



Using Data & Information Systems in Partnered Research Cyberseminar Series

Third Tuesday of the month @ 12:00 – 1:00 PM ET

Presentations from the field focusing on VA data use in quality improvement and operations-research partnerships.

Topics

- Use of VA data and information systems in QUERI Projects and Partnered Evaluation Initiatives
- Operational data resources and QI-related data
- Challenges in using and managing multiple data sources
- VA resources to support data use
- Experiences working within operations/research partnerships

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FACILITATION OF THE STEPPED CARE MODEL AND MEDICATION TREATMENT FOR OPIOID USE DISORDER

VIReC's Partnered Research Cyberseminar
September 15, 2020

Adam J. Gordon, MD MPH FACP DFASAM

Chief, Addiction Medicine

National Director, Medication Addiction Treatment in the VA (MAT-VA) Initiative
National co-Director, Coordinating Center of the Advanced Interdisciplinary Fellowship in Addiction Treatment
Director (emeritus), Vulnerable Veteran Innovative Patient Aligned Care Team (VIP) Initiative
Salt Lake City VA Health Care System

Professor of Medicine and Psychiatry

Director, Program for Addiction Research, Clinical Care, Knowledge, and Advocacy (PARCKA)
Co-Director, Greater Intermountain Node (GIN) of the NIH NIDA Clinical Trials Network
University of Utah School of Medicine



OBJECTIVES

1. Discuss the Stepped Care for Opioid Use Disorder Train the Trainer (SCOUTT) Initiative
2. Discuss the use and integration of diverse data sources used to increase implementation of the SCOUTT Initiative
3. Discuss ongoing big data approaches to evaluate the access and quality of care for Veterans with opioid use disorder



DISCLOSURES

- I have no personal fiduciary conflicts of interest
- I work full time for the Department of Veterans Affairs (VA Salt Lake City Health Care System) and University of Utah
- The views expressed in this presentation are solely my own and do not necessarily reflect the position or policy of the Department of Veterans Affairs or the United States government or any other university or organization



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ACKNOWLEDGEMENTS: PARTNERS AND FUNDING

- PARTNERS:
 - Office of Mental Health and Suicide Prevention (Substance Use Disorder)
 - Primary Care, Pharmacy, Pain, etc.
- Current Funding
 - HSR&D QUERI PEC #19-001 (SCOUTT Facilitation; PI: Gordon)
 - HSR&D QUERI PEC #18-203 (SCOUTT Evaluation; PI: Hawkins)
 - VA PII 19-321 (CONDUIT; MPIs: Becker, ..., Gordon (MPIs))
 - ...
- Prior HSR&D and QUERI IIRs/Pilots
 - VA HSR&D RCD-00038-2 (VA Career Development Award; Gordon)
 - RRP 06-155 (Fac/Barr of Bup; MPIs:Gordon, Liberto)
 - ...
- NIH:
 - NIDA 3uG1DA040316-04S3 (Buprenorphine Discontinuation; MPIs: Gordon, ...)
 - ...

Poll #1: Your role as a data user

What is your role in research and/or quality improvement?

- Investigator, PI, Co-I
- Data manager, analyst, or programmer
- Project coordinator
- Other – please describe via the Q&A function



Poll #2: Your experience with VA data

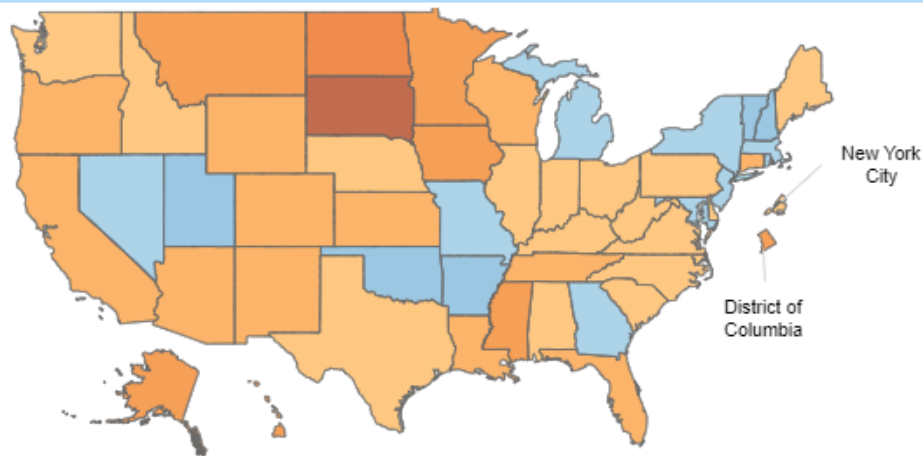
How many years of experience do you have working with VA data?

- One year or less
- More than 1, less than 3 years
- At least 3, less than 7 years
- At least 7, less than 10 years
- 10 years or more



OPIOID ADDICTION EPIDEMIC

Figure 1b. Percent Change in Predicted 12 Month-ending Count of Drug Overdose Deaths, by Jurisdiction: December 2018 to December 2019



Select predicted or reported number of deaths

- Predicted
- Reported

Percent Change for United States

4.8 ▲

Legend for Percent Change in Drug Overdose Deaths Between 12-Month Ending Periods



NOTES: *Reported* provisional counts for 12-month ending periods are the number of deaths received and processed for the 12-month period ending in the month indicated. Drug overdose deaths are often initially reported with no cause of death (pending investigation), because they require lengthy investigation, including toxicology testing. Reported provisional counts may not include all deaths that occurred during a given time period. Therefore, they should not be considered comparable with final data and are subject to change. *Predicted* provisional counts represent estimates of the number of deaths adjusted for incomplete reporting (see **Technical notes**). Deaths are classified by the reporting jurisdiction in which the death occurred. Percent change refers to the relative difference between the reported or predicted provisional numbers of deaths due to drug overdose occurring in the 12-month period ending in the month indicated compared with the 12-month period ending in the same month of the previous year. Drug overdose deaths are identified using ICD-10 underlying cause-of-death codes: X40–X44, X60–X64, X85, and Y10–Y14.

- 128 Opioid Overdose Deaths each day¹
- 192 Drug Overdose Deaths each day²
- 21.2 million Americans needed treatment
- 3.7 million received any treatment³

¹<https://www.cdc.gov/drugoverdose/epidemic/index.html>

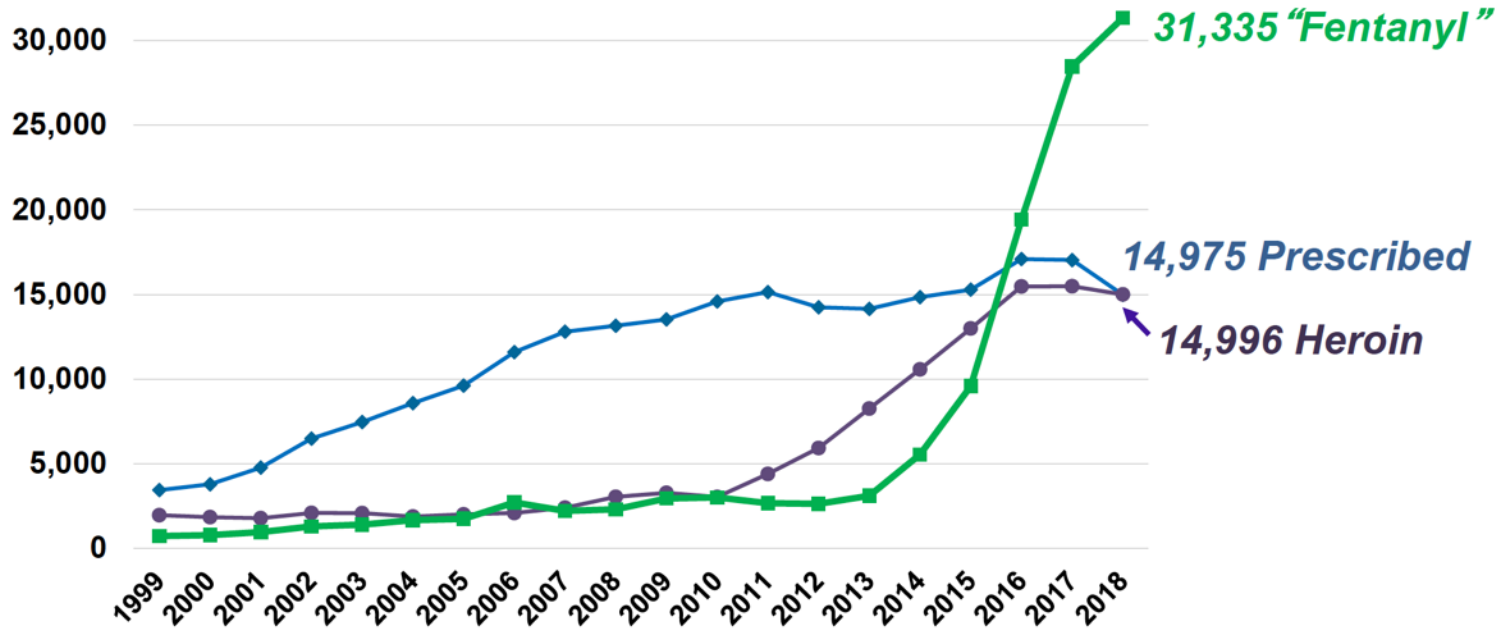
²<https://www.cdc.gov/drugoverdose/data/statedeaths.html>

