



## **TCPI Exemplary Practice Performance Summary, April 2019**

### **Maricopa County Correctional Health Services (MC-CHS)**

#### **Rebecca Quince, Integration Manager**

*Nationally recognized correctional health care services dedicated to reducing recidivism and harm while increasing access to care, facilitating transitions of care to community agencies and improving outcomes for Maricopa County's incarcerated population.*

**Maricopa County Correctional Health System (MC-CHS)** achieved success on TCPI Aim 2 ("Build the evidence base on practice transformation so that effective solutions can be scaled"), Aim 4 ("Reduce unnecessary hospitalizations for 5 million patients") and Aim 5 ("Sustain efficient care delivery by reducing unnecessary testing and procedures"). These successes were achieved using evidence-based protocols like MAT (Medication Assisted Treatment) and Mosaic (intensive, holistic substance use treatment program), as well as through the use of the state health information exchange (HIE) to access clinical records of incarcerated persons to reduce duplication of tests and services, continue care and management of chronic conditions and to provide resources to those with a substance use disorder.

The Maricopa County Jail System is the fifth largest in the country and we book approximately 100,000 individuals each year. MC-CHS provides medical, dental, and mental health services for all individuals incarcerated within the jail system. Totalling 6 jail facilities and operating 9 clinics, we provide care including behavioral health, diet management, discharge planning, follow-up care, lab draws, medication administration, wound care, therapeutic interventions, and specialty clinics for infectious disease, obstetrics, optometry, orthopedics, physical therapy and surgery. Our population is broad and diverse and is defined by the demographics listed below.

- 23% of the individuals in MC-CHS facilities are dealing with chronic care conditions, such as diabetes, hypertension and heart disease
- At any one time, MC-CHS cares for between 30 and 40 pregnant patients
- MC-CHS conducts 400 withdrawal checks daily
- MC-CHS receives over 4,000 healthcare requests monthly
- The male to female ratio is 7 to 1
- The average daily population is 7,500 individuals
- Up to 8.2% of the total daily population are identified with SMI (Serious Mental Illnesses) and approximately another 16% have a significant mental health condition

Maricopa County Correctional Health Services has implemented programs to support improvements on TCPI Aims 2, 4 and 5. Our focus on interventions designed to reduce harm and deaths associated with opioid use not only highlights the evidence-based protocols we use to support the affected population, but also reduces the incidence of overdose resulting in hospitalization or death. Finally, research indicates the interventions we have adopted will result in cost savings in the communities and healthcare systems we serve.

## Targeting the Opioid Crisis

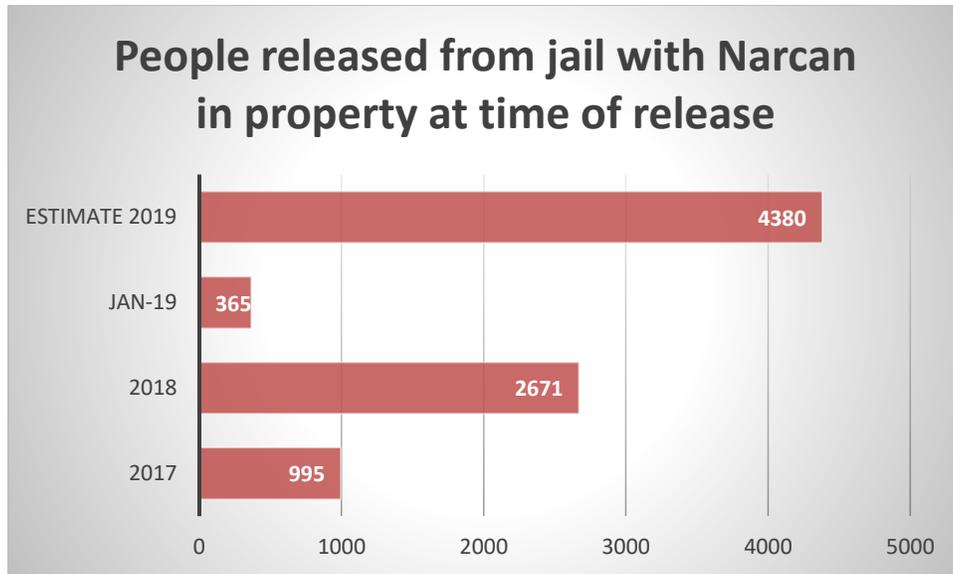
Maricopa County Correctional Health Services has focused on harm reduction and death associated with opioid use through the adoption of interventions that improved outcomes for the affected population. This included using the HIE to identify relevant clinical information for persons entering jail and improve on continuity of care, coordination of care with community agencies to transition to MAT and/or residential treatment programs, expansion of Mosaic to include women and men, and adoption of a consent pilot to allow the use of substance abuse data and to better inform the treatment and management of affected members.

