

### Project Summary

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| <b>NAME OF PROJECT</b>                                                                                                                                   | <b>Reduce No Shows to the Pill Line</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>WHY IS THIS IMPORTANT?</b>                                                                                                                            | This is important because when inmate-patients do not show up to the pill window because when the medication is not taken it could impact the I/P health.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>PRIMARY METRIC</b><br><i>Include the baseline capability</i>                                                                                          | Reduce the percentage of no shows to pill line to 5% or less.<br>Baseline capability was 12%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>FINDINGS FROM PROCESS MAP</b><br><i>e.g., number of steps, workarounds, bottlenecks, potential critical x's</i>                                       | The process map showed that 2 of the 4 building were not following the process all the way, that the process stopped when the post medication list was given to the custody officer.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>EXPLAIN THE TYPES OF ANALYSES USED AND FINDINGS</b><br><i>Include significant and insignificant findings, and notate them accordingly.</i>            | <p>Used a Chi Square test to see if there were any differences between buildings 1-4. The test showed that yes there were significant differences between the buildings.</p> <p>Used a pareto chart to see which buildings had the highest number of no shows. Chart showed building 3 and 4 had the highest number of no shows.</p> <p>Used pareto chart to look to find out I/P that were in the top 30% of no shows 2 months in a row. Chart showed that 60% of the top 30% that were no shows were the same I/P. This shows that when I/P have a high number of no shows the medications are not being discharged.</p> <p>Used a pareto chart to find the number of medications that are currently prescribed as NA/DOT and can be prescribed as KOP or PRN. A list of these medications was created and approved by medical management for the pharmacy to automatically change these medications to KOP or PRN.</p> |
| <b>WHAT CRITICAL X'S WERE IDENTIFIED?</b>                                                                                                                | <ol style="list-style-type: none"> <li>1. The process did not follow the policy</li> <li>2. That medications are not being discharged when the inmate continually refused or does not show up to take the medication.</li> <li>3. Medications that can be prescribed as KOP or PRN are not.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>LIST IMPROVEMENT ACTIVITIES USED TO ADDRESS EACH CRITICAL X</b><br><i>Include any available data such as current capability and pre/post analysis</i> | <ol style="list-style-type: none"> <li>1. Policy was updated to reflect current workflow process and training was provided to both nursing and custody staff on both second and third watch.</li> <li>2. A list of these medications was created and approved by medical management for the pharmacy to automatically change these medications to KOP or PRN.</li> <li>3. Education to the I/P is being provided on them having to walk to the pill line even if they do not want to take the medication when they arrive in receiving and release</li> <li>4. Mental health primary clinicians are providing education to the inmates on walking to the pill line to take or refuse the medication.</li> </ol>                                                                                                                                                                                                           |

**DESCRIBE THE CONTROL PLAN**

*Include the classification of the process owner*

The control plan will include weekly audits for the first 3 months of whether the medication post list is being printed and returned by custody with the reasons for no shows.

Also quarterly meeting with the psych tech unit supervisor and healthcare sergeant to address when the control chart shows that the process is falling out of control.

Observe the process to make sure it is being followed according to the policy, and identify barriers if any.

The process owner is the Chief of Mental health.

# Reduce No Shows to the Pill Line

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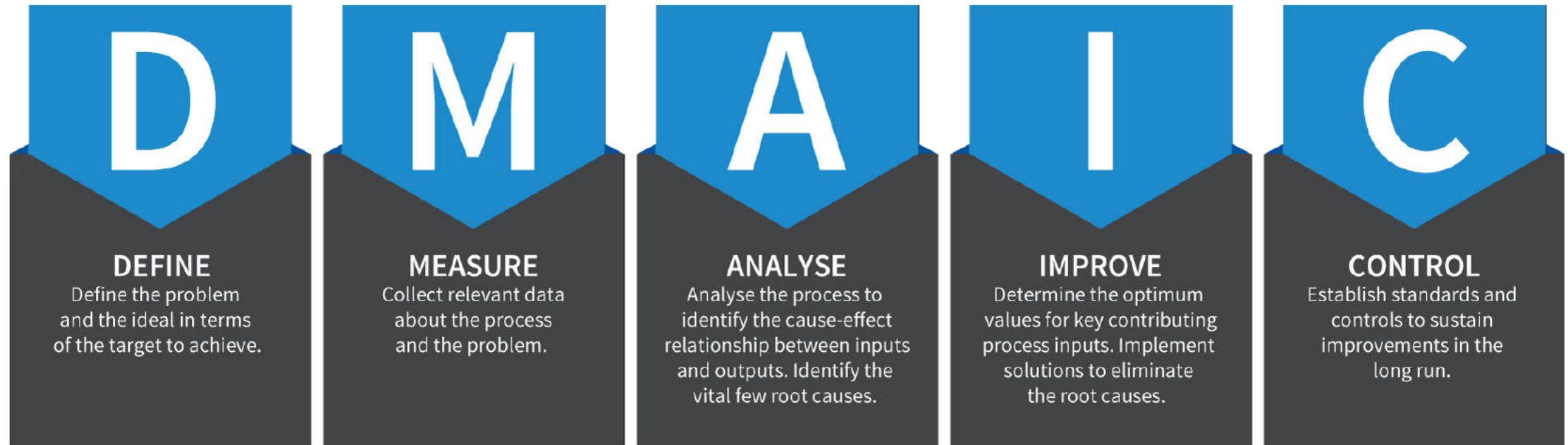
CCHCS LEAN SIX SIGMA PROGRAM

GREEN BELT | [REDACTED] HEALTH PROGRAM SPECIALIST II,

CALIFORNIA STATE PRISON – LOS ANGELES COUNTY

# Lean Six Sigma Methodology

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# Define Phase

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Define and scope the problem, identify the key metric and the team that will work the project, and create the project charter.

