

Data-Driven Process Improvement: Using Lean Management to Improve Residential Program Housing Outcomes

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VAPAHCS Domiciliary Service

- Only Domiciliary Service in VISN 21
- Operates 8 programs for homeless and at-risk Veterans
 - Service area includes the entire Northern California area, Reno, and Hawaii
 - Primary catchment area is the highly diverse San Francisco Bay Area
- Mission: To provide supportive outpatient and/or residential rehabilitation to homeless and/or substance dependent veterans with the ultimate goal of returning each individual to optimal independent living.

Domiciliary Service

DCHV Process improvement project

- Goal: improve housing outcomes from HVRP
- Utilize our maturing Lean culture and mindset
- Cross-program collaboration using Lean process improvement tools

Lean Culture in Dom Service

Lean is:

- how we operate our healthcare system
- a new way of thinking, managing, and doing our work
- a way to be more effective in accomplishing our goals
- fundamentally based on: (1) Respect for People and (2) Mindset of Continuous Improvement

Lean Mindset

From



To

- Problems are hidden
- Blame the person; it's someone's fault
- Live with problems & chaos
- "It's just the way it is"
- Everything we need is in the computer
- We don't know because there is no data
- **Problems are treasures**
- **Let's make the problem visible so we can fix it**
- **The process is broken**
- **Respect for people**
- **Let's seek to understand the problem and go fix it**
- **Relentless pursuit of improvement**
- **Let's make everything visible**
- **Everything we do is data; we can observe our data every day**

2019 Lean Culture

Where we are today:

- Huddles each morning for 15 minutes with teams to resolve barriers for the day's operations.
- Standard work and leader standard work guides our regular/reoccurring work for maximum efficiency
- Visual management makes problems visible and increases staff engagement in our work
- Mindset of continuous improvement
 - 5 years into our Lean journey (culture change)
 - “Problems are Treasures”: Celebration of staff revealing process barriers
 - Teaching and modeling A3/Root Cause Problem Solving process
 - Spread of learning through regular service-wide presentations

	H	V	O	P	A	Barrier	Owner	Action
Mentals	●	●	●	●	●			
Egpt	●	●	●	●	●			
Stalk	●	●	●	●	●			
Smpls	●	●	●	●	●			

Meg }
 Daron } 1/3
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 Nana M }

Quick Hits

Date	Issue	Fix	Owner	Status

Big Issues

Date	Issue	Owner	Next Step	Due	Status

- Strategic Plan Goal milestone
- educate staff on leave policy
 - develop standard protocol for making requests
 - Update P+P
 - announce focus on this area in leadership meetings
 - Clarify telework status who & when
 - Join VAPARC Finalizing wellness team 30
 - Hold wellness inservice for staff



Anniversaries

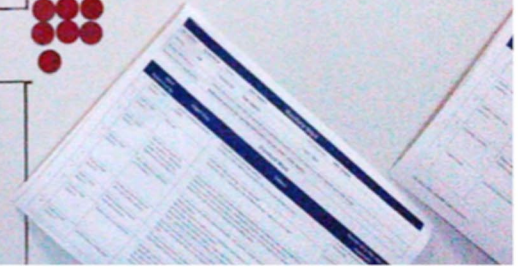
10 Kirk
 VASH interior today

Appreciations



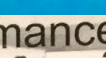
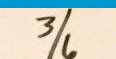

