

# Integrating Medical Care Coordination Services into HIV Clinic Medical Homes

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# Background

- DHSP funds HIV Clinics to provide Ambulatory Outpatient Medical (AOM) and Medical Care Coordination (MCC) Services in an Integrated Approach
- Funding for AOM and MCC began November 2012.
- AOM services began immediately; MCC had rolling implementation



# Implementation Progress

- 20 Providers at 41 sites Providing HIV Care
- 20 Providers at 41 sites Providing MCC
- All AOM Providers Attended Casewatch Registration and Invoice Trainings
- All MCC Providers attended the Four Day Programmatic and the MCC Casewatch trainings.



# Medical Home Program Goals

- **Reduce New HIV infections**
  - Lower the number of new infections.
- **Increase Access to Care**
  - Increase the number of newly diagnosed patients linked to clinical care within three months of their HIV diagnosis
- **Reduce HIV-Related Health Disparities**
  - Improve access to prevention and care services



# Target Population for MCC

- HIV+ clients who:
  - Are not in medical care
    - Recently diagnosed <6 months
  - Have fallen out of care
  - Are currently in care and having trouble adhering to care plan
  - Are adherent but have poor health status
  - Are at risk for transmitting HIV



# Rationale for Program Integration

- Integrated care is essential for HIV treatment
  - Effective for patients with multiple co-morbidities and changing conditions
- Treat the whole patient
  - Care team provides clinical care services
  - MCC addresses supportive service needs:
    - Substance abuse, mental health, prevention counseling, housing, etc.
- Integrated Data
  - Seamless for patient flow
  - Reduce redundancy



# Medical Home Team Members

## Primary Clinical Care

- Primary Care Provider
  - Medical Doctor
  - Physician's Assistant
  - RNP
  - Nurses,
  - Medical Assistants
  - Referral Specialists
  - Other clinic staff

## Medical Care Coordination

- Patient Care Manager (PCM)
  - Master Level Social Worker
- Medical Care Manager (MCM)
  - Registered Nurse
- Case Worker (CW)
  - Bachelor's or LVN



# Integrated Program Design

- Screening Clinic Patients for MCC need
  - AOM Clinic Patients should be screened to determine need for MCC
- Assessment and Care Plan Developed
  - MCM and PCM conduct together
- Multi-disciplinary team case conferencing
  - PCP, MCM, PCM, etc.
- Provision of Brief Interventions
  - Treatment Adherence
  - Risk Reduction



# MCC Evaluation Plan

- Implementation Evaluation
  - To describe and monitor fidelity to the MCC protocol
  - To identify best practices to refine MCC
  - To determine program costs
- Outcome Evaluation
  - To evaluate the impact of MCC on health outcomes among high risk patients from baseline to 6 and 12 months



# Evaluation Plan continued

- All funded agencies are included in evaluation
- Uses data entered into Casewatch as part of intake and MCC service delivery
- Annual reports will be produced
- Provider input critical to assure the utility of reports and interpretation of findings



# MCC Screening and Assessment

- From March 1 through November 30, 2013
  - 5,925 patients had screening data entered into Casewatch
    - 1,896 (32%) patients were identified as needing active MCC services
  - 1,001 patients had an initial assessment completed



# Baseline Characteristics

Patients in Active MCC, March-November 2013 (N=1,001)

| PATIENT DEMOGRAPHICS          | n   | %  |
|-------------------------------|-----|----|
| <b>Race/Ethnicity</b>         |     |    |
| Latino                        | 499 | 50 |
| African-American              | 266 | 26 |
| White                         | 199 | 20 |
| <b>Age 40 years and older</b> | 513 | 51 |
| <b>Gender</b>                 |     |    |
| Male                          | 843 | 84 |
| Female                        | 137 | 14 |
| Transgender                   | 21  | 2  |
| <b>Foreign-born</b>           | 367 | 27 |

Source: DHSP, Casewatch, Years 22-23 and Assessment data



# Baseline Characteristics

Patients in Active MCC, March-November 2013 (N=1,001)

| PSYCHOSOCIAL ISSUES  | n   | %  |
|--|-----|----|
| Ever diagnosed with a mental health issue                    | 484 | 48 |
| Ever in counseling/treatment for ongoing mental health issue | 594 | 57 |
| Possible depressive disorder (PHQ9 $\geq$ 9)                 | 396 | 40 |
| Possible anxiety disorder (GAD8 $\geq$ 10)                   | 297 | 30 |
| Homeless in the past 6m                                      | 220 | 22 |
| Ever incarcerated  | 368 | 37 |

