

# Increasing the Efficiency and Productivity of Psychiatric Evaluation and Treatment

[REDACTED] MD

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North Kern State Prison



# Background

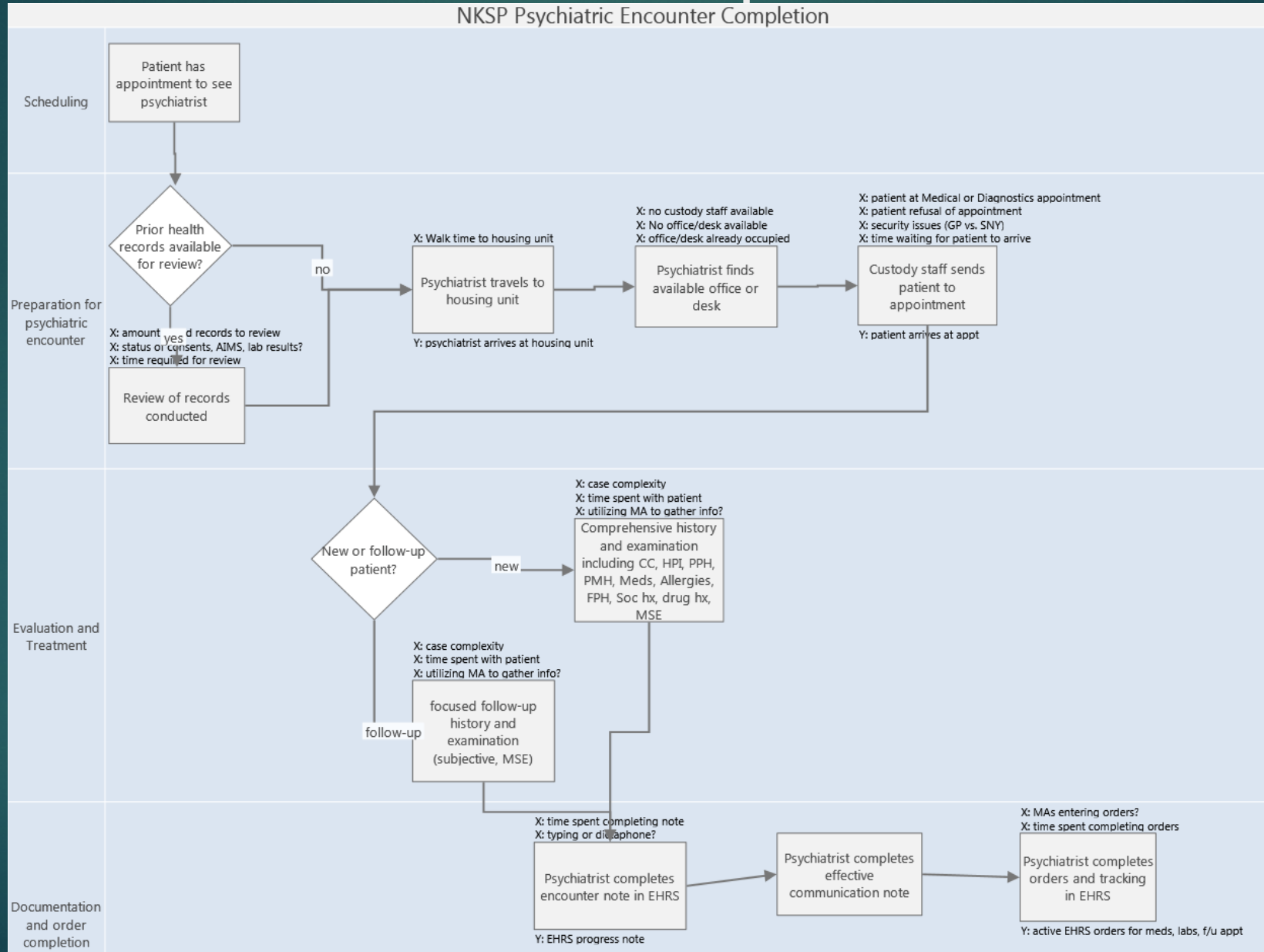
- Even prior to the Electronic Health Records System (EHRS), the documentation burden on the psychiatrist had been growing.
- Through the years at NKSP, the standard daily workload for the psychiatrist gradually decreased from twenty patient encounters per day to fifteen per day and finally down to ten per day where it currently remains.
- Experience has shown that an electronic records system by itself does not necessarily increase psychiatrist productivity.

