A Facility-Wide Plan to Increase Access to Medication for Opioid Use Disorder in Primary Care and General Mental Health Settings

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Background: The opioid epidemic in the United States has generated a pressing need to enhance access to medications for opioid use disorder (MOUD). This program description illustrates a quality-improvement effort to extend MOUD to primary care and general mental health clinics within the US Department of Veterans Affairs (VA) Connecticut Healthcare system (VACHS), and to examine barriers and facilitators to implementation of MOUD in target clinics.

Observations: As part of the national VA Stepped Care for Opioid Use Disorder Train the Trainer (SCOUTT) initiative to improve MOUD access, a VACHS team identified and resolved barriers to MOUD in target clinics. Key interventions were to obtain leadership support, increase waivered prescribers, and develop processes and tools to enhance prescribing. New initiatives included quarterly educational sessions, templated progress notes, and instant messaging for addiction specialist electronic consultations. MOUD

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n the United States, opioid use disorder (OUD) is a major public health challenge. In 2018 drug overdose deaths were 4 times higher than they were in 1999.1 This increase highlights a critical need to expand treatment access. Medication for opioid use disorder (MOUD), including methadone, naltrexone, and buprenorphine, improves outcomes for patients retained in care.² Compared with the general population, veterans, particularly those with co-occurring posttraumatic stress disorder (PTSD) or depression, are more likely to receive higher dosages of opioid medications and experience opioid-related adverse outcomes (eg. overdose, OUD).3,4 As a risk reduction strategy, patients receiving potentially dangerous full-dose agonist opioid medication who are unable to taper to safer dosages may be eligible to transition to buprenorphine.⁵

Buprenorphine and naltrexone can be prescribed in office-based settings or in addiction, primary care, mental health, and pain clinics. Office-based opioid treatment with buprenorphine (OBOT-B) expands access to patients who are not reached by addiction

receipt and prescriber characteristics were evaluated before and 1 year after implementation. There was a 4% increase in eligible patients receiving MOUD, from 552 (44%) to 582 (48%) (P = .04). The number of waivered prescribers increased from 67 to 131, and the number of buprenorphine prescribers increased from 35 to 52 over a 6-month span, and the percentage of health care practitioners capable of prescribing within the electronic health record increased from 75% to 89% (P = .01).

Conclusions: An interdisciplinary team approach to identifying and overcoming barriers to MOUD target clinics expands access. Key interventions include interdisciplinary leadership engagement, proactive education and incentivization of target prescribers, removal of procedural barriers, and development of tools to facilitate and support prescribing. These concrete interventions can help inform other institutions interested in expanding MOUD access.

> treatment programs.^{6,7} This is particularly true in rural settings, where addiction care services are typically scarce.⁸ OBOT-B prevents relapse and maintains opioid-free days and may increase patient engagement by reducing stigma and providing treatment within an existing clinical care team.⁹ For many patients, OBOT-B results in good retention with just medical monitoring and minimal or no ancillary addiction counseling.^{10,11}

> Successful implementation of OBOT-B has occurred through a variety of care models in selected community health care settings.^{8,12,13} Historically in the Veterans Health Administration (VHA), MOUD has been prescribed in substance use disorder clinics by mental health practitioners. Currently, more than 44% of veterans with OUD are on MOUD.¹⁴

> The VHA has invested significant resources to improve access to MOUD. In 2018, the Stepped Care for Opioid Use Disorder Train the Trainer (SCOUTT) initiative launched, with the aim to improve access within primary care, mental health, and pain clinics.¹⁵ SCOUTT emphasizes stepped-care treatment, with patients engaging in the step

of care most appropriate to their needs. Step 0 is self-directed care/self-management, including mutual support groups; step-1 environments include office-based primary care, mental health, and pain clinics; and step-2 environments are specialty care settings. Through a series of remote webinars, an inperson national 2-day conference, and external facilitation, SCOUTT engaged 18 teams representing each Veterans Integrated Service Network (VISN) across the country to assist in implementing MOUD within 2 step-1 clinics. These teams have developed several models of providing step-1 care, including an interdisciplinary team-based primary care delivery model as well as a pharmacist care manager model.^{16, 17}

