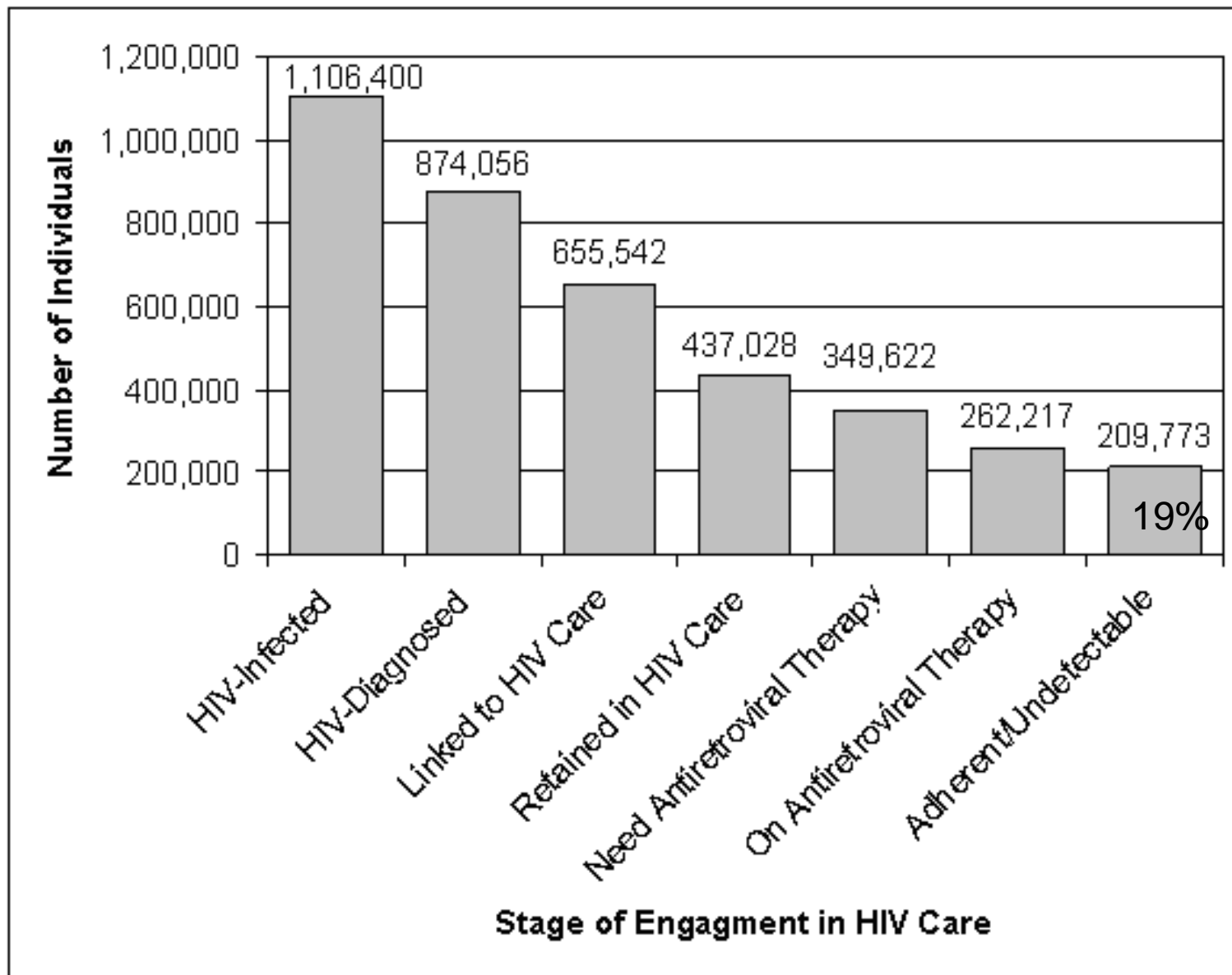
Disclosure

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

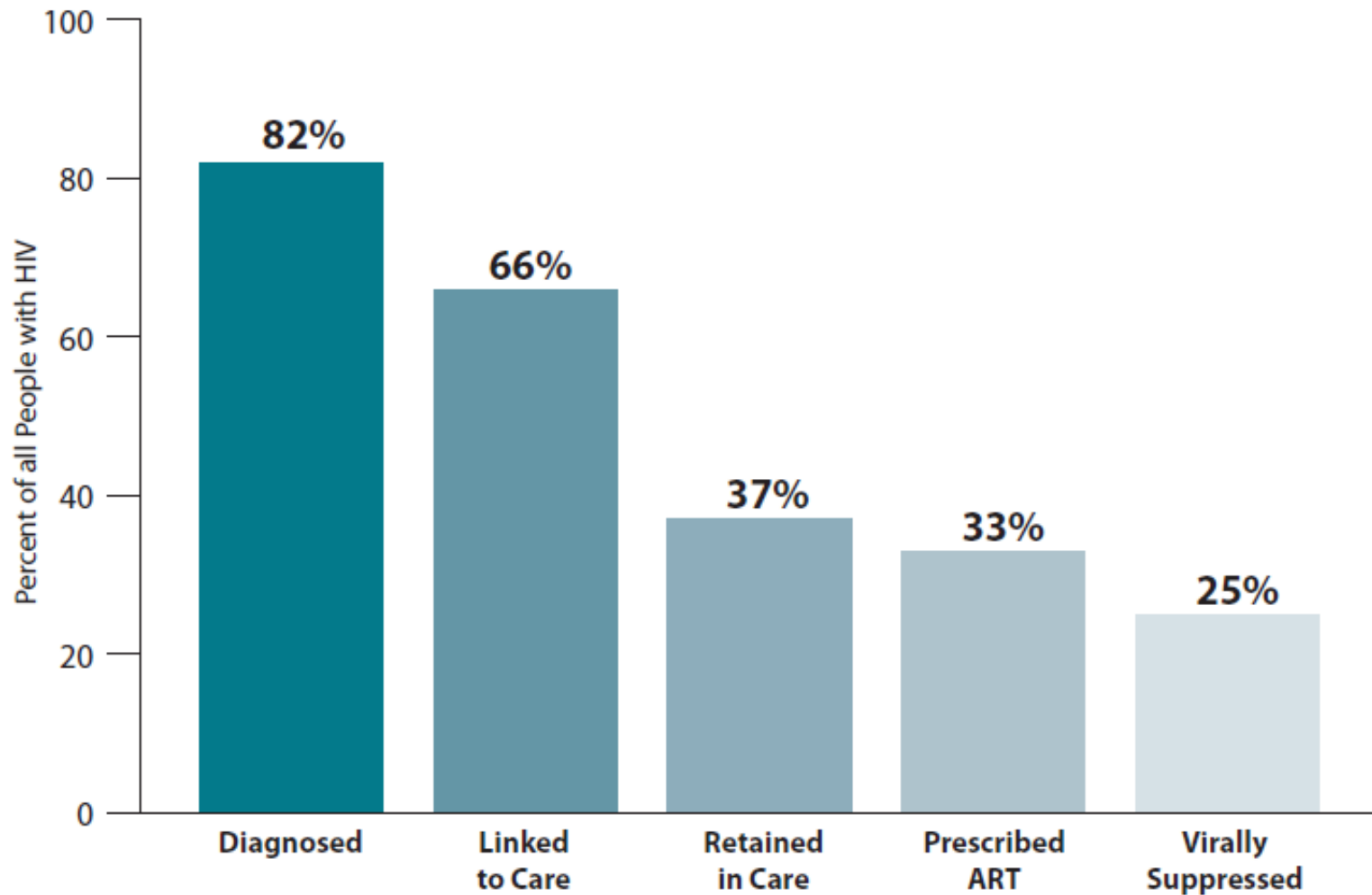
Learning Objectives

- As a result of participating in this activity, learners should be able to
 - Understand and implement strategies to improve engagement in HIV Care
 - Understand and implement strategies to improve adherence to antiretroviral therapy
- Mindset for the talk
 - Improving engagement in HIV care benefits:
 - The individual
 - The population