Sally Payment
 Sarah John vic growing company
 Nursing 2 admissions

Parking Lot

dctox



VASH PM's Visual Management to achieve 97% housed

Team	Current Status	Targets	Performance					2/27	3/6	3/13	3/20	7/27
			1/30	2/6	2/13	2/20						
MP 	Open V: 25 Unhoused: 43	H	3	8 ●	2	3	0 ●	6 ●	0 ●	6 ●	7 ●	3
		A	5	0 ●	8 ●	0	0	0	3	0	0	0
		T	2	1	1	1	0	3	4	1	0	6
		S	5	5	2	5	14 ●	14	24 ●	19 ●	12 ●	16
SJ 	Open V: 14 ● Unhoused: 36	H	3	1 ●	0 ●	1 ●	0 ●	1 ●	5 ●	2 ●	2	0 ●
		A	3	6 ●	6 ●	3	2	3	1	2	3	2
		T	1	1	2	0	1	0	1	0	0	4
		S	6	3	4	4	4	3	4	12 ●	4	9
MONT 	Open V: 0 (-12) ● Unhoused: 24	H	1	0 ●	2 ●	0 ●	0 ●	2 ●	0	0 ●	0 ●	1
		A	3	2	1	0	0	2	1	2	0	0
		T	1	1	1	0	0	2	1	1	2	1
		S	4	5	5	4	3	4	3	3	3	3
SCRUZ 	Open V: 9 Unhoused: 48	H	2	1 ●	0 ●	1 ●	1	2	4 ●	1	2	1
		A	2	1	2	1	1	4 ●	3	0	3	1
		T	1	5 ●	1	1	3	3	4	0	1	3
		S	4	10 ●	2	2	6 ●	1	2	6 ●	1	4
VALLEY 	Open V: 8 Unhoused: 65	H	6	2 ●	1 ●	2 ●	3 ●	5	6 ●	0 ●	1 ●	2
		A	1	12 ●	1	5 ●	4 ●	6 ●	2	5 ●	8	5
		T	1	3	0	0	4	8	4	0	4	0
		S	6	15 ●	13 ●	9 ●	9 ●	9 ●	11 ●	12 ●	13	15

Standard Work Template

Standard Work		
Last updated:	Owner:	Performed by:
Version: 1.0	Revised by:	Trigger:
VA Palo Alto Mission:	Honor America's Veterans by providing exceptional health care that improves their health and well-being.	
Standard Work Applicability:		

Standard Work

Work Performed by	Major Step	Details	Reason why this step is important
1			
2			
3			
4			
5			

Culture Drives Improvement

- Our shared culture with a common language and mindset normalizes and facilitates improvement projects
- The declining outcomes naturally triggered a cross-program collective effort to understand why
- The answer to “why?” drives the countermeasures we test in the Plan-Do-Check-Act approach

DCHV – We call it “HVRP”

- “Homeless Veterans Rehabilitation Program”
- Established 1989
- Located at Menlo Park VA campus
- 70 Beds
- 180-Day residential treatment program
- Therapeutic community model
- Mission: Return homeless and at-risk veterans to optimal independent living.

DCHV Program Overview

- 6 month program at Menlo Park VA designed to help Veterans achieve stable housing, employment, and other goals, while maintaining a clean and sober lifestyle.
- 1st 90 Days: Problem Solving & Life Skills training in a peer support format with fellow veterans.
- 2nd 90 Days: Working on stable housing, employment, and other goals.





An Opportunity to Improve

- Program has a rich history and strong reputation locally
- However, Homeless Scorecard outcomes have been under target recently
- Why?
- How can we improve?

VA National Homeless Scorecard Data FY18 - FY19 YTD

FY	DCHV1 - Housed	DCHV2 – Negative Exits	DCHV3 - Employed
FY18 National Target	60%	25%	35%
National Avg	51%	26%	38%
VAPA Score	36%	27%	20%
FY19 Q1 Target	60%	25%	35%
National Avg	53%	26%	40%
VAPA Score	31%	38%	11%

Population Served at Palo Alto vs. Nationwide DCHV

Palo Alto DCHV Veterans present at admission with **more severe issues in all major risk categories.**

Palo Alto admits a significant percentage (30% in Q1) of Veterans directly from jail or prison custody, sometimes after serving many years in incarceration for serious crimes.