# Project Background

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- From April 2019 to September 2019 68% of the non compliant cases for medication given timely were due to no shows.
- Problem was identified by drilling down into the continuous low compliance for medication management. Research showed that the main reason for the low compliance was due to no shows to the pill line.
- A lapse in I/P medication can result in a negative impact on I/P health.

# Project Charter

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- Problem Statement: To reduce the number of inmates not showing up to the pill line.
- Project Objective: To increase the number of inmates going to the pill line.
- Primary Metric: To reduce the number of no shows to pill line to 5%.

# Team Members

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- Champion: [REDACTED]
- Process Owner: [REDACTED]
- Executive Sponsor: [REDACTED]
- Team Members:
  - [REDACTED] – Unit Supervisor
  - [REDACTED] – Psych Tech
  - [REDACTED] i – DON
  - [REDACTED] y – Chief Psychiatrist
  - [REDACTED] – Sergeant

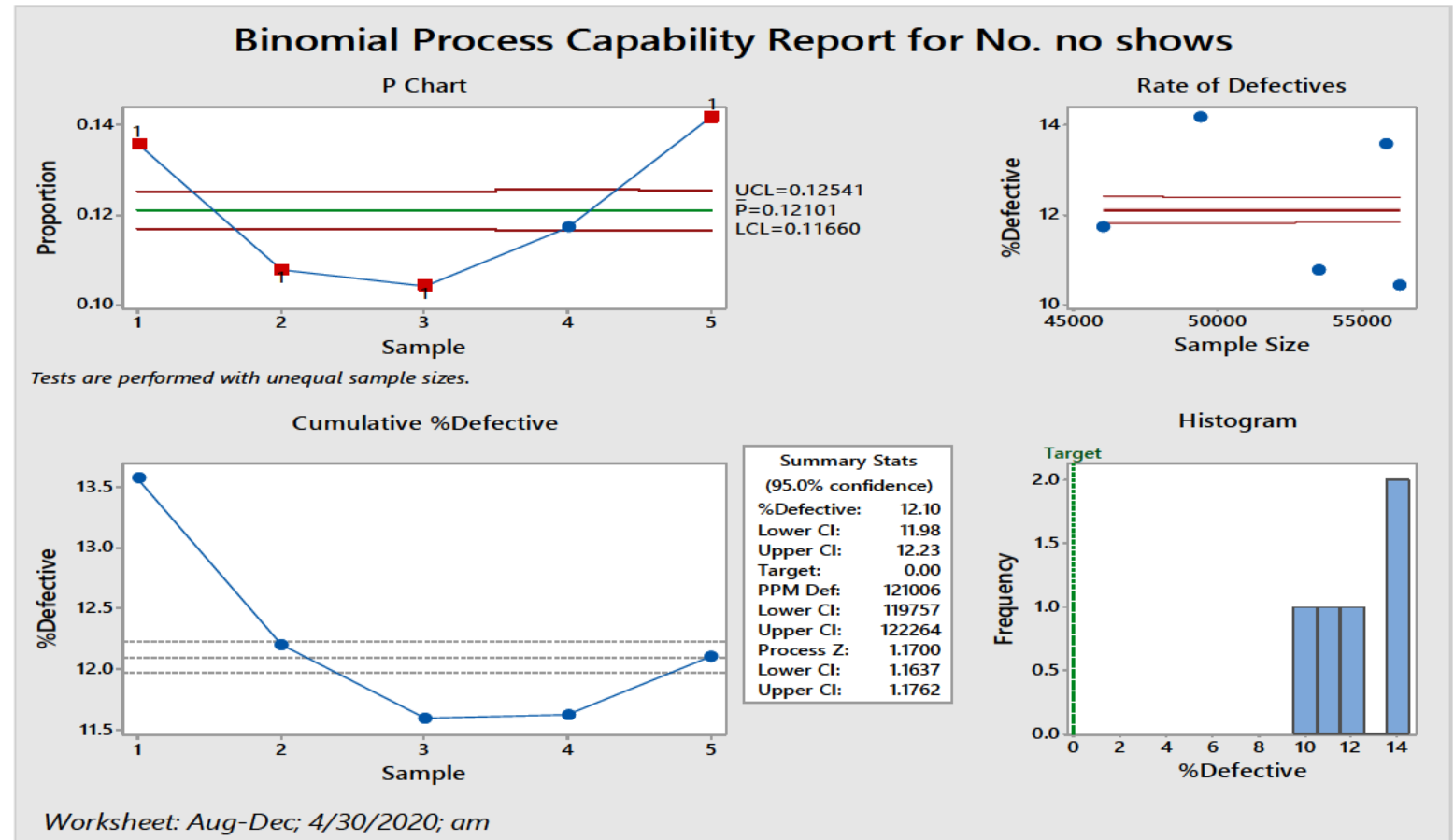
# Measure Phase

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Gather the process inputs, set up and validate the measurement system, and determine the baseline for the primary metric.

