

# The Evolution of Acuity-Based MCM in Massachusetts: What Can Acuity Data Tell Us About Our Clients?

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## INTRODUCTION

In 2016, the Massachusetts Department of Public Health (MDPH), Office of HIV/AIDS (OHA) implemented an acuity-based medical case management (MCM) system using a tool that standardized how HIV-related needs of clients are assessed. Acuity scores are integrated into CAREWare MA giving OHA the ability to aggregate and evaluate the funded service system’s MCM acuity data.

Clients are assessed on 14 Areas of Function. The client receives a score of Basic, Moderate, or High acuity. An overall **Basic** score indicates that the client receives the expected core MCM services: appointment reminders, referrals, check-in calls, and other primary activities related to engagement and retention in medical care.

OHA intends to use this data to better articulate the areas of need for MCM clients in MA and allow for adjustments to programming accordingly.

## METHODS

- **Population:** Clients receiving MCM services in Massachusetts
- **Time period:** November 2016 to June 2020
- Acuity scores were categorized into:
  - Basic (1-14)
  - Moderate (15-28)
  - High (29-42)
- Data were reported using the CAREWare MA data system. Only the most recent acuity scores were used in analysis.

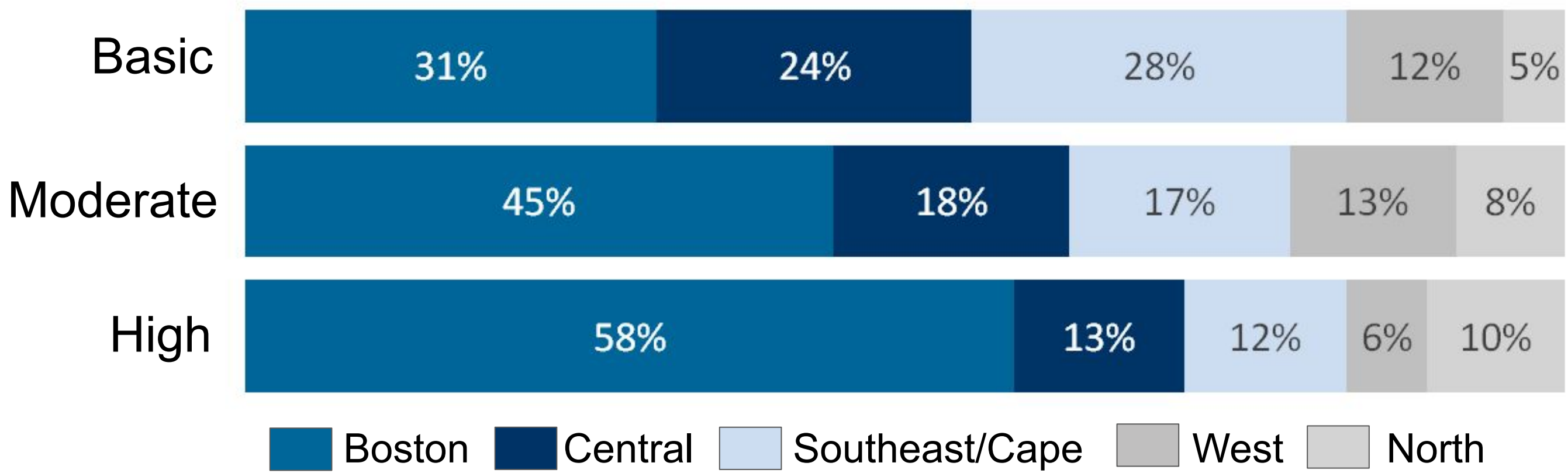
## CLIENT CHARACTERISTICS

- **10,369** clients receiving any services
- **8,296** clients receiving MCM or Care Access services
- **4,308** clients with acuity scores
- **Gender:**
  - **64%** Males, **35%** Females, **1%** Transgender
- **Race:**
  - **53%** White, **39%** Black, **7%** Unknown, **2%** Asian, **1%** other, **1%** American Indian/Alaska Native, **<1%** Native Hawaiian/Pacific Islander

## RESULTS

- Overall:
  - **70%** had basic acuity for core MCM services: appointment reminders, referrals, and activities related to engagement/retention in medical care
  - **26%** had moderate acuity
  - **4%** had high acuity

