

# Clinical Characteristics of HIV Patients in Care in LAC: Findings from the Medical Monitoring Project



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MAC Meeting  
November 13, 2015





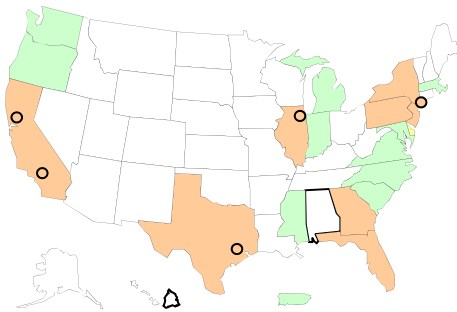
## The Medical Monitoring Project (MMP)

- **MMP is a supplemental surveillance project designed to produce nationally representative data on people living with HIV/AIDS in the United States**
  - Interview and medical record abstraction
  - Includes patients with a care visit Jan-April
- **Collaborative effort with:**
  - State and local health departments
  - CDC (Centers for Disease Control and Prevention)
  - NIH (The National Institutes of Health)
  - HRSA (Health Resources and Services Administration)



## Changes as of 2015

- MMP now employs a two-stage sampling design (was 3-stage design: project areas, facilities, patients)
- Starting in '15, patients sampled from HIV Surveillance



23 Project Areas



>10,000 Patients

- Sample will be representative of all persons diagnosed with HIV and will include persons who are **out-of-care** or not in regular care
- Facilities no longer have to prepare patient lists annually
- MMP staff still work with providers to recruit patients



## Data Collected

### Interview

- Demographics
- Access to Health Care
- HIV testing experiences/care
- Treatment and Adherence
- Health Conditions
- Sexual Behavior
- Drug Use Behavior
- Access to Prevention Services
- Met and Unmet Needs
- Social Support

### Medical Record Abstraction

- Demographics
- Insurance Status
- Opportunistic Illnesses
- Antiretroviral Therapy
- Laboratory Data (e.g. CD4, VL)
- Vaccinations
- Substance Abuse
- Mental Health
- Pregnancy
- Referrals



## Uses of MMP Data

### Local

- Ryan White vs non Ryan White provider comparisons
- Epi profiles
- Evaluation of local prevention programs
- Evaluation of resource needs for treatment and care, unmet need
- Information on access to care and prevention services

### National

- Healthy People 2020
- Documentation of impact of Ryan White CARE Act-supported care
- Treatment Guidelines
  - Evaluation of compliance
  - Revisions



## **Some Questions MMP Data Can Help to Answer**

- **Are patients receiving care and treatment in accordance with USPHS guidelines?**
- **What are the barriers to receiving care and services?**
- **What behaviors are persons who are HIV-infected engaging in?**