³<https://www.whitehouse.gov/wp-content/uploads/2020/02/2020-NDCS-Treatment-Plan.pdf>

<https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm#citation>

OPIOID ADDICTION EPIDEMIC

Evolution of Drivers of Overdose Deaths:
Analgesics ➔ **Heroin** ➔ **“Fentanyl”**



See: Compton WM & Jones CM, *Ann NY Acad Sci*, 2019;
Updated for 2018 from WONDER Database and Hedegaard et al. *NCHS Data Brief*, no 356. January, 2020



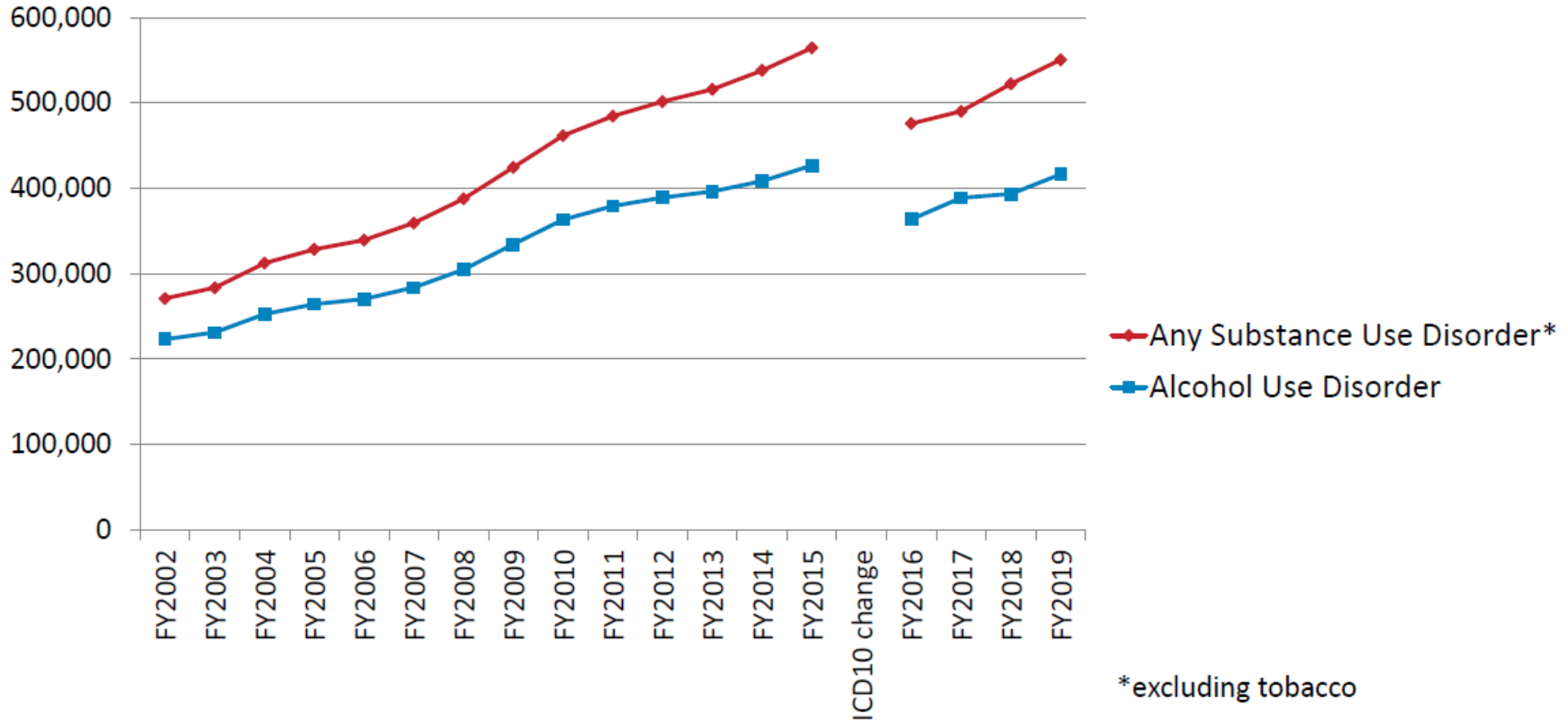
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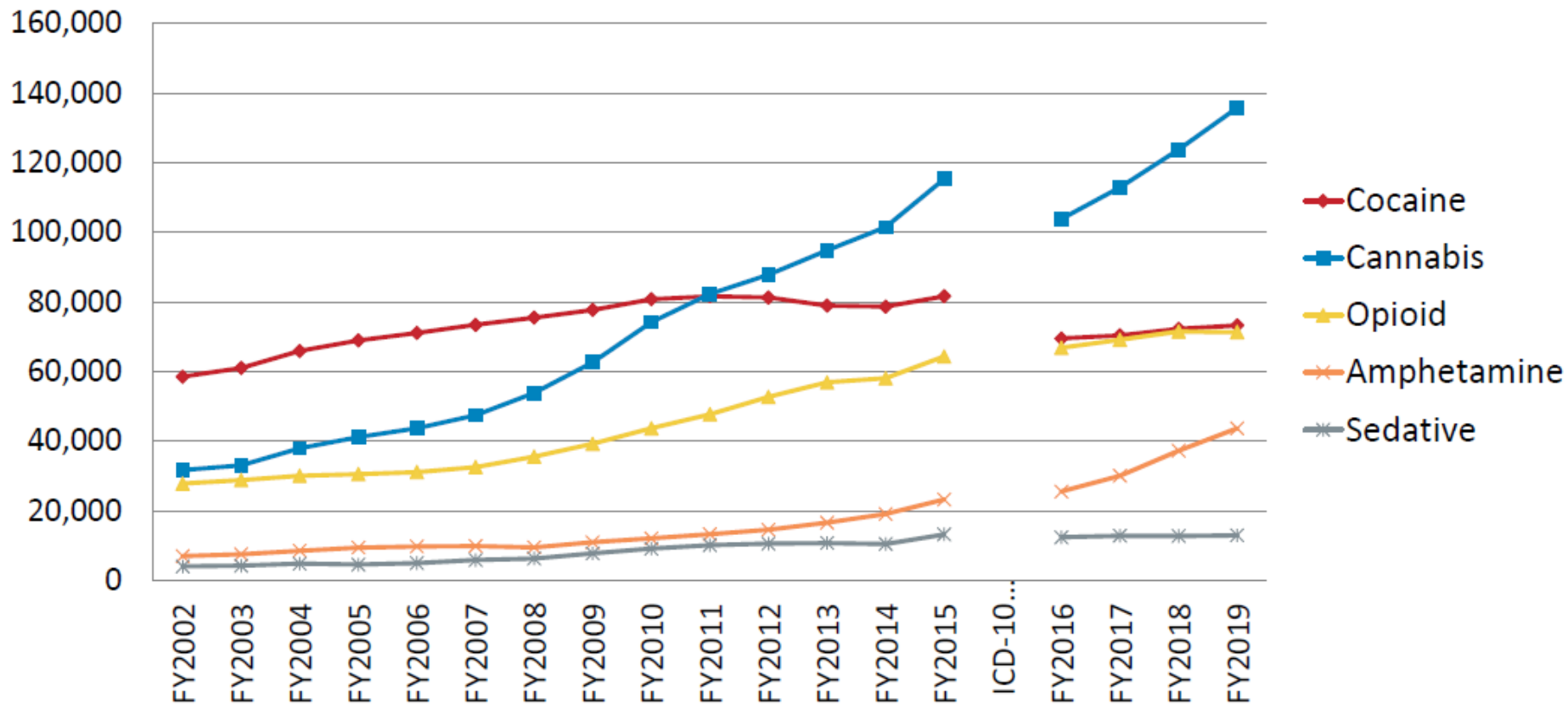


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VA TRENDS IN SUD DISORDERS



VA TRENDS IN SUD DISORDERS



Medication-Assisted Therapies — Tackling the Opioid-Overdose Epidemic

Nora D. Volkow, M.D., Thomas R. Frieden, M.D., M.P.H., Pamela S. Hyde, J.D., and Stephen S. Cha, M.D.

The rate of death from overdoses of prescription opioids in the United States more than quadrupled between 1999 and 2010 (see graph), far exceeding the combined death toll from cocaine and heroin overdoses.¹ In 2010 alone, prescription opioids were involved in 16,651 overdose deaths, whereas heroin was implicated in 3036. Some 82% of the deaths due to prescription

N ENGL J MED 370;22 NEJM.ORG MAY 29, 2014

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The New England Journal of Medicine

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Medication treatment for OUD

Characteristics of Medications for Opioid-Addiction Treatment.