US Department of Veterans Affairs (VA) Connecticut Health Care System (VACHS), which delivers care to approximately 58,000 veterans, was chosen to be a phase 1 SCOUTT site. Though all patients in VACHS have access to specialty care step-2 clinics, including methadone and buprenorphine programs, there remained many patients not yet on MOUD who could benefit from it. Baseline data (fiscal year [FY] 2018 4th quarter), obtained through electronic health record (EHR) database dashboards indicated that 710 (56%) patients with an OUD diagnosis were not receiving MOUD. International *Classification of Disease, 10th Revision codes* are the foundation for VA population management dashboards, and based their data on codes for opioid abuse and opioid dependence. These tools are limited by the accuracy of coding in EHRs. Additionally, 366 patients receiving long-term opioid prescriptions were identified as moderate, high, or very high risk for overdose or death based on an algorithm that considered prescribed medications, sociodemographics, and comorbid conditions, as characterized in the VA EHR (Stratification Tool for Opioid Risk Mitigation [STORM] report).¹⁸

This article describes the VACHS quality-improvement effort to extend OBOT-B into step-1 primary care and general mental health clinics. Our objectives are to (1) outline the process for initiating SCOUTT within VACHS; (2) examine barriers to implementation and the SCOUTT team response; (3) review VACHS patient and prescriber data at baseline and 1 year after implementation; and (4) explore future implementation strategies.

SCOUTT TEAM

A VACHS interdisciplinary team was formed and attended the national SCOUTT kickoff conference in 2018.15 Similar to other SCOUTT teams, the team consisted of VISN leadership (in primary care, mental health, and addiction care), pharmacists, and a team of health care practitioners (HCPs) from step-2 clinics (including 2 addiction psychiatrists, and an advanced practice registered nurse, a registered nurse specializing in addiction care), and a team of HCPs from prospective step-1 clinics (including a clinical psychologist and 2 primary care physicians). An external facilitator was provided from outside the VISN who met remotely with the team to assist in facilitation. Our team met monthly, with the goal to identify local barriers and facilitators to OBOT-B and implement interventions to enhance prescribing in step-1 primary care and general mental health clinics.

Implementation Steps

The team identified multiple barriers to dissemination of OBOT-B in target clinics (Table). The 3 main barriers were limited leadership engagement in promoting OBOT-B in target clinics, inadequate number of HCPs with active X-waivered prescribing status in the targeted clinics, and the need for standardized processes and tools to facilitate prescribing and follow-up.

To address leadership engagement, the SCOUTT team held quarterly presentations of SCOUTT goals and progress on target clinic leadership calls (usually 15 minutes) and arranged a 90-minute multidisciplinary leadership summit with key leadership representation from primary care, general mental health, specialty addiction care, nursing, and pharmacy. To enhance X-waivered prescribers in target clinics, the SCOUTT team sent quarterly emails with brief education points on MOUD and links to waiver trainings. At the time of implementation, in order to prescribe buprenorphine and meet qualifications to treat OUD, prescribers were required to complete specialized training as necessitated by the Drug Addiction Treatment Act of 2000.

X-waivered status can now be obtained without requiring training

The SCOUTT team advocated for Xwaivered status to be incentivized by performance pay for primary care practitioners and held quarterly case-based education sessions during preexisting allotted time. The onboarding process for new waivered prescribers to navigate from waiver training to active prescribing within the EHR was standardized via development of a standard operating procedure (SOP).

The SCOUTT team also assisted in the development of standardized processes and tools for prescribing in target clinics, including implementation of a standard operating procedure regarding prescribing (both initiation of buprenorphine, and maintenance) in target clinics. This procedure specifies that target clinic HCPs prescribe for patients requiring less intensive management, and who are appropriate for office-based treatment based on specific criteria (eAppendix, available at doi:10.12788/fp.0186).

Templated progress notes were created for buprenorphine initiation and buprenorphine maintenance with links to recommended laboratory tests and urine toxicology test ordering, home induction guides, prescription drug monitoring database, naloxone prescribing, and pharmacy order sets. Communication with specialty HCPs was facilitated by development of e-consultation within the EHR and instant messaging options within the local intranet. In the SCOUTT team model, the prescriber independently completed assessment/follow-up without nursing or clinical pharmacy support.

Analysis

We examined changes in MOUD receipt and prescriber characteristics at baseline (FY 2018 4th quarter) and 1 year after implementation (FY 2019 4th quarter). Patient data were extracted from the VHA Corporate Data Warehouse (CDW), which contains data from all VHA EHRs. The VA STORM, is a CDW tool that automatically flags patients prescribed opioids who are at risk for overdose and suicide. Prescriber data were obtained from the Buprenorphine/X-Waivered Provider Report, a VA Academic Detailing Service database that provides details on HCP type, X-waivered status, and prescribing by location. χ^2 analyses were conducted on before and after measures when total values were available.

RESULTS

There was a 4% increase in patients with an OUD diagnosis receiving MOUD, from 552 (44%) to 582 (48%) (P = .04), over this time. The number of waivered prescribers increased from 67 to 131, the number of prescribers of buprenorphine in a 6-month span increased from 35 to 52, and the percentage of HCPs capable of prescribing within the EHR increased from 75% to 89% (P = .01).