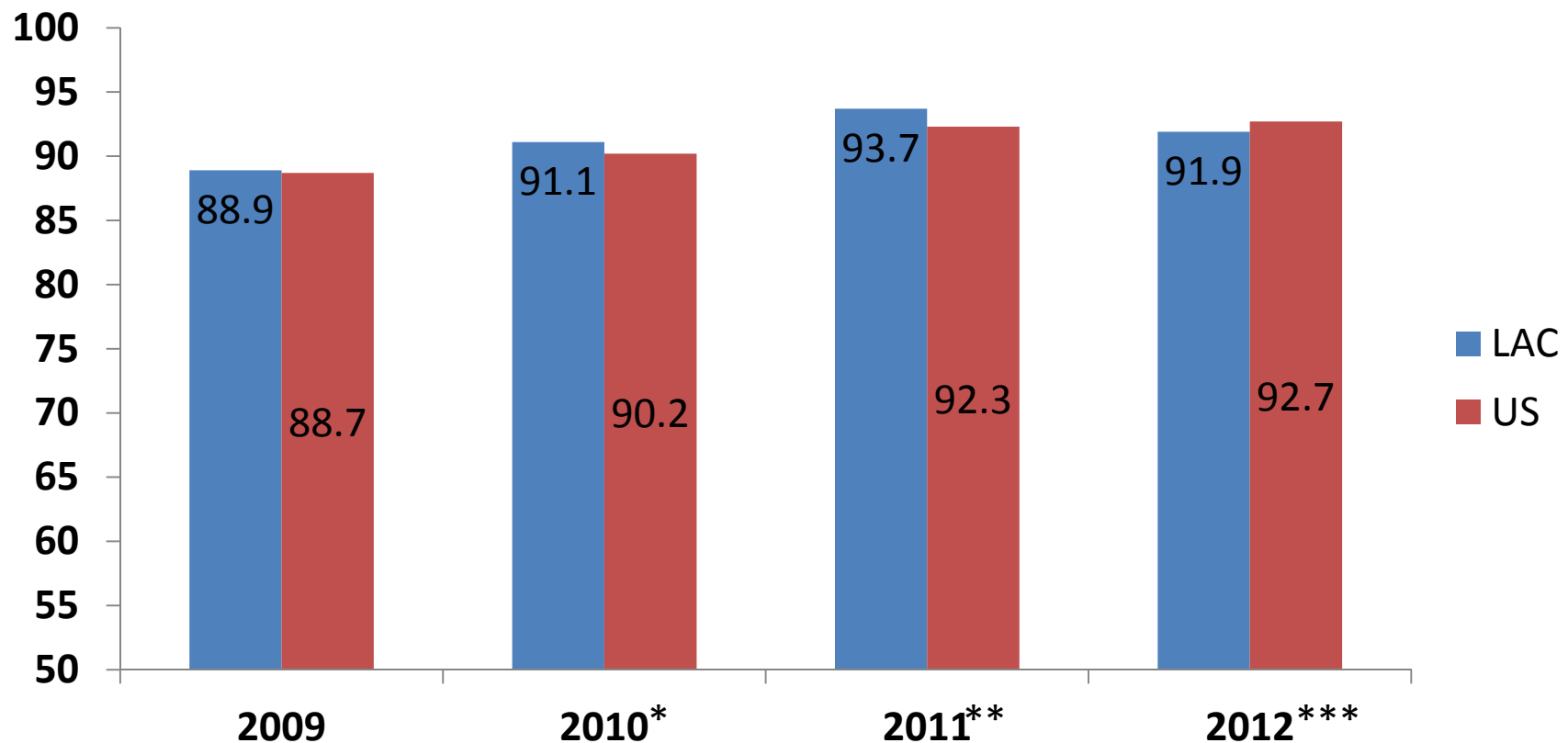


# MMP Data on ART and Viral Suppression: LAC and US, 2009-2012





## ART Prescription in Past 12 Months for MMP Patients in Care, LAC vs. US, by Year



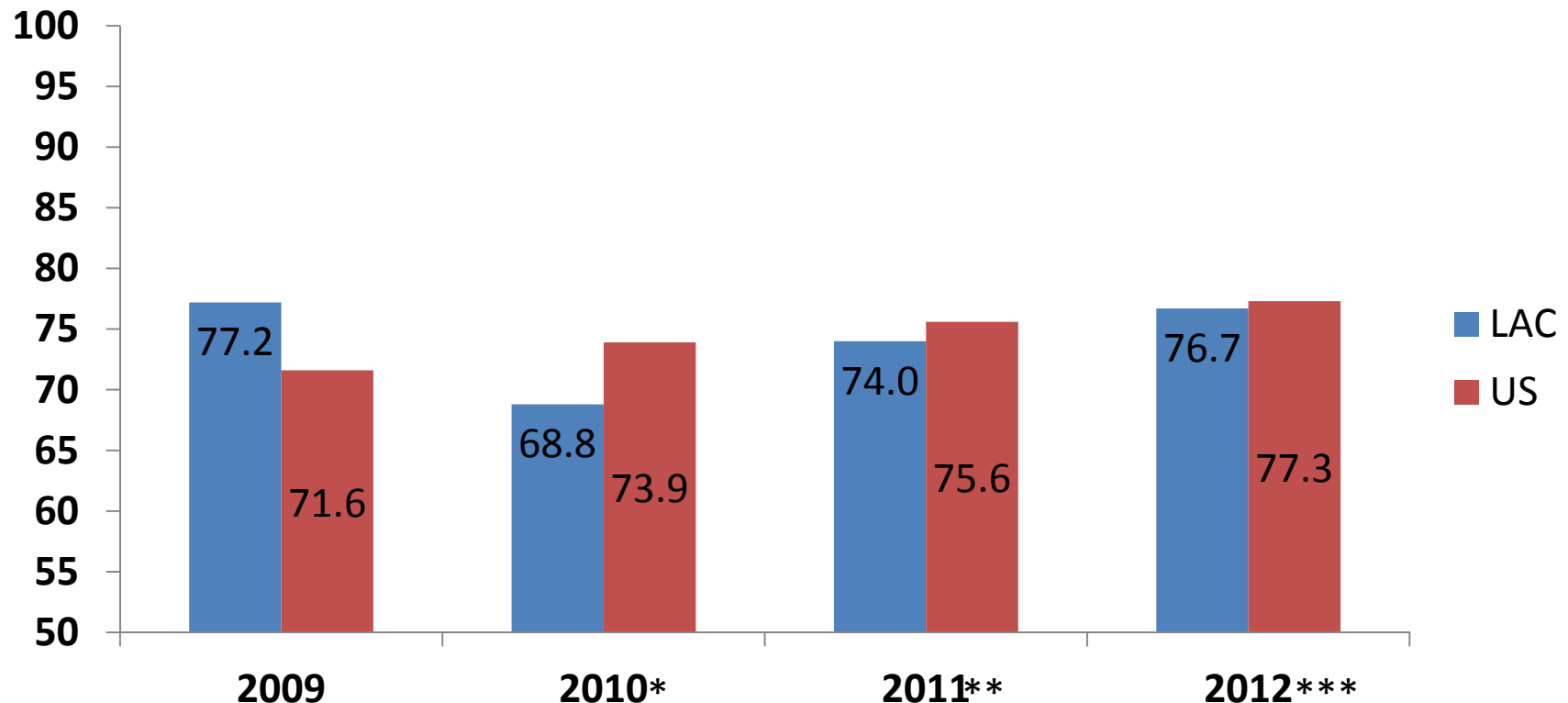
Data source: LAC MMP 2009-2012

References for US data: \*CDC MMWR Surveillance Summary Vol 63, No. 5, June 2014; \*\*CDC HIV Surveillance Report No. 9, Oct 2014; \*\*\*CDC HIV Surveillance Report No. 10, Jan 2015





## Viral Suppression<sup>1</sup> in Past 12 Months for MMP Patients in Care, LAC vs. US, by Year



<sup>1</sup>Viral load <200 copies/ml at most recent test

Data source: LAC MMP 2009-2012

References for US data: \*CDC MMWR Surveillance Summary Vol 63, No. 5, June 2014; \*\*CDC HIV Surveillance Report No. 9, Oct 2014; \*\*\*CDC HIV Surveillance Report No. 10, Jan 2015



# MMP Quality of Care Estimates: LAC and US





## Recommended Clinical Care for HIV patients\*

- **Annually:**