Characteristic	Methadone	Buprenorphine	Naltrexone
Brand names	Dolophine, Methadose	Subutex, Suboxone, Zubsolv	Depade, ReVia, Vivitrol
Class	Agonist (fully activates opioid receptors)	Partial agonist (activates opioid receptors but produces a diminished response even with full occupancy)	Antagonist (blocks the opioid receptors and interferes with the rewarding and analgesic effects of opioids)
Use and effects	Taken once per day orally to reduce opioid cravings and withdrawal symptoms	Taken orally or sublingually (usually once a day) to relieve opioid cravings and withdrawal symptoms	Taken orally or by injection to diminish the reinforcing effects of opioids (potentially extinguishing the association between conditioned stimuli and opioid use)
Advantages	High strength and efficacy as long as oral dosing (which slows brain uptake and reduces euphoria) is adhered to; excellent option for patients who have no response to other medications	Eligible to be prescribed by certified physicians, which eliminates the need to visit specialized treatment clinics and thus widens availability	Not addictive or sedating and does not result in physical dependence; a recently approved depot injection formulation, Vivitrol, eliminates need for daily dosing
Disadvantages	Mostly available through approved outpatient treatment programs, which patients must visit daily	Subutex has measurable abuse liability; Suboxone diminishes this risk by including naloxone, an antagonist that induces withdrawal if the drug is injected	Poor patient compliance (but Vivitrol should improve compliance); initiation requires attaining prolonged (e.g., 7-day) abstinence, during which withdrawal, relapse, and early dropout may occur



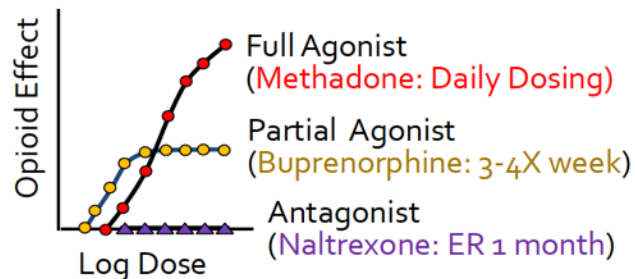
BUPRENORPHINE PRODUCTS (ALL IN VA)

- Buprenorphine IV (1981 approved)
 - Indication: **PAIN**
- Buprenorphine (2002 approved)
 - Indication: **OPIOID USE DISORDER**
 - Tablets available
 - *Indication (one formulation): PAIN (2017 approved)*
- Buprenorphine/Naloxone (2002 approved)
 - Indication: **OPIOID USE DISORDER**
 - SL/Buccal Tablets and Film available
- Buprenorphine Patches (2010 approved)
 - Indication: **PAIN**
- Buprenorphine Implants (2016 approved)
 - Indication: **OPIOID USE DISORDER**
- Buprenorphine Depot Injections (2017 approved)
 - Indication: **OPIOID USE DISORDER**



MEDICATION TREATMENT ESSENTIAL

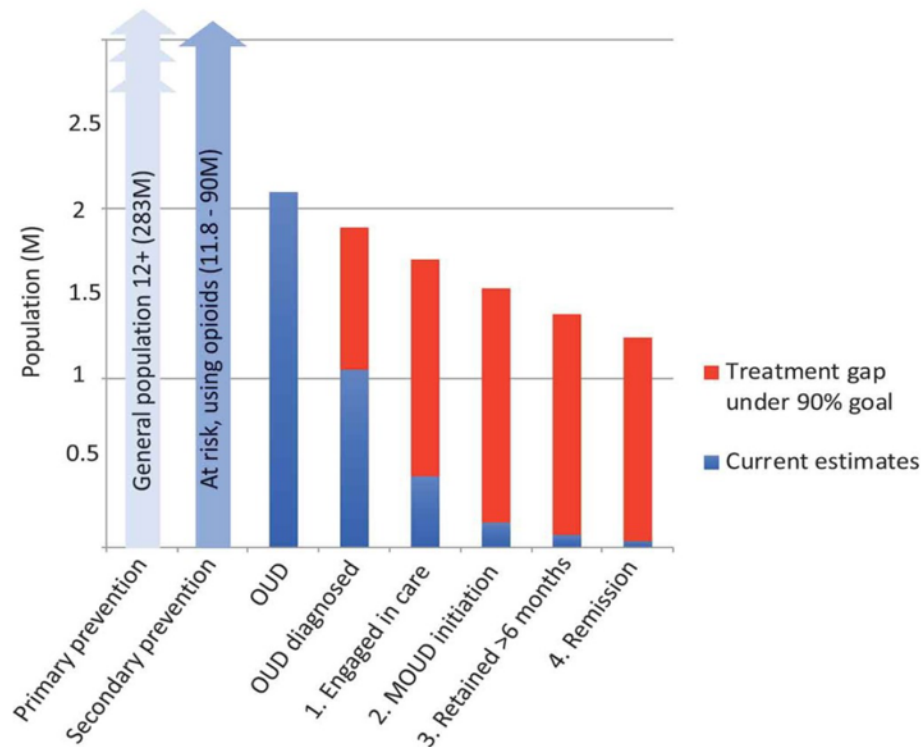
Medication Assisted Treatment (MAT)



- **DECREASES:**
 - Opioid use
 - Opioid-related overdose deaths
 - Criminal activity
 - Infectious disease transmission
- **INCREASES**
 - Social functioning
 - Retention in treatment

But MAT is highly underutilized!
Relapse rates are very high!

Opioid Treatment “Cascade of Care”



Williams, Nunes, Bisaga, Levin *Am J Drug Alcohol Abuse* 2019



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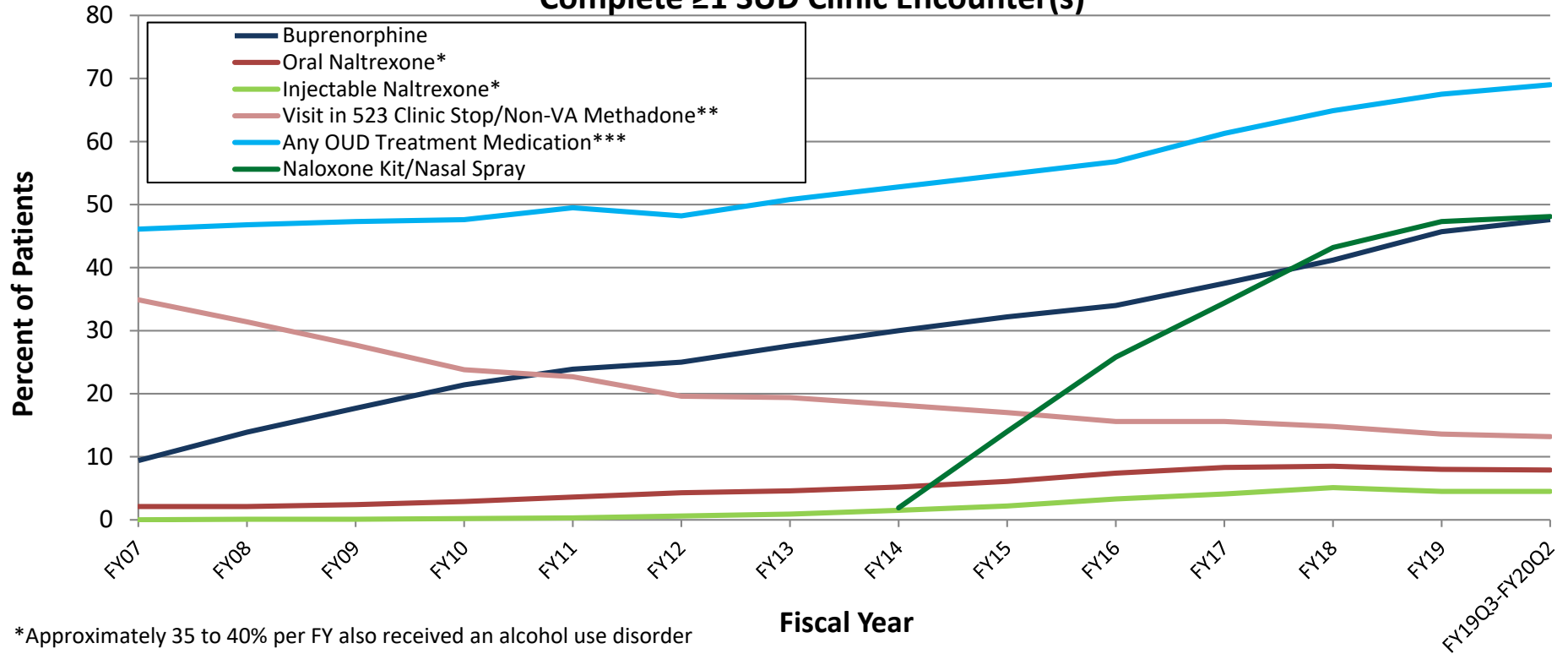
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MEDICATIONS FOR OUD – SUD Specialty Care