The Spectrum of Engagement in HIV Care in the United States



OVERALL: Of the 1.1 million Americans living with HIV, only 25 percent are virally suppressed.



U.S. Department of Health and Human Services

Centers for Disease Control and Prevention

JULY 2012

Excellent engagement in HIV Care is associated with which of the following?

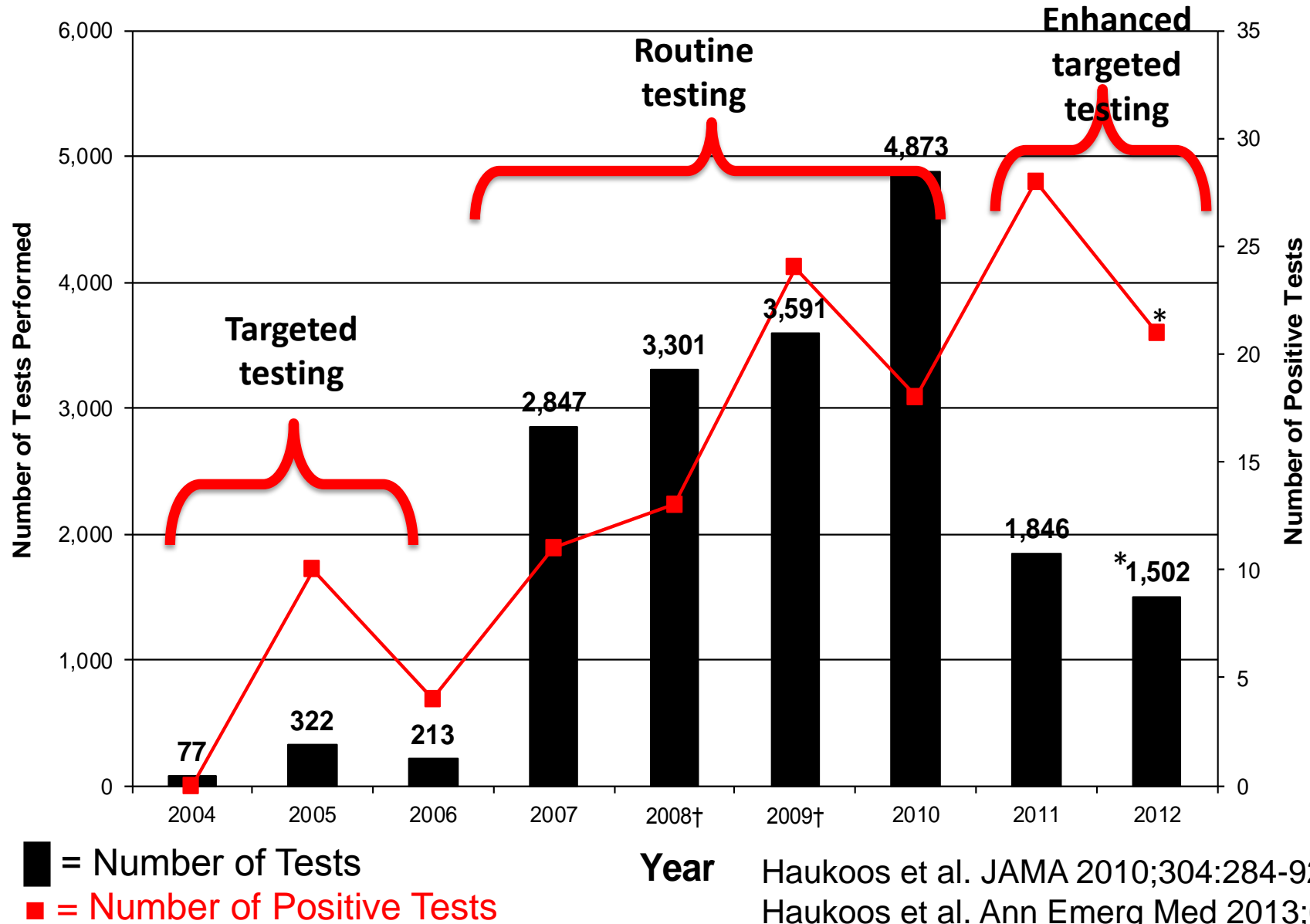
- A. Decreased mortality
- B. Better rates of HIV viral suppression
- C. Better adherence to antiretroviral therapy
- D. Better CD4 response to therapy
- E. All of the Above