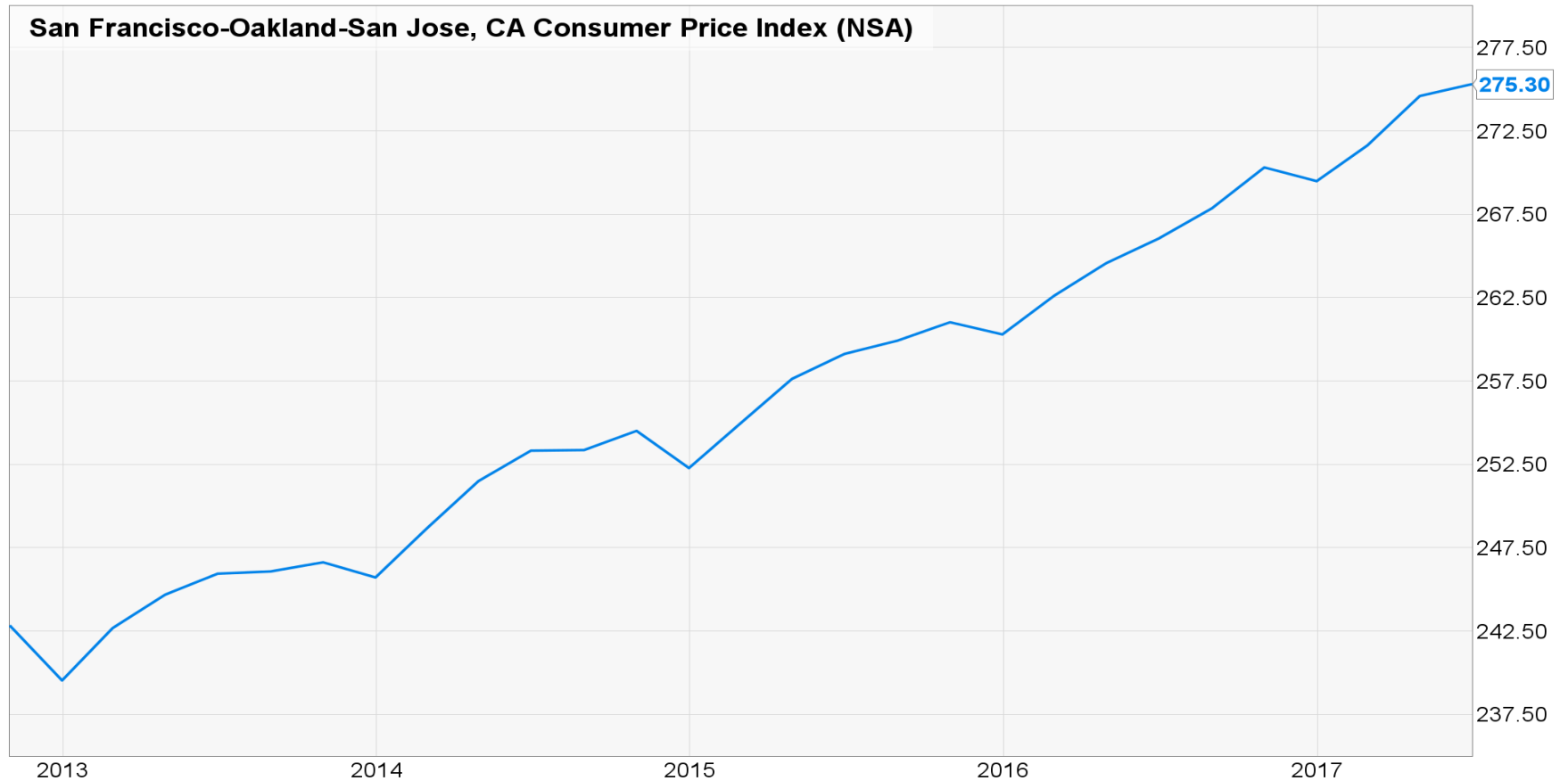
Palo Alto serves registered sex offenders. **12% of current residents are registered sex offenders.** These Veterans have significant housing and employment challenges.

This **more acute population often requires a transitional step** before reaching permanent employment and housing.

Risk Factors – FY18 Data	Nationwide DCHV	Palo Alto DCHV
Alcohol Addiction	59%	62% (+3%)
Drug Addiction	57%	73% (+16%)
Drug & Alcohol Addiction	37%	45% (+8%)
Mental Health D/O	75%	78% (+3%)
Dual MH & SUD	63%	71% (+8%)
Literally Homeless	78%	86% (+8%)
Un/Under-employed	40%	49% (+9%)
Admitted directly from incarceration (jail or prison)	Data Not Available	30%
Registered Sex Offenders	Data Not Available	12% (current census)

S.F. Bay Area Cost of Living

San Francisco-Oakland-San Jose, CA Consumer Price Index (NSA)