Initially, addiction HCPs prescribed to about 68% of patients on buprenorphine, with target clinic HCPs prescribing to 24% (with the remaining coming from other specialty HCPs). On follow-up, addiction professionals prescribed to 63%, with target clinic clincians prescribing to 32%.

Interpretation

SCOUTT team interventions succeeded in increasing the number of patients receiving MOUD, a substantial increase in waivered HCPs, an increase in the number of waivered HCPs prescribing MOUD, and an increase in the proportion of patients receiving MOUD in step-1 target clinics. It is important to note that within the quality-improvement framework and goals of our SCOUTT team that the data were not collected as part of a research study but to assess impact of our interventions. Within this framework, it is not possible to directly attribute the increase in eligible patients receiving MOUD solely to SCOUTT team interventions, as other factors may have contributed, including improved awareness of HCPs.

SUMMARY AND FUTURE DIRECTIONS

Since implementation of SCOUTT in August 2018, VACHS has identified several barriers to buprenorphine prescribing in step-1 clinics and implemented strategies to overcome them. Describing our approach will hopefully inform other large health care systems (VA or non-VA) on changes required in order to scale up implementation of OBOT-B. The VACHS SCOUTT team was successful at enhancing a ready workforce in step-1 clinics, though noted a delay in changing prescribing practice and culture.

TABLE Barriers and Resolutions to implementation of OBOT-B in VACHS Clinics

Barriers	Approaches
Limited leadership engagement in promoting OBOT-B	 Incorporated quarterly progress reports into regional primary care leadership call 90-minute leadership summit with primary care, mental health care, SUD care, nursing, and pharmacy leadership 1-day in-person SUD regional leadership meeting
Clinicians without X-waivers	 Quarterly emails to target clinic clinicians Training courses included: 8 h online (learning.pcssnow.org); 4 h webinar and 4-h online self-study X-licensure status linked to incentives for primary care; X-waiver/opioid safety components qualified for \$3000 incentive for 2019 Quarterly case-based education sessions during existing clinician education time
Procedural barrier for waivered prescribers	SOP onboarding for new waivered prescribersSOP generated and accepted by stakeholders
SOP to ensure adherence with evidence-based practice within target clinics	 Created and solicited stakeholders support for SOP for waivered prescribers in clinics to prescribe buprenorphine Templated buprenorphine induction and maintenance progress notes; active links to urine toxicology and pharmacy order sets, home induction guides, informed consent, prescription drug monitoring website, and naloxone prescription
Unstructured support for clinicians in step-1 clinics	SUD e-consult for potential OBOT-B problemsInstant messaging group for addiction care team
Understaffed clinics unable to accommodate buprenorphine prescribing	Telebuprenorphine clinics at outpatient clinics

Abbreviations: OBOT-B, office-based opioid treatment with buprenorphine; SOP, standard operating procedure; SUD, substance use disorder; VACHS, Veterans Affairs Connecticut Healthcare System.

We recommend utilizing academic detailing to work with clinics and individual HCPs to identify and overcome barriers to prescribing. Also, we recommend implementation of a nursing or clinical pharmacy collaborative care model in target step-1 clinics (rather than the HCP-driven model). A collaborative care model reflects the patient aligned care team (PACT) principle of team-based efficient care, and PACT nurses or clinical pharmacists should be able to provide the minimal quarterly follow-up of clinically stable patients on MOUD within the step-1 clinics. Templated notes for assessment, initiation, and followup of patients on MOUD are now available from the SCOUTT national program and should be broadly implemented to facilitate adoption of the collaborative model in target clinics. In order to accomplish a full collaborative model, the VHA would need to enhance appropriate staffing to support this model, broaden access to telehealth, and expand incentives to teams/clinicians who prescribe in these settings.

