

Supplementary Online Content

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This supplementary material has been provided by the authors to give readers additional information about their work.

eMethods. Approach Used to Match Comparison Clinics to Intervention Clinics

To increase similarity between intervention and comparison clinics with respect to secular trends in MOUD prescribing, intervention clinics were matched 1:1 to comparison clinics using nearest-neighbor matching in Stata 15 (teffects nnmatch). Intervention clinics, identified both by clinic location and type (mental health, primary care, pain management; n=35), and comparison clinics, which included all mental health, primary care, pain management that treated patients with OUD in the preimplementation year, were entered as treatment variables (1=intervention clinics, 0=comparison clinics). Variables in the models included clinic-specific count of patients with OUD treated in the preimplementation year; clinic-specific percent of patients receiving MOUD by month in the preimplementation year; and facility-level complexity. A unique comparison clinic was selected for each intervention clinic, for a total of 70 clinics.

eTable 1. Characteristics of Comparison and Intervention Clinics in the Pre-implementation Year

		Pre-implementation Comparison Clinics (n=35)						Pre-implementation Intervention Clinics (n=35)					
Facility	Clinic Type	Facility Complexity ^a	Prescriber ^b No.*	MDs ^c %	Patients with OUD ^d No.	Patients Receiving MOUD ^e %	Increase MOUD Receipt ^f %	Facility Complexity ^a	Prescriber ^b No.*	MDs ^c %	Patients with OUD ^d No.	Patients Receiving MOUD ^e %	Increase MOUD Receipt ^f %
1	MH	High	≥50	83.9	≥500	>5%	<1%	High	≥50	90.0	≥500	>5%	<1%
	PC	High	≥50	84.6	≥500	1 - 5%	<1%	High	≥50	63.6	≥500	>5%	1 - 5%
2	PC	High	≥50	57.1	100-499	1 - 5%	<1%	High	10-24	95.2	100-499	<1%	<1%
	Pain	High	≥50	66.7	100-499	<1%	<1%	High	≥50	92.2	≥500	<1%	<1%
4	MH	High	25-49	58.6	100-499	>5%	1 - 5%	High	<10	100.0	<100	>5%	1 - 5%
	PC	High	10-24	93.8	100-499	<1%	<1%	High	10-24	77.3	100-499	>5%	<1%
	Pain	High	10-24	68.8	<100	>5%	1 - 5%	High	<10	66.7	<100	1 - 5%	<1%
5	MH	High	≥50	69.4	≥500	>5%	<1%	High	25-49	84.1	≥500	>5%	1 - 5%
	Pain	High	10-24	81.8	<100	1 - 5%	1 - 5%	High	10-24	72.7	100-499	>5%	>5%
6	PC	High	≥50	74.6	≥500	<1%	<1%	High	≥50	78.6	≥500	1 - 5%	<1%
	PC	Low	25-49	65.4	100-499	<1%	<1%	Low	<10	100.0	<100	<1%	<1%
7	PC	High	25-49	75.0	100-499	1 - 5%	<1%	Low	10-24	78.6	100-499	<1%	<1%
	Pain	High	<10	0.0	<100	<1%	<1%	High	<10	60.0	<100	<1%	<1%
8	PC	High	<10	42.9	100-499	<1%	<1%	High	<10	87.5	<100	<1%	<1%
	Pain	High	<10	83.3	100-499	1 - 5%	1 - 5%	High	10-24	60.0	100-499	>5%	>5%
9	PC	High	<10	87.5	100-499	<1%	<1%	High	<10	55.6	<100	<1%	<1%
	Pain	High	<10	100.0	<100	>5%	>5%	High	<10	100.0	<100	>5%	>5%
10	PC	High	≥50	67.3	100-499	1 - 5%	<1%	High	10-24	100.0	100-499	1 - 5%	<1%
	Pain	High	<10	100.0	<100	>5%	>5%	High	<10	100.0	<100	>5%	>5%
11	MH	High	≥50	100.0	100-499	>5%	1 - 5%	High	25-49	69.2	100-499	1 - 5%	<1%

	MH	High	25-49	69.4	100-499	1 - 5%	<1%		High	25-49	64.3	100-499	1 - 5%	<1%
12	Pain	High	<10	100.0	100-499	1 - 5%	1 - 5%		Low	<10	60.0	<100	<1%	<1%
13	PC	High	10-24	90.0	<100	<1%	<1%		High	<10	80.0	<100	<1%	<1%
	Pain	High	10-24	100.0	<100	1 - 5%	<1%		High	<10	87.5	<100	<1%	<1%
14	MH	Low	10-24	72.7	100-499	1 - 5%	1 - 5%		Medium	10-24	75.0	<100	>5%	>5%
	PC	Low	25-49	63.0	100-499	<1%	<1%		Medium	25-49	61.3	100-499	1 - 5%	<1%
15	PC	High	25-49	67.4	100-499	1 - 5%	<1%		High	≥50	73.8	100-499	1 - 5%	<1%
16	PC	Medium	≥50	54.7	100-499	>5%	>5%		High	≥50	61.3	≥500	>5%	1 - 5%
	PC	High	10-24	100.0	<100	<1%	<1%		High	10-24	36.4	<100	<1%	<1%
	PC	High	10-24	100.0	<100	<1%	<1%		High	10-24	25.0	<100	<1%	<1%
	Pain	High	10-24	90.5	100-499	<1%	<1%		High	10-24	60.0	<100	<1%	<1%
17	Pain	High	10-24	70.0	100-499	1 - 5%	<1%		High	<10	50.0	100-499	<1%	<1%
	MH	High	≥50	84.9	100-499	<1%	<1%		High	25-49	77.1	100-499	1 - 5%	<1%
	Pain	High	<10	80.0	100-499	<1%	<1%		High	<10	62.5	<100	<1%	<1%
18	PC	High	25-49	58.8	100-499	<1%	<1%		High	≥50	90.6	100-499	<1%	<1%
	PC	High	<10	75.0	<100	<1%	<1%		High	10-24	94.1	<100	<1%	<1%