HIV Diagnosis

How do we increase HIV diagnosis?

- CDC Guidelines 2006
(<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5514a1.htm>)
- USPSTF Draft Recommendation Statement
(<http://www.uspreventiveservicestaskforce.org/uspstf13/hiv/hivdraftrec.htm>)
- Normalizing HIV testing
 - DECREASING HIV STIGMA
- Home HIV testing

Evaluation of Rapid HIV Testing in Unscheduled Ambulatory Settings: Denver Health 2004 - 2012

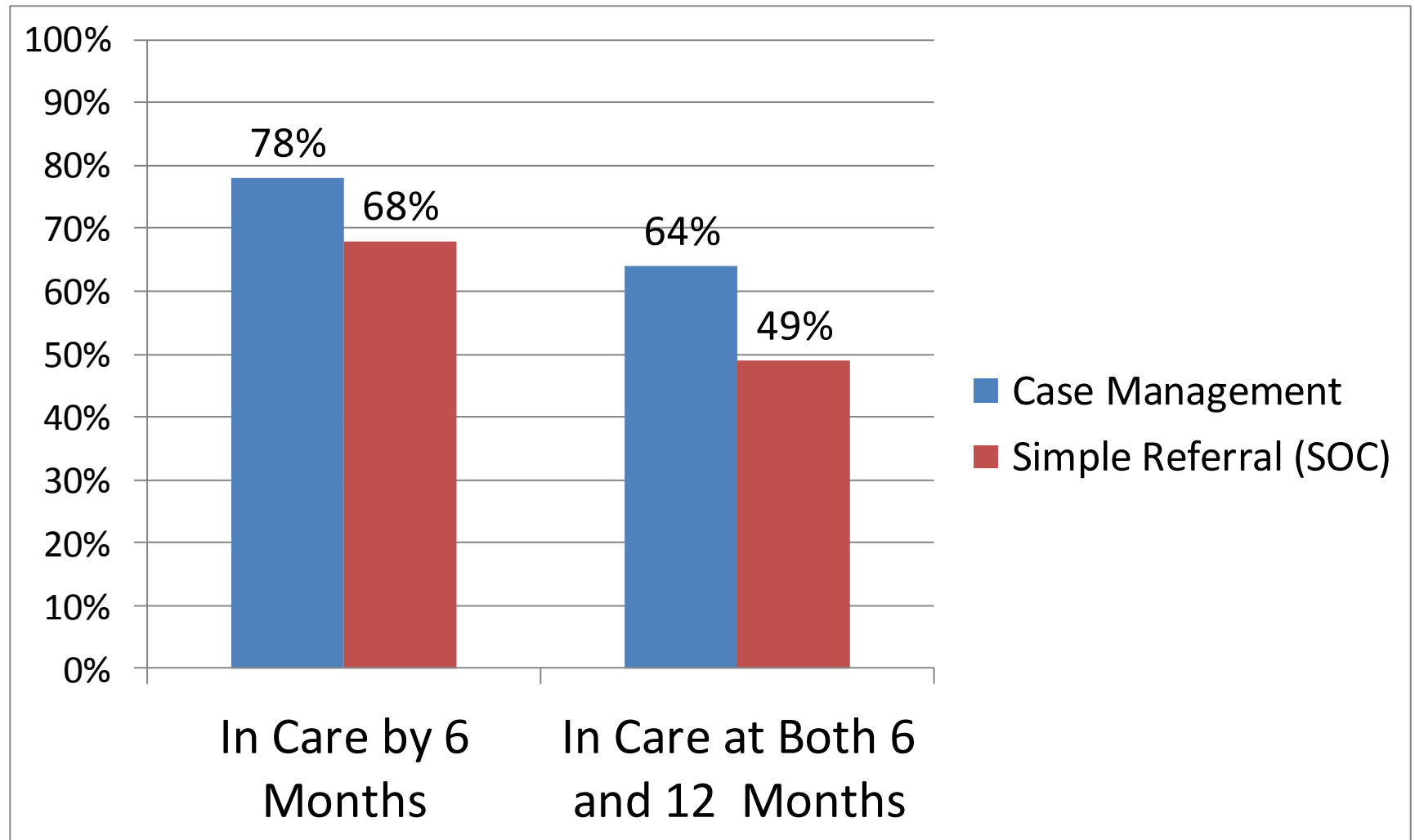


Linkage to HIV Care

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

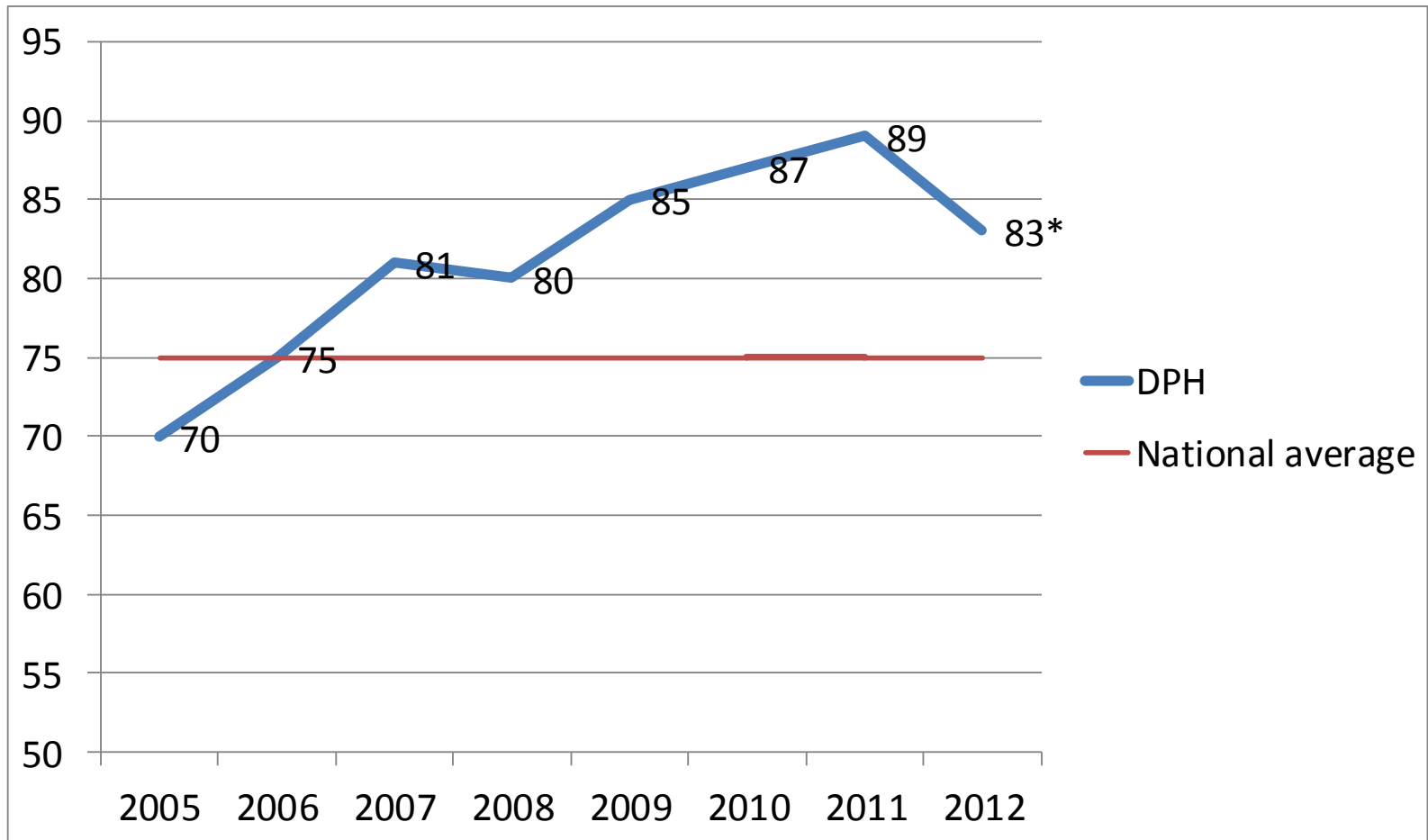
- Recently HIV-Diagnosed Individuals
- Randomized to
 - Standard of Care = passive referral to HIV Care
 - Received information about HIV and local resources
 - Strengths Based Case Management
 - Up to five case manager contacts over 90 days
 - Relationship building
 - Identifying client resources, needs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

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



Use of Case Managers to Actively Link Persons with HIV to HIV Care, Denver Health:

Percentage of persons identified with new HIV infection linked into care within 6 months



*Note that data from 2012 remain preliminary.