Receipt of Medications by Patients with an Opioid Use Disorder Diagnosis Who Complete ≥1 SUD Clinic Encounter(s)



*Approximately 35 to 40% per FY also received an alcohol use disorder

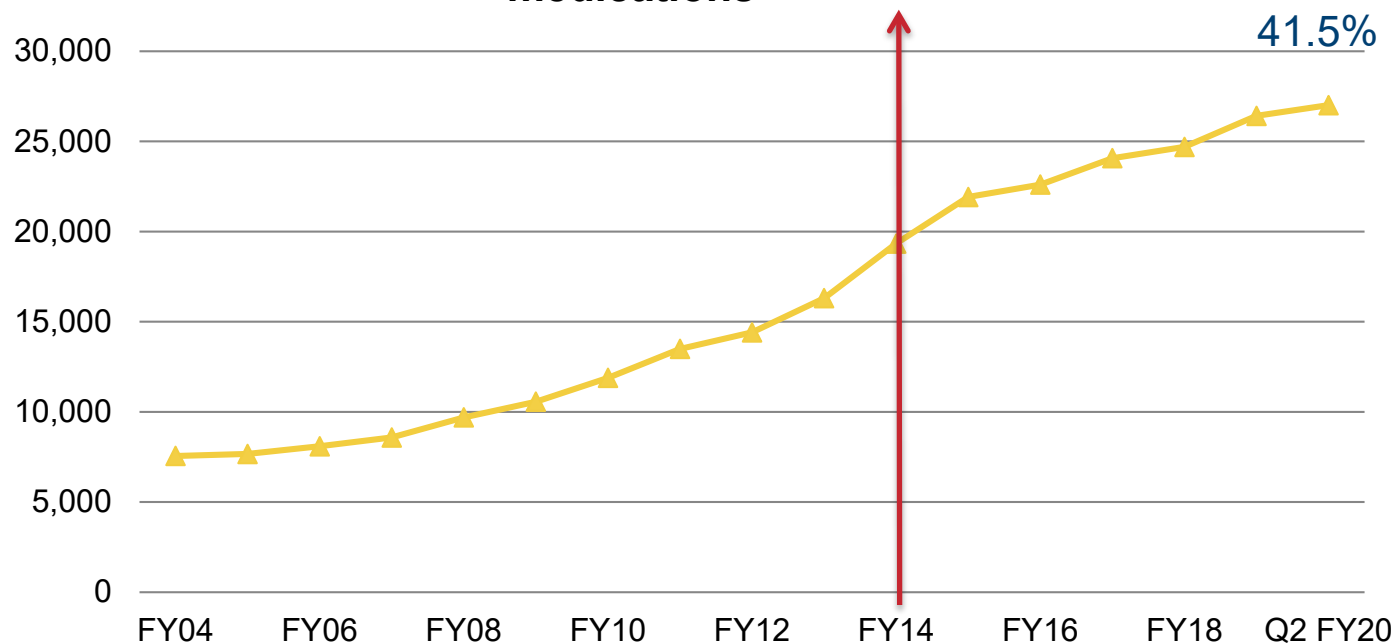
**Excludes patients with visits in Clinic Stop 523 who received buprenorphine

M-ODD FOR VETERANS TREATED IN VHA

- Percentage of VHA-treated Veterans with clinically diagnosed OUD who received indicated medications (i.e. OTP-administered methadone, buprenorphine, or injectable naltrexone)
- Most of this medication provided in SUD specialty care settings.
- During FY 2019, among Veterans with an OUD diagnosis nearly 87% were seen in outpatient mental health clinics with 55% seen in SUD Specialty Care

Starting in FY14, Extended-Release Naltrexone was counted as a medication assisted treatment for OUD

Veterans with an OUD receiving CPG consistent medications



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VHA 1st TO ENCOURAGE BUPRENORPHINE CARE

- In the VHA, Buprenorphine made available:
 - 2002, Buprenorphine a non-Formulary medication
 - 2005, Buprenorphine a Formulary medication
- Early utilization
 - Increase in buprenorphine use did occur over time, indicating some early success at implementation
 - During the first 3 years of buprenorphine availability in the VHA, buprenorphine treatment failed to close this treatment gap in numbers of Veterans with OUD
 - Providers were only treating a few patients: FY2005 = 4.2 patients/provider
 - Regional variations in the implementation of buprenorphine were striking

Gordon, AJ, Trafton JA, Saxon AJ, Gifford AL, Goodman F, Calabrese VS, McNicholas L, Liberto, J. Implementation of buprenorphine in the Veterans Health Administration. Drug alc dep. 2007;90:292-296

VARIABILITY OF BUPRENORPHINE - FACILITIES

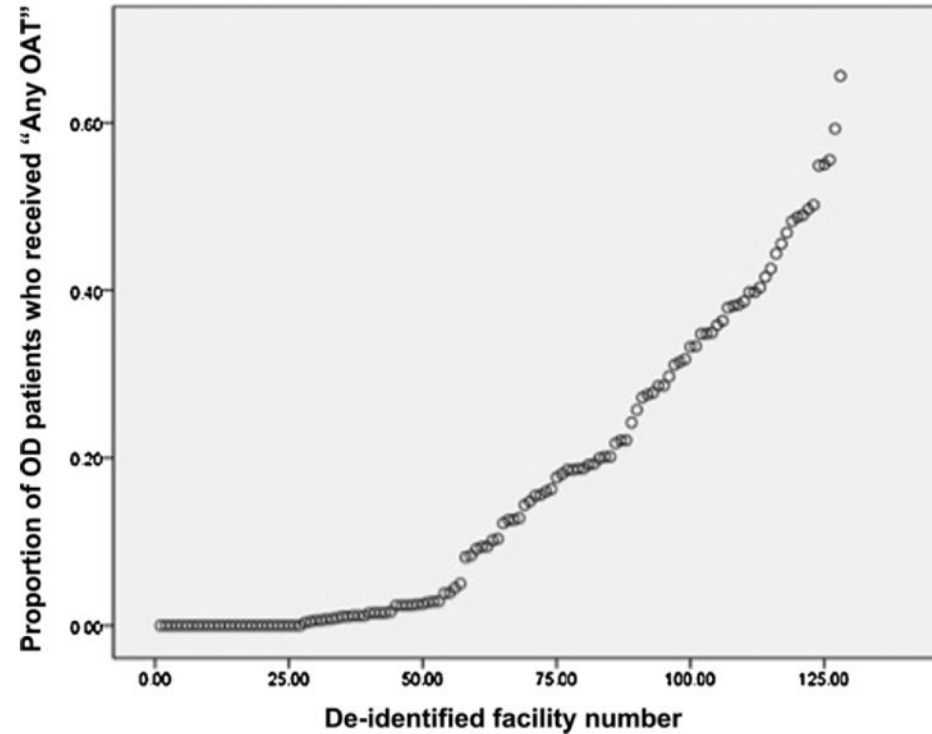


Fig. 1. Percentage of patients at 128 facilities receiving opioid agonist treatment (OAT) for an opioid use disorder in fiscal year 2008. OD=opioid use disorder. OAT=opioid agonist treatment.

Oliva EM, Harris AHS, Trafton JA, Gordon AJ. Receipt of opioid agonist treatment in the Veterans Health Administration: Facility and patient factors. Drug alc dep. 2012;122:241-246

VARIABILITY OF BUPRENORPHINE - FACILITIES

- From FY2004 through FY2010:
 - Bup utilization has increased steadily
 - Greater numbers of patients receiving office-based OAT and greater numbers of providers and facilities providing office-based OAT
- The actual proportion patients with OUD receiving OAT has not increased and has remained relatively stable with rates around 27% (relatively flat...) in this period