Source: BLS

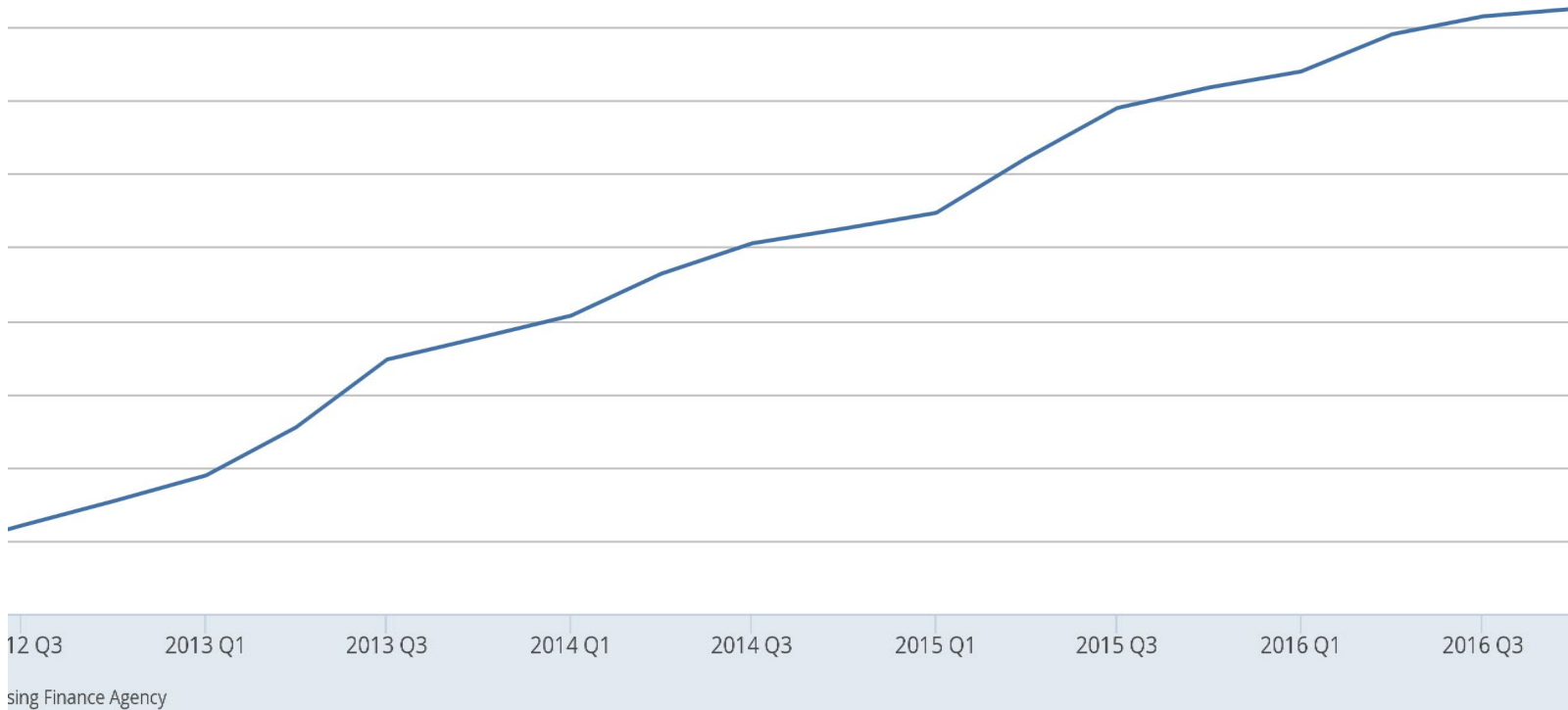
source: U.S. Bureau of Labor Statistics

Sep 06 2017, 3:53PM EDT. Powered by **YCHARTS**

The Consumer Price Index (CPI) is a measure that examines the weighted average of prices of a basket of consumer goods and services, such as transportation, food and medical care. It is calculated by taking price changes for each item in the predetermined basket of goods and averaging them.