Retention in HIV Care

Intensive Outreach Improves Retention in HIV Care

- Observational demonstration project (Special Projects of National Significance, SPNS)
- Underserved recently diagnosed individuals
 - women, youth, substance abuse, mental illness
- Intensive outreach defined as
 - HIV education and support
 - Addressing stigma
 - Helping individuals access resources
 - Addressing structural barriers to care

Intensive Outreach Improves Retention in HIV Care

- 104 participants had an average of 19 contacts over 12 months, 15 minutes per contact
- Results:
 - 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
 - 50% reduction in unmet support service need

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

Who originally sang the song “I was country, when country wasn’t cool”?

- A. PSY
- B. Justin Roberts
- C. Tool
- D. Barbara Mandrell
- E. Barry Manilow
- F. Tanya Tucker

Retention “Messaging” Improves Retention

- 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.”

Table 2. Adjusted Percentage of Patients Keeping Next 2 Primary Care Visits During Preintervention and Intervention Periods, 2008 - 2010

Variable	Patients Keeping Next 2 Visits, % (No.)		% Relative Improvement ^a	<i>P</i>
	Preintervention Year (2008–2009)	Intervention Year (2009–2010)		
Overall (no adjustment)	52.7 (8535)	58.2 (9227)	10.4	<.0001
Overall (adjusted)	49.3 (8535)	52.7 (9227)	7.0	<.0001

Table 3. Adjusted Mean Proportion of All Primary Care Visits Among Patients During Preintervention and Intervention Periods, 2008 - 2010

Variable	Visits Kept, Mean Proportion (No.)		Relative Improvement, % ^a	<i>P</i>
	Preintervention Year (2008–2009)	Intervention Year (2009–2010)		
Overall (no adjustment)	0.700 (9407)	0.724 (10 344)	3.4	<.0001
Overall (adjusted)	0.679 (9407)	0.699 (10 344)	3.0	<.0001

Other Reasonable Retention Strategies

- Substance abuse counseling and treatment services
- Mental Health diagnosis and care
- Housing for homeless individuals
- Address competing needs
- Improve the system of health care delivery

Which of the following strategies has been shown to improve retention in HIV Care?

- A. Patient navigation
- B. Clinic-wide retention messaging
- C. Enhanced HIV screening
- D. Intensive outreach
- E. A, B, and D are correct

Adherence to Antiretroviral Therapy

Pill Boxes Improve Adherence

- Observational cohort, n = 245
- Adherence by unannounced pill count
- **Table 3. Marginal structural model estimates of the effect of pillbox organizer use on adherence and viral load.**

Method	Difference in adherence, ^a % (95% CI)	Reduction in viral load, mean log ₁₀ ^b copies/mL (95% CI)	Viral load <400 copies/mL, OR ^b (95% CI)
G-computation	4.5 (2.0–7.0)	0.34 (0.08–0.60)	1.81 (1.25–2.62)
IPTW	4.1 (0.0–8.3)	0.37 (0.05–0.69)	1.91 (1.27–2.90)
Double robust	4.1 (1.1–7.1)	0.36 (0.09–0.63)	1.91 (1.27–2.90)

Managed Problem Solving (MAPS)

- 5-step process
 - Identifying adherence barriers
 - Brainstorming solutions
 - Selecting the best option
 - Monitoring implementation
 - Monitoring adherence
- Assessing substance use, alcohol, depression, HIV knowledge, and religious beliefs
- 4 face-to-face encounters over 3 months
- Weekly calls the first 3 months
- Monthly calls the next 9 months

Figure 2a. Longitudinal Distribution of Adherence Categories (Intent to Treat)