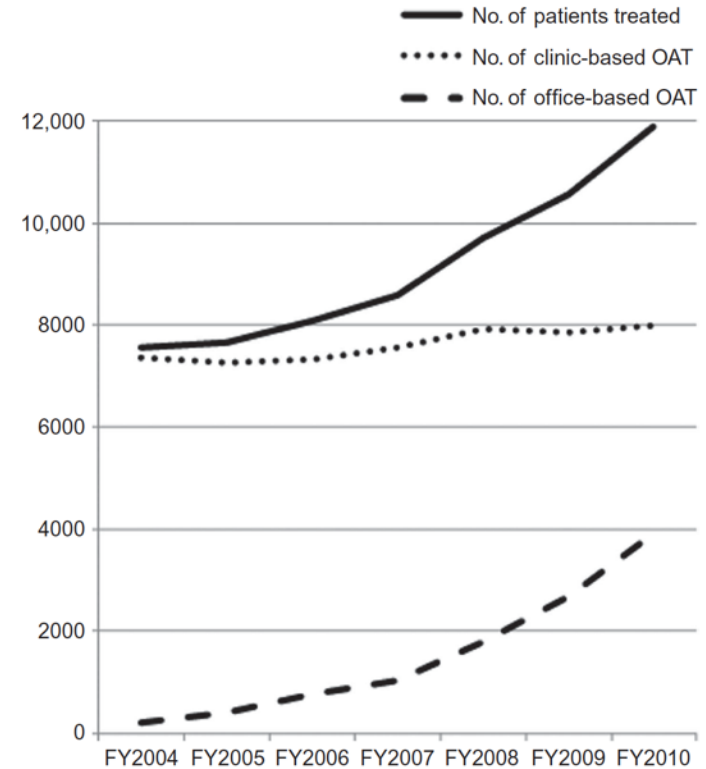
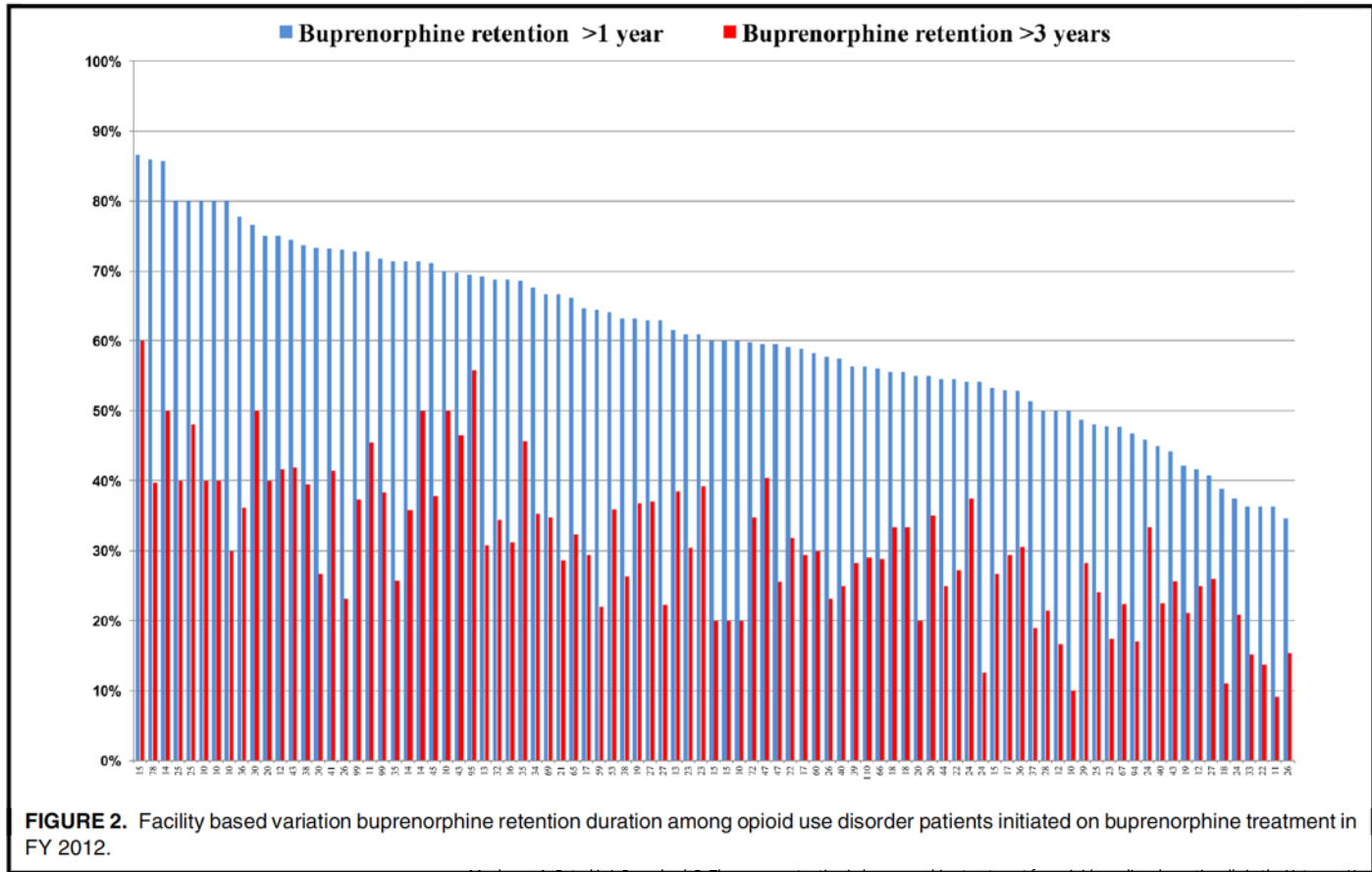


FIGURE 2. Number of veterans with opioid use disorder treated from FY2004 through FY2010, including treatment setting (clinic-based OAT and office-based OAT).

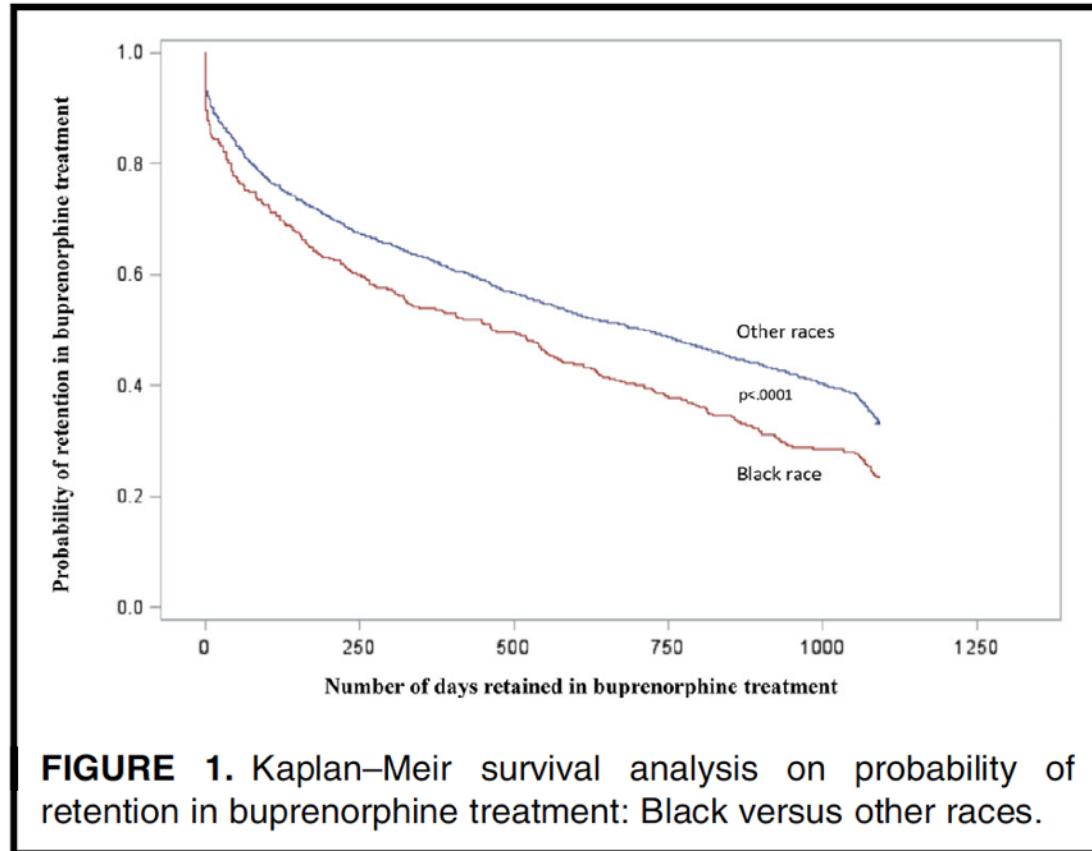
Oliva EM, Trafton JA, Harris AHS, Gordon AJ. Trends in opioid agonist therapy in the Veterans Health Administration: is supply keeping up with demand? *Amer J of Drug and alc abus.* 2013;39(2):103-107

FACILITY VARIATION IN MOUD RETENTION



Manhappa A, Petrakis J, Rosenheck R. Three-year retention in buprenorphine treatment for opioid use disorder nationally in the Veterans Health Administration. Amer J Addict. 2017;26(6):572-580