# Project Goal

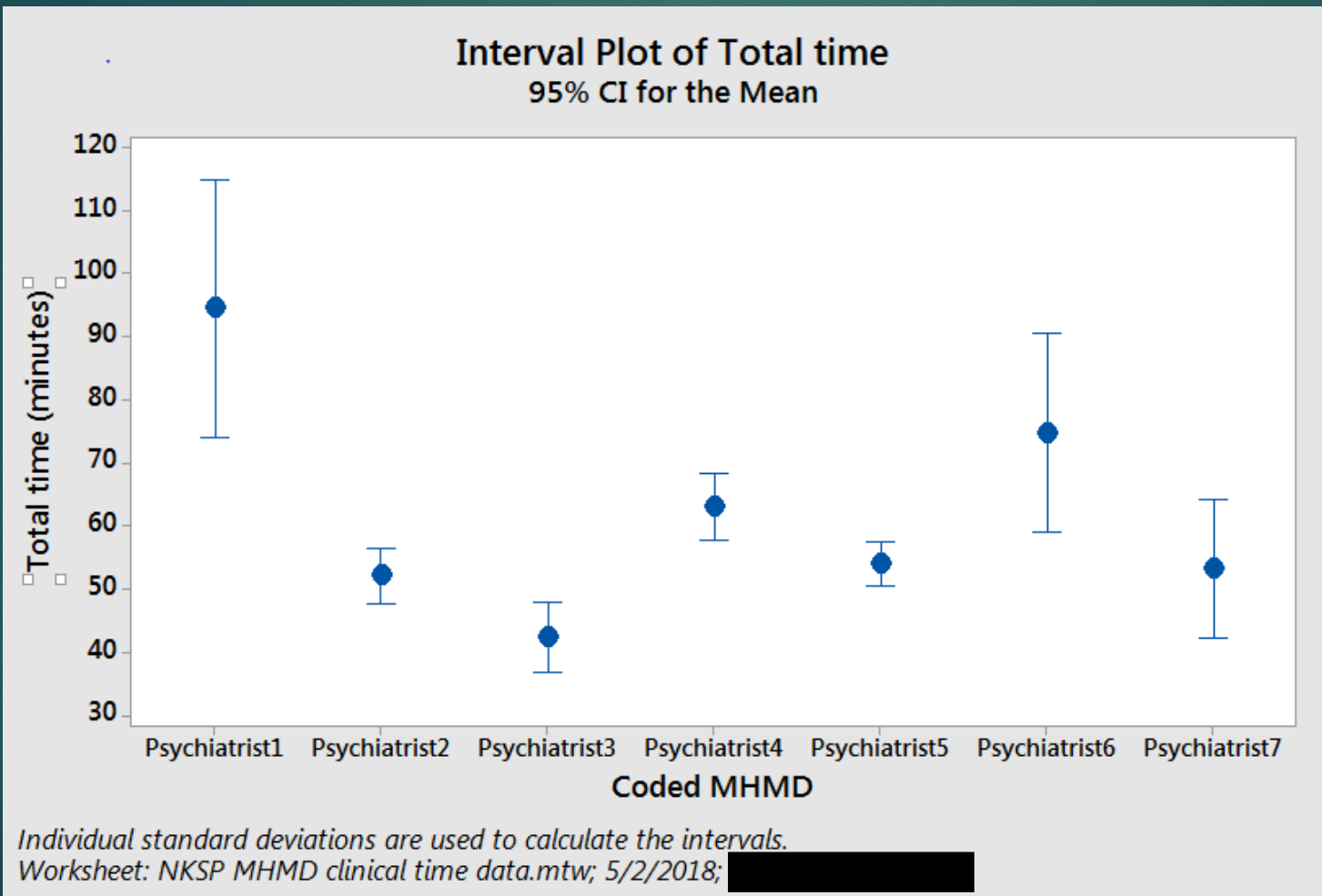
Increase the number of completed psychiatric encounters per ten-hour workday to 11 to 18 per day by streamlining the process by which psychiatric encounters are completed at NKSP.