MC-CHS uses evidence-based screening and assessment tools to detect history of substance use (including opioid use disorder and substance use disorder). Individuals who started MAT prior to incarceration are permitted to continue their treatment while incarcerated. According to a recent report published in the *Journal of Addiction Medicine*, January 2018, Drs. Moore, Oberleitner, Smith, Maurer and McKee from Yale University reported the following:

“Inmates who were given methadone to treat their opioid dependence while in jail were less likely to be disciplined for bad behavior and more apt to continue their treatment after release, according to a state-funded evaluation of data by Yale School of Medicine researchers. The research, published online in the *Journal of Addiction Medicine*, revealed that inmates who had consistent methadone treatment before, during, and after incarceration were five times less likely to be re-arrested for a felony and 10 times less likely to be charged with a drug offense after release. By 30 days after their release, 41 percent were continuing their treatment in the community, compared to 10 percent of inmates who did not receive methadone in jail. The research also revealed that inmates had lower odds of being re-arrested and returning to jail if they continued treatment with the in-jail methadone provider, in this case the APT Foundation” (Moore, 2018).

MC-CHS introduced the distribution of nasal naloxone to opioid use disorder inmates that are exiting the correctional system in 2017. Since the start of the program, we have provided nasal naloxone education and medication to 995 patients in 2017 and 2,671 patients in 2018 upon their release from incarceration. Education to the inmate includes knowledge of the use of the medication and need to share with trusted family and/or friends upon release for application in case of overdose emergency. As inmates are exiting incarceration and connected to community resources, the education with use of this medication is reinforced by their MAT providers.

This intervention has been demonstrated to be efficacious in reducing opioid overdose death rates in communities where opioid education and naloxone distribution (OEND) was adopted. A 2013 study in Massachusetts found “observational evidence that by training potential bystanders to prevent, recognize and respond to opioid overdoses, OEND is an effective intervention, “ and “opioid overdose death rates were reduced in communities where OEND was implemented” (Walley, et al., 2013).



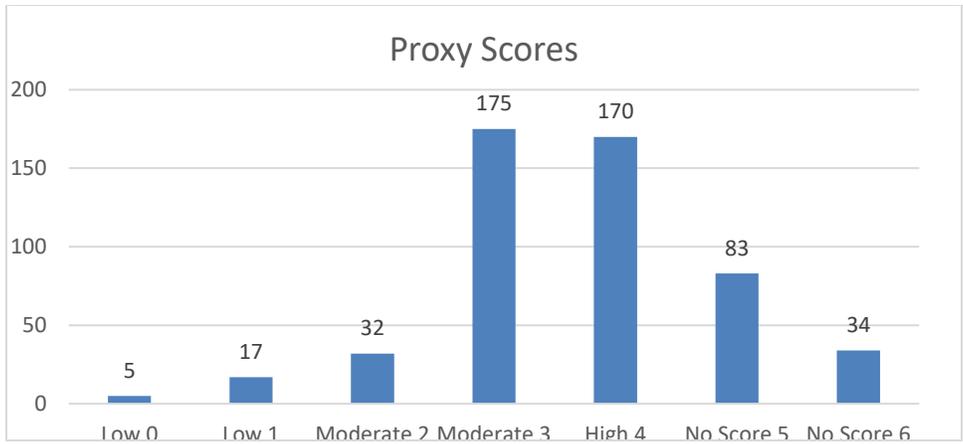
***Naloxone Distribution, Maricopa County Correctional Health Services, 2017-2019***