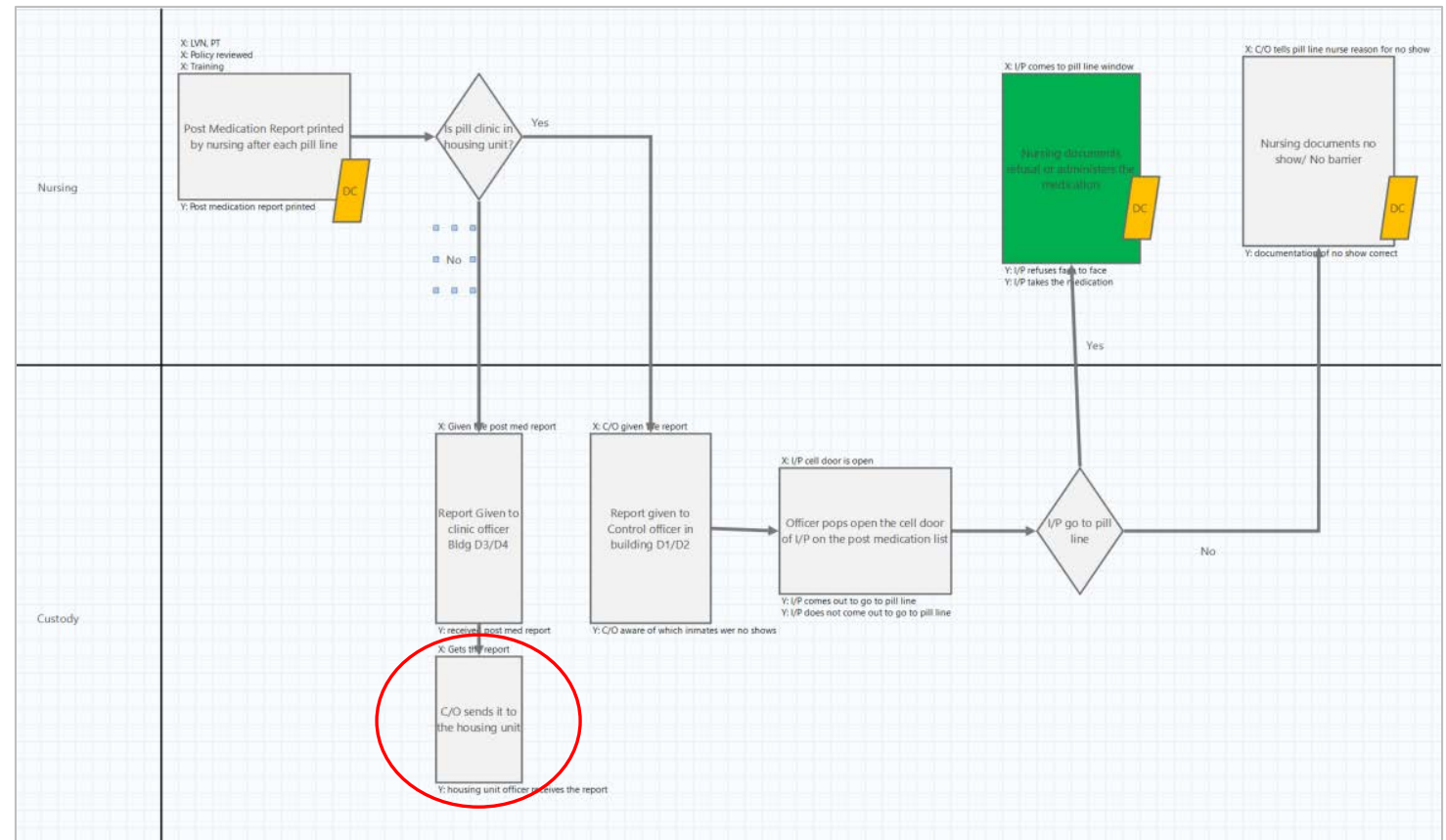
# Baseline Capability/Performance

- Binomial Capability – Discrete data.
- 12.54% defective rate

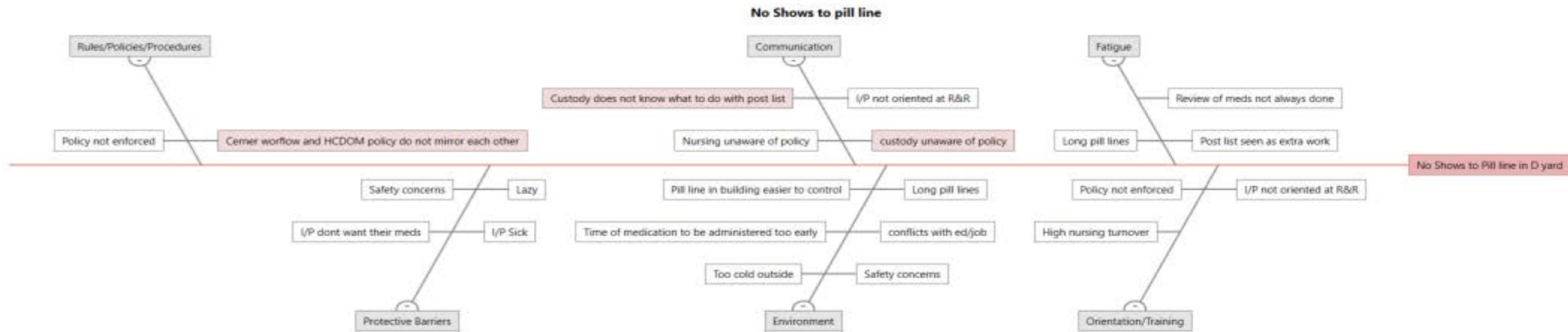


# Initial Process Map

- Process was not complete
- Process stopped at the officer for Bldg D3 and D4 which is where the higher number of No Shows are



# Brainstorming Using Fishbone



- Current process does not follow policy
- Both custody and nursing unaware of policy
- Custody does not know what to do with post medication list when given to them.

# Measurement System Analysis

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## Dashboard Measurement System Analysis

Does the denominator for this metric correctly capture all the actual process opportunities?

