

Improvements in Retention in Care and Viral Suppression: Results from the First Year of the Medical Care Coordination Program in Los Angeles County

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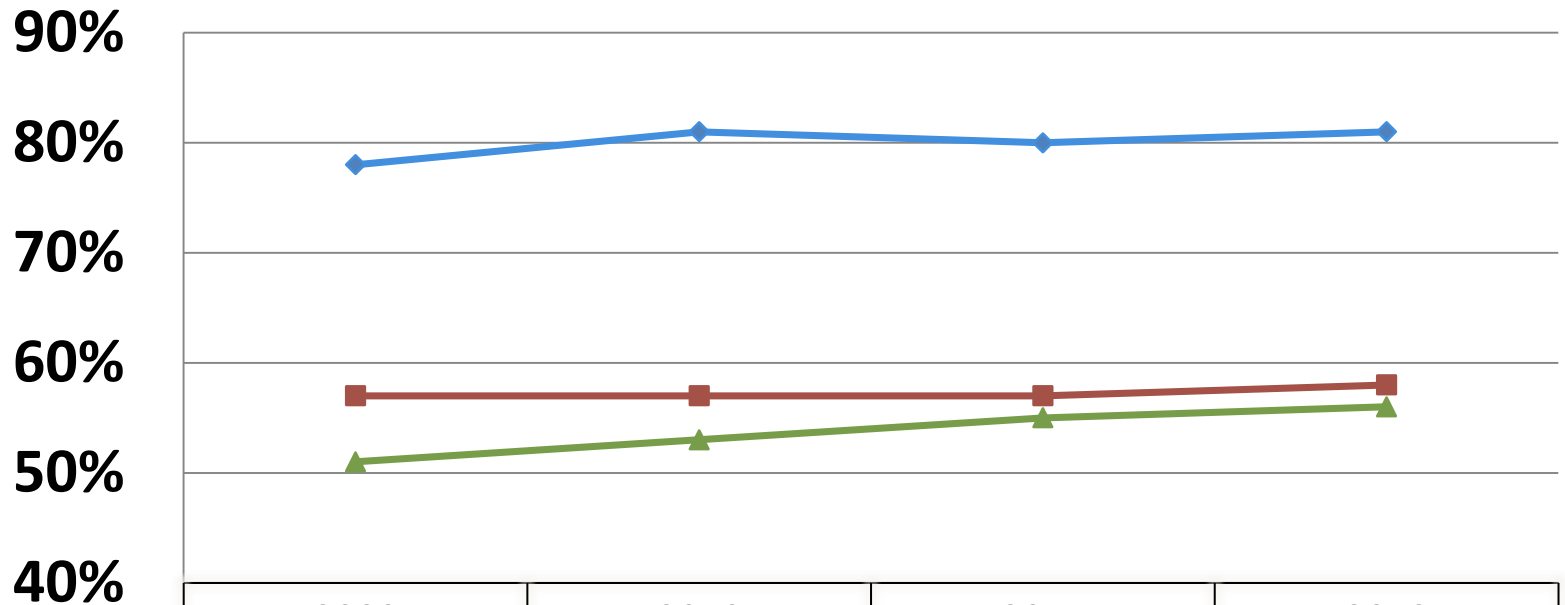
Los Angeles County Department of Public Health
Division of HIV and STD Programs

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Background

- In Los Angeles County (LAC) and across the US, approximately 50% of people living with HIV do not see a doctor regularly for their HIV medical care
- Care coordination models have improved health outcomes for a number of chronic diseases however there is limited application in HIV care and management
- In 2013, the LAC Division of HIV and STD Programs (DHSP) implemented the “Medical Care Coordination” program in its Ryan White (RW)-funded HIV medical homes to identify and manage patients’ medical and psychosocial needs

HIV Linkage, Retention and Viral Suppression in LAC, 2009-2012



	2009	2010	2011	2012
◆ 1. Linkage to Care	78%	81%	80%	81%
■ 2. Retained in Care	57%	57%	57%	58%
▲ 3. Viral Suppression	51%	53%	55%	56%

1. Linkage to Care: Percentage of persons 18+ linked to care within 3 months of their HIV diagnosis among persons 18+ diagnosed with HIV in each calendar year and residing in Los Angeles County

2. Retained in Care: Percentage of persons 18+ with ≥ 2 care visits at least 3 months apart among all 18+ persons living with HIV in each calendar year

3. Viral Suppression: Percentage of persons with HIV viral suppression (most recent viral load ≤ 200 copies/ml) in each calendar year Reported through 12/23/2013.