Source: DHSP, Casewatch, Years 22-23 and Assessment data



# Baseline Characteristics

Patients in Active MCC, March-November 2013 (N=1,001)

| RISK BEHAVIORS                                   | n   | %  |
|--|-----|----|
| <b>Ever used drugs or alcohol</b>                | 864 | 86 |
| Used drugs or alcohol in the past 6m             | 635 | 74 |
| Possible SA problem (SA screener $\geq$ 3)       | 228 | 23 |
| <b>Primary mode of HIV exposure</b>              |     |    |
| MSM  | 568 | 56 |
| MSM-IDU/IDU                                      | 247 | 25 |
| Heterosexual                                     | 41  | 4  |
| No identified risk/ other*                       | 64  | 6  |
| <b>Diagnosed with an STD with in the past 6m</b> | 225 | 22 |
| <b>Sexually active in the past 6m</b>            | 532 | 53 |
| Did not use a condom with any partner(s)         | 314 | 59 |

\*Other includes perinatal transmission, transfusion and hemophilia/coagulation disorder

Source: DHSP, Casewatch, Years 22-23 and Assessment data



# Baseline Characteristics

Patients in Active MCC, March-November 2013 (N=1,001)

| HEALTH STATUS, HIV CARE HISTORY AND ACUITY                     | n   | %  |
|--|-----|----|
| Diagnosed with HIV in the past 6 months                        | 243 | 24 |
| Most recent viral load suppressed < 200 copies/mL <sup>a</sup> | 337 | 34 |
| Prescribed ARTs  | 725 | 72 |
| Reports missing at least 1 ART doses in past week              | 240 | 33 |
| <b>Acuity Level</b>  |     |    |
| Severe   | 4   | <1 |
| High   | 291 | 29 |
| Moderate   | 513 | 51 |
| Self-Managed   | 193 | 19 |

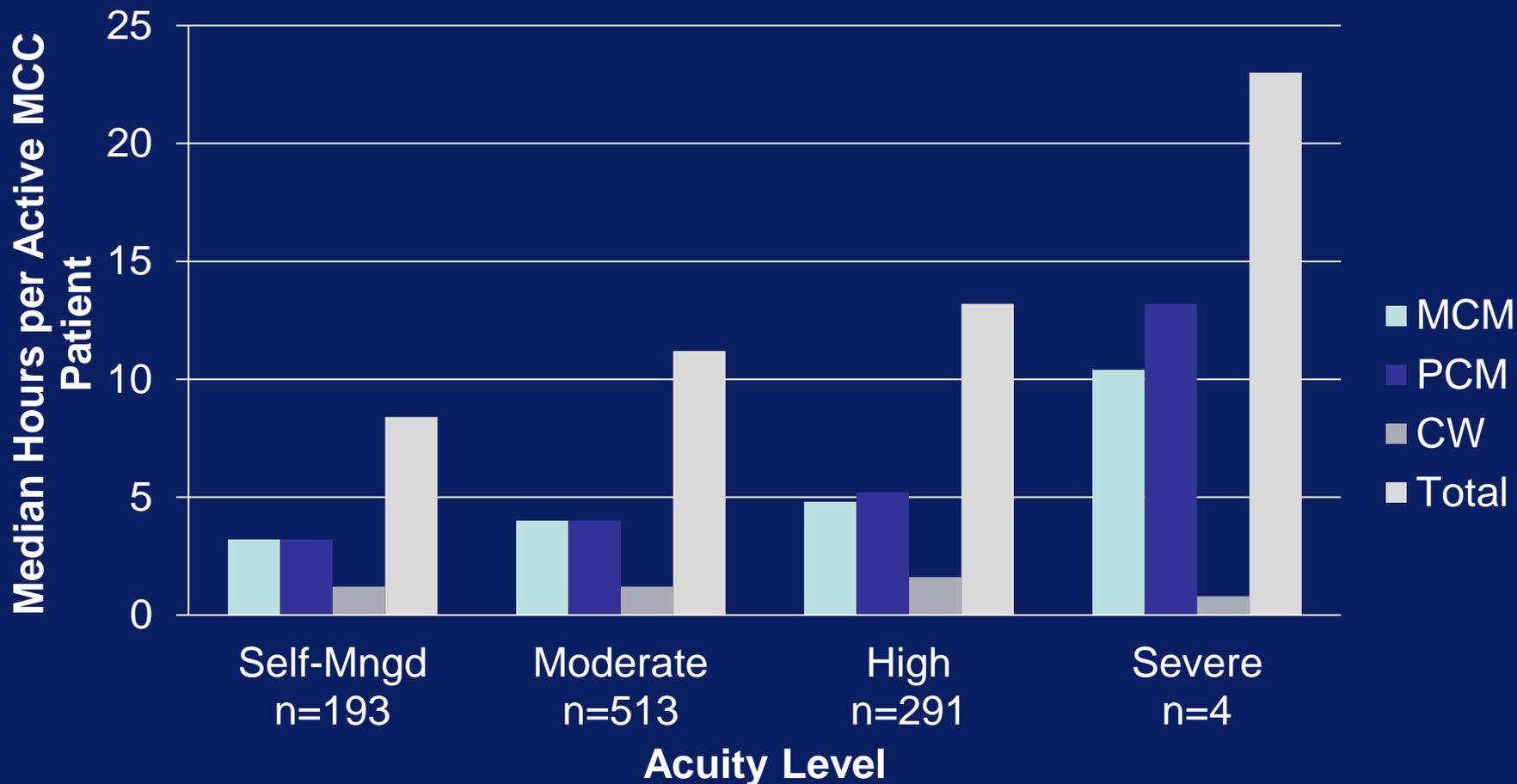
<sup>a</sup>Missing=41 patients without viral load