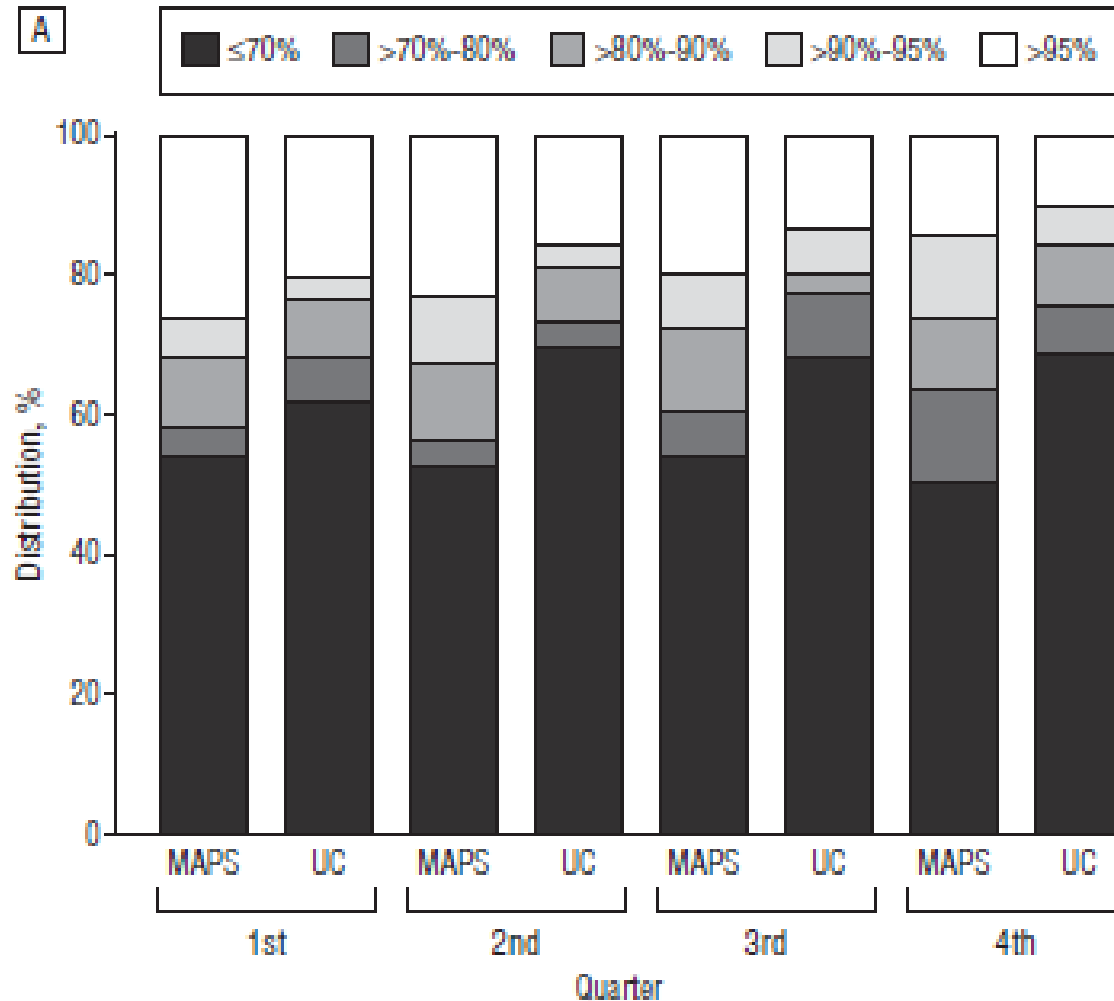
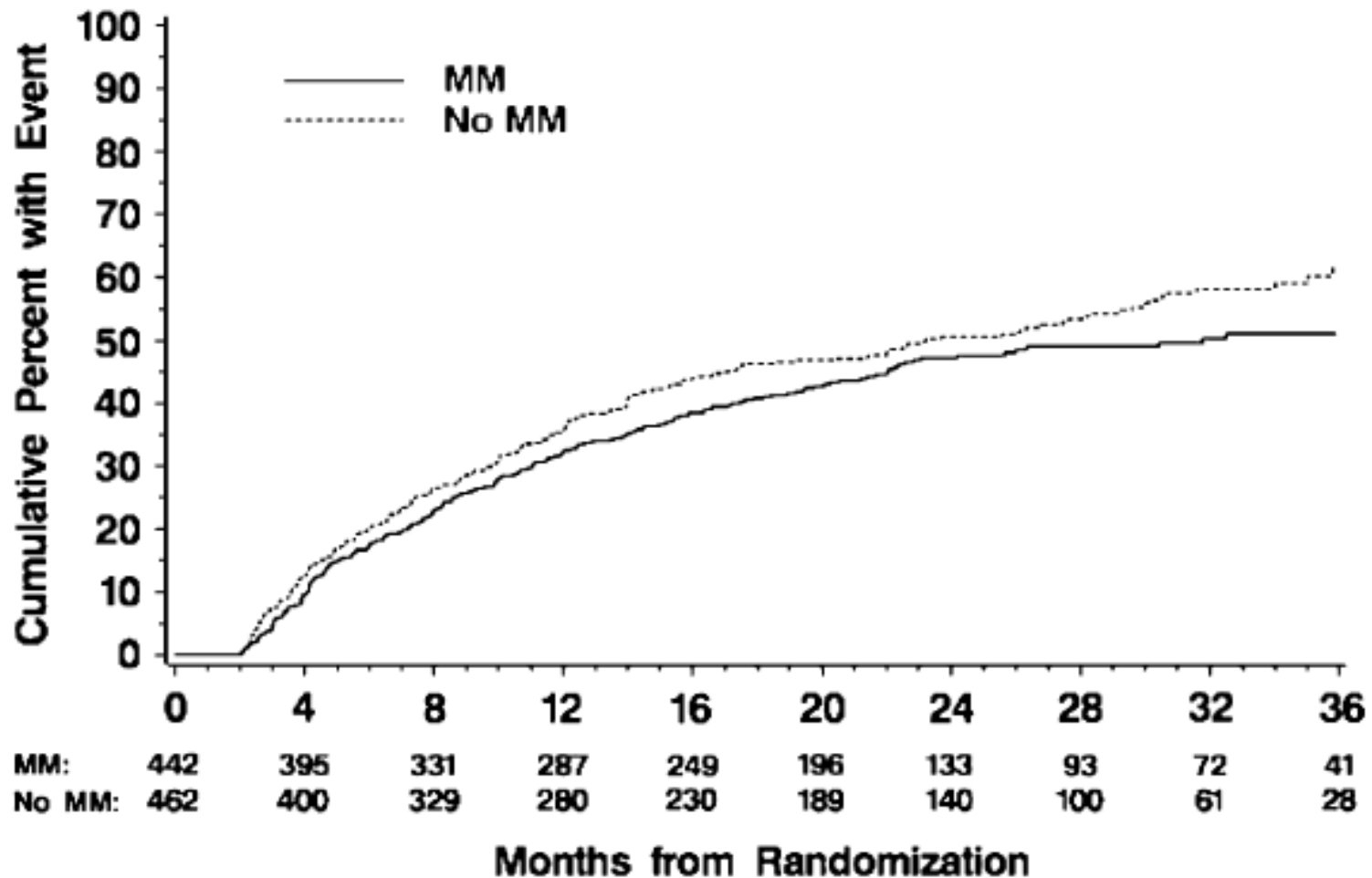