  - **CD4 count tests**
  - **Viral load tests (every 6 months)**
  - **Gonorrhea, chlamydia and syphilis screening for sexually active persons**
  - **Cervical cancer screening in women**
  - **Influenza immunizations in all patients**
  - **PCP prophylaxis among persons with CD4 counts <200**
  - **ART prescription for all patients**
  - **HIV prevention counseling for all patients**

\*National and Multiagency HIV Care Quality Measures (Horberg et al. CID 2010; 51 (6): 732-738); Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. Dept of Health and Human Services Panel on Antiretroviral Guidelines for Adults and Adolescents (<http://aidsinfo.nih.gov/contentfiles/lvguidelines/adultandadolescentgl.pdf>).



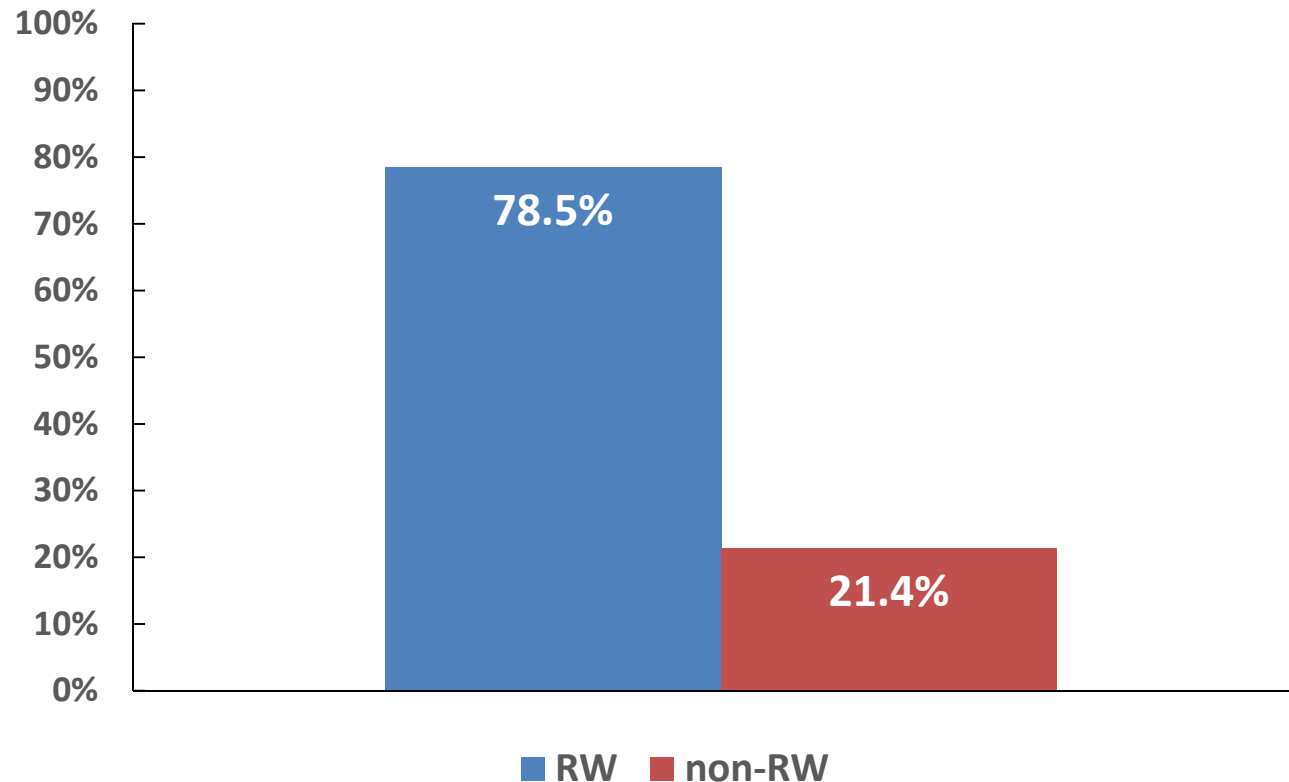
## Receipt of Recommended HIV Clinical Care in the Past 12 Months, LAC and US MMP 2009-2011