Source: DHSP, Casewatch, Years 22-23 and Assessment data



# Active MCC Service Delivery

## Median Hours of MCC by MCC Provider and Acuity



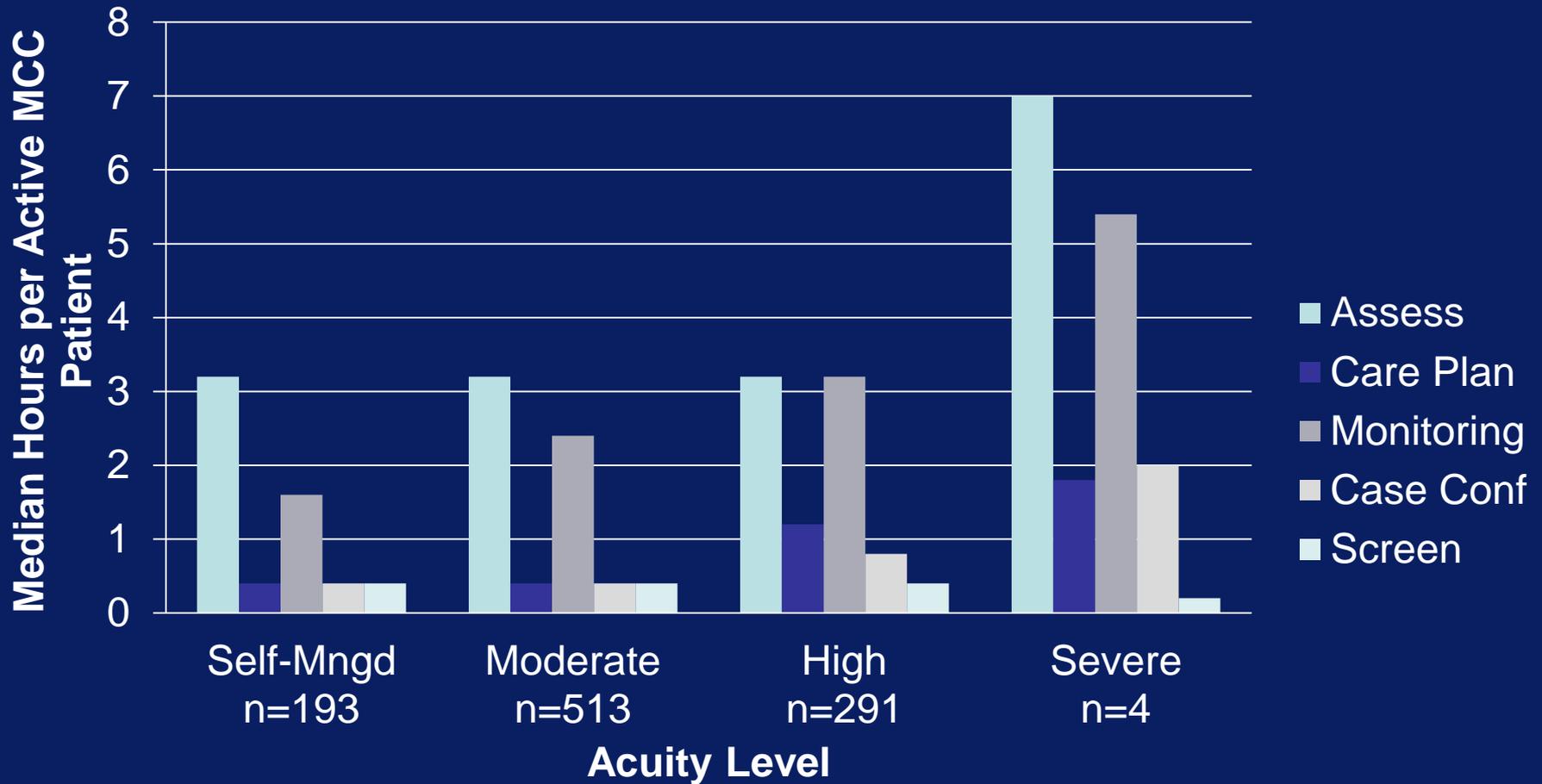
\*Includes services delivered during face-to-face and telephone contacts

