

# Developing a Protocol to Continue Psychiatric Medications for the Newly Incarcerated Population in San Francisco County Jail





Kory Combs, MD; Melanie Thomas, MD, MS; Jennie Xu, BS; Tanya Mera, LCSW; James Dilley, MD; Christina Mangurian, MD, MAS



University of California, San Francisco and Zuckerberg San Francisco General Hospital

#### **Background**

- In the U.S. over half of prison and jail inmates meet diagnostic criteria for mental illness.
- People with mental illness are 4.5 times more likely to be arrested compared to those without.
- Less than 20% jail inmates in the U.S. who need mental health treatment report receiving treatment while incarcerated.
- Abruptly discontinuing psychiatric medication can have deleterious effects both acutely and chronically.
- There is a lack of consensus in the scientific literature to support best practices for continuing psychiatric medications for the incarcerated population.
- Addressing the treatment gaps for the large numbers of incarcerated individuals with mental illness presents a complex challenge for county jail systems.

## **Objective**

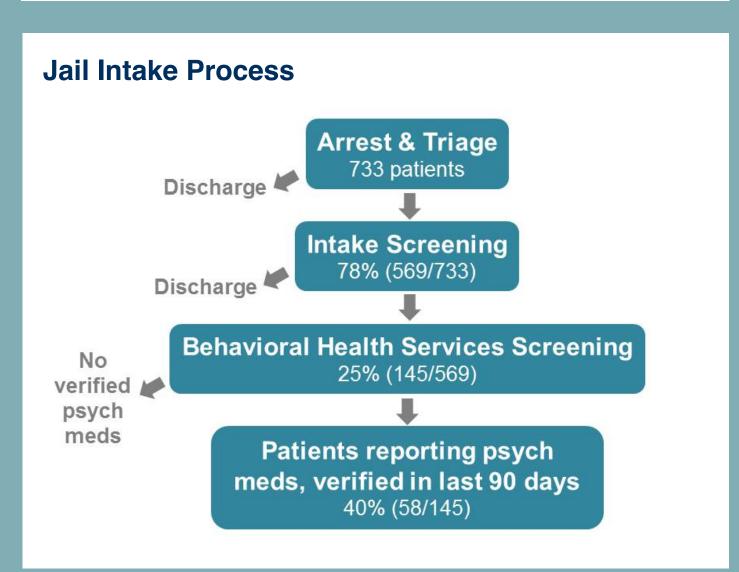
 The purpose of our study was to assess the feasibility and acceptability of implementing a protocol to continue verified psychiatric medications for the acutely incarcerated in a county jail health system.

# Methods

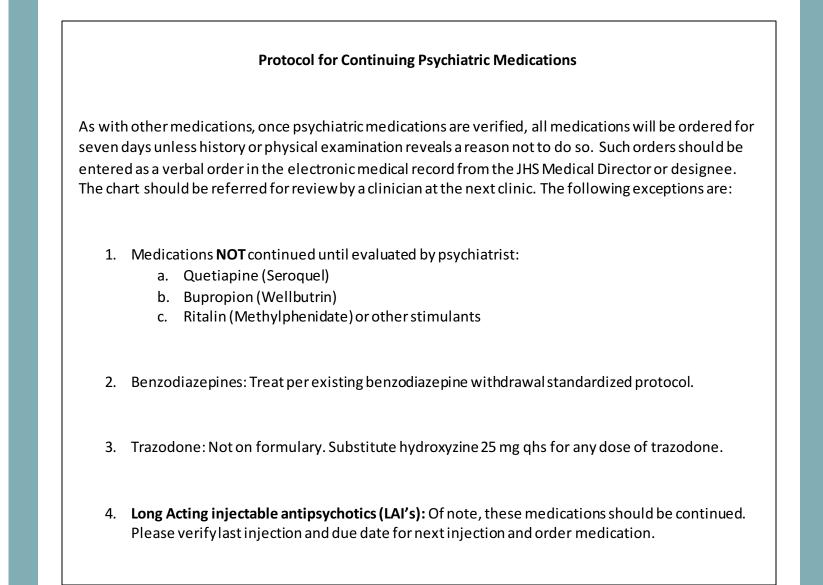
- We conducted a pre-post comparison study to gather data on the feasibility, acceptability, and effectiveness following the implementation of a new protocol.
- We collected quantitative and qualitative data to assess results during a two-week pre-implementation period and a two-week pilot implementation. The pilot was performed by just one nursing staff member.
- Our study included meetings with various stakeholders in the Jail Health System, including leadership and front line staff, to assure adequate engagement in protocol development and implementation.
- Our primary outcome measure was continuation of psychiatric medications for newly incarcerated individuals upon entry into the county jail system.