Overview of Medical Care Coordination (MCC)

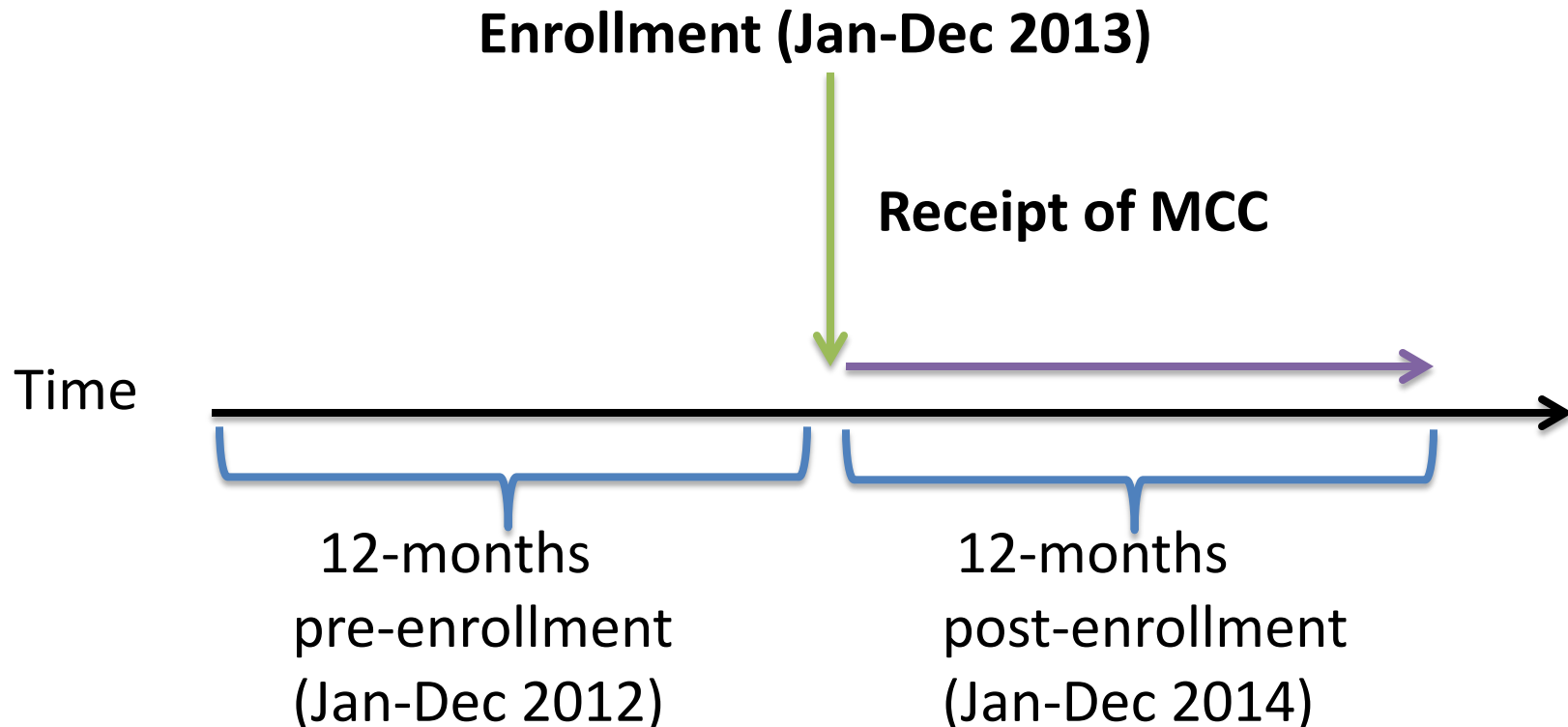
- MCC is an **integrated approach** that combines medical and psychosocial support services
- Delivered by a clinic-based, **multidisciplinary team**:
 - Registered nurse
 - Licensed social worker (MSW)
 - Case worker (BA/BS)
- Patients are assessed to **determine acuity** – level of medical and psychosocial service need
- **Acuity drives service delivery** to support retention in HIV care:
 - **Brief interventions:** ART adherence, risk reduction, engagement in care
 - **Linked referrals:** Mental and addiction treatment, housing, partner services