Figure 1a. CPCRA 062: Medical Manager (MM) effect on virologic failure over time (13% reduction, $p = 0.013$)



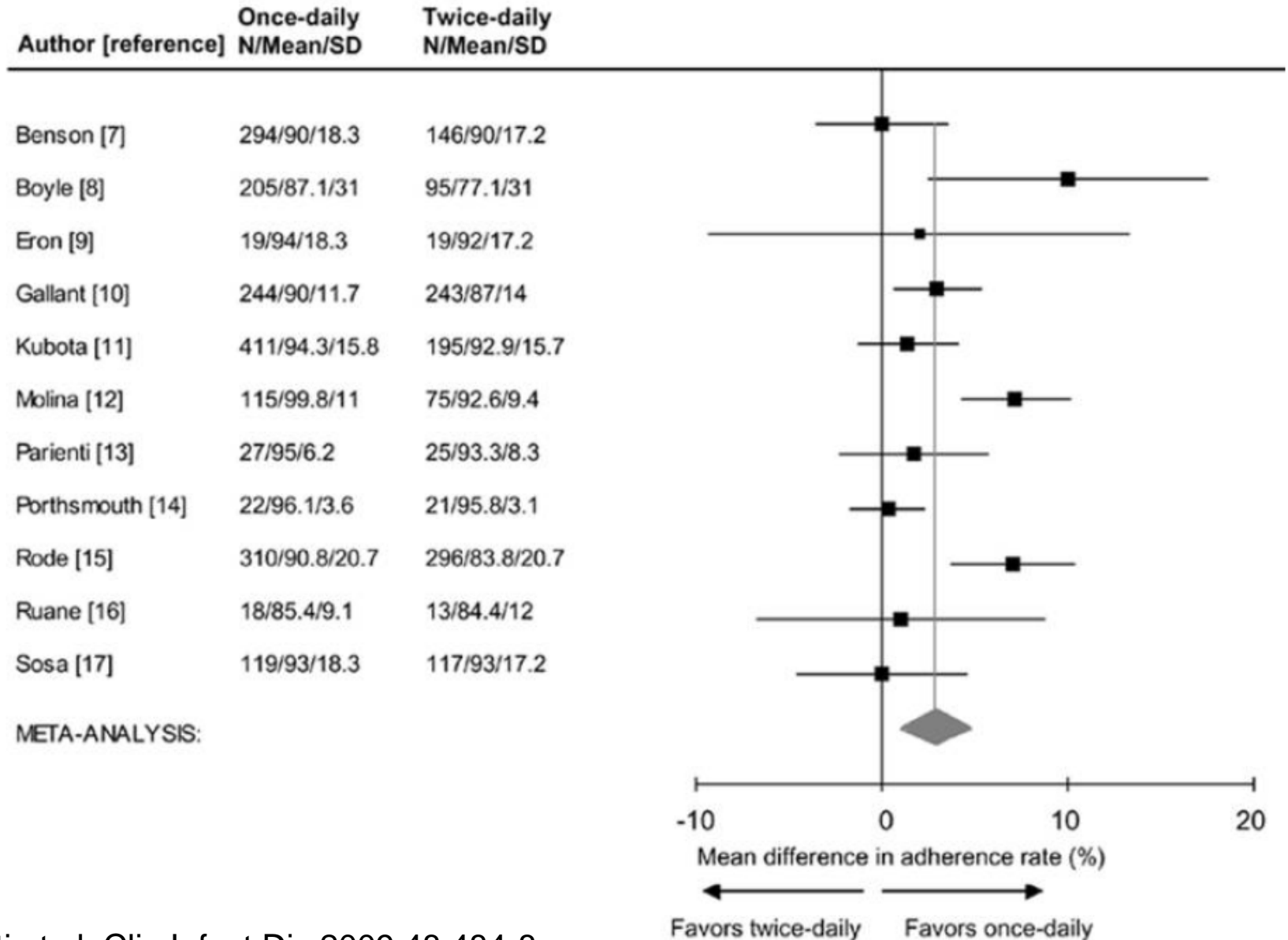
Text Messaging Improves Adherence

- Kenya, 538 patients
- Previously naïve to ART
- Randomized to Usual Care versus weekly text messages “Mambo?”
 - If not doing well or if no answer, phone contact was attempted by study personnel
- Intervention duration one year
- Adherence measure by self-report