YES

Number of "NO" errors:

1

Number of "YES" errors:

0

MSA Results and Actions:

**CONDITIONAL PASS: data can be used but the measurement system must be improved**

# Analyze Phase

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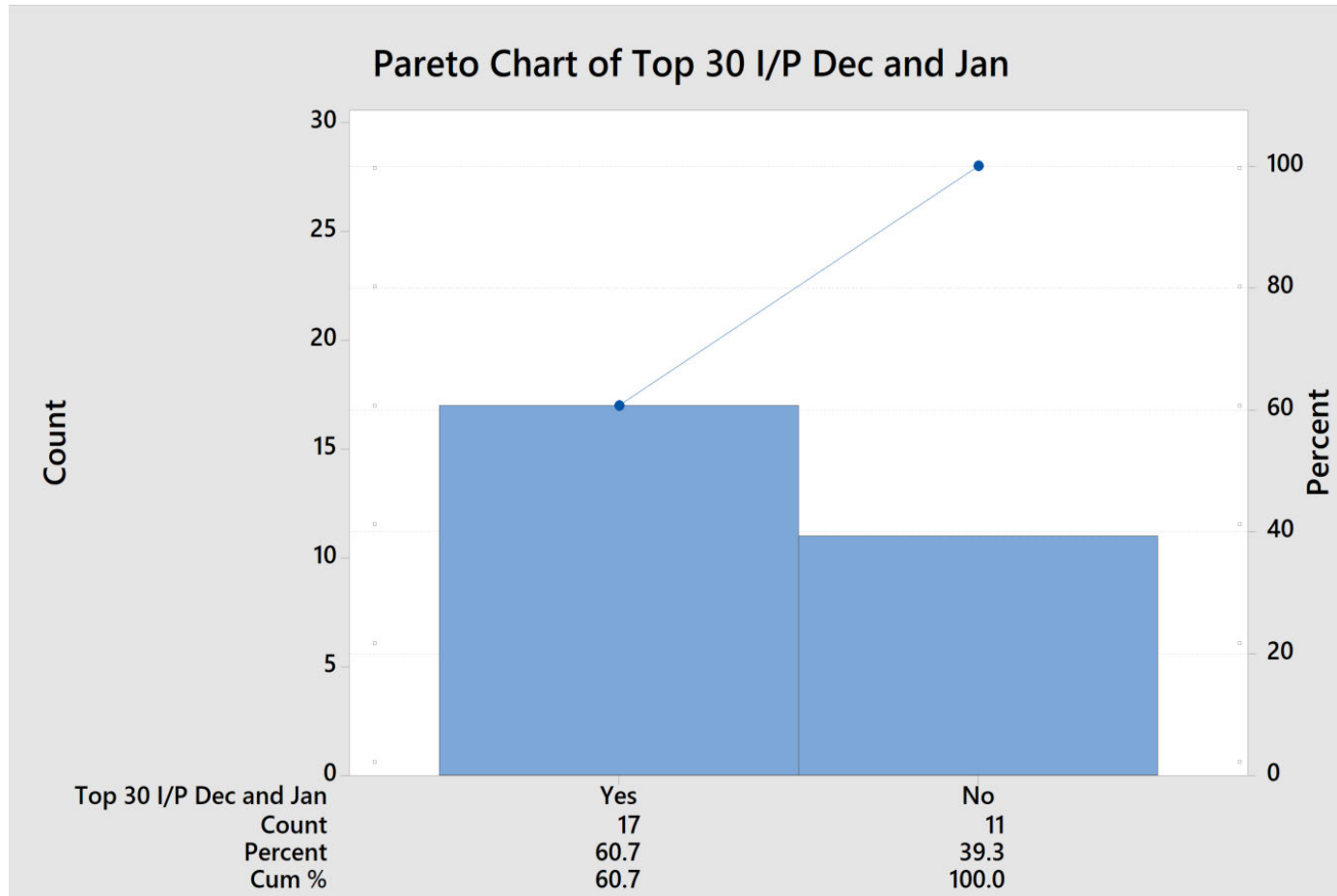
Analyze data to determine the critical inputs affecting the primary metric.

# Failure Modes and Effects Analysis (FMEA) Findings

- 2 Steps with a PRN > 500
- Potential problems – Nurse not printing the post medication list and custody not knowing what to do with the post medication list

| Step # | Process Map - Activity                                                        | Key Process Input | Potential Failure Mode                   | Potential Failure Effects      | SEV | Potential Causes                           | OCC | Current Controls                     | DET | RPN |
|--------|-------------------------------------------------------------------------------|-------------------|------------------------------------------|--------------------------------|-----|--------------------------------------------|-----|--------------------------------------|-----|-----|
| 1      | High-Level Process Map - Post Medication Report is printed from EHRS          | Nurse             | report not printed                       | I/P does not show to pill line | 10  | Nurse unaware of policy                    | 6   | none                                 | 10  | 600 |
| 2      | Detailed Process Map - Report Given to clinic officer                         | officer           | report not delivered                     | I/P does not show to pill line | 10  | officer unaware of policy                  | 6   | none                                 | 10  | 600 |
| 3      | Nurse documents in Cerner before getting the reasons for no show from custody | Nurse             | Cerner Documentation incorrect           | Dashboard stats incorrect      | 6   | custody does not return with reasons       | 8   | none                                 | 10  | 480 |
| 4      | Detailed Process Map - Report given to Control officer in building D1/D2      | officer           | officer does not get reasons for no show | incorrect documentation        | 7   | officer gets busy incident/ alarm response | 8   | Nurse educate new officer of process | 6   | 336 |