Source: DHSP, Casewatch, Years 22 and 23, March-November 2013



# Active MCC Service Delivery

## Median Hours of Service Activity per Patient



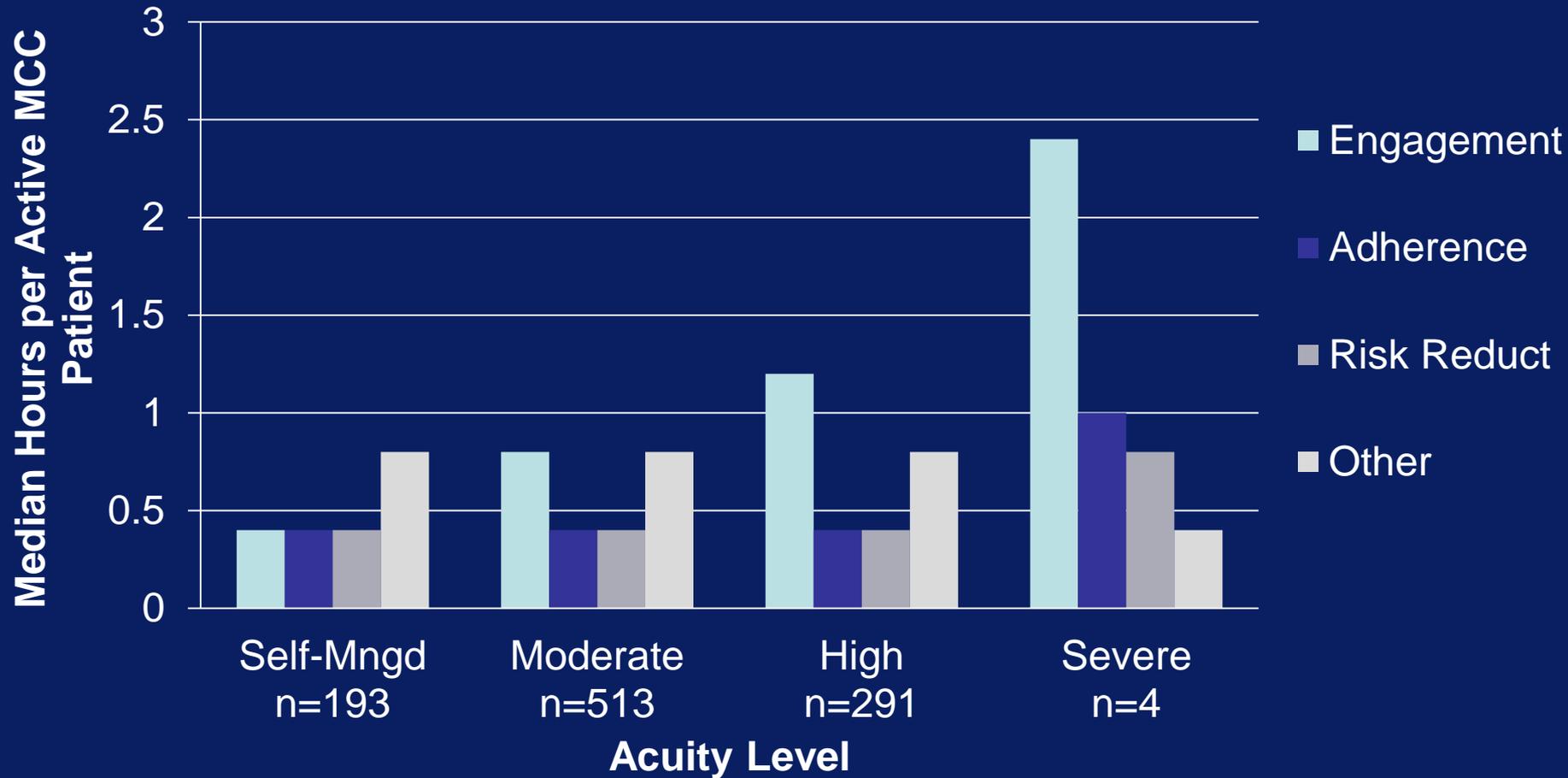
\*Includes services delivered during face-to-face and telephone contacts