Measure	Weighted % (95% CI)			
	LAC 2009-11	US 2009*	US 2010**	US 2011***
<b>CD4 and Viral Load Screening</b>				
Viral load test every 6 months	71.4 (66.1, 76.8)	76.5 (74.3, 78.6)	76.0 (72.9, 79.0)	74.6 (72.2-77.1)
1 or more CD4 tests	96.7 (94.2, 99.2)	96.8 (95.9, 97.7)	96.5 (95.7, 97.4)	95.1 (94.3-96.0)
<b>STI Screening (sexually active)</b>				
Gonorrhea screening	65.9 (55.1, 76.6)	23.2 (19.7, 26.7)	28.6 (22.7, 34.5)	32.0 (26.9-37.0)
Chlamydia screening	66.8 (56.1, 77.6)	23.9 (20.6, 27.3)	29.7 (23.8, 35.6)	32.7 (27.6-37.8)
Syphilis screening	87.2 (82.1, 92.3)	55.0 (51.5, 58.5)	58.2 (53.3, 63.1)	58.0 (53.9-62.1)
<b>Cervical cancer screening</b>	75.5 (54.9, 96.2)	77.4 (73.1, 81.8)	79.0 (74.8, 82.8)	77.0 (73.7-80.2)
<b>Influenza Immunization</b>	71.9 (68.0, 75.7)	78.5 (76.0, 81.0)	84.0 (82.3, 86.5)	82.4 (80.2-84.6)
<b>PCP Prophylactic therapy (persons with CD4&lt;200 cells/μL)</b>	73.5 (60.2, 86.8)	78.8 (75.1, 82.5)	78.0 (73.0, 82.0)	77.6 (73.4-81.8)
<b>ART prescription</b>	91.5 (88.5, 94.6)	88.7 (86.9, 90.5)	90.2 (88.9, 91.6)	92.3 (91.0-93.6)
<b>HIV prevention counseling</b>	35.0 (29.2, 40.9)	44.8 (39.8, 49.8)	43.0 (39.3, 47.3)	44.9 (41.3-48.5)

\*CDC MMWR Surveillance Summary Vol 63, No. 5, June 2014; \*\*CDC HIV Surveillance Report No. 9, Oct 2014; \*\*\*CDC HIV Surveillance Report No. 10, Jan 2015



