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

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MAC Meeting
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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
- 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
Viral Suppression\(^1\) in Past 12 Months for MMP Patients in Care, LAC vs. US, by Year

\[\begin{array}{cccc}
\text{Year} & \text{LAC} & \text{US} \\
2009 & 77.2 & 71.6 \\
2010* & 68.8 & 73.9 \\
2011** & 74.0 & 75.6 \\
2012*** & 76.7 & 77.3 \\
\end{array}\]

\(^1\)Viral load <200 copies/ml at most recent test

Data source: LAC MMP 2009-2012

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

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

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

Dose adherence is 100% adherence in the past 3 days; all percentages are weighted. *p<0.001

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

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 <=200 copies/ml; §§all viral loads over the past 12 months undetectable or <=200 copies/ml

# Acknowledgements

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

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