The Centers for Disease Control and Prevention reported in the Morbidity and Mortality Weekly Report in 2015,

“Providing naloxone kits to laypersons reduces overdose deaths, is safe, and is cost-effective. U.S. and international health organizations recommend providing naloxone kits to laypersons who might witness an opioid; to patients in substance use treatment programs; to persons leaving prison and jail; and as a component of responsible opioid prescribing” (Eliza Wheeler, 2015).

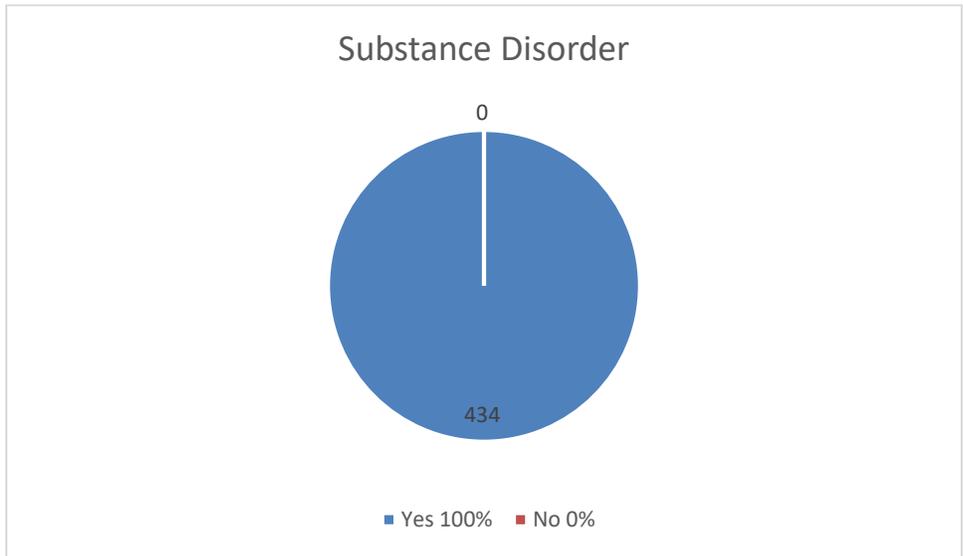
MC-CHS is also **addressing the substance abuse through our Mosaic program**. Located in the former “Tent City” in Maricopa County, participants engage in classes in an air-conditioned dayroom, and are housed in living quarters adjacent to the classroom. Since moving to the new location, we have been able to add an additional 200 people to our Mosaic graduate list. In 2018, our program was the focus of an article that described Mosaic as, “...a seven-week curriculum, focused on the moderate to high risk jail population, teaches participants to deal with past trauma and gives them skills to replace the substance. The overarching goal is to reduce the likelihood they will return to jail” (Office of Communications, Maricopa County Department of Corrections, 2018).

When Mosaic was originally introduced, our program focused on women only, and the program was housed in a dormitory at the women’s jail. In 2016 a report overviewing Mosaic’s beginning stated it “...incorporates the use of gender-informed, **evidence-based programming** (including *Start Now*, *Parenting Inside Out*, and *New Freedom* curricula) and utilizes materials developed for this population alongside cognitive processing theory-based trauma and resiliency curriculum. To maximize [our] impact, Mosaic serves moderate to high risk women, focusing on individuals with co-occurring high needs, and [we have] developed a risk-needs-responsivity (RNR) model as the program’s foundation” (National Resource Center on Justice Involved Women, 2016). In 2018 the program expanded to include men as well as women. Participants were admitted based on several factors. A moderate – high risk proxy score, which measures risk of recidivism, was a consideration for participation. The table below illustrates the breakdown of MOSAIC participants by proxy score.