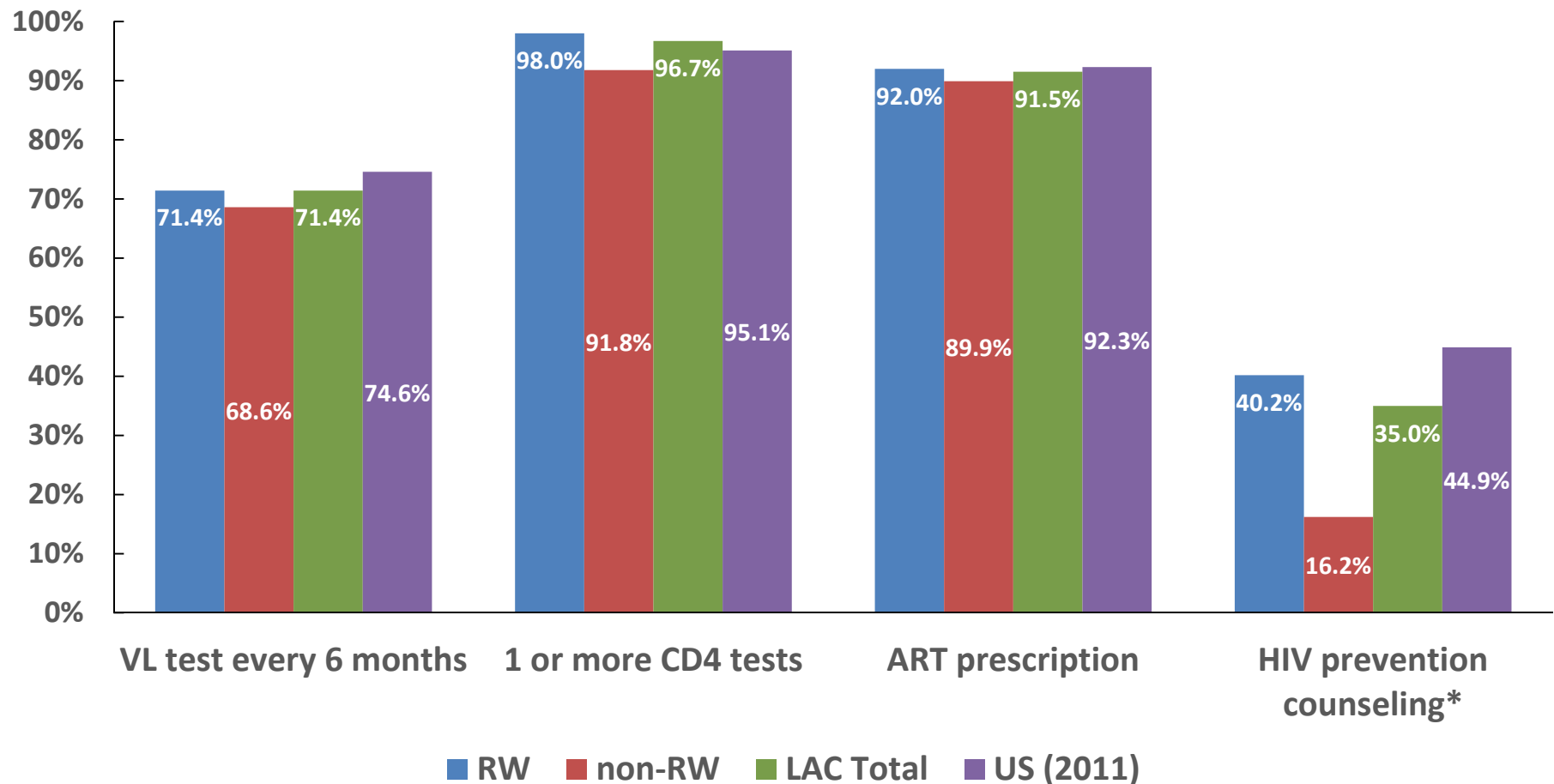
## Patients Receiving Care in RW-funded and non-RW-Funded Facilities, LAC MMP, 2009-2011 (n=692)