# Process Map

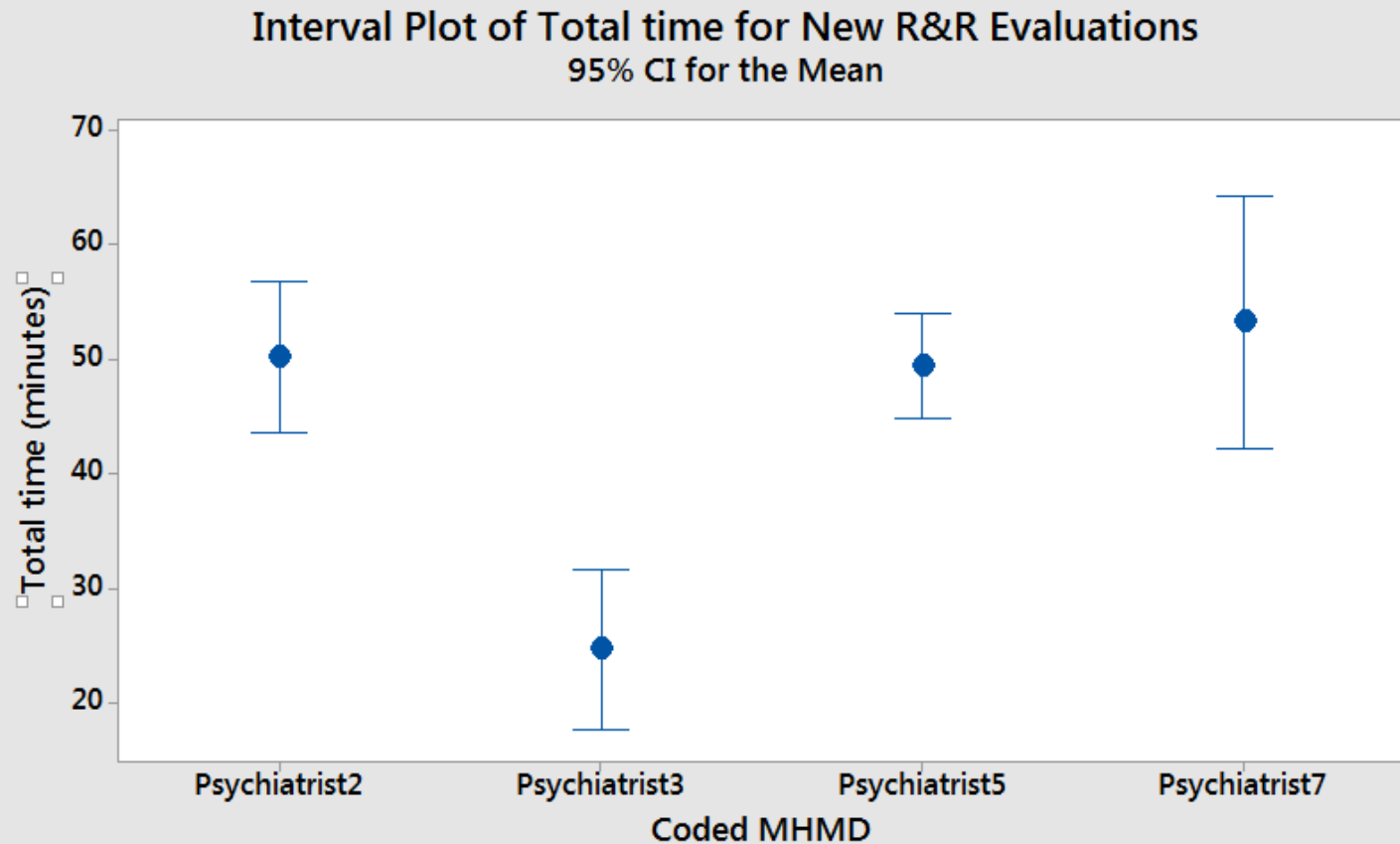
## NKSP Psychiatric Encounter Completion



# Total Time by Psychiatrist for All Encounters



# Total Time by Psychiatrist for R&R Evaluations



Individual standard deviations are used to calculate the intervals.  
Worksheet: R&R; 5/2/2018; [REDACTED]

