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

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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 (≥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 ≥ 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**: 52% Latino, 21% African-American, 24% White, 3% other
- **Gender**: 84% male, 13% female, 3% transgender
- **Age**: 52% age 40 years and older
- **Income**: 75% at or below federal poverty level
- **Language**: 23% Monolingual Spanish-speaking

**HIV History and Care:**
- 19% newly diagnosed with HIV (in the past 6m)
- 12% out of HIV care (no visits in at past 6m)
- 52% not on ART but meets criteria (CD4 count <500 cells/mm$^3$)
- 55% on ART without viral suppression (<200 copies/mL)

**Psychosocial**
- 65% current drug/alcohol use
- 50% previously diagnosed with mental health issue

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1 Provider reported; 2 laboratory report; 3 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 (χ²=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
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Thank you

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