\*p<0.05



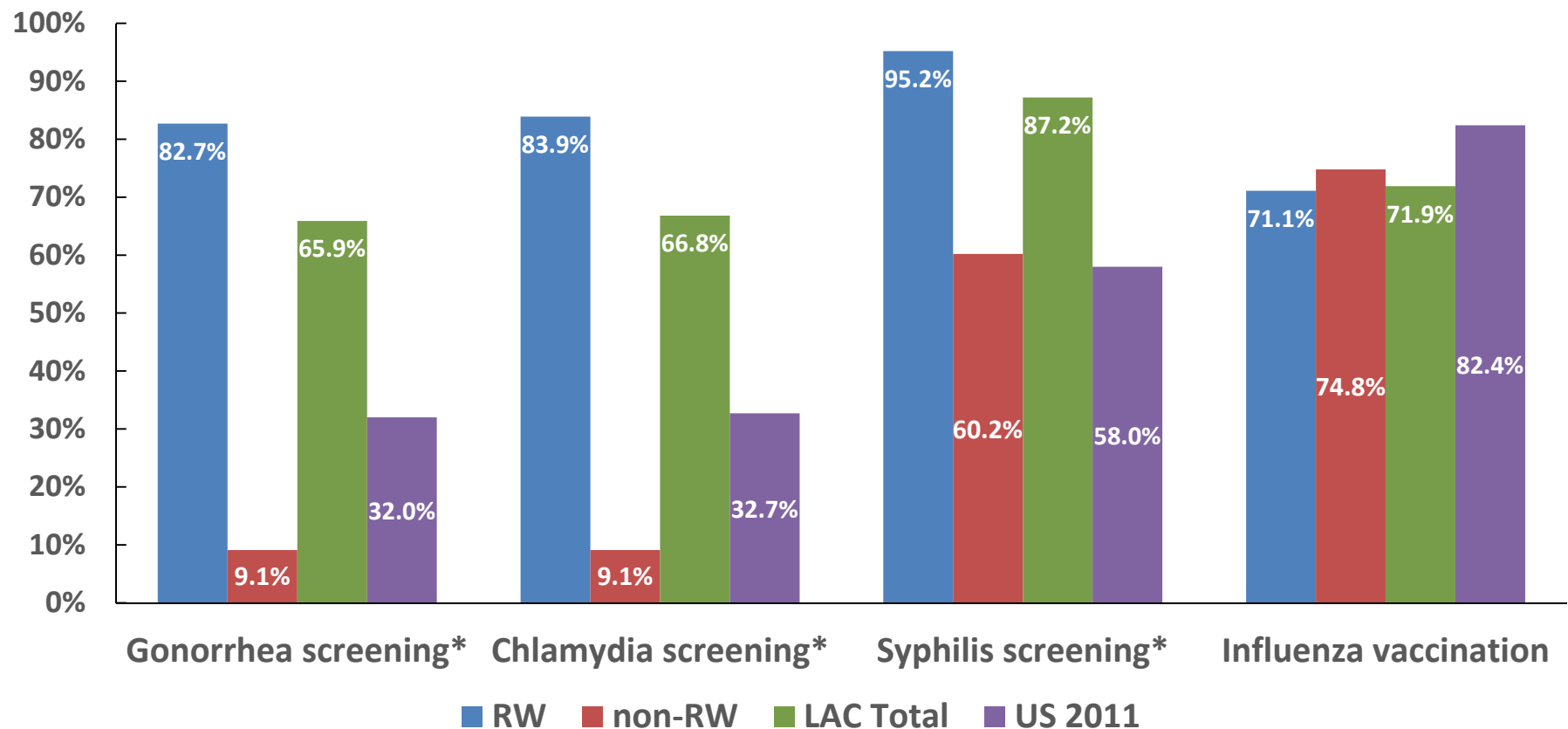
## Recommended Clinical Care in the Past 12 Months for MMP Patients



\*p<0.05 (RW vs. non-RW in LAC); data for LAC MMP is from 2009-2011



## Receipt of STI Screening and Influenza Vaccination in Past 12 months for MMP Patients



\* $p < 0.05$  (RW vs. non-RW in LAC); data for LAC MMP is for 2009-2011



## Multivariate Modeling Results

- **HIV Prevention Counseling:**
  - After controlling for other significant factors (age, race, education, number of years diagnosed), **differences by RW facility status were no longer significant**
  - **Significant predictors in the multivariate analyses were age (younger persons 18-29, 30-39 more likely to receive vs. 50+) and race (Latinos were more likely to receive vs. whites)**
- **Gonorrhea and Chlamydia Screening:**
  - After controlling for other significant factors (age, race, education, sexual orientation, number of years diagnosed), **differences by RW facility status remained significant: patients at RW-funded facilities were more likely to receive gonorrhea and chlamydia screening than patients at non-RW clinics**
- **Syphilis Screening:**
  - After controlling for other significant factors (race, sexual orientation), **differences by RW facility status remained significant: patients at RW-funded facilities were more likely to receive syphilis screening**





## SUMMARY

- **Compared to the US, LAC had:**
  - similar rates of CD4/VL testing, cervical cancer screening, PCP prescription, and ART prescription
  - lower rates of influenza vaccination and HIV prevention counseling
  - higher rates of STI screening
- After controlling for race and sexual orientation, patients at RW-funded facilities were more likely to receive STI screening compared to patients at non-RW clinics in LAC