# Worker Activity Charts

time of day	activity	type	time (minutes)	
8:00	Encounter with patient	VA processing	10	
8:10	Encounter with patient	VA processing	40	
8:50	Encounter with patient	VA processing	30	
9:20	Documentation	NVA processing	10	
9:30	Check e-mail; respond to e-mail	NVA processing	5	
9:35	Scan notes with patient from previous appointment	NVA processing	10	
9:45	Encounter with patient	VA processing	25	
10:10	Documentation	NVA processing	10	
10:20	Patient education on refusal risks	VA processing	15	
10:35	Documentation	NVA processing	10	
10:45	Check e-mail	NVA processing	10	
10:55	Documentation	NVA processing	20	
11:15	Check e-mail	NVA processing	10	
11:25	Documentation	NVA processing	305	
		waiting (idle)	0	0.0%
		VA processing	120	23.5%
		NVA processing	390	76.5%
		total:	510	

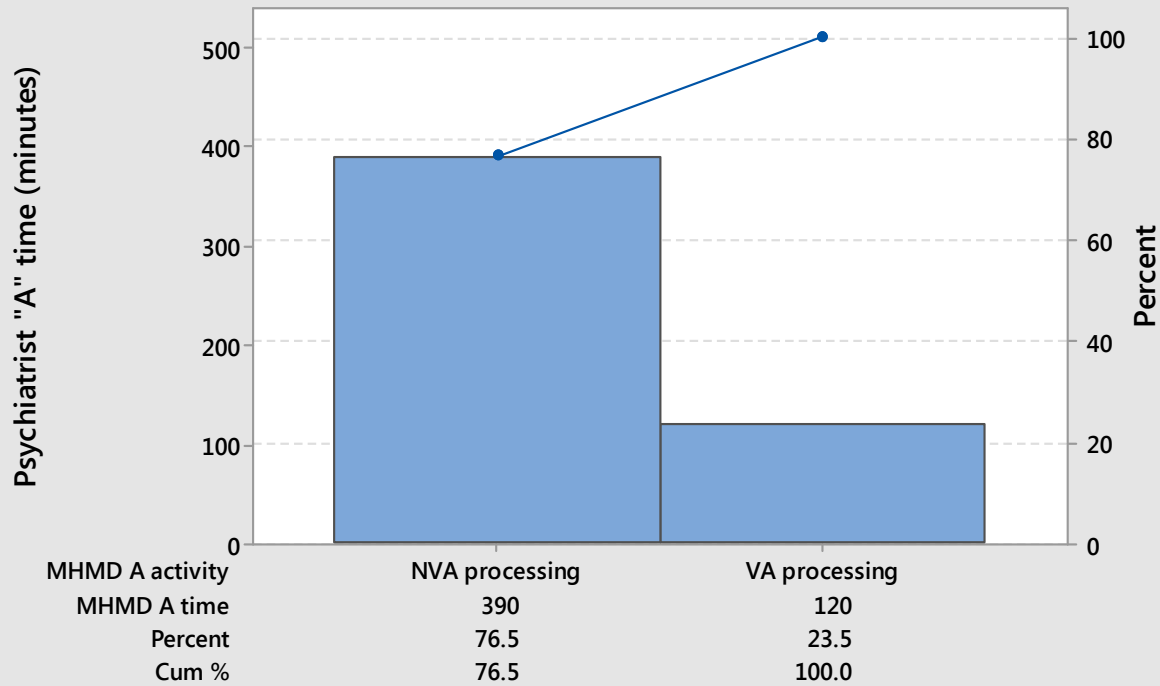
← Psych "A"

Psych "B" →

time of day	activity	type	time (minutes)	
7:00	Education about Administrative Segregation Unit	VA processing	10	
7:10	Check e-mail; respond to e-mail	NVA processing	10	
7:30	Documentation	NVA processing	20	
7:50	Waiting	waiting (idle)	5	
7:55	Check e-mail; respond to e-mail	NVA processing	10	
8:20	Prepare for patient appointment	NVA processing	10	
8:30	Encounter with patient at cell front	VA processing	10	
8:40	Encounter with patient at office	VA processing	10	
8:50	Documentation; orders	NVA processing	20	
9:10	Encounter with patient; IDTT	VA processing	70	
10:20	Check e-mail; respond to e-mail	NVA processing	10	
10:30	Encounter with patient	VA processing	10	
10:40	Encounter with patient	VA processing	10	
10:50	Documentation	NVA processing	30	
11:30	Check e-mail; respond to e-mail	NVA processing	15	
11:45	Encounter with patient	VA processing	25	
12:05	Encounter with patient at cell front	VA processing	40	
12:45	Documentation	NVA processing	15	
13:00	Check e-mail; respond to e-mail	NVA processing	15	
13:15	Documentation	NVA processing	225	
	< INSERT ROWS TO ADD STEPS >			
		waiting (idle)	5	0.9%
		VA processing	185	32.5%
		NVA processing	380	66.7%
		total:	570	