Source: DHSP, Casewatch, Years 22 and 23, March-November 2013



# Active MCC Service Delivery

## Median Hours of Brief Intervention per Patient



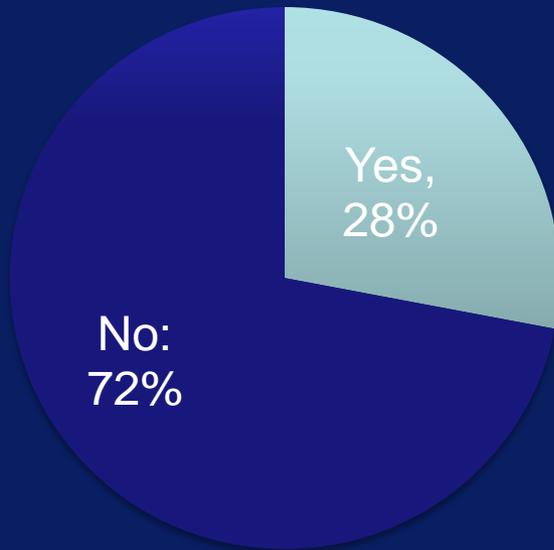
\*Includes services delivered during face-to-face and telephone contacts

Source: DHSP, Casewatch, Years 22 and 23, March-November 2013

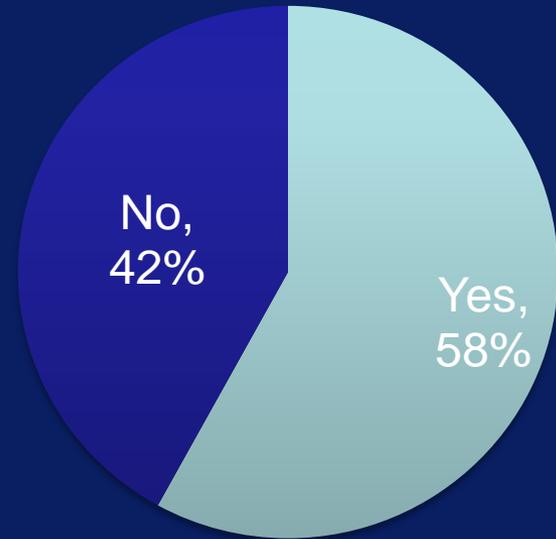


# Viral Suppression in MCC at 6 Months

**Viral Suppression pre-MCC**



**Viral Suppression after 6m of MCC**



**Receiving active MCC was associated with viral suppression at 6 months (OR=5.1; 95%CI=2.6, 9.8)**

Source: DHSP, Casewatch, Years 22 and 23, March-November 2013



# Next Steps for Evaluation

- Incorporate surveillance data
- Continue monthly review of data to ensure data quality and fidelity to service model
- Identify how to best share findings with stakeholders
- Developing an economic evaluation component