Sample Population

- HIV-positive patients at 25 RW-funded medical homes in LAC
- Patients identified as being at risk for poor health outcomes:
 - Not in HIV care (≥ 6 months);
 - Not on ART but CD4 count < 500 ;
 - On ART with viral load > 200 copies/mL;
 - Diagnosed with an STD in the past 6 months;
 - Multiple medical and/or psychosocial co-morbidities; and/or,
 - Referred by medical care provider
- 1,204 patients enrolled in MCC from January 1, 2013 through December 31, 2013
 - Enrolled=an initial assessment reported in DHSP RW data system during the evaluation study period

12-Month Evaluation Design

- A quasi-experimental pre-and post-test design was used to evaluate the impact of MCC on viral suppression and retention after 12 months



Outcomes and Methods

- **Outcome Measures:**
 - Viral Suppression: Most recent viral load <200 copies/mL in the second half of each 12-month observation period
 - Retention in care: Estimated as 2 or more CD4, viral load or resistance tests at least 90 days apart in the 12-month observation period
- **Statistical Methods:**
 - Analysis of outcome measures conducted using intent-to-treat approach in which missing values=failure
 - Comparison of outcomes measures pre-and post 12 months were performed using McNemar's tests for paired data

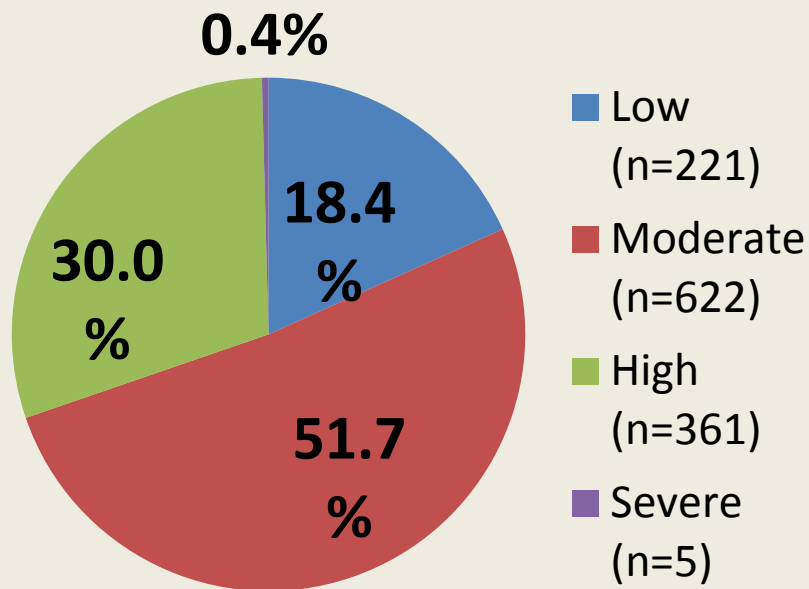
Patient Characteristics at Enrollment (n=1,204)

- **Race¹: 49% Latino**, 26% African-American, 21% White, 4% other
- **Gender¹: 85% male**, 13% female, 2% transgender
- **Age¹: 51% age 40 years and older**
- **Income¹: 78% at or below federal poverty level**
- **Language¹: 23% Spanish-speaking**
- **Sexual Risk¹: 23% diagnosed with an STD in past 6 months**
- **HIV History and Care¹:**
 - 7.7 mean years since HIV diagnosis¹ (SD=7.3 years)
 - **33% most recent viral load <200 copies/mL²**
 - 73% currently prescribed ART¹
- **Psychosocial³**
 - **64% current drug/alcohol use**
 - **40% met screening criteria for depressive disorder (PHQ-9)**

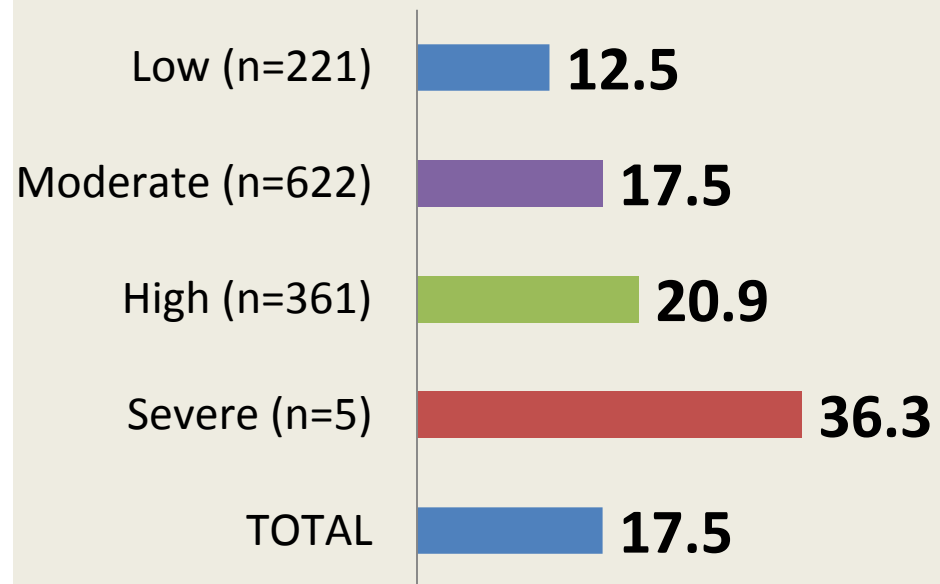
¹Provider reported; ²laboratory report ³patient self-report