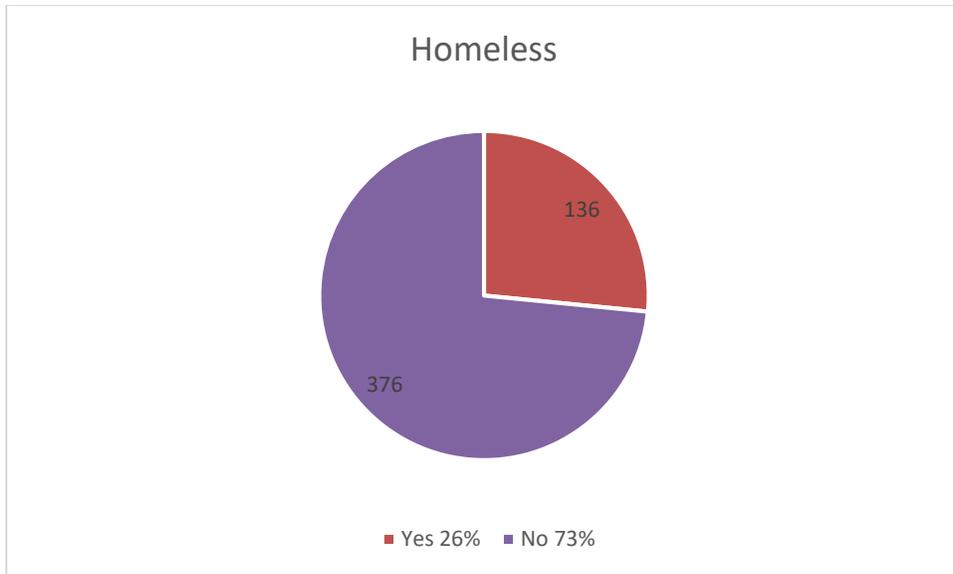
**2018 Mosaic Proxy Scores, Maricopa County Correctional Health Services**

Additionally, applicants were considered based on a history of substance disorder. In the 2018 Mosaic class, 100% of participants had a history of substance disorder. (See table below)

