



# Six-Month Outcomes from a Medical Care Coordination Program at Safety Net HIV Clinics in Los Angeles County (LAC)

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9<sup>th</sup> International Conference on HIV Treatment and Prevention Adherence, June 10, 2014



## Background

- In LAC and across the US, approximately 50% of people living with HIV do not see a doctor regularly for their HIV medical care
- Medical care coordination models have improved health outcomes for a number of chronic diseases however there is limited application of these models in HIV care and management
- In 2013, DHSP shifted toward “Medical Care Coordination” model in its HIV clinics to identify and manage patients’ medical and psychosocial needs



## MCC Objectives

- To implement a medical care coordination program at Ryan White-funded HIV clinics in LAC to:
  - Improve retention in HIV care
  - Increase viral suppression (<200 copies/mL)
  - Link patients with identified medical and psychosocial comorbidities to needed services



## LAC Medical Care Coordination (MCC) Model

- Combines medical and non-medical case management services
- Services delivered by a multidisciplinary team (RN, Master's –level social worker, and case worker) based at the HIV clinic as part of care team
- All HIV clinic patients are screened for MCC service need:
  - Intensive services delivered to patients at risk for poor health outcomes for minimum of 12m
  - Stable patients monitored for change in health status, and support referrals provided as needed



## Evaluation Design and Outcomes

- Design:
  - Pre-and posttest program evaluation
- Evaluation Period: January 2013-February 2014
- Main Outcomes:
  - Change in median viral load from baseline to 6 months
  - Change in viral suppression (< 200 copies/mL) from baseline to 6 months



# Patient Population

- MCC Sites
  - 18 Ryan White-funded HIV clinics in LAC
- Eligibility Criteria
  - HIV+ patients at risk for poor health outcomes
    - Not in HIV care ( $\geq 6$  months)
    - Not on ART but CD4 count  $< 500$
    - On ART with viral load  $> 200$  copies/mL
    - Multiple medical/psychosocial co-morbidities that impact health status
  - Receiving intensive MCC services for  $\geq 6$  months
  - Insurance type=Ryan White or Healthy Way LA (Medicaid expansion)



## Data Collection and Analysis

- Data collection
  - Patient characteristics at baseline
  - Laboratory (viral load and CD4 count) and MCC service data from baseline to 6m
- Analysis
  - Differences in viral load and viral suppression were compared from baseline to 6 months using Wilcoxon signed rank and McNemar's tests for paired data, respectively
  - Logistic regression to calculate odds ratios and 95% confidence intervals for viral suppression

## Patient Characteristics (n=327)

- **Race<sup>1</sup>: 52% Latino**, 21% African-American, 24% White, 3% other
- **Gender<sup>1</sup>: 84% male**, 13% female, 3% transgender
- **Age<sup>1</sup>: 52% age 40 years and older**
- **Income<sup>1</sup>: 75% at or below federal poverty level**
- **Language<sup>1</sup>: 23% Monolingual Spanish-speaking**
- **HIV History and Care:**
  - 19% newly diagnosed with HIV (in the past 6m) <sup>1</sup>
  - 12% out of HIV care (no visits in at past 6m) <sup>1</sup>
  - **52% not on ART but meets criteria** (CD4 count <500cells/mm<sup>3</sup>)<sup>2</sup>
  - **55% on ART without viral suppression** (<200 copies/mL)<sup>2</sup>
- **Psychosocial<sup>3</sup>**
  - **65% current drug/alcohol use**
  - **50% previously diagnosed with mental health issue**

<sup>1</sup>Provider reported; <sup>2</sup>laboratory report <sup>3</sup>patient self-report





## Viral Load and Viral Suppression at 6 months

- Median **viral load decreased** from 3,870 copies/mL (IQR=54,538) at baseline to 24 copies/mL (IQR=309) at 6 months (**p<0.001**)
- The proportion of **patients with suppressed viral load (<200 copies/mL) increased** from 25% at baseline to 57% at 6 months ( $\chi^2=80.4$ ;  $p<0.001$ )
- After adjusting for outpatient visits and patient acuity, **patients were more likely to have suppressed viral load** after 6m of MCC than before MCC (**odds ratio=4.1; 95%CI=2.2-7.6**)
- Total hours of MCC service received not associated with viral suppression



## Limitations

- No control group
- May not be generalizable to patients who are:
  - Not in Ryan White or other safety net HIV care systems
  - Not experiencing risk factors for poor health outcomes



## Conclusions

- At six months patients in medical care coordination programs at safety net HIV clinics in Los Angeles County had a 4 fold increase in the proportion of patients with viral suppression
- While findings are preliminary, they suggest that these MCC programs have the potential to improve health outcomes among patients at safety net HIV clinics
- Future analyses will examine the association between MCC and retention in HIV care, the impact of specific MCC service components on health outcomes, and changes in health behaviors over time



## Acknowledgements

- This research was supported by funds from the California HIV/AIDS Research Grants Program Office of the University of California, Grant Number MH10-LAC-610
- All recipients of MCC services
- MCC county and community-based providers
- Key DHSP staff: Carlos Vega-Matos MPA, Angela Boger, Abel Alvarez, Yvette Humphrey-Jones, Ana Rios



# Thank you

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