Housing Market & HV Focus

— All-Transactions House Price Index for San Jose-Sunnyvale-Santa Clara, CA (MSA)



House Price Index for San Jose-Sunnyvale-Santa Clara, CA: 2012-2017

Root Cause Problem-Solving

- Meetings between Chief, Asst. Chief, VASH Program Manager, DCHV Program Manager
- Careful review of **the data and what it tells us about process**
 - What is the DCHV-to-VASH referral process?
 - What are the VASH screening and admission processes?
 - What are the challenges VASH is experiencing related to housing Veterans?
 - What unique new challenges are both programs experiencing that may be contributing to the data?
 - What is the DCHV/VASH collaboration process?
- All agreed on use of **"A3"** – a 9-step root cause problem-solving process

A3 Step 1: Background & Vision

BACKGROUND: One of the core missions of the DCHV program is to assist Veterans with obtaining permanent housing at the time of discharge. Recently, our DCHV permanent housing numbers have lagged behind the national target.

VISION: Optimize DCHV permanent housing processes, responding to current challenges in our local housing market with the goal of housing our Veterans more efficiently.

Step 2: Current State (*Where we are now*)

VAPA DCHV has lagged behind the nation in discharge to permanent housing for past few years and finished Q1 of FY19 with just 30% of Veterans discharging to permanent housing.

Step 3: Future State *(Where we want to be)*

With this project, DCHV aims to increase the number of Veterans being discharged to permanent housing to meet the national target of 60% by the end of FY19.

Step 4: Root Cause Analysis

(What are *the sources of the problem*)

#1

- DCHV referral to HV was occurring later than ideal for current market

#2

- HV Screening of DCHV referred Veterans was prolonged

#3

- HV Admission of DCHV Veterans was prolonged

#4

- DCHV/HV administrative communication was case-by-case

#5

- DCHV/HV clinical case conferencing was case-by-case

#6

- Relevant DCHV/HV processes were based on historical program cultures

Step 5: Countermeasures

(Addressing each root cause)

R.C.	If We...	Then We Expect...
1	Refer to VASH at Day 40	Enough time for Veterans to be screened, admitted, complete VASH requirements, and find permanent housing by Day 180 in DCHV
2	All DCHV Veterans will be screened within 10 days of referrals	Additional time for Veteran to work on VASH requirements prior to d/c from DCHV
3	HV will establish additional admissions group for DCHV residents	Additional time for Veterans to work on VASH requirements prior to d/c from DCHV
4	DCHV SW/HV PSAs will establish regular feedback loop for all referrals	SW will be able to confirm that all VASH referrals have been received and need no further info to process
5	Monthly joint DCHV/VASH case conferences to discuss mutual Vets	DCHV staff will prompt and assist Veteran with meeting VASH requirements (housing search, etc.)
6	Program leaders will continue to coach staff around process changes	Staff will understand and adhere to new processes

Step 6: Plan Do Check Act

(Testing if each “fix” works)

Plan

- Schedule test phase for implementation of each countermeasures

Do

- Follow Implementation Plan

Check

- Chief, Asst. Chief & VASH PM maintain tracking spreadsheet

Act

- Ongoing consultation on each process & updating as necessary

Step 6: our PDCA

(Who is going to do what, when, how, why?)

RC	Who	What	When	Why	How
1	DCHV SW	Refer to VASH NLT than day 40 (vs. 40 to 60 days)	Jan 2019	Time needed to secure permanent housing	Use tracker; Remind Veterans
2	VASH CM	All DCHV Veterans will be screened by HV within 10 days of referrals	Jan 2019	Time needed for HV admission and to secure permanent housing	
3	HV Menlo	Establish additional admissions group for DCHV residents	Feb 2019	Time needed to secure permanent housing	
4	DCHV SW	Reconcile referrals w/ VASH PSA or PM	Jan 2019	Confirm referrals are received and complete	Bi-weekly check-in
5	DCHV & VASH staff	Scheduled clinical case conferences to discuss housing of mutual Vets	Feb 2019	Improve coordination; Help Vets meet housing requirements	Standing monthly meeting
6	PMs	Program leaders will continue to coach staff around process changes	Jan 2019	Explaining reasons for changes increases staff buy-in	Ongoing conversations w/ frontline ²⁶

Step 6: Plan Do Check Act – an ongoing process

- Plan Do Check Act monthly tracking spreadsheet revealed significant delays creeping back up in:
 - Avg # of days until VASH referral (44 in Feb vs. **63.5 in Mar**)
 - % of Veterans receiving a VASH referral at Day 40 (25% in Feb vs. **0% in Mar**)
 - HV adjustments to screening and admissions processes
- Consulted with DCHV SW and Program Manager to understand current processes and possible root causes of the delay
- New countermeasures were added