DISPARITIES IN MOUD RETENTION



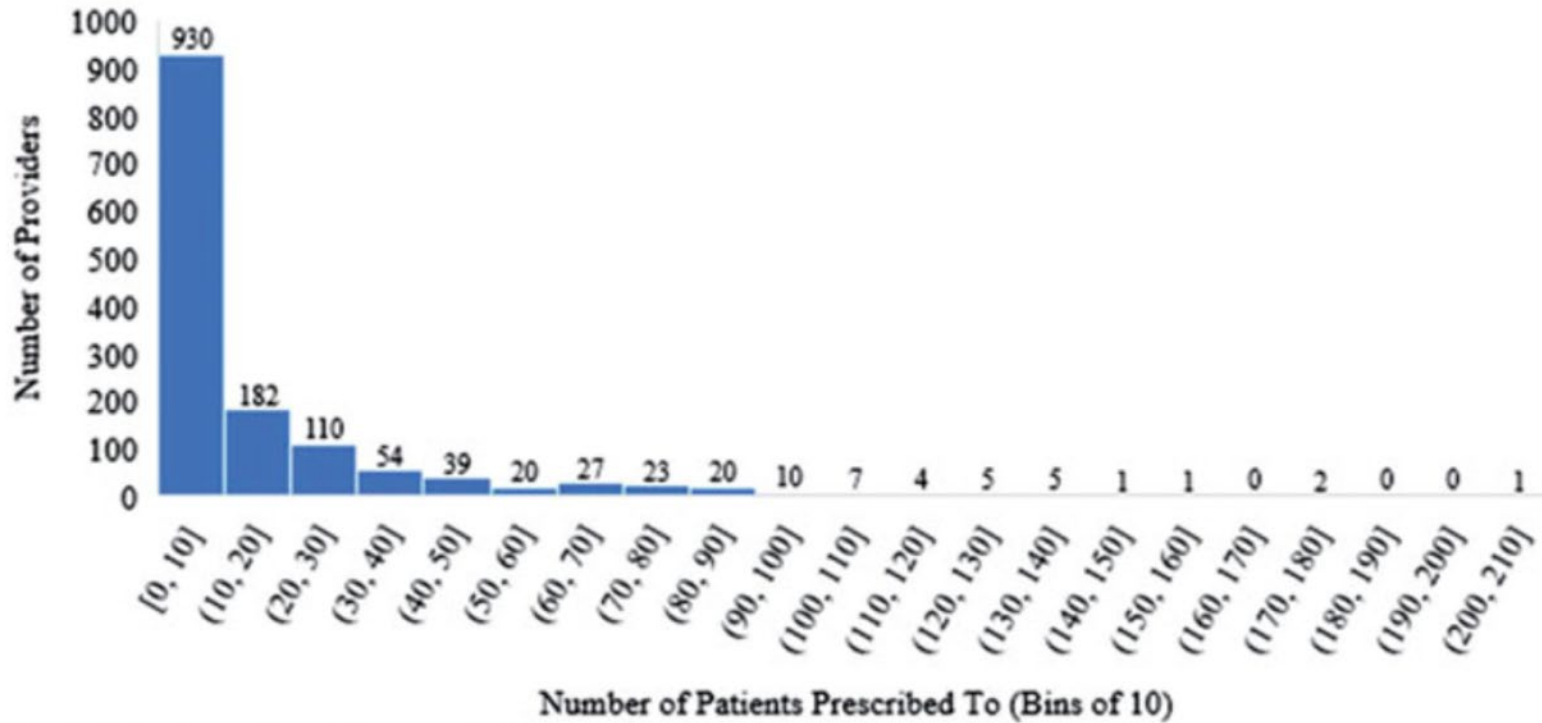
Manhapa A, Petrakis I, Rosenheck R. Three-year retention in buprenorphine treatment for opioid use disorder nationally in the Veterans Health Administration . Amer J Addict. 2017;26(6):572-580

FACILITATORS & BARRIERS TO MOUD

- In the VHA, the introduction of buprenorphine MOUD has the capacity to provide MOUD to veterans with opioid dependence where a VHA OATP, or access to any OATP, does not exist
 - buprenorphine OAT has the potential to expand access to pharmacological treatment of veterans with OUD
- Evaluated perceptions of implementation among facilities with high, medium, and low adoption of buprenorphine MOUD
- Barriers to OAT care included patient, provider, and system factors
 - providers were either uneducated regarding buprenorphine care, had ill perceptions toward opioid-dependent patients, perceived a lack of resources, and thought this care was better suited for non-VHA settings
- The primary facilitator for buprenorphine care
 - the establishment or identification of a “role model/champion”

Gordon AJ, et.al. Facilitators and Barriers in Implementing Buprenorphine in the Veterans Health Administration. Psychology of Addict Beh. 2011;25(2):215-224

BUPRENORPHINE CAPACITY IN THE VA



Note. [] = inclusive, () = exclusive.

Frequency of VA providers prescribing to Veterans in last 180 days in July 27, 2017 to January 24, 2018

Valenstein-Mah H, Hagedorn H, Kay CL, Christopher ML, Gordon AJ. Underutilization of the current clinical capacity to provide buprenorphine treatment for opioid use disorders within the Veterans Health Administration. Subst abu. 208;38(3):286-288



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LESSONS LEARNED



Substance Abuse



ISSN: 0889-7077 (Print) 1547-0164 (Online) Journal homepage: <https://www.tandfonline.com/loi/wsub20>

Medications for opioid use disorder in the Department of Veterans Affairs (VA) health care system: Historical perspective, lessons learned, and next steps

Jessica J. Wyse PhD, MPP, Adam J. Gordon MD, MPH, Steven K. Dobscha MD, Benjamin J. Morasco PhD, Elizabeth Tiffany MD, Karen Drexler MD, Friedhelm Sandbrink & Travis I. Lovejoy

To cite this article: Jessica J. Wyse PhD, MPP, Adam J. Gordon MD, MPH, Steven K. Dobscha MD, Benjamin J. Morasco PhD, Elizabeth Tiffany MD, Karen Drexler MD, Friedhelm Sandbrink & Travis I. Lovejoy (2018) Medications for opioid use disorder in the Department of Veterans Affairs (VA) health care system: Historical perspective, lessons learned, and next steps, Substance Abuse, 39:2, 139-144, DOI: [10.1080/08897077.2018.1452327](https://doi.org/10.1080/08897077.2018.1452327)

To link to this article: <https://doi.org/10.1080/08897077.2018.1452327>

Wyse JJ, Gordon AJ, Dobscha SK, Morasco BJ, Tiffany E, Drexler K, Sandbrink F, Lovejoy TI. Medications for opioid use disorder in the Department of Veterans Affairs (VA) health care system: historical perspectives, lessons learned, and next steps. Subst abus. 2018;39(2):139-144

LESSONS LEARNED

- Research should identify institutional factors that contribute to the variance in the facilities' rates of medication usage and the strategies and mechanisms through which some facilities have been able to achieve greater rates of prescribing over time
- Continued expansion will likely require new approaches to care delivery (CBOCs, VVC, primary care and office based settings)
- Examine sources of disparities in the use of MOUD
- Improve and enhance methadone delivery (with outside providers)
- New initiatives are needed to overcome barriers

Wyse JJ, Gordon AJ, Dobscha SK, Morasco BJ, Tiffany E, Drexler K, Sandbrink F, Lovejoy TI. Medications for opioid use disorder in the Department of Veterans Affairs (VA) health care system: historical perspectives, lessons learned, and next steps. *Subst abus.* 2018;39(2):139-144

SCOUTT: WHY STEPPED CARE?

- VA/DoD Clinical Practice Guidelines recommend medication treatment for OUD (M-OUD) as primary treatment for OUD and psychosocial interventions alone are not recommended
- Patient resistance to referral to Substance Use Disorder (SUD) specialty care may impact access to treatment
- Provides care in settings where Veterans are most likely to present
- Medication treatment for OUD saves lives and can be successfully implemented in non-addiction specialty settings

Gordon AJ, Drexler K, 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.

STEPPED CARE FOR OUD

LEVEL 0:

Self-management:

Mutual help groups

Skills application

LEVEL 1:

Addiction-focused medical management: in Primary Care

in Pain Clinics

in Mental Health

LEVEL 2:

SUD Specialty Care:

Outpatient

Intensive outpatient

Opioid program

Residential

Gordon AJ, Drexler K, 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.