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References

- Centers for Disease Control and Prevention. Understanding the epidemic. Updated March 17, 2021. Accessed September 17, 2021. https://www.cdc.gov/drugoverdose /epidemic/index.html
- Blanco C, Volkow ND. Management of opioid use disorder in the USA: present status and future directions. *Lancet.* 2019;393(10182):1760-1772. doi:10.1016/S0140-6736(18)33078-2
- Seal KH, Shi Y, Cohen G, et al. Association of mental health disorders with prescription opioids and highrisk opioid use in US veterans of Iraq and Afghanistan [published correction appears in JAMA. 2012 Jun 20;307(23):2489]. JAMA. 2012;307(9):940-947. doi:10.1001/jama.2012.234
- Bohnert AS, Ilgen MA, Trafton JA, et al. Trends and regional variation in opioid overdose mortality among Veterans Health Administration patients, fiscal year 2001 to 2009. *Clin J Pain*. 2014;30(7):605-612. doi:10.1097/AJP00000000000011
- US Department of Health and Human Services, Working Group on Patient-Centered Reduction or Discontinuation of Long-term Opioid Analgesics. HHS guide for clinicians on the appropriate dosage reduction or discontinuation of Long-term opioid analgesics. Published October 2019. Accessed September 17, 2021. https://www.hhs.gov /opioids/sites/default/files/2019-10/Dosage_Reduction _Discontinuation.pdf
- Sullivan LE, Chawarski M, O'Connor PG, Schottenfeld RS, Fiellin DA. The practice of office-based buprenorphine treatment of opioid dependence: is it associated with new patients entering into treatment?. *Drug Alcohol Depend*. 2005;79(1):113-116. doi:10.1016/j.drugalcdep.2004.12.008
- 7. LaBelle CT, Han SC, Bergeron A, Samet JH. Office-based

opioid treatment with buprenorphine (OBOT-B): statewide implementation of the Massachusetts collaborative care model in community health centers. *J Subst Abuse Treat.* 2016;60:6-13. doi:10.1016/j.jsat.2015.06.010

- Rubin R. Rural veterans less likely to get medication for opioid use disorder. *JAMA*. 2020;323(4):300. doi:10.1001/jama.2019.21856
- Kahan M, Srivastava A, Ordean A, Cirone S. Buprenorphine: new treatment of opioid addiction in primary care. Can Fam Physician. 2011;57(3):281-289.
- Fiellin DA, Moore BA, Sullivan LE, et al. Long-term treatment with buprenorphine/naloxone in primary care: results at 2-5 years. *Am J Addict.* 2008;17(2):116-120. doi:10.1080/10550490701860971
- Fiellin DA, Pantalon MV, Chawarski MC, et al. Counseling plus buprenorphine-naloxone maintenance therapy for opioid dependence. N Engl J Med. 2006;355(4):365-374. doi:10.1056/NEJMoa055255
- Haddad MS, Zelenev A, Altice FL. Integrating buprenorphine maintenance therapy into federally qualified health centers: real-world substance abuse treatment outcomes. *Drug Alcohol Depend.* 2013;131(1-2):127-135. doi:10.1016/j.drugalcdep.2012.12.008
- Alford DP, LaBelle CT, Richardson JM, et al. Treating homeless opioid dependent patients with buprenorphine in an office-based setting. *J Gen Intern Med.* 2007;22(2):171-176. doi:10.1007/s11606-006-0023-1
- Wyse JJ, Gordon AJ, Dobscha SK, et al. Medications for opioid use disorder in the Department of Veterans Affairs (VA) health care system: Historical perspective, lessons learned, and next steps. *Subst Abus*. 2018;39(2):139-144. doi:10.1080/08897077.2018.1452327
- Gordon AJ, Drexler K, Hawkins EJ, et al. Stepped Care for Opioid Use Disorder Train the Trainer (SCOUTT) initiative: Expanding access to medication treatment for opioid use disorder within Veterans Health Administration facilities. *Subst Abus*. 2020;41(3):275-282. doi:10.1080/08897077.2020.1787299
- Codell N, Kelley AT, Jones AL, et al. Aims, development, and early results of an interdisciplinary primary care initiative to address patient vulnerabilities. *Am J Drug Alcohol Abuse*. 2021;47(2):160-169. doi:10.1080/00952990.2020.1832507
- DeRonne BM, Wong KR, Schultz E, Jones E, Krebs EE. Implementation of a pharmacist care manager model to expand availability of medications for opioid use disorder. Am J Health Syst Pharm. 2021;78(4):354-359. doi:10.1093/ajhp/zxaa405
- Oliva EM, Bowe T, Tavakoli S, et al. Development and applications of the Veterans Health Administration's Stratification Tool for Opioid Risk Mitigation (STORM) to improve opioid safety and prevent overdose and suicide. *Psychol Serv.* 2017;14(1):34-49. doi:10.1037/ser0000099
- US Department of Defense, US Department of Veterans Affairs, Opioid Therapy for Chronic Pain Work Group. VA/DoD clinical practice guideline for opioid therapy for chronic pain. Published February 2017. Accessed August 20, 2021. https://www.va.gov/HOMELESS/nchav /resources/docs/mental-health/substance-abuse/VA _DoD-CLINICAL-PRACTICE-GUIDELINE-FOR-OPIOID -THERAPY-FOR-CHRONIC-PAIN-508.pdf