GOOD  
BETTER  
**BEST**



# Quality Management and MCC Performance Measures



# Principles of Quality Improvement

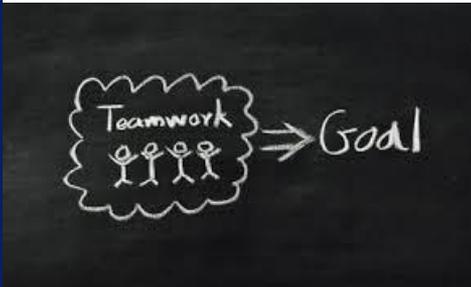


- Focus on the customer



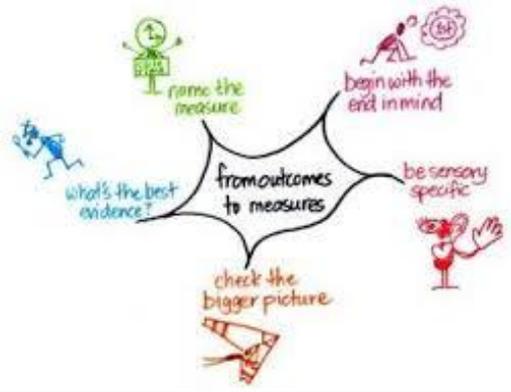
- Measurement

- Emphasis on the system of care



- Involvement of participants





# Developing Performance Measures

3 major activities for developing measures:

- Defining the measurement population
- Defining the measures
- Developing the data collection plan





# MCC Performance Measures

- Retention in HIV care
- Viral load suppression on ART
- Provision of Interventions
  - *Adherence*
  - *Risk reduction*
- Linkages to support services
  - *Mental health*
  - *Substance abuse*
  - *Housing*
  - *Partner services*



## Performance Measure 1.1: Retention in HIV care (ALL)

Percentage of medical care coordination (MCC) patients who had 2 or more medical visits at least 90 days apart within the past 12 months

**Numerator:** Number of MCC patients who had 2 or more face-to-face (FTF) visits with an HIV provider at least 90 days apart within the past 12 months

**Denominator:** All clinic patients who were screened for MCC within the past 12 months

**Definition:**

1. MCC Patients: refers to clinic patients who were screened for MCC services and determined to be either active or self-managed status
2. HIV Provider: refers to a physician or mid-level provider ( PA or NP) who performs medical evaluation for patient in an HIV care setting
3. Screened: refers to any clinic patient for whom the DHSP Casewatch “MCC Screener and Outcome” screen was completed

**Patient Exclusions:**

1. Patients who have been incarcerated within the past 12 months
2. Any patient registered as new patient at the HIV medical home within the last 6 months of the measurement period
3. Any patient refusing services that was documented in the medical record

**Data Element:**

1. Is the patient HIV-infected? (Y/N)
2. If yes, was the patient screened for MCC? (Y/N)
3. If yes, did the patient have 2 or more medical visits with an HIV provider at least 90 days apart during the past 12 months? (Y/N)

**Data Source:**

- Casewatch or other electronic data base

DHSP Threshold for Compliance: 90%



**Performance Measure 1.2: Viral load suppression less than 200 copies/mL when on antiretroviral therapy (ART) (ALL)**

Percentage of MCC patients who are prescribed ART and achieve viral suppression (< 200 copies/mL) within the past 12 months.

|                            |   |
|----------------------------|---|
| <b>Numerator:</b>          | Number of MCC patients who were prescribed ART in the last 6 months whose most recent viral load was <200 copies/mL   |
| <b>Denominator:</b>        | Number of MCC patients who were prescribed ART in the last 6 months   |
| <b>Definition:</b>         | <ol style="list-style-type: none"><li>1. MCC Patients: refers to clinic patients who were screened for MCC services and determined to be either active or self-managed status</li><li>2. Screened: refers to any clinic patient for whom the DHSP <u>Casewatch</u> “MCC Screener and Outcome” screen was completed</li><li>3. Viral load suppression: refers to an HIV viral load measurement that is less than 200 copies/ml</li></ol> |
| <b>Patient Exclusions:</b> | <ol style="list-style-type: none"><li>1. Patients who have been incarcerated within the past 12 months</li><li>2. Any patient registered as a new patient within the last 3 months of the 12-month measurement period</li><li>3. Any patient refusing services that was documented in the medical record</li></ol>  |
| <b>Data Element:</b>       | <ol style="list-style-type: none"><li>1. Is the patient HIV-infected? (Y/N)</li><li>2. If yes, is the patient screened for MCC? (Y/N)</li><li>3. If yes, was the patient prescribed ART medication in the last 6 months? (Y/N)</li><li>4. If yes, <u>was the patient’s last viral load less than 200 copies/mL?</u> (Y/N)</li></ol>   |
| <b>Data Sources:</b>       | <ul style="list-style-type: none"><li>• <u>Casewatch</u>, <u>eHARS</u>, or other electronic data base</li></ul>   |