Visual Management

Target

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	YTD
HCHV5	107%	19%	28%	36%	45%								45%
HCHV1	22%	33%	15%	31%	31%	100%	100%						30%
DCHV1	38%	33%	20%	29%	100%	100%							47%
DCHV2	40%	50%	40%	29%	0%	0%							27%
DCHV3	13%	0%	0%	18%	67%	100%							24%
HMLS3	92%	passed	passed	84%	86%								86%
VASH 2	14%	0%	17%	16%	4%	5%							8%
GPDC1	65%	56%	70%	67%	33%	67%							59%
GPDC2	23%	38%	10%	8%	33%	11%							21%
Avg days from int to VASH refer	40 days		78 (last)	68 (last)	44 (last)								
Screens ≤ 10 BD	100%		66%	100%	88%								
VASH elig & sched & int	100%		66%	100%	100%								

Data refers on the 10th of each month

really! headed in right

HVRP - FY19

Permanent Housing		Negative Exits		Permanent Employment		
Goal = 60%		Goal = 25% or less		Goal = 35%		
	Nation	Palo Alto	Nation	Palo Alto	Nation	Palo Alto
Q1	53%	30%	27%	45%	40%	6%
Q2	54%	58%	24%	16%	43%	41%
Q3						
Q4						
YTD	54%	47%	25%	27%	42%	24%

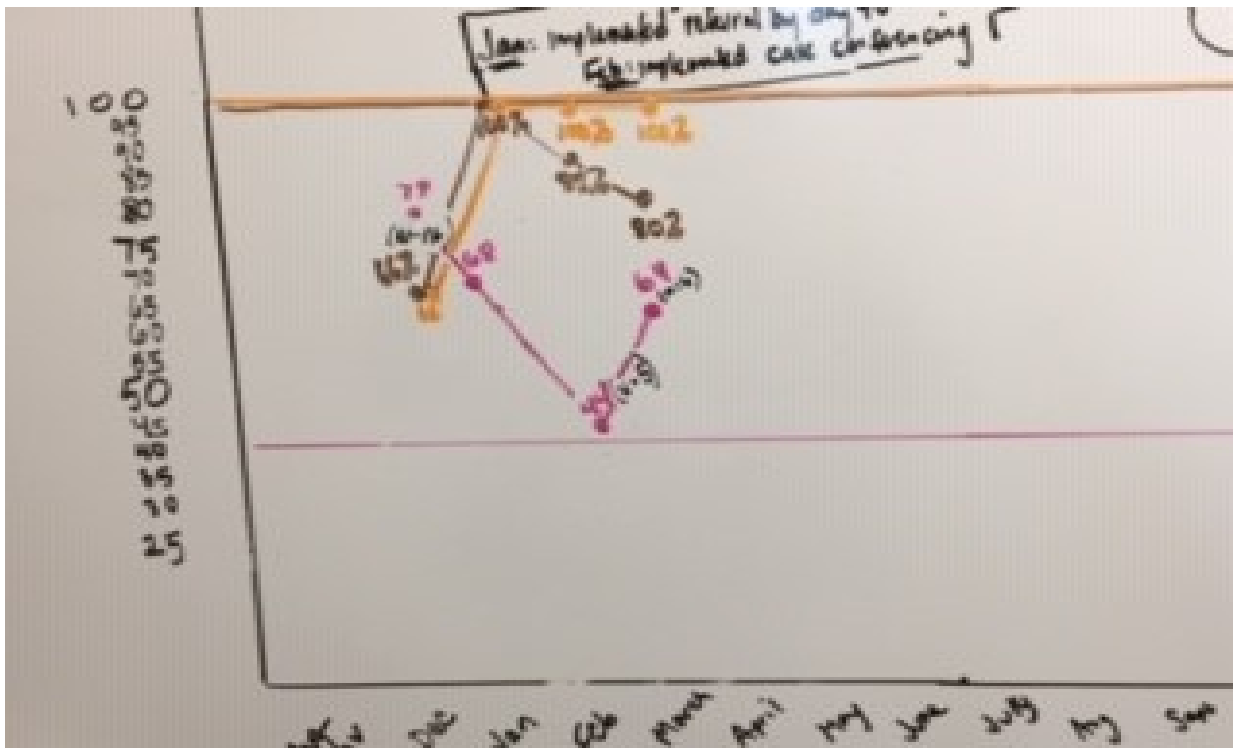
Root Causes	Root Causes	Root Causes
What is contributing to less-than-perfect outcomes?	What is contributing to less-than-perfect outcomes?	What is contributing to less-than-perfect outcomes?
<ul style="list-style-type: none"> POSSIBLE IMPROPER CODING ON H.O.P.E'S EXIT FORM REFERRAL TO VASH IS HARD TO TRACK VASH SCHEDULING STAFF ARE MISTAKENLY DEPT ADMISSION COMMUNICATION LAPS BETWEEN VASH & MAP REFERRAL TO VASH HAPPENING TOO LATE 	<ul style="list-style-type: none"> POSSIBLE IMPROPER CODING ON H.O.P.E'S EXIT FORM 	<ul style="list-style-type: none"> POSSIBLE IMPROPER CODING ON H.O.P.E'S EXIT FORM LACK OF NEW-OUT EMPLOYMENT TRAINING