Table 2. Primary Outcomes for the WeTel Kenya1 SMS Text Adherence Intervention Trial

Primary outcome	SMS group (number [%])	Control group (number [%])	RR (95% CI)*	p value
Intention-to-treat analysis†				
Self-reported adherence (>95%)	168 (62%)	132 (50%)	0.81 (0.69–0.94)	0.006
Viral suppression (<400 copies per mL)	156 (57%)	128 (48%)	0.85 (0.72–0.99)	0.04
Complete-case analysis‡				
Self-reported adherence§	168 (91%)	132 (91%)	1.00 (0.94–1.07)	0.94
Viral suppression¶	156 (75%)	128 (66%)	0.88 (0.77–1.00)	0.047

Adherence is Better with Once Daily Dosing



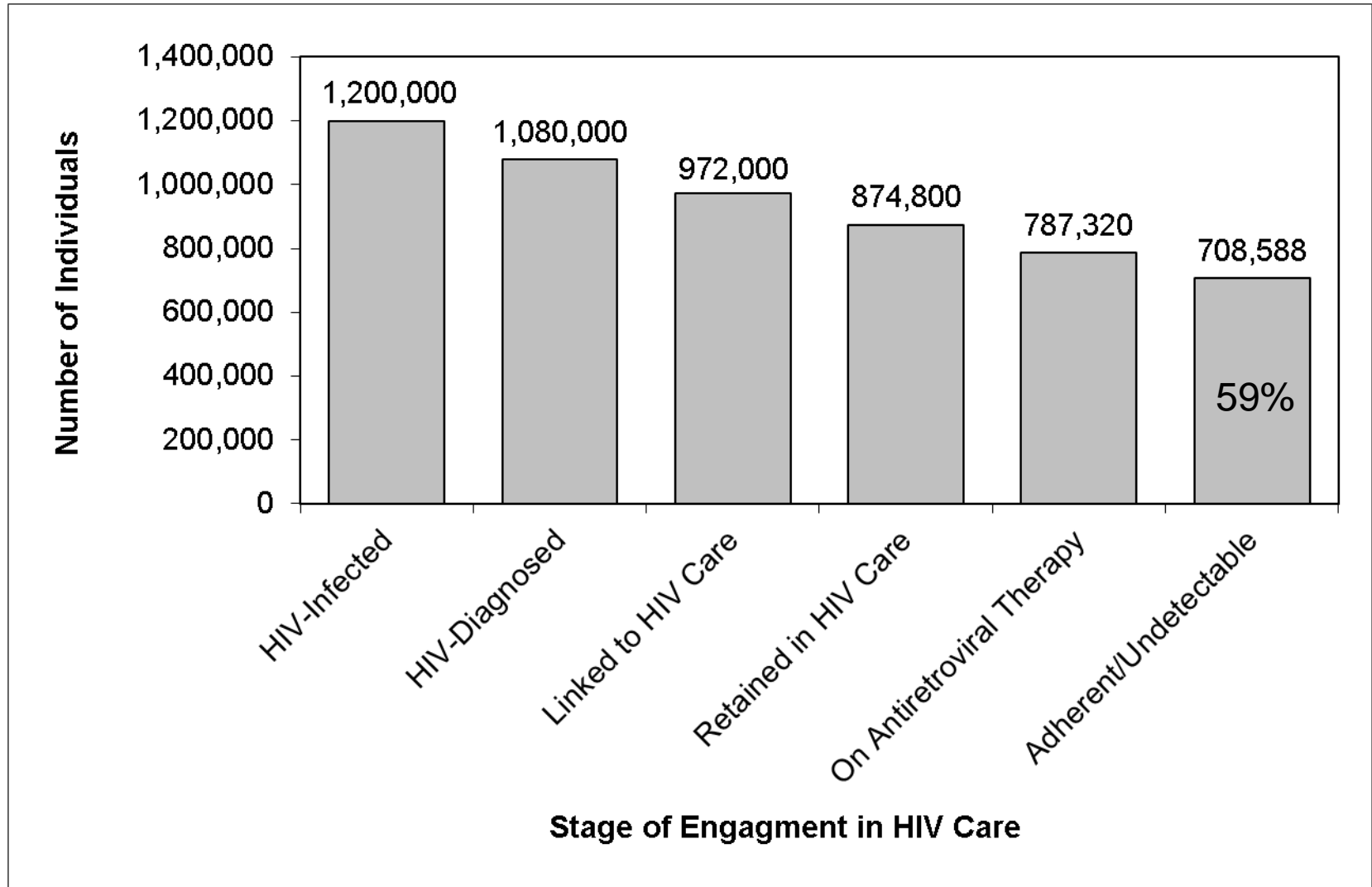
Which of the following strategies has been shown to improve adherence to antiretroviral therapy?

- A. Utilizing once daily regimens
- B. Pill boxes
- C. Text messaging
- D. Managed problem solving
- E. All of the above

Conclusions

- Engagement in HIV care is critical for individual and population level HIV outcomes
- HIV diagnosis requires HIV testing
- Strengths based case management improves linkage to care
- Outreach, navigation, and messaging improve retention in HIV care
- Intensive counseling, pill boxes, and messaging improve adherence to ART

Can We Get Here? Or better?



Thank You

Questions?