**DHSP Threshold for Compliance: 85%**



**Performance Measure 2.1: Provision of antiretroviral (ART) adherence intervention to high-risk patients (ACTIVE PATIENTS ONLY)**

Percentage of active MCC patients who are provided the ART adherence intervention in the past 12 months

**Numerator:** Number of active MCC patients with ART adherence need identified in the MCC Assessment who are provided the ART adherence intervention by MCC staff within 30 days of identified need

**Denominator:** All active MCC patients with ART adherence need identified in the MCC Assessment within the past 12 months

**Definition:**

1. Active: refers to patients who are enrolled in the MCC program to receive intensive services within the past 12 months
2. ART Adherence Need: refers to patients with severe or high acuity level in the “Medication Access and Adherence” domain of the MCC Assessment

**Patient Exclusions:**

1. Patients who have been incarcerated within the past 12 months
2. Any patients enrolled in MCC within the last 3 months of the 12-month measurement period
3. Any patient refusing services that was documented in the medical record

**Data Element:**

1. Is the patient HIV-infected? (Y/N)
2. If yes, did patient complete an MCC Assessment? (Y/N)
3. If yes, did the patient have identified ART adherence need? (Y/N)
4. If yes, did the patient receive the ART adherence intervention within 30 days of identified need? (Y/N)

**Data Source:**

- Casewatch, or other electronic data base

**DHSP Threshold for Compliance: 85%**



**Performance Measure 2.2: Linkage to mental health programs (ACTIVE PATIENTS ONLY)**

Percentage of active MCC patients who were successfully linked to mental health programs

**Numerator:**

Number of active MCC patients who were enrolled in a mental health program within 45 days of identified mental health need

**Denominator:**

All active MCC patients who were referred to mental health programs within the past 12 months

**Definition:**

1. Active: refers to patients who are enrolled in the MCC program to receive intensive services within the past 12 months
2. Mental Health Need: refers to refers to patients with severe or high acuity level in the “Mental Health” domain of the MCC Assessment

**Patient Exclusions:**

1. Any patient enrolled in MCC within the last 3 months of the 12-month measurement period
2. Any patient refusing services that was documented in the medical record
3. Patients who have been incarcerated within the past 12 months

**Data Element:**

1. Is the patient HIV-infected? (Y/N)
2. If yes, did the patient complete an MCC Assessment? (Y/N)
3. If yes, did the patient have a mental health need identified in the MCC Assessment? (Y/N)
4. If yes, did the patient enroll in a mental health program within 45 days of identified need ? (Y/N)

**Data Source:**

- Casewatch or other electronic data base

**DHSP Threshold for Compliance: 85%**

|  |  |
|--|--|
| <b>Performance Measure 2.3: Linkage to substance abuse programs (ACTIVE PATIENTS ONLY)</b> |  |
| Percentage of active MCC patients who were successfully linked to substance abuse programs |  |
| <b>Numerator:</b>  | Number of active MCC patients enrolled in substance abuse programs within 45 days of identified substance abuse treatment need   |
| <b>Denominator:</b>  | All active MCC patients who were referred to substance abuse programs within the past 12 months  |
| <b>Definition:</b>   | <ol style="list-style-type: none"> <li>Active: refers to patients who are enrolled in the MCC program to receive intensive services within the past 12 months</li> <li>Substance Abuse Treatment Need: refers to refers to patients with severe or high acuity level in the “Drug and Alcohol Use” domain of the MCC Assessment</li> </ol>                                       |
| <b>Patient Exclusions:</b>   | <ol style="list-style-type: none"> <li>Any patient enrolled within the last 3 months of the 12-month measurement period</li> <li>Any patient refusing services that was documented in the medical record</li> <li>Patients who have been incarcerated within the past 12 months</li> </ol>   |
| <b>Data Element:</b>   | <ol style="list-style-type: none"> <li>Is the patient HIV-infected? (Y/N)</li> <li>If yes, did the patient complete an MCC Assessment? (Y/N)</li> <li>If yes, did the patient have a substance abuse need identified in the MCC Assessment? (Y/N)</li> <li>If yes, did the patient enroll in the substance abuse program within 45 days of the identified need? (Y/N)</li> </ol> |
| <b>Data Source:</b>  | <ul style="list-style-type: none"> <li>Casewatch or other electronic data base</li> </ul>  |