Patient Acuity Level and Service Delivery Hours (n=1,204)

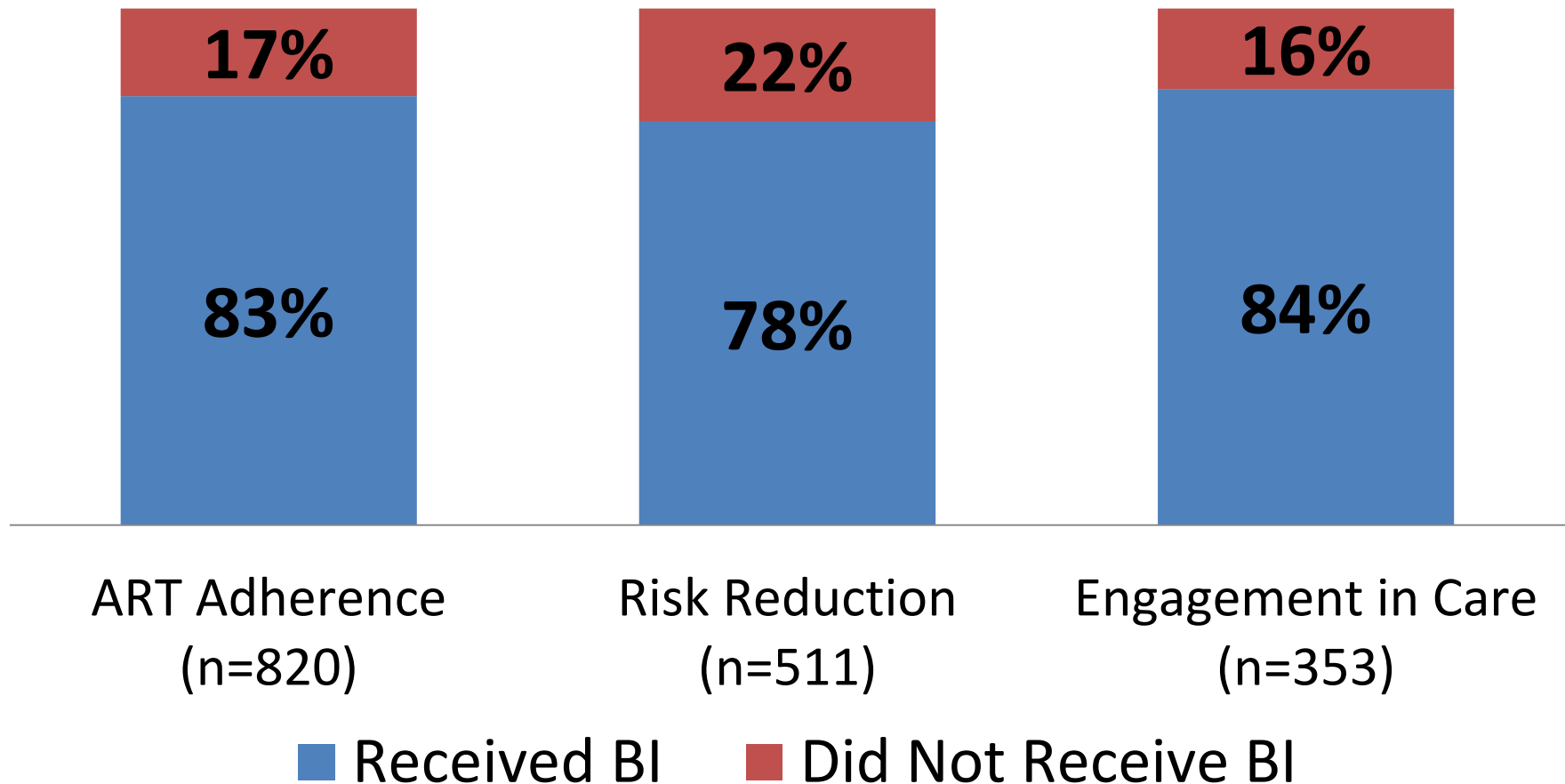
Patients by Acuity Level



Median Service Hours per Patient by Acuity Level

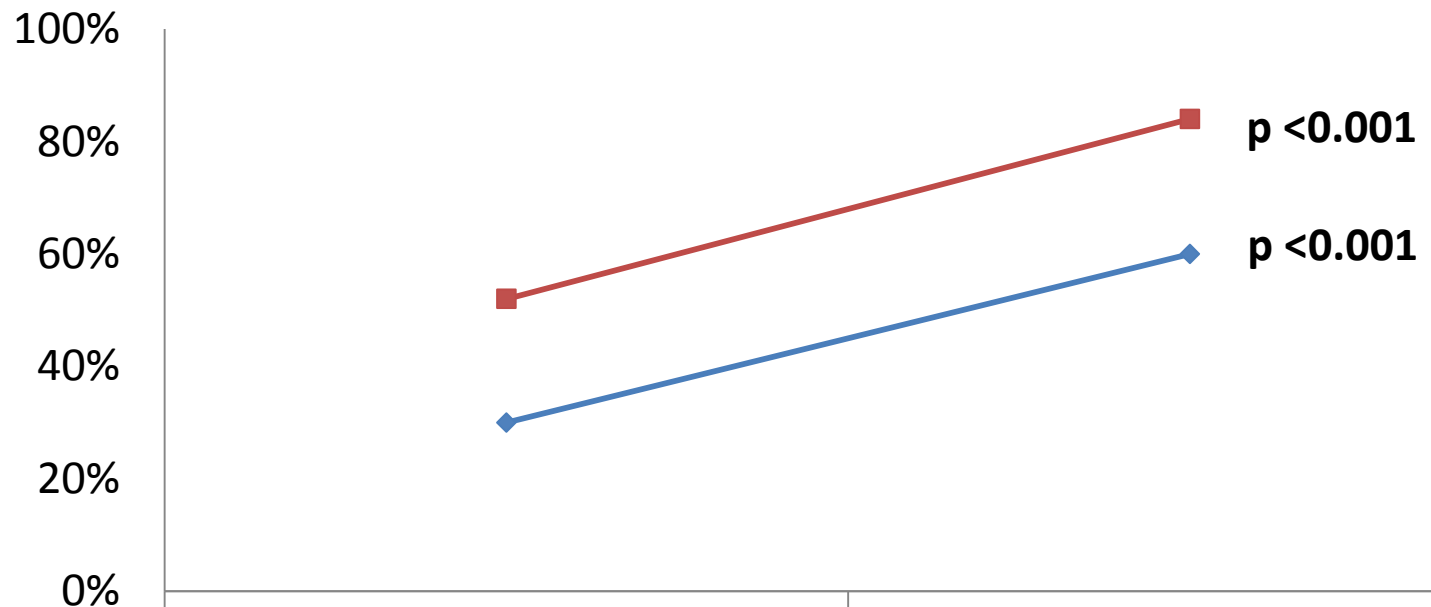


Receipt of Brief Interventions (BI) among Patients with Identified Needs



12-Month Outcomes

Changes in Viral Suppression and Retention 12m Pre- and Post-MCC (N=1,204)



	12m Pre-MCC	12m Post-MCC
◆ Viral Suppression	30%	60%
■ Retention in Care	52%	84%

Limitations

- Convenience sample
- Intent-to-treat approach may underestimate true effect size
- Individual HIV medical homes may implement additional retention in care strategies outside of MCC
- May not be generalizable to patients who are:
 - Not in Ryan White or other safety net HIV care systems
 - Not experiencing or at risk for poor health outcomes at time of screening for services

Conclusions

- At 12 months, patients in MCC programs at 25 safety net HIV clinics across Los Angeles County had significant improvements in retention in care and viral suppression
- These results suggest that MCC is a promising service model to:
 - Improve retention in care and viral suppression among persons at safety net HIV clinics in LAC; and,
 - To positively impact engagement in these key HIV care continuum components in LAC

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Questions

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MCC Service Guidelines and Assessment available at:
<http://publichealth.lacounty.gov/dhsp/MCC.htm>