No. = Number

PC = Primary Care

MH = Mental Health

ODU = Opioid Use Disorder

MOUD = Medications for Opioid Use Disorders

a = Facility complexity is based on a VA constructed in dex that classifies VA facilities into three main categories: high complexity (level 1a-1c), medium complexity (level 2), and low complexity (level 3). Facility complexity is based on the number of patients, patient risk scores and cost of patient population, research funding, and availability of inpatient and outpatient clinical services.

b = Number of prescribers

c = Percent of physician prescribers among all prescribers

d = Number of patients with documented OUD

e = Percent of patients with OUD who received MOUD

f = Percent increase in MOUD receipt among patients with documented OUD

eTable 2. Integrated Promoting Action on Research Implementation in Health Services Framework Elements and SCOUTT Initiative Interventions

Elements	Implementation Strategies	SCOUTT Interventions	Fidelity Monitoring
Facilitation	<ul style="list-style-type: none"> External facilitation 	<ul style="list-style-type: none"> Each site assigned an external facilitator with regular meetings 	Number of meetings per site (Mdn = 6, range = 0-10) 83.3% of sites with >2 meetings
Innovation	<ul style="list-style-type: none"> Conduct educational meetings Conduct ongoing training Distribute educational materials Promote adaptability Provide ongoing consultation 	<ul style="list-style-type: none"> In-person two-day training Monthly webinars to address knowledge gaps SharePoint site with online training resources On-going consultation 	246 attendees representing medical, behavioral health, pharmacy and leaders Data unavailable Data unavailable
Recipients	<ul style="list-style-type: none"> Identify and prepare clinical champions Create a learning community 	<ul style="list-style-type: none"> In-person two-day training Monthly meetings to promote learning community 	See above Number of attendees per meeting (M = 66.4, SD = 9.7).
Context	<ul style="list-style-type: none"> Create new clinical teams Prioritize change Audit and provide feedback 	<ul style="list-style-type: none"> Formation of interdisciplinary teams National leadership requesting all regional networks involvement in SCOUTT initiative Quarterly reports 	All sites developed implementation teams Memorandum sent to all regional network directors Four quarterly reports sent by email to all sites

Mdn = median

M = mean

SD = standard deviation

eTable 3. Sensitivity Analyses - Association Between the Implementation Intervention and Monthly Proportion of Patients Receiving MOUD Using Mixed Effects Logit Models with Site Only as Random Effect

	Pre-implementation		Post-implementation		Step Change	
	AOR (95% CI) ^a	P-value	AOR (95% CI) ^a	P-value	AOR (95% CI) ^a	P-value
Intervention clinics	1.02 (1.01-1.04)	0.003	1.05 (1.03-1.07)	<0.001	1.09 (0.97-1.22)	0.141
Comparison clinics	1.03 (1.01-1.04)	0.002	0.99 (0.97-1.02)	0.586	0.84 (0.73-0.97)	0.018
Intervention vs. Comparison clinics	1.00 (0.98-1.02)	0.704	1.05 (1.02-1.08)	<0.001	1.27 (1.06-1.52)	0.011

a = Adjusted for demographic (age, gender, race/ethnicity, marital status, housing insecurity, and VA disability rating $\geq 50\%$), mental health comorbidity (depression, anxiety, posttraumatic stress disorder, serious mental illness disorders¹), substance use comorbidity (alcohol use and any non-opioid drug use disorders), medical comorbidity, clinic type (primary care, mental health, pain), and time-varying indicators (monthly visit attendance in intervention/comparison clinics, monthly substance use disorder specialty-care attendance, and monthly medications for opioid use disorder receipt from other VA and non-VA clinics).

AOR = Adjusted Odds Ratio

CI = Confidence Interval

1 = Serious Mental Illness Disorders include schizophrenia-spectrum or bipolar-spectrum disorders.

eTable 4. Yearly Unadjusted Percentages of MOUD Receipt among Patients in Comparison and Intervention Clinics

	Patients Receiving MOUD in Comparison clinics				Patients Receiving MOUD in Intervention clinics			
	Pre-implementation Year		Post-implementation Year		Pre-implementation Year		Post-implementation Year	
	No.	% (95% CI)	No.	% (95% CI)	No.	% (95% CI)	No.	% (95% CI)
Any MOUD	294	4.8 (2.7 – 8.6)	390	6.4 (3.6 – 11.1)	472	6.3 (3.1 – 12.4)	1,016	13.6 (8.1 – 21.8)
Buprenorphine	276	4.5 (2.4 – 8.2)	372	6.1 (3.4 – 10.6)	413	5.5 (2.5 – 11.6)	944	12.6 (7.3 – 20.8)
Injectable Naltrexone	18	0.3 (0.1 – 0.7)	19	0.3 (0.1 – 0.9)	63	0.8 (0.3 – 2.1)	74	1.0 (0.5 – 2.0)

MOUD = Medications for Opioid Use Disorder

No. = Number

CI = Confidence Interval