# **Table 1. Population Characteristics**

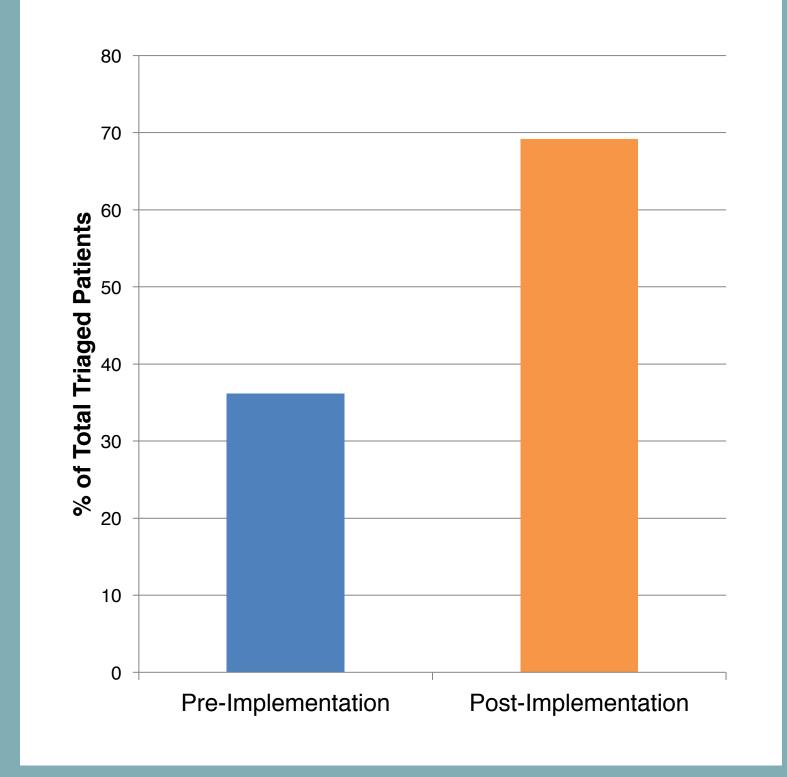
	Pre-	Post-
	Implementation	Implementation
Sample Size	58	13
Age (mean years)	41.3	42.7
Gender		
Male	74% (43)	77% (10)
Race/Ethnicity		
Caucasian	33% (19)	39% (5)
African American	34% (22)	31% (4)
Latino	17% (10)	8% (1)
Asian/Pacific Islander	10% (6)	15% (2)
Other	2% (1)	8% (1)
Psychiatric Diagnoses		
(primary and secondary)		
Schizophrenia/Psychotic Disorder	42% (28)	62% (8)
Depression	5% (3)	0
Bipolar Disorder	3% (2)	8% (1)
Anxiety Disorder	3% (2)	0
Unspecified Mood Disorder	19% (11)	8% (1)
Substance Use Disorder	57% (33)	46% (6)
Verified Medications		
Typical Antipsychotic	14% (8)	0
Atypical Antipsychotic	47% (27)	54% (7)
Mood Stabilizer	7% (4)	15% (2)
Antidepressant	40% (22)	23% (3)
Other	22% (13)	8% (1)



# **Figure 1. Simplified Protocol**



# Figure 2. Patients Receiving Psychiatric Medications



#### **Qualitative Provider Feedback**

#### Pre-implementation

- "Is it safe to give psychiatric medications to patients who are intoxicated?"
- "The work load is simply too much already."

## Post-implementation

- "It wasn't much more work at all, since we verify and order the non-psych medications for patients anyway."
- "The only obvious problem was not being able to verify medications from closed pharmacies during the night shift. But this is a similar problem with non-psychiatric medications as well."
- "So far, it's gone smoothly."

#### Results

- Stakeholder engagement across sectors of Jail Health Staff resulted in simplified protocol (see Figure 1) to streamline the work flow.
- Implementation of this protocol is feasible and acceptable as evidenced by feedback from nursing staff, though not without concerns regarding workflow for staff (see Qualitative Results).
- In the two weeks preceding implementation, 36% (21/58) of newly incarcerated individuals received medications during the 2 weeks after their triage screen. During the pilot protocol implementation, the number of individuals who received medications within 2 weeks increased to 70% (9/13). (see Figure 2)
- Prior to protocol implementation, the mean number of days until medications were ordered was 4.8 days for the individuals on verified psychiatric medications. During the pilot implementation phase, the mean number of days until medications were ordered was 2.2 days.

#### **Conclusions**

- Overall, implementation of the protocol was both feasible and acceptable.
- This study is limited by a small sample size in our pilot implementation.
- Potential increase in cost for medications was not a consideration in this study.
- The development of an evidence-based protocol for continuing psychiatric medications for newly incarcerated individuals is an important care improvement tool for a vulnerable and marginalized population.



# Acknowledgements & Contact Information

- This work was supported by the San Francisco Department of Public Health, Community Behavioral Health Services
- kory.combs@ucsf.edu