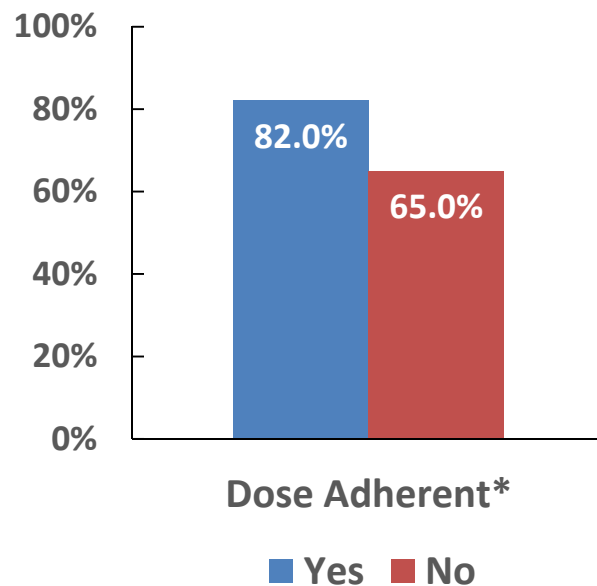
# Additional US MMP Analyses



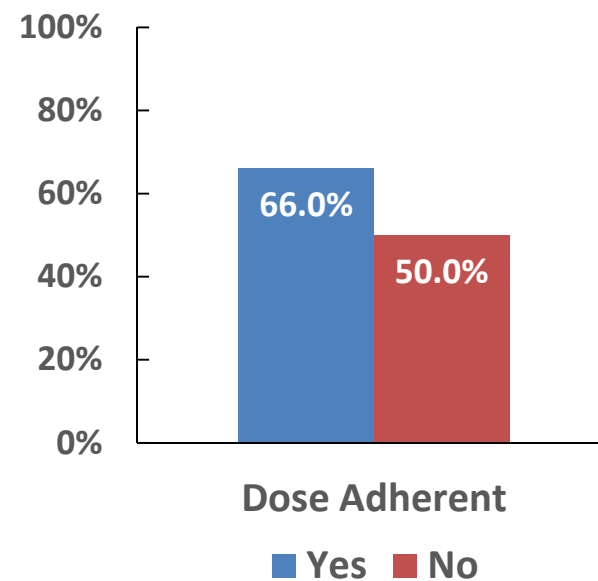


## Viral Suppression and Adherence to ART Among HIV-Infected Adults in the US, MMP 2009

Most recent viral load <200



All viral loads <200 in the past yr



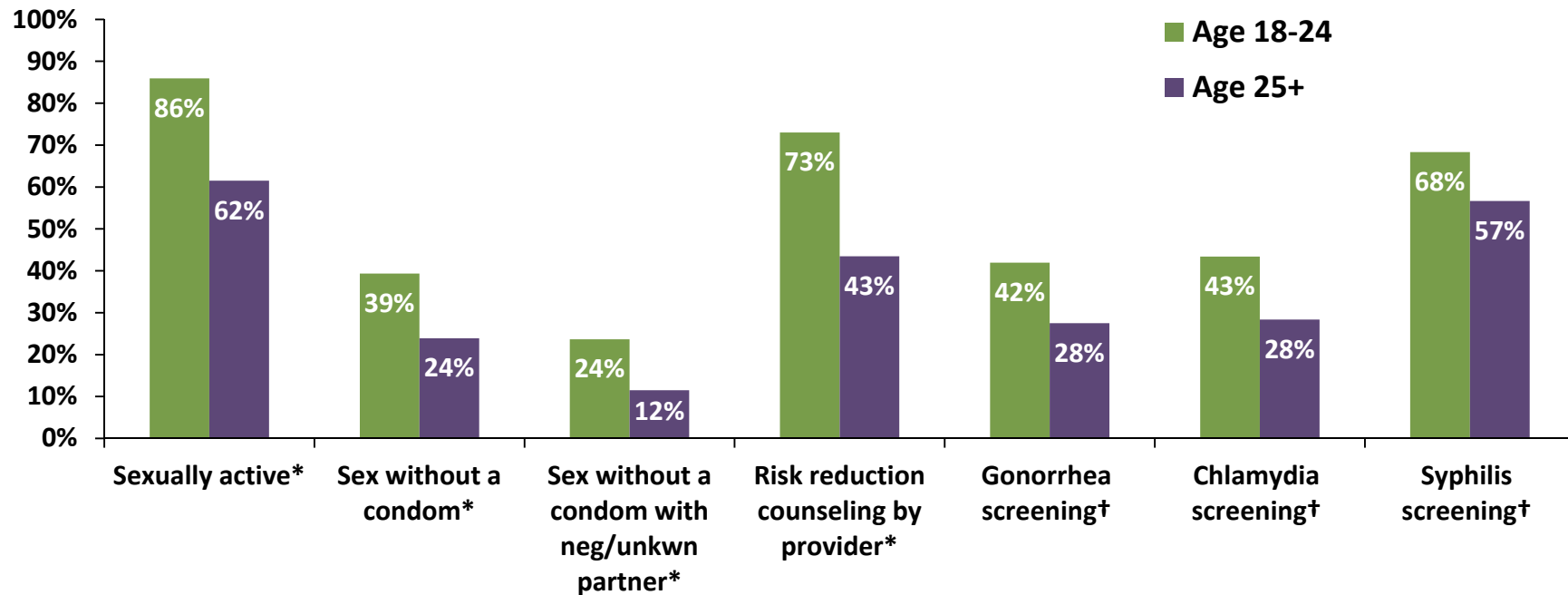
Dose adherence is 100% adherence in the past 3 days; all percentages are weighted.