**DHSP Threshold for Compliance: 85%**



## Performance Measure 2.4: Linkage to housing programs (ACTIVE PATIENTS ONLY)

Percentage of active MCC patients who were successfully linked to housing programs

Numerator:

Number of active MCC patients enrolled in a housing program within 45 days of identified housing need

Denominator:

All active MCC patients who were referred to housing programs during the past 12 months

Definition:

1. Active: refers to patients who are enrolled in the MCC program to receive intensive services within the past 12 months
2. Housing Need: refers to refers to patients with severe or high acuity level in the "Housing" domain of the MCC Assessment

Patient Exclusions:

1. Patients who have been incarcerated within the past 12 months
2. Any patient refusing services that was documented in the medical record
3. Any patient enrolled in MCC within the last 3 months of the 12-month measurement period

Data Element:

1. Is the patient HIV-infected? (Y/N)
2. If yes, did the patient complete an MCC Assessment? (Y/N)
3. If yes, did the patient have a housing need identified in the MCC Assessment? (Y/N)
4. If yes, did the patient enroll in a housing program within 45 days of identified need? (Y/N)

Data Source:

- Casewatch or other electronic data base

DHSP Threshold for Compliance: 70%



**Performance Measure 2.5: Linkage to partner services (ACTIVE PATIENTS ONLY)**

Percentage of active MCC patients who are successfully linked to partner services in the past 12 months

Numerator:

Number of active MCC patients with identified high risk sexual behavior linked to partner services within 45 days of identified need

Denominator:

All active MCC patients with referred to partner services within the past 12 months

**Definition:**

1. Active: refers to patients who are enrolled in the MCC program to receive intensive services within the past 12 months
2. High Risk Sexual Behavior: refers to patients with severe or high acuity level in the “Risk Behaviors” domain of the MCC Assessment

**Patient Exclusions:**

1. Patients who have been incarcerated within the past 12 months
2. Any patient refusing services that was documented in the medical record
3. Any patient enrolled in MCC within the last 3 months of the 12-month measurement period

**Data Element:**

1. Is the patient HIV-infected? (Y/N)
2. If yes, did the patient complete an MCC Assessment? (Y/N)
3. If yes, did the patient have identified high risk sexual behavior needs? (Y/N)
4. If yes, did the patient receive partner services within 45 days of identified need? (Y/N)

**Data Sources:**

- Casewatch or other electronic data base

**DHSP Threshold for Compliance: 100%**



**Performance Measure 2.6: Provision of behavioral risk reduction counseling and education intervention (ACTIVE PATIENTS ONLY)**

Percentage of active MCC patients who were provided the behavior risk reduction intervention in the past 12 months

**Numerator:** Number of active MCC patients with identified high risk behaviors in the assessment who are provided the risk reduction intervention by MCC staff within 30 days of identified need

**Denominator:** All active MCC patients with identified high risk behaviors in the MCC Assessment within the past 12 months

**Definition:**

1. Active: refers to patients who are enrolled in the MCC program to receive intensive services within the past 12 months
2. High Risk Behavior: refers to patients with severe or high acuity level in the "Risk Behaviors" domain of the MCC Assessment

**Patient Exclusions:**

1. Patients who have been incarcerated within the past 12 months
2. Any patient refusing services that was documented in the medical record
3. Any patient enrolled in MCC within the last 3 months of the 12-month measurement period

**Data Element:**

1. Is the patient HIV-infected? (Y/N)
2. If yes, did patient complete an MCC Assessment? (Y/N)
3. If yes, did the patient have identified high risk behaviors (Y/N)
4. If yes, was the patient provided the risk reduction intervention within 30 days of identified need? (Y/N)

**Data Sources:**

- Casewatch or other electronic data base

**DHSP Threshold for Compliance: 100%**



# Quality Improvement: Raising the Bar



- Strong provider-patient relationship
- Effective assistance from the multidisciplinary care team
- Every one has a critical role in improving the quality of patient care and service



# Things to Think About

- How are these services currently being coordinated in your clinic?
- What is working well in implementing this integrated approach?
- What changes have you noticed in your patient population?
  - Are new patients getting into your clinic faster?
  - Are existing patients showing improved outcomes?



# Contact Information

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