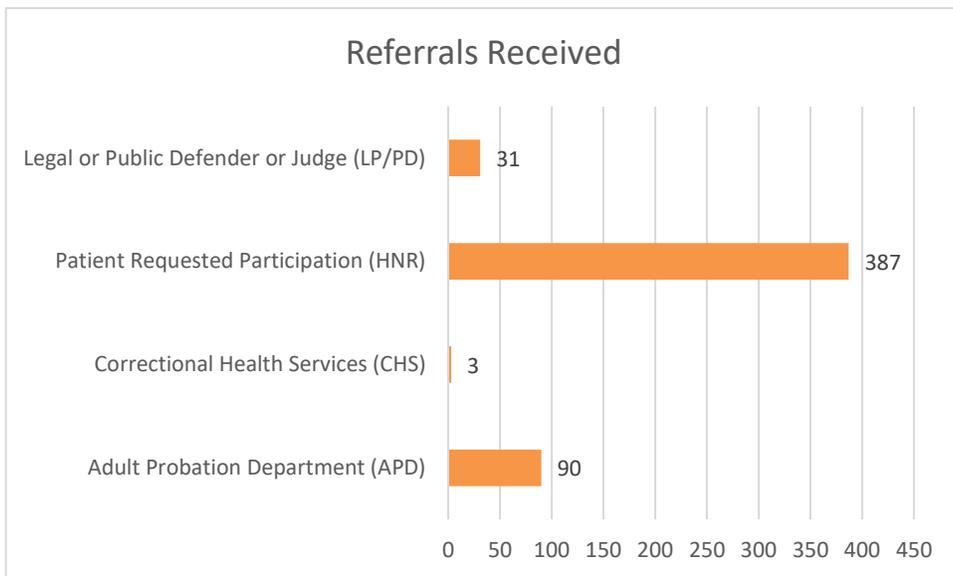


**Rate of Substance Disorder Among Mosaic Participants 2018, Maricopa County Correctional Health Services**

Other factors considered for admission into the Mosaic program include history of homelessness and direct referral into the program by the legal system, judge or public defender, Adult Probation Department, Correctional Health Services, or patient-inmate request to participate. (See tables below)



**Rate of Homelessness Among Mosaic Participants 2018, Maricopa County Correctional Health Services**



**Referrals Received by Category for Mosaic 2018, Maricopa County Correctional Health Services**

### Reduced Recidivism Rate for Mosaic Participants

Maricopa County-Justice Systems Planning and Information (JSPI) conducted an analysis for MC-CHS of the 2017 Mosaic participant data. Based on an analysis (using a control group) of 549 participants, 365 days post Mosaic release, there was a **20% reduction in recidivism** (return to jail for any reason), a robust reduction especially given the participant selection criteria of both SUD and moderate to high recidivism risk. The control group of 549 participants was comprised of incarcerated individuals who had a moderate to high proxy risk score and had a positive screening result for opioid use or other substance use in their history but *did not* participate in Mosaic. According to MC-CHS Mental Health

Director Dawn Noggle, PhD, CCHP, “Mosaic brings together all the pieces of the individual’s care needs in one program.” Mosaic is a metaphor for the multifactorial components of the program and the multidimensional aspects of the participant’s clinical, behavioral and substance use history, unique personality and care needs. The 2017 recidivism data is extremely encouraging for future applications of this intervention in other correctional settings.

### **Improvement Optimized Through Use of the Health Information Exchange**

MC-CHS has actively engaged with Health Current to optimize our use of the health information exchange (HIE). Registered users of the HIE can access external clinical records of incarcerated individuals (with consent) to provide the most up-to-date accounting of the member’s needs. This reduces the need for testing for members with chronic conditions like diabetes, hypertension or asthma and permits the member to continue treatment protocols without a gap in care. Additionally, members who had started MAT prior to incarceration are permitted to continue that treatment in jail without losing the progress associated with the prior treatment. The bi-directional interface has a physical health portal and a CFR 42 Part 2 portal (Confidentiality of Substance Abuse Data), and our users have been collecting consents of incarcerated members to coordinate care with community agencies to support the "warm hand off" of members transitioning to MAT program and other clinical providers after exiting the jail system.

MC-CHS staff access the HIE portals manually and downloads patient records as well as uploads consent forms for CFR 42 Part 2 data. The current interface is set up such that we push data to the Part 2 portal once a patient leaves the jail facility. We are in the process of splitting the interface into two sections; physical health and Part 2 data. Patients who participate in the Mosaic program have their data housed in the Part 2 section of the HIE. The remaining patients’ information is placed in the physical health record.

Maricopa County Correctional Health System successfully targeted TCPI Aim 2, Aim 4, and Aim 5. Our success was characterized by using evidence-based protocols like MAT and Mosaic as well as through use of the state health information exchange. We were able to leverage the nasal naloxone distribution program, MAT, and Mosaic interventions to reduce hospitalizations resulting from opioid overdose secondary to substance use disorder. These solutions are effective and scalable to other correctional institutions. Additionally, we have effectively leveraged the HIE to maximize the care experience of incarcerated members to reduce duplicate and unnecessary testing and to provide continuity of care for chronic diseases and MAT therapies initiated outside the institution.

*Maricopa County Correctional Health Services is an active participant of the Practice Innovation Institute (Pii), Arizona’s Practice Transformation Network.*

*As of May 2018, MC-CHS has completed the 5 Phases of Transformation.*



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## References

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