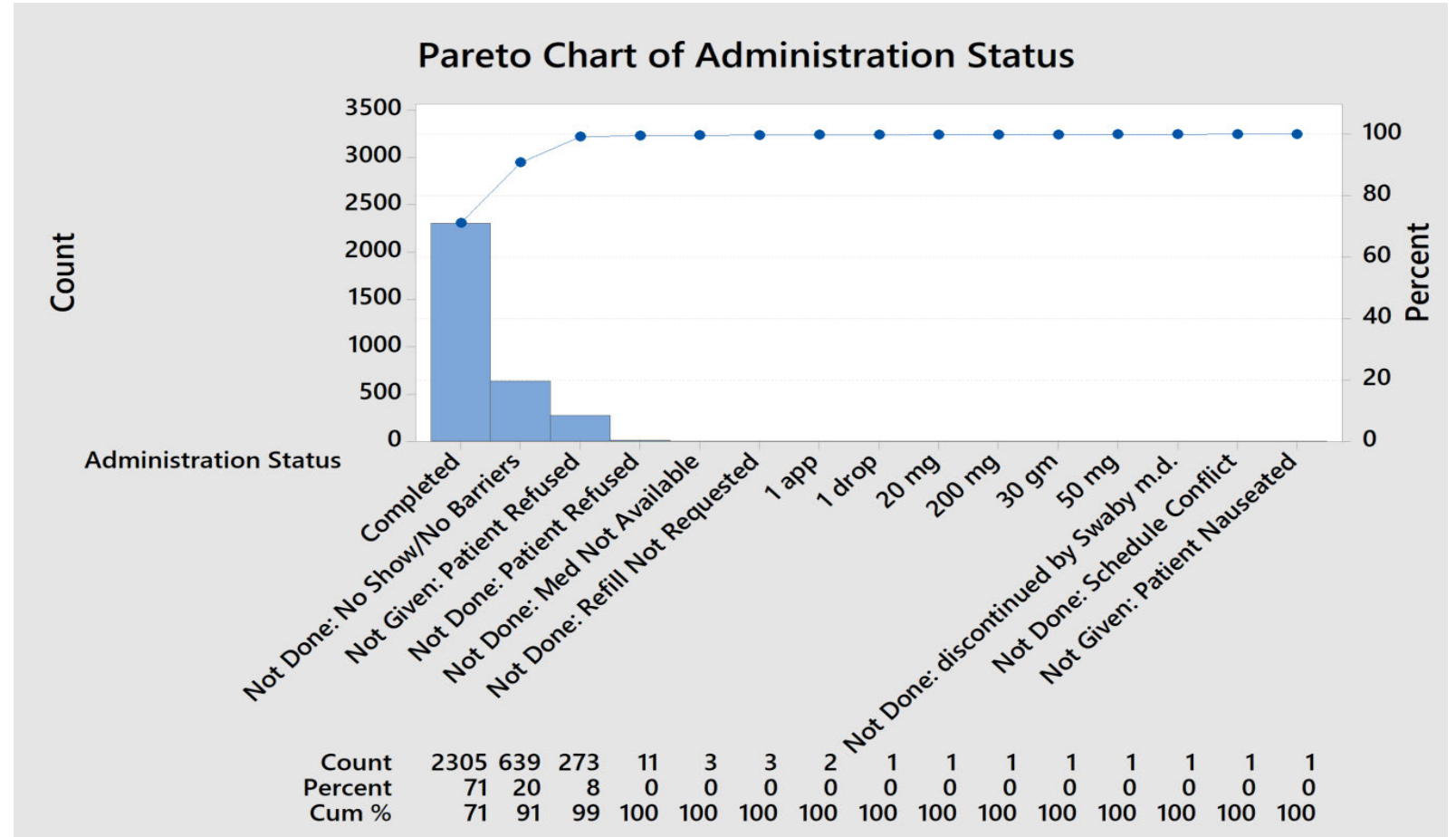
# Key Findings 1



- Used a Pareto chart to show that 60% of the inmates that were in the top 30% I/P for No Shows/Refusals during the month of Dec were the same also in the top 30 for the month of Jan.
- Providers are not discharging medications after I/P constantly refuse/no shows for their prescribed medication