SCOUTT INITIATION

- August 2018 kick-off conference
 - Senior VA Leadership support and engagement
 - 246 Participants with teams from all 18 VISNs
- Emphasis on
 - Medical Management (Fiellin et al.)
 - Collaborative Care (Massachusetts Model)
- Facilitated discussions to support the development of VISNs
- TIMELINE: PHASE 1
 - <6 months:
 - Teams participate in community of practice calls and the learning core
 - 6-9 months:
 - Implement the Stepped Care Model at the facility (one level 1 clinic)
 - 9-12 months:
 - Implement at another Level 1 clinic at the facility
- TIMELINE: PHASE 2
 - Implement at another facility in the VISN [we are here now]

SUBSTANCE ABUSE
2020, VOL. 41, NO. 3, 275-282
<https://doi.org/10.1080/08897077.2020.1787299>



COMMENTARY

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

Adam J. Gordon, MD, MPH^{a,b,c}, Karen Drexler, MD^d, Eric J. Hawkins, PhD^{e,f,g}, Jennifer Burden, PhD^d, Nodira K. Codell, MPA^h, Amy Mhatre-Owens, MSⁱ, Matthew T. Dungan, MPH^j, and Hildi Hagedorn, PhD^{h,i}

^aVulnerable Veteran Innovative PRACT (VIP) Initiative, VA Salt Lake City Health Care System, Salt Lake City, Utah, USA; ^bInformatics, Decision Enhancement, and Analytic Sciences (IDEAS) Center of Innovation, VA Salt Lake City Health Care System, Salt Lake City, Utah, USA; ^cProgram for Addiction Research, Clinical Care, Knowledge, and Advocacy (PARCKA), Department of Internal Medicine, University of Utah School of Medicine, Salt Lake City, Utah, USA; ^dOffice of Mental Health and Suicide Prevention, Veterans Health Administration, Washington, DC, USA; ^eVeterans Affairs (VA) Puget Sound Health Care System, Health Services Research & Development (HSR&D) Seattle Center of Innovation for Veteran-Centered and Value-Driven Care, Seattle, Washington, USA; ^fVA Puget Sound Health Care System, Center of Excellence in Substance Addiction Treatment and Education, Seattle, Washington, USA; ^gDepartment of Psychiatry and Behavioral Sciences, University of Washington School of Medicine, Seattle, Washington, USA; ^hCenter for Care Delivery and Outcomes Research Minneapolis VA Health Care System, Minneapolis, Minnesota, USA; ⁱDepartment of Psychiatry, University of Minnesota School of Medicine, Minneapolis, Minnesota, USA

ABSTRACT

The US is confronted with a rise in opioid use disorder (OUD), opioid misuse, and opioid-associated harms. Medication treatment for opioid use disorder (MOUD)—including methadone, buprenorphine and naltrexone—is the gold standard treatment for OUD. MOUD reduces illicit opioid use, mortality, criminal activity, healthcare costs, and high-risk behaviors. The Veterans Health Administration (VHA) has invested in several national initiatives to encourage access to MOUD treatment. Despite these efforts, by 2017, just over a third of all Veterans diagnosed with OUD received MOUD. VHA OUD specialty care is often concentrated in major hospitals throughout the nation and access to this care can be difficult due to geography or patient choice. Recognizing the urgent need to improve access to MOUD care, in the Spring of 2018, the VHA initiated the Stepped Care for Opioid Use Disorder, Train the Trainer (SCOUTT) Initiative to facilitate access to MOUD in VHA non-SUD care settings. The SCOUTT Initiative's primary goal is to increase MOUD prescribing in VHA primary care, mental health, and pain clinics by training providers working in those settings on how to provide MOUD and to facilitate implementation by providing an ongoing learning collaborative. Thirteen healthcare providers from each of the 18 VHA regional networks across the VHA were invited to implement the SCOUTT Initiative within one facility in each network. We describe the goals and initial activities of the SCOUTT Initiative leading up to a two-day national SCOUTT Initiative conference attended by 246 participants from all 18 regional networks in the VHA. We also discuss subsequent implementation facilitation and evaluation plans for the SCOUTT Initiative. The VHA SCOUTT Initiative could be a model strategy to implement MOUD within large, diverse health care systems.

KEYWORDS

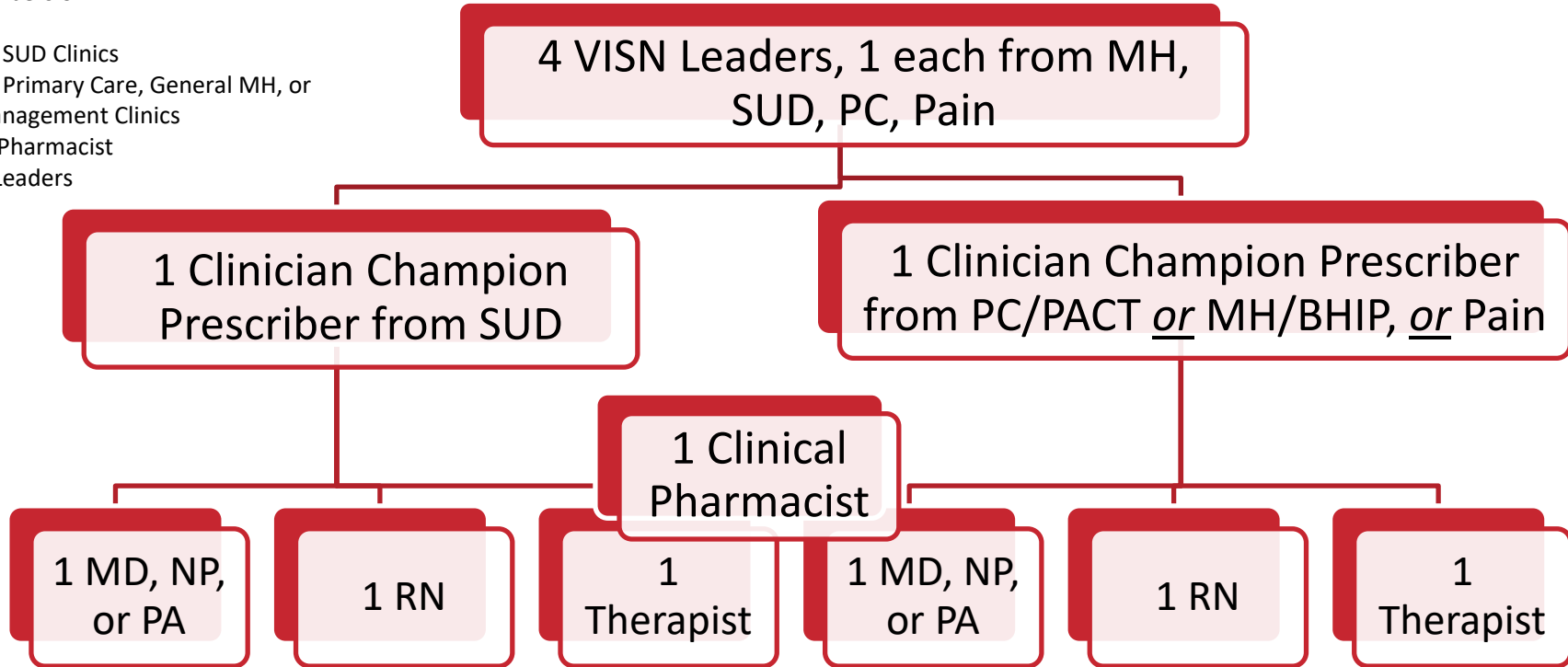
Veterans; Veterans Health Administration; stepped care; opioid use disorder; buprenorphine; implementation science

Gordon AJ, Drexler K, 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.

SCOUTT TEAM COMPOSITION

Each VISN tasked to identify a team to include members of:

1. Level 2: SUD Clinics
2. Level 1: Primary Care, General MH, or Pain Management Clinics
3. Clinical Pharmacist
4. 4 VISN Leaders



13 team members in total. All members, aside from the VISN leaders, are from 1 facility

Gordon AJ, Drexler K, 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.



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SCOUTT FACILITATION

- Supported by VACO and QUERI (**PEC 19-001**. Facilitation of the Stepped Care Model and Medication Treatment for Opioid Use Disorder)
- Modeled after the ADAPT-OUD trial (**VA IIR 16-145** Testing a Novel Strategy to Improve Implementation of Medication-Assisted Treatment for Veterans with Opioid Use Disorders in Low Performing Facilities)
- Facilitation Teams from: Salt Lake City, Minneapolis, Palo Alto
- Education and Facilitation Calls (national)
 - Community of Practice/Site Reports
 - VA EES: Didactic learning sessions
- SCOUTT SharePoint Site
- External Facilitation Teams
 - Each facility assigned a facilitator
 - Facilitators check in with facility team monthly via email/phone for updates/questions
 - As needed consultation and connection to resources
- Site visits upon request

STUDY PROTOCOL

Open Access



Advancing pharmacological treatments for opioid use disorder (ADaPT-ODU): protocol for testing a novel strategy to improve implementation of medication-assisted treatment for veterans with opioid use disorders in low-performing facilities

Hildi Hagedorn^{1,2*}, Marie Kenny¹, Adam J. Gordon^{3,4}, Princess E. Ackland^{5,6}, Siamak Noorbaloochi^{6,7}, Wei Yu^{8,9} and Alex H. S. Harris^{10,11}

Abstract

Background: In the US, emergency room visits and overdoses related to prescription opioids have soared and the rates of illicit opioid use, including heroin and fentanyl, are increasing. Opioid use disorder (OUD) is associated with higher morbidity and mortality, higher HIV and HCV infection rates, and criminal behavior. Opioid agonist therapy (OAT; methadone and buprenorphine) is proven to be effective in treating OUD and decreasing its negative consequences. While the efficacy of OAT has been established, too few providers prescribe OAT to patients with OUD due to patient, provider, or system factors. While the Veterans Health Administration (VHA) has made great strides in OAT implementation, national treatment rates remain low (35% of patients with OUD) and several facilities continue to have much lower prescribing rates.