\* $p < 0.001$

Source: Linda Beer and Jacek Skarbinski (2014). Adherence to Antiretroviral Therapy Among HIV-Infected Adults in the United States. AIDS Education and Prevention: Vol. 26, No. 6, pp. 521-537



# Sexual Behavior, Risk Reduction Counseling, and STI Screening among HIV-Infected Adults in Care by Age in the US, MMP 2009-2011



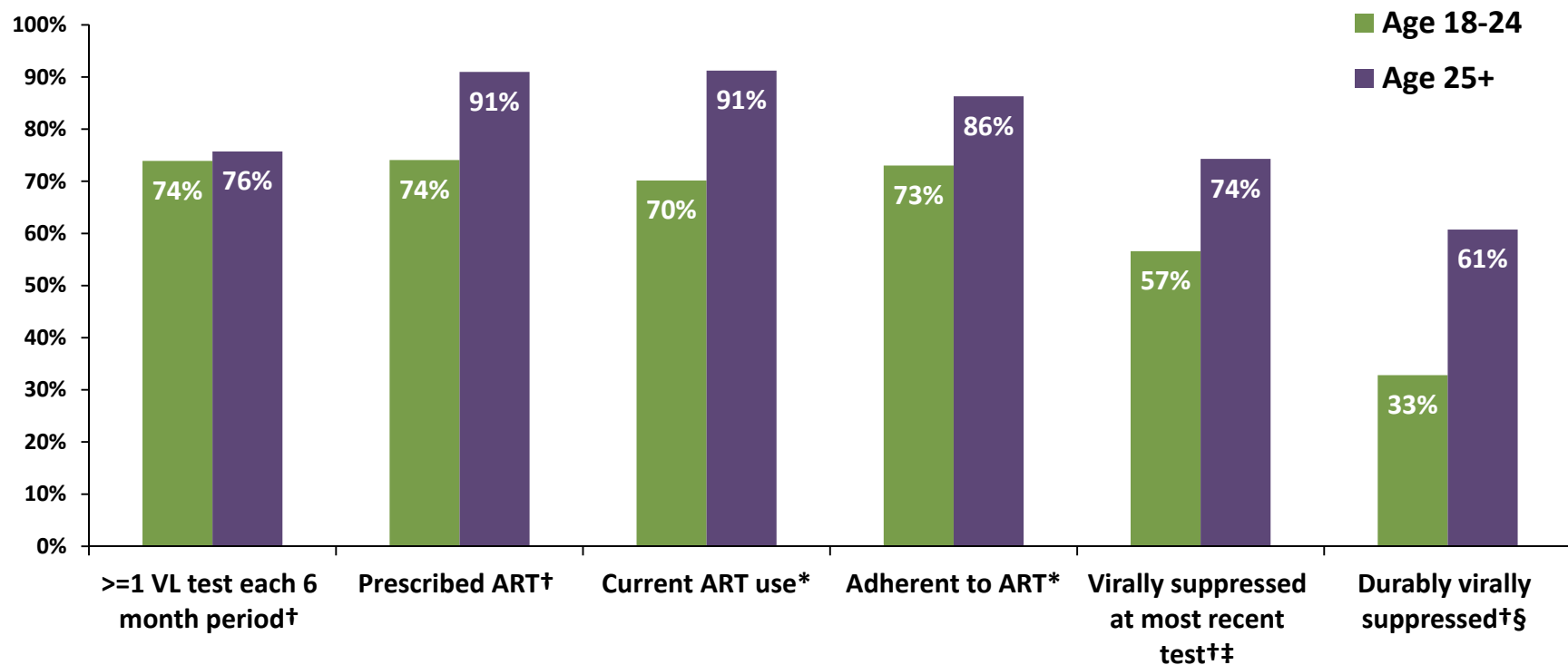
All age group differences significant ( $p < 0.01$ )

\*reported in interview; †documented in medical record in the past 12 months

Source: Beer L, Mattson CL, Prejean J, Shouse L. (2015) Clinical and Behavioral Characteristics of HIV-infected Young Adults in Care in the US. 10th International Conference on HIV Treatment and Prevention Adherence.



## HIV Care and Viral Status among HIV-Infected Adults in Care by Age in the US, MMP 2009-2011



Except for VL test each 6 month period, all age group differences significant ( $p < 0.01$ )

\*reported in interview; †documented in medical record in the past 12 months; ‡most recent viral load test undetectable or  $\leq 200$  copies/ml); §all viral loads over the past 12 months undetectable or  $\leq 200$  copies/ml

Source: Beer L, Mattson CL, Prejean J, Shouse L. (2015) Clinical and Behavioral Characteristics of HIV-infected Young Adults in Care in the US. 10th International Conference on HIV Treatment and Prevention Adherence.



# Acknowledgements

We would like to thank all of the MMP providers and patients for their participation and support.

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