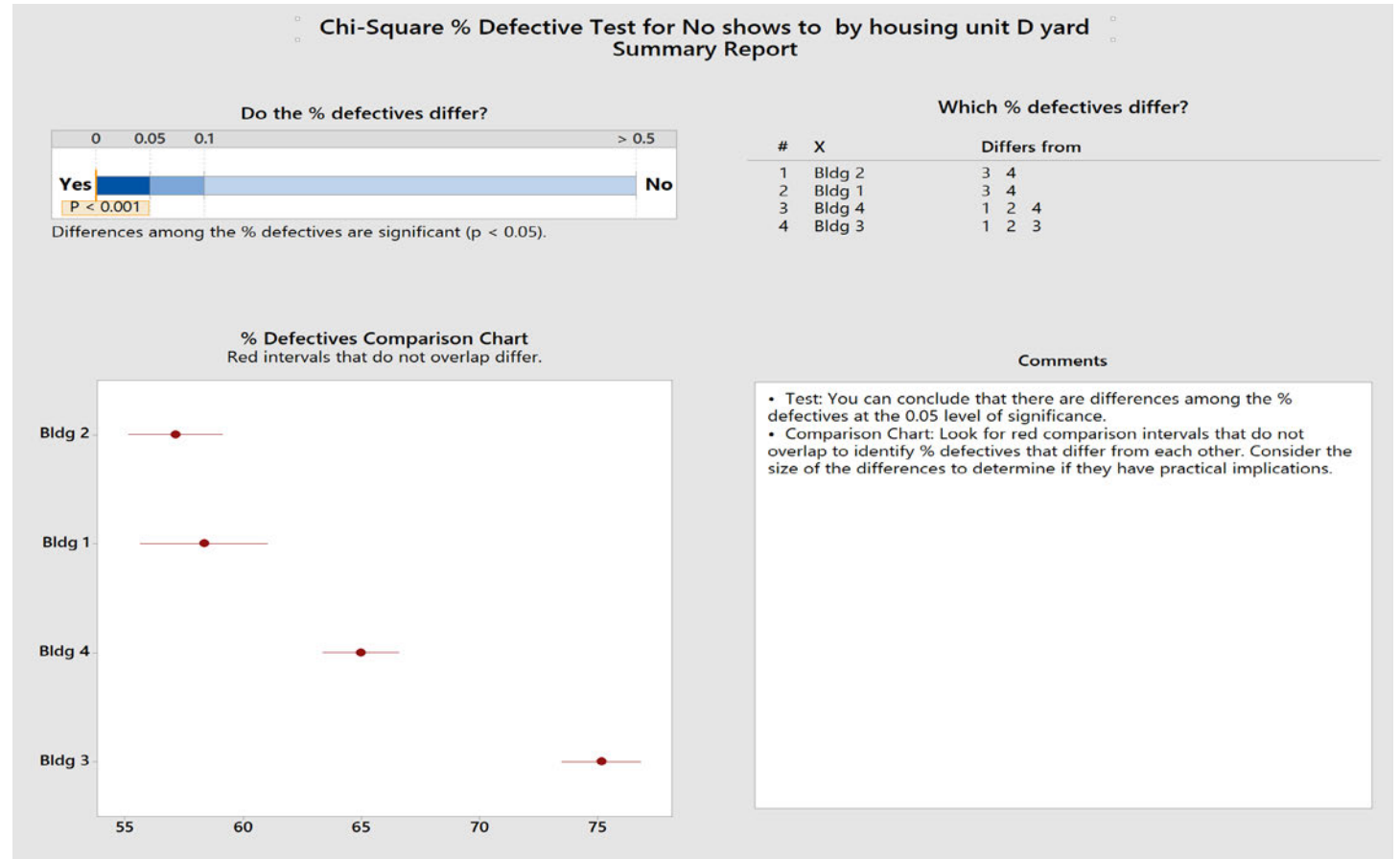
# Key Findings 2

- Used a Pareto chart to look at the I/P that currently had meds that could be KOP or PRN but that were NA/DOT
- Dec 2019 data showed 3244 doses could be prescribed as KOP or PRN. Currently they are NA/DOT
- 28% of meds that can be KOP or PRN



# Key Findings 3

- Used a Chi Square defective test to see if there were differences between housing units D1-D4
- Clearly it showed that Buildings D3 and D4 are different amongst each other and between D1 and D2.
- The P value is  $> 0.001$  therefore statistically there is a significant difference amongst the building.



# Critical X's

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- Process does not follow policy for no shows
- Providers are not evaluating/discharging medications when med non compliance is high.
- NA/DOT meds that can be KOP or PRN are not.

# Improve Phase

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Identify and implement fixes for the problem, and analyze new data to validate the improvement.

# Improvements

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- Medication management policy was updated and training provided to nursing and custody staff on both second and third watch.
- List of medications was created and approved by the Chief Medical Executive, Chief Physician and Surgeon and Chief psychiatrist for pharmacy to change from NA/DOT to KOP or PRN
- Education will be provided to the I/P arriving in receiving in release.
- Audits conducted to make sure post medication lists are printed by nursing and then returned with reasons for no show by custody.