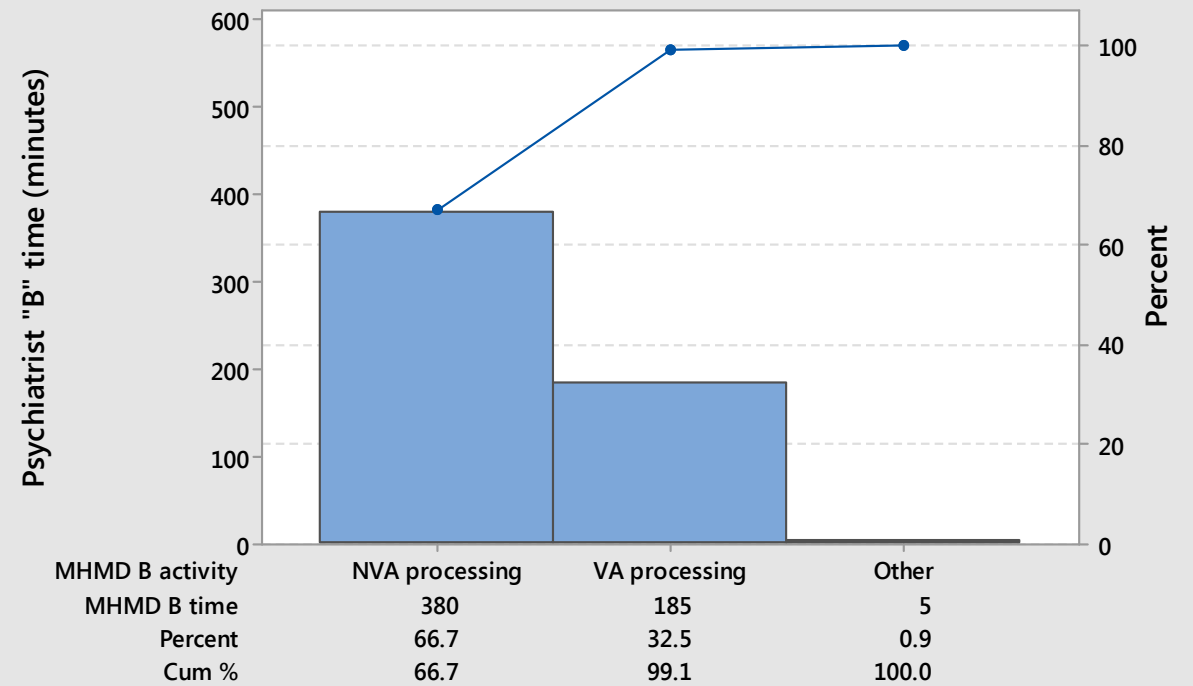
# Analyzing Activity of the Worker

### Pareto Chart of Psychiatrist "A" activity



Worksheet: Worker Activity Chart; 5/11/2018

### Pareto Chart of Psychiatrist "B" activity



Worksheet: Worker Activity Chart; 5/11/2018

\*Majority of time in non-value added processing was spent in documentation

# Critical x's

- Total encounter time showed significant differences among the psychiatrists
- Standard deviation of note times was significantly different among the psychiatrists
- One psychiatrist working in R&R had a significantly shorter encounter time
- Worker activity analysis showed a large amount of time is spent completing documentation of the clinical encounter

# Improvement Methods

- Integrating the psychiatric medical assistant into the psychiatric patient encounter
  - The medical assistant will conduct a preliminary interview of the patient to gather clinical data prior to meeting with the psychiatrist.
  - As the patient is then moved along to the psychiatrist (for a more focused interview), the psychiatrist will not spend as much time gathering historical clinical data.
  - While the psychiatrist is seeing the first patient, the medical assistant can begin the preliminary interview for the next patient.