Countermeasures	Countermeasures	Countermeasures
What can we do to improve?	What can we do to improve?	What can we do to improve?
<ul style="list-style-type: none"> CREATED COLOR-CODED H.O.P.E'S EXIT FORM (JAN) ADDED A "VASH REFERRAL" TAB TO CENSUS DASHBOARD (JAN) RICK WILL REVIEW ALL VASH REFERRALS W/ MONTH (JAN) LOPE WILL CASE CONFERENCE MONTHLY W/ VASH LMS (FEB) VASH REFERRAL WILL BE MADE BY DAY 10 (FEB) 	<ul style="list-style-type: none"> CREATED COLOR-CODED H.O.P.E'S EXIT FORM (JAN) 	<ul style="list-style-type: none"> CREATED COLOR-CODED H.O.P.E'S EXIT FORM (JAN) WILL ADD LEC EMPLOYMENT GROUP (MARCH) WILL OFFER OTHER CERTIFICATION TRAINING (MARCH)

Leadership's Shared Tracking Spreadsheet – Updated Monthly

HVRP-HV Process Improvement Project Data												
Process	Jul - Dec #	Jul -Dec %	Pre-Project Notes	PI Target	PI Target comments	Jan #	Jan %	Feb #	Feb %	Mar #	Mar %	Notes
* HVRP "refer to HV" by 40th day in tx.	(16 vets) 78 avg days in tx before referred	N/A	60-day mark was previously sufficient due to HV screen/admit process and HVRP culture	40 avg	↓ DECREASE Avg. Days to VASH referral placed: HVRP refer to HV within 40 days	68 avg	N/A	44 days avg (5 Vets)	25 %	63.5 days avg (6 Vets)	0%	results calculation starts with veterans whose 40th day in treatment fell after the countermeasure was implemented in early Jan, through to the last day of the end of the month being studied (e.g. for Feb, the 44 average days to referral is for the 5 veterans who's 40th day in treatment fell between Jan 15 and Feb 28)
HV Screening to Admission period (average)	43 days		HV screens quickly, but Menlo team moving admissions to monthly increased time from screen to admit	30 days	↓ DECREASE Days: Ensure HV screening and admission is more efficient and completed within 30 days	32 days		27 days		23 days		
HV Admission to Housing period	110 days		Period increased due to market challenges	90 days	↓ DECREASE Days: Continue goal to decrease housing timeline to 90 days by increasing HVRP/HV staff collaboration	n/a		n/a		n/a		
HVRP Referral to HV Housing period	213 days		Total of previous 3 data points		↓ DECREASE Days: total of 3 previous data points	n/a		n/a		n/a		Total of previous 3 data points
Eligible Vets referred to HV	44 Veterans	95%	All Veterans who are interested and appear eligible	100%	↑ INCREASE as needed to reach 100% eligible	7	100%	9	100%	6	100%	
*HVRP referrals screened in timely fashion (NLT 10 business days)	15 Veterans	66%	All referrals should have been screened; these were not due to Admin communication (Joey waited for updated referral and Rick was unaware)	100%	↑ INCREASE to 100% Veterans screened in timely fashion	7	100% (was 71% prior to Kelsey's fix)	8	88% (was 44% prior to Kelsey's fix)	4	80%	3/20: Designated Menlo VASH Screener did not prioritize this work & her supervisor changed over. Countermeasure: new sup to reinforce importance of screening w/in 10BD. 3/28: HV screener wasn't reporting screenign on time, now knows to report upon completion (previous data noted in paranthesis). Mar data is 80% due to Alameda team screening Vet late-discussed with Alameda Sup.