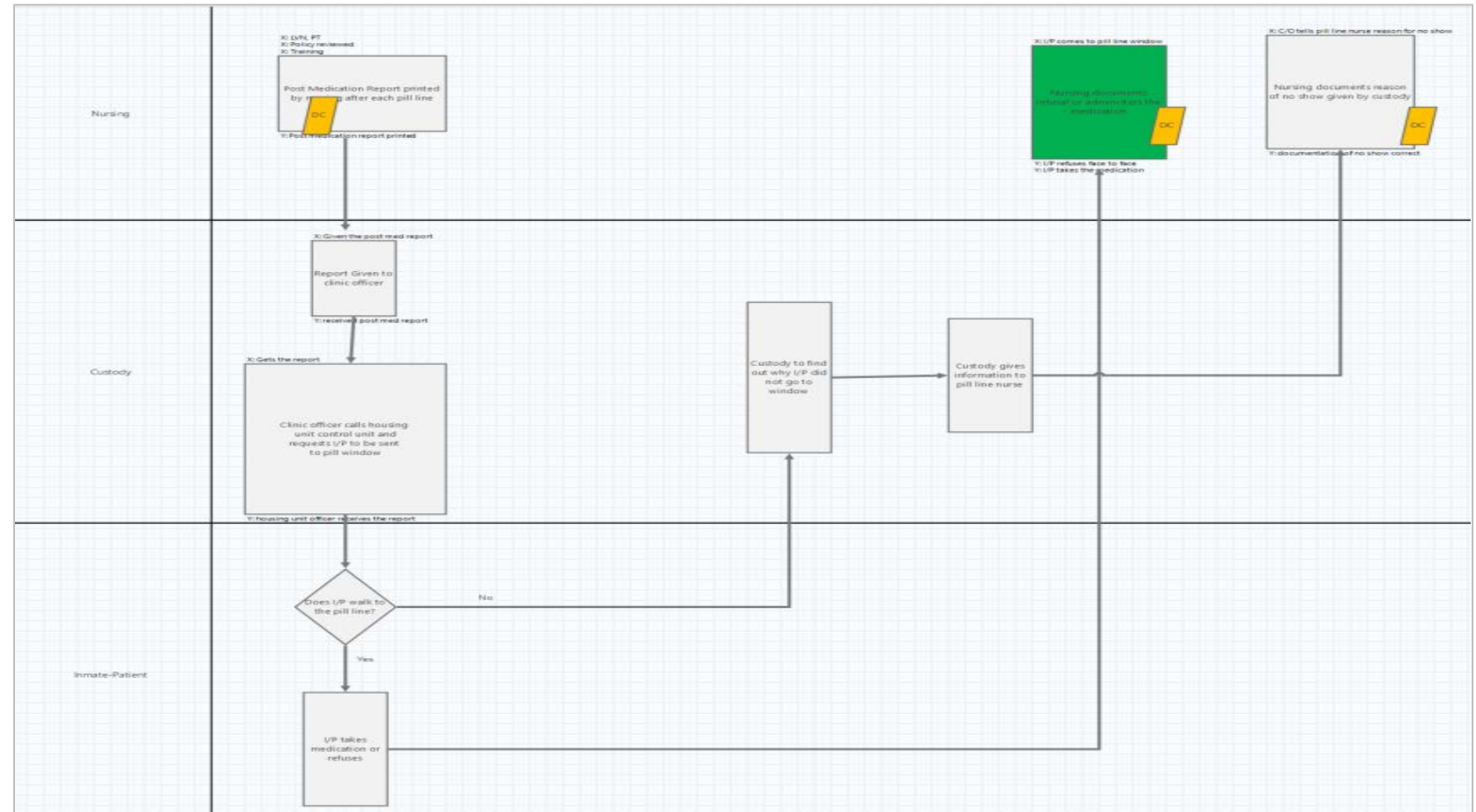
# Control Phase

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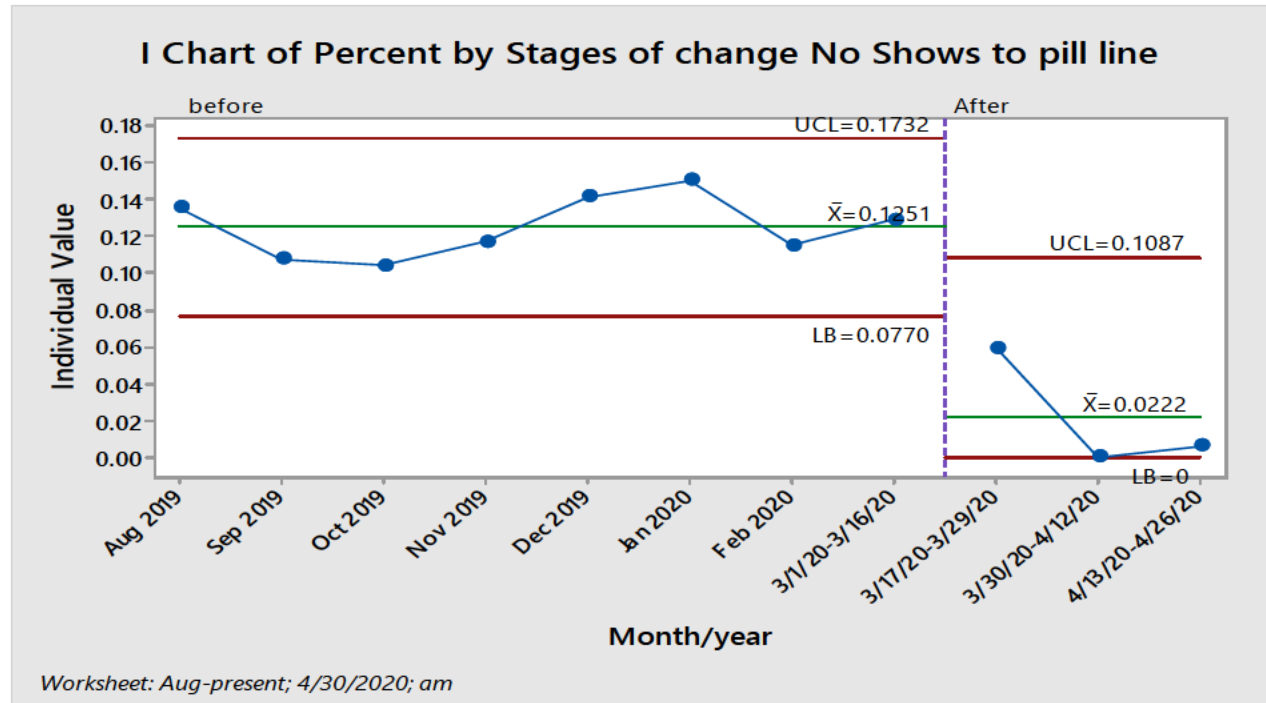
Implement controls to assure that the improvement remains permanent, and create a control plan with a sustaining and continuous improvement strategy.

# Updated Process Map

- Process was simplified so that all building followed the same procedure regardless if the pill clinic was inside the building or not



# Updated Capability/Performance Analysis



- Baseline for No shows in D yard was 12.54% in August 2019. Toward the end of April 2020 Capability had dropped .07%.
- Dashboard compliance shows improvement to 89% in April 2020, main reason is no longer No shows but rather refusals.

| MEDICATION MANAGEMENT                  | NOV | DEC | JAN | FEB | MAR | APR | 6 mo. Trend |
|----------------------------------------|-----|-----|-----|-----|-----|-----|-------------|
| All Medications Received Timely (EHRS) | 85% | 83% | 82% | 81% | 83% | 89% |             |

# Control Plan

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- Unit supervisor and yard/HC sergeant will provide training on the post medication list to current and new staff.
- Education will be provided to all new I/P arrivals in receiving and release on reporting to the pill window.
- Process will be observed once a week for the first month to make sure that it is being followed according to policy.
- Weekly audit of the post medication list will be done the first month to make sure that it is being printed by nursing and returned completed by custody.
- The I/P assigned mental health clinician will remind the I/P to walk to the pill line even if they do not want to take the medication.

# A3

## General Information:

**Project Title:** Reduction of No shows to pill line – D yard  
**Agency/Department:** Dept of Corrections / CSP-LAC  
**Division/District/Office:**  
**Champion/Process Owner:** [REDACTED] hD  
**Green Belt:** [REDACTED]  
**Executive Sponsor:** [REDACTED] CEO  
**Date:** 3/5/2020

## Problem Statement:

The percentage of no shows to pill line averaged 57% from Jan 2019 to April 2019, with the bulk of no shows coming from D yard.