**Figure 1. Acuity Levels by Region (N=4,308)**  
Most high acuity clients received services in Boston.



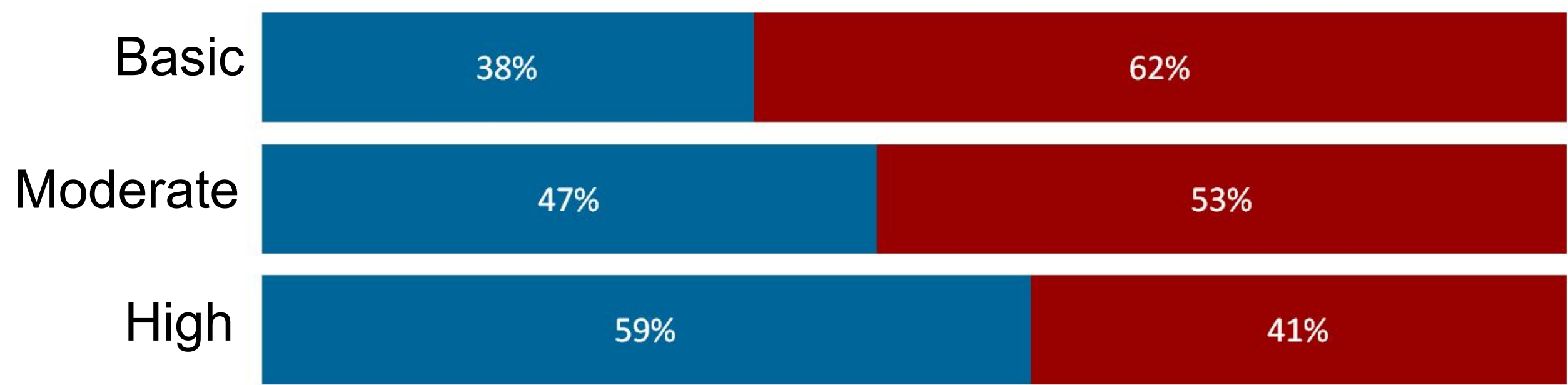
**Figure 4: Acuity Level by Area (Graph shown lower right)**

- The area in which clients experience the highest acuity is **Other Non-HIV Related Medical Issues**; over 60% of clients experience some level of acuity in this area. 21% of clients experience high acuity - managing multiple chronic health and other medical issues.
- Clients experience some of the lowest acuity in **Sexual and Reproductive Health** and **Substance Use**.
- Clients experience the lowest levels of acuity in the **Legal** area (82%) and yet 10% of clients experience high acuity in this area.
- 41% of clients are assessed as having no acuity in **HIV Health Status**; clients experience no HIV related health issues. MA Care Continuum data shows that over 90% of clients who are engaged in medical care are virally suppressed.
- 30% of clients experience moderate to high acuity in the area of **Social Support** indicating they report isolation and lack of support from a social group and/or heavily rely on the MCM or program for this.
- 85% of clients receive assistance with **HDAP and other Insurance** needs; 37% experience moderate to high acuity in this area.
- 51% of clients experience a challenge or require assistance with **Transportation and Mobility**.
- 34% of clients experience moderate to high acuity in **Mental Health**.
- 53% of clients experience some challenge in the area of **Nutrition**, predominantly (26%) receiving support from agency staff in order to obtain and/or maintain food benefits.

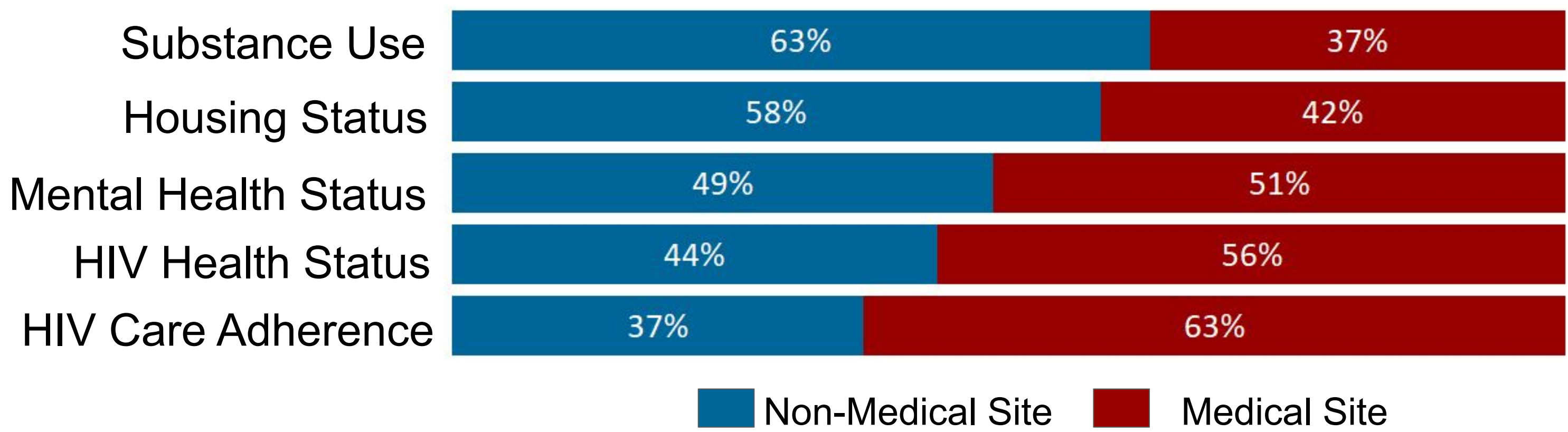
## HOW ACUITY DATA ARE USED BY PROGRAMS

- Assign case loads
- Request additional funds for staff
- Request additional funds for services
- Clinical Quality Improvement projects

**Figure 2: Acuity Levels by Site (N=4,308)**  
A higher percentage of clients with High scores received services at non-medical sites, compared to medical sites



**Figure 3: Acuity Levels of 2 or 3 by Site Type (N=4,308)**  
Non-medical sites assess clients as having higher acuity in non-medical areas while medical sites assess clients as having higher acuity in medical areas



**Figure 4. Acuity Level by Area (N=4,308)**