# Improvement Methods

- Psychiatrist will utilize Dragon Dictaphone in order to reduce time needed to transcribe the clinical note in EHRS.
- NKSP Psychiatry currently does not have an adequate number of Dragon Dictaphones for State-employee psychiatrists, and no devices have even been allotted for contractor (registry) psychiatrists.
- \*\*\* Dragon Dictaphones for *all* psychiatrists will be very important for achieving maximum performance of this improvement program.\*\*\*



# Improvement Methods

## Standard Work: Medical Assistants to utilize questionnaires

Name: \_\_\_\_\_ DOB: \_\_\_\_\_

### MEDICAL HISTORY

What Mental health medications have you previously tried? \_\_\_\_\_

Do you have any Allergies or Adverse Drug Reactions? \_\_\_\_\_

Any Surgeries? Yes No. When? What surgeries? \_\_\_\_\_

Any Head Trauma? Yes No. When? What happened? \_\_\_\_\_

Any Accidents, serious injuries? Yes No. When? What happened? \_\_\_\_\_

Any chronic medical conditions? Yes No. Please circle any conditions or add any other conditions  
Seizures, High blood pressure, Asthma, Heart disease, Hep A, B, C, HIV, TB, STD or any other conditions.

### MENTAL HEALTH HISTORY

Any Prior Psychiatric Diagnosis? \_\_\_\_\_

Have you ever been hospitalized in either a mental health facility or a hospital for more than 24 hours?

If yes than when, where and for how long? \_\_\_\_\_

Have you ever been to a Mental Health Crisis Bed? Yes No. If yes than when and where? \_\_\_\_\_

Have you ever been to DSH/ICF? Yes No. If yes than when and where? \_\_\_\_\_

### Suicide Attempt History:

Have you ever attempted suicide? Yes No.

If yes how many times? When? How did you attempt? \_\_\_\_\_

Have you ever done Self-injurious behavior/cutting? Yes No. If yes than when was the last time? How did you hurt yourself? \_\_\_\_\_

### PSYCHOSOCIAL HISTORY:

What is the highest level of education you have completed? \_\_\_\_\_

Do you have any Employment history? If yes what was your profession? \_\_\_\_\_

Have you ever had any Childhood Traumatic Experiences/Adult Traumatic Experiences? Yes No.

If yes that what happened and when? \_\_\_\_\_

What was your Living Situation at Time of Arrest? \_\_\_\_\_

**SUBSTANCE ABUSE HX:** Have you used any of these? If yes than when was the last time you used? What age did you start using?

Alcohol: \_\_\_\_\_

THC: \_\_\_\_\_

Tobacco: \_\_\_\_\_

Methamphetamine: \_\_\_\_\_

Cocaine: \_\_\_\_\_

Opiates, Heroin, Prescription pills: \_\_\_\_\_

IV Drug use? \_\_\_\_\_

Have you ever been to drug rehab? Yes No. If yes than when and where? \_\_\_\_\_

### FAMILY HISTORY

Do you have any family history mental health issues? Yes No. Who? \_\_\_\_\_

Has anyone in your family ever attempted or completed Suicide? Yes No. Who? \_\_\_\_\_

Any additional information you would like to add? \_\_\_\_\_

Name \_\_\_\_\_ CDCR# \_\_\_\_\_

### **Follow-up Psychiatric Appointment**

Subjective: (complaints or problems reported by patient today)