Leadership's Shared Visual Management- Updated Monthly



Step 6: Modified PDCA

(Who is going to do what, when, how, why?)

RC	Who	What	When	Why	How
1	DCHV SW	Refer to VASH NLT than day 40 (vs. 40 to 60 days) Updated to day 30, added to Vet contract and weekly Rapid Review group agenda (May)	Jan 2019	Time needed to secure permanent housing	Use tracker; Remind Veterans
2	VASH CM	All DCHV Veterans will be screened by HV within 10 days of referrals	Jan 2019	Time needed for HV admission and to secure permanent housing	
3	HV Menlo	Establish additional admissions group for DCHV residents	Feb 2019	Time needed to secure permanent housing	
4	DCHV SW	Reconcile referrals w/ VASH PSA or PM	Jan 2019	Confirm referrals are received and complete	Bi-weekly check-in
5	DCHV & VASH staff	Scheduled clinical case conferences to discuss housing of mutual Vets	Feb 2019	Improve coordination; Help Vets meet housing requirements	Standing monthly meeting
6	PMs	Program leaders will continue to coach staff around process changes	Jan 2019	Explaining reasons for changes increases staff buy-in	Ongoing conversations w/ frontline ³¹

Step 7: Implementation Plan & Standard Work

Implementation Plan:

- This will be our final, ongoing plan to sustain improvements once all countermeasures have been PDCA-tested and observed to be effective

Standard Work:

- Shared document outlining the best known way to complete a given task, outlined in step-by-step detail

Standard Work		
Last updated:	Owner:	Performed by:
Version: 1.0	Revised by:	Trigger:
VA Palo Alto Mission:	Honor America's Veterans by providing exceptional health care that improves their health and well-being.	
Standard Work Applicability:		

Standard Work				
	Work Performed by	Major Step	Details	Reason why this step is important
1				
2				
3				
4				
5				

Step 8: Confirmed State

(How did things turn out?)

- Initial results have been promising, with noted improvements in
 - Processes
 - Cross-program collaborations
 - Across-the-board increases in all three HVRP national performance measures for Q2 (see next slide)
- Permanent Housing is a process that typically takes months, so it will take several quarters before we are able to know the extent to which our countermeasures are impacting those outcomes

VA National Homeless Scorecard Data FY19 Q1-Q2

Fiscal Year	HVRP1 - Housed	HVRP2 – Negative Exits	HVRP3 - Employed
Q1-Nat'l Target	60%	25%	35%
Q1-Nat'l	53%	26%	40%
Q1-DCHV	31%	38%	11%
Q2-Nat'l Target	60%	25%	35%
Q2-Nat'l	54%	24%	43%
Q2-DCHV	58%	16%	41%
YTD - DCHV	47%	27%	24%

Step 9: Lessons Learned

- Importance of communication
- Visual management encourages engagement in the project
- Data informs the PDCA process
- Importance of messaging the mindset: the data reflects process problems, not people problems

Community Role

Permanent housing for Homeless Veterans is a complex process involving many community partnerships. Several are highlighted here:

- Coordinated entry process within our COCs identify most vulnerable homeless Veterans for program referrals, in addition to tailoring resources and wrap-around care
- Our relationships with landlords and property-managers are key
- VA Employment Specialists work closely with area employers
- Housing Authorities have increased PBV opportunities for HV Veterans
- DCHV Veterans often have criminal histories that may make permanent housing more challenging – assistance by legal providers can help expunge those records

[What was most helpful to me was] *“to be able to be who I am, or would like to be, and to be taken seriously again.”*



QUESTIONS