## Primary Metric:

Percent of Pill line no shows

## Goal:

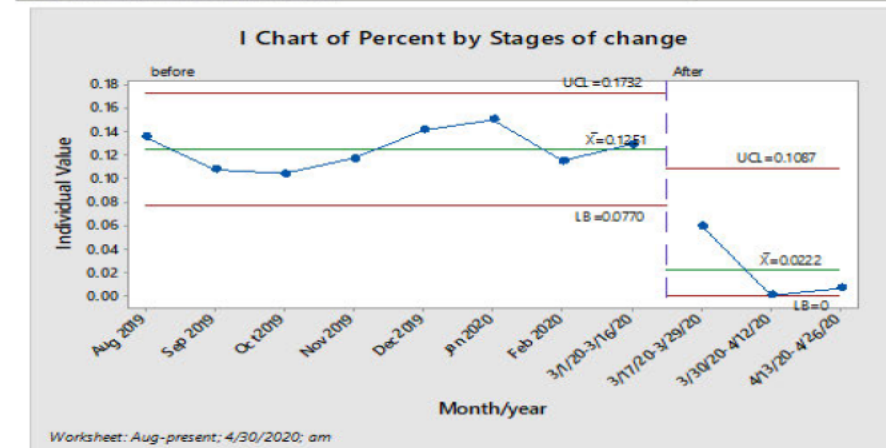
To reduce the percent of pill line no-shows to <5%

## Root Causes (Critical X's):

- Process does not follow policy for no shows
- Providers are not evaluating/discharging medications when med non compliance is high.
- NA/DOT meds that can be KOP or PRN are not.

## Solution Implementation Tracking:

| item                                                                                                                                      | status    |
|-------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| Medication management policy updated                                                                                                      | Completed |
| Train Psych Techs and Custody assigned to the pill clinic on the policy                                                                   | Completed |
| Lis of medications that can be changed from NA/DOT to KOP or PRN was created and approved by the CME, CP&S and Chief Psychiatrist         | Completed |
| Education provided to I/P as they arrive to Receiving and release on the expectation of going to the pill window                          | Ongoing   |
| Education provided to the I/P by MH primary clinician Assigned to the I/P on going to the pill window daily for For prescribed medication | Ongoing   |



**Baseline Average:** 12.54%  
**Current Capability:** 2.2%

# Project Impacts

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- Financial impact of improvements when medications are discharged when I/P is a chronic no show/refusal for his medications, annual hard savings of \$157,463.
- Financial impact of improvements of time spent on preparing meds for I/P that do not show up/refuse the med or that are administering to the I/P as NA/DOT when they could be prescribed as KOP or PRN, soft savings of \$594,639.

# Project Impacts

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- Communication between custody and nursing has increased.
- I/Ps are being made aware of the expectation to walk to the pill clinic and take their medication at arrival to institution and by their mental health assigned primary clinician.
- Reduced time and pill clinic line by changing some N/A DOT prescriptions to KOP or PRN
- Due to COVID-19 we have not been able to implement the changes the team wants to make. All positive cases of the virus are being housed in D2. Changes were made to the medication administration in D yard which was the yard my project focused on. Medication is being passed at the cell door for the inmates housed in building D1 and D2, and medication is being passed inside the building at the podium for housing unit D3 and D4. This is the cause for the large reduction of no shows during the month of April.

# Project Summary and Lessons Learned

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- Reducing the number of no shows is difficult in a yard that has several missions. D yard is specially challenging as it is an EOP yard and so there are many competing activities such as mental health groups, one on one contacts with the I/P assigned mental health clinician, Interdisciplinary Treatment Team (IDTT) meetings, medical appointments, education.
- Communication between nursing, custody and the I/P is very important in order to get the I/P to the pill window or accurately document the reason for the no show.

# Green Belt Contact Information

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[REDACTED]

Health Program Specialist II

[REDACTED]

[REDACTED]

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**Division/District/Office:**  
**Champion/Process Owner:** [Redacted] PhD  
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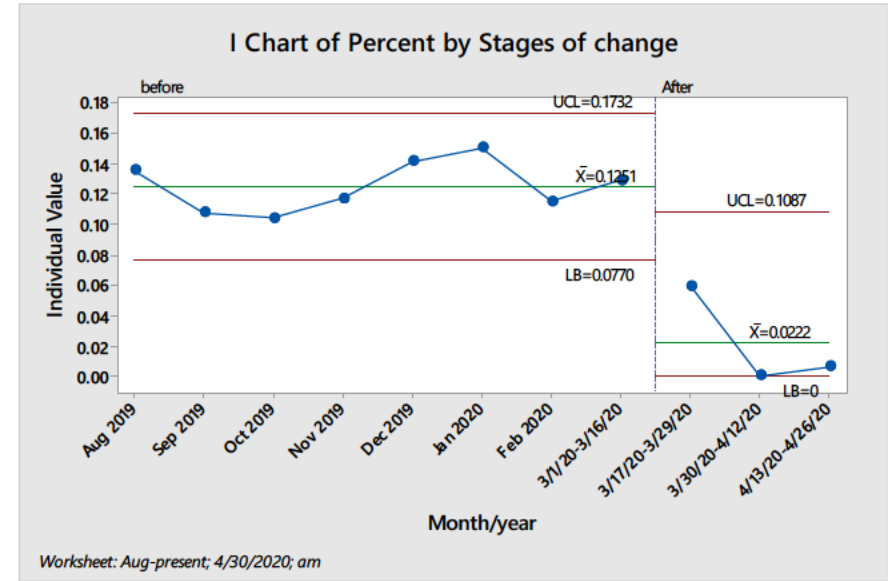
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