Depression: \_\_\_\_\_

Anxiety: \_\_\_\_\_

Suicidal Ideation: \_\_\_\_\_

Homicidal Ideation: \_\_\_\_\_

Auditory/Visual Hallucinations: \_\_\_\_\_

Paranoia/Delusions: \_\_\_\_\_

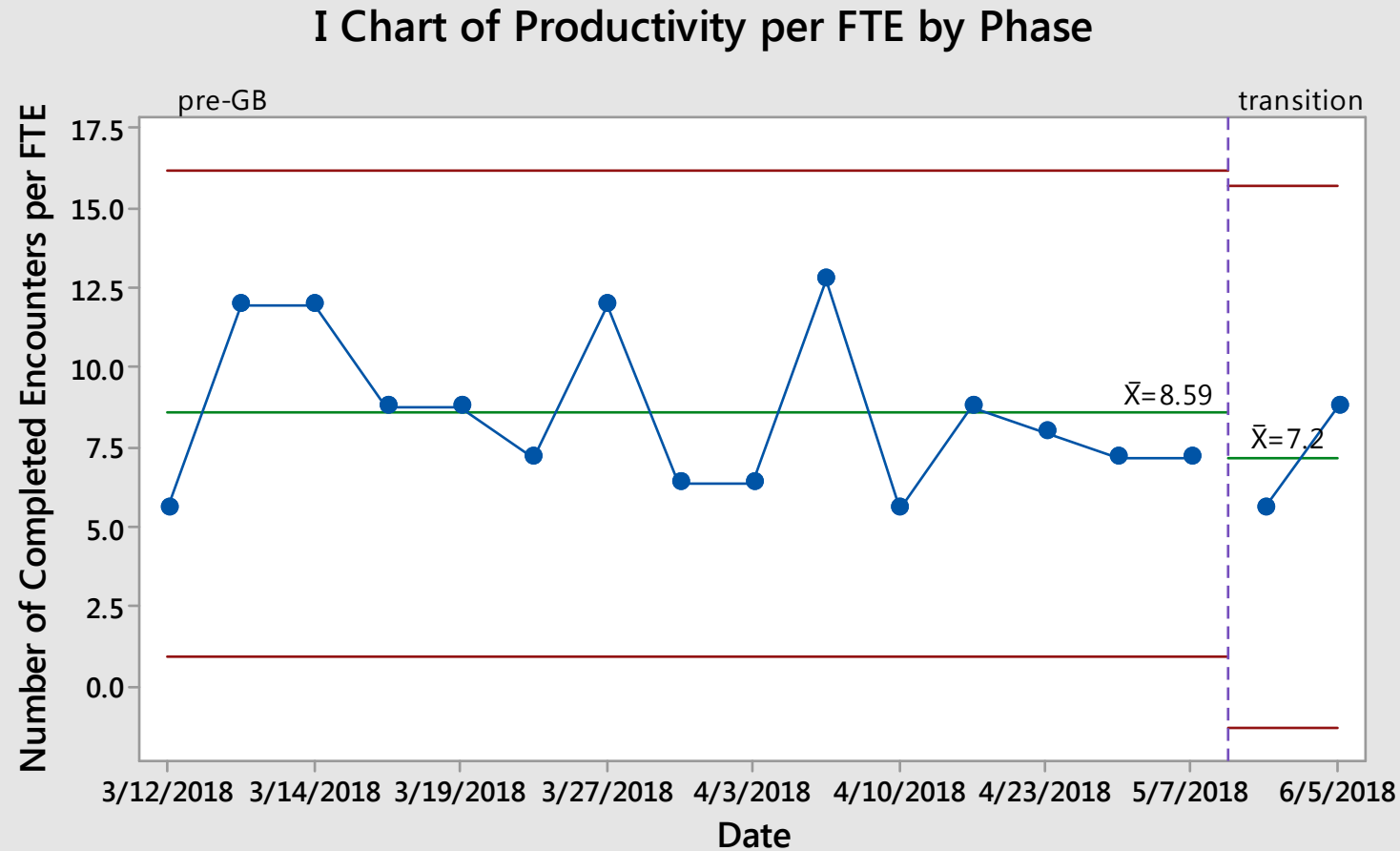
Medication Side Effects: \_\_\_\_\_

Objective: (your observations of the patient)

agitated  malodorous  uncooperative  pressured/rapid speech

poor eye-contact  angry  distracted  \_\_\_\_\_

# Control Plan



Improvement not seen yet; only have two workdays of data so far; staff still being trained

# Potential Financial Benefits

- Current productivity per psychiatrist figure of 6.0 encounters per FTE (8-hour day)
- Total burdened rate for Staff Psychiatrist (maximum) = \$382,224/year
- NKSP FTE staff psychiatrists = 3.75

If productivity improves to 9 encounters per FTE (8-hour day):

(%productivity increase) x (FTE) x (annual salary) = **\$716,670 (soft savings)**

If productivity improves to 12 encounters per FTE (8-hour day):

(%productivity increase) x (FTE) x (annual salary) = **\$1,433,340 (soft savings)**

\*Consider extrapolating this data for 3.75 FTE for NKSP to the entire Statewide system – potential for huge soft savings which could eventually become hard savings.



# Additional Benefits

- Value of having actual data on psychiatric encounters as opposed to speculating about how long certain steps are taking
- Potential for expanding this psychiatric practice model to other areas within NKSP and even statewide
- Potential for huge cost savings if fewer psychiatric positions are needed to complete the workload
- Psychiatrists will focus more on doing clinical work rather than clerical work

Thank you for listening!

# Green Belt Contact Information

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