Methods: Eight VA sites with low baseline prescribing rates (lowest quartile, < 21%) were randomly selected from the 35 low prescribing sites to receive an intensive external facilitation implementation intervention to increase OAT prescribing rates. The intervention includes a site-specific developmental evaluation, a kick-off site visit, and 12 months of ongoing facilitation. The developmental evaluation includes qualitative interviews with patients, substance use disorders clinic staff, and primary care and general mental health leadership to assess site-level barriers. The site visit includes: (1) a review of site-specific barriers and potential implementation strategies; (2) instruction on using available dashboards to track prescribing rates and identify actionable patients; and (3) education on OAT, including, if requested, buprenorphine certification training for prescribers. On-going facilitation consists of monthly conference calls with individual site teams and expert clinical consultation. The primary outcomes is the proportion of Veterans with OUD initiating and sustaining OAT, with intervention sites expected to have larger increases in prescribing compared to control sites. Final qualitative interviews and a cost assessment will inform future implementation efforts.

Discussion: This project will examine and respond to barriers encountered in low prescribing VHA clinics allowing refinement of an intervention to enhance access to medication treatment for OUD in additional facilities.

Hagedorn H, Kenny M, Gordon AJ, Ackland PE, Noorbaloochi S, Yu W, Harris AHS. Advancing Pharmacologic treatments for opioid use disorder (ADaPT-ODU): Protocol for testing a novel strategy to improve implementation of medication-assisted treatment for Veterans with opioid use disorders in low-performing facilities. *Addict Sci Clin Pract.* 2018;13:25

IMPLEMENTATION FRAMEWORK

- Integrated Promoting Action on Research Implementation in Healthcare Systems (i-PARIHS)
- Three major constructs:
 - INNOVATION: Characteristics of the evidence-based practice that you are trying to implement that may promote or hinder adoption
 - RECIPIENTS: Beliefs and attitudes of the individuals who you are asking to adopt the innovation that may promote or hinder adoption
 - CONTEXT: Characteristics of the organization/clinic/unit you are asking to adopt the innovation that may promote or hinder adoption

Harvey, G., Kitson, A. PARIHS revisited: From heuristic to integrated framework for the successful implementation of knowledge into practice. Implementation Science. 2016; 11:33.

SCOUTT ONGOING EDUCATION

- Monthly Facilitation calls
 - 1 community of practice call (VISN reports and open discussion)
 - 1 accredited didactic presentation
- Link to education nationally
 - Twice monthly, hourly, MAT-VA “SUD Journal Clubs”
 - Various monthly webinars
 - Buprenorphine waiver trainings
- Provide resources
 - Buprenorphine dashboards available to use

VA SCOUTT-EES WEBINARS to DATE

EES Webinar Date	Topic	Presenter	Attendees
10/10/2018	Treatment of Prescription Opioid Dependence and the Role of Counseling with Buprenorphine TX	Dr. Weiss	52
11/14/2018	Multidisciplinary Management of Chronic Pain	Dana Cervone, Sara Edmond, Ellen Edens	90
12/12/2018	Introduction to the uses of long-acting injectable naltrexone (XR-NTX)	Maria Sullivan	103
1/9/2019	Office Based Treatment of Buprenorphine: What is Necessary and Sufficient to Prescribe in VA Office	Adam Gordon	170
2/13/2019	Introduction to Injectable Buprenorphine	Adam Gordon	167
3/20/2019	Buprenorphine Dashboards: How to Use Data to Optimize Patient Care	Michael A. Harvey, Pharm.D., BCPS	45
4/10/2019	So what are these VISN Partnered Implementation Initiatives?	Adam Gordon	34
5/8/2019	Mini-Residency: Experiences and lessons learned	Ellen Edens and team	38
6/12/2019	America's Opioid Epidemic: Treating Opioid Addiction in Primary Care	Ilene Robeck and Stephen Mudra	123
7/17/2019	Why should WE take care of YOUR patients?" - what Bedford VA has learned	Dongchan Park, M.D.	49
8/14/2019	Recommendations for Use: Buprenorphine Formulations for Chronic Pain Management in Patients with OUD or on Long Term Opioid Therapy with Physiologic Tolerance and Dependence.	Mitchell Nazario	179
9/18/2019	The Definition Of Addiction To Opioids And How To Code For It	Adam Gordon, Karen Drexler, Ilene Robeck	168
10/9/2019	The Collaborative Care Model applied to Medication Assisted Treatment for SUD	Andrew Pomerantz	52
11/13/2019	Initiative to improve drug screening in Primary Care to inform treatment.	Michael Saenger and Dominic DePhillips	82
12/11/2019	SCOUTT at a Year: Lessons Learned, Achievements, and Opportunities Going Forward	Adam Gordon, Eric Hawkins, Karen Drexler, Jennifer Burden, Hildi Hagedorn	40
1/8/2020	The emerging role of buprenorphine in opioid dependence and pain	William Becker	167
2/12/2020	QUERI VISN 22 Pilot to Increase Access to MAT and CIH in Primary Care	Evelyn Chang and Rebecca Oberman	
3/11/2020	Tele-health Approaches to Prescribing MAT	David Moore and Marc Rosen - CONDUIT	158
5/13/2020	Buprenorphine formulation for chronic pain management in patients with OUD or long-term opioid therapy with Physiological tolerance".	Adam Gordon	222
6/10/2020	Expanding diagnosis and treatment of opioid use disorder during acute hospitalization	Hilary Mosher - CONDUIT	41
7/8/2020	Implementation of Medication Treatment in Rural and CBOC Settings: Progress and Opportunities.	Adam Gordon and Matthew Dugan CONDUIT	67



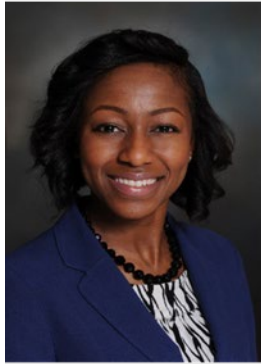
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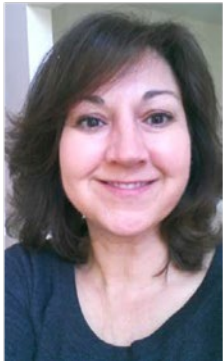
FACILITATION



**Princess Ackland, PhD, LP
MSPH**
External Facilitator

**Adam J. Gordon, MD
MPH**
External Facilitator

Hildi Hagedorn, PhD LP
External Facilitator



Marie Kenny, BA
External Facilitator



Amanda Midboe, PhD
External Facilitator



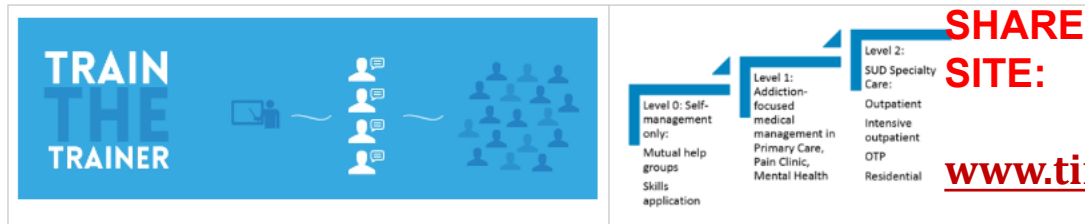
Hope Salameh, BA
Research Assistant

VISN	Site Facility Name	Facilitator
VISN 1	Connecticut	Princess Ackland
VISN 2	Hudson Valley	Princess Ackland
VISN 4	CMCVAMC Philadelphia	Hildi Hagedorn
VISN 5	Martinsburg	Marie Kenny
VISN 6	Hampton	Princess Ackland
VISN 7	Atlanta	Hildi Hagedorn
VISN 8	North Florida, South Georgia	Marie Kenny
VISN 9	Tennessee Valley HCS	Princess Ackland
VISN 10	Battle Creek	Hildi Hagedorn
VISN 12	Madison VAH	Princess Ackland
VISN 15	St Louis	Marie Kenny
VISN 16	Houston	Marie Kenny
VISN 17	El Paso	Marie Kenny
VISN 19	Salt Lake City	Adam Gordon
VISN 20	Puget Sound	Hildi Hagedorn
VISN 21	VANCHS	Amanda Midboe
VISN 22	Phoenix VAHCS	Marie Kenny
VISN 23	Minneapolis VAHCS	Hildi Hagedorn and Hope Salameh

SCOUTT SITE

Stepped Care for Opioid Use Disorder

Welcome to the Stepped Care for Opioid Use Disorder Train the Trainer (SCOUTT) home page. Please see below and the quick links in the sidebar for SCOUTT resources, contacts and other information.



**SCOUTT
SHAREPOINT
SITE:**

www.tinyurl.com/SCOUTT-VA

The goals and objectives of this program is to focus on implementing a comprehensive plan to train interdisciplinary teams in Primary Care, General Mental Health, Pain Clinics and SUD Specialty Care clinics to deliver a stepped care model of medication treatment for OUD in order to provide treatment services around the Veteran at his/her preferred point of care. The intent is to improve Veteran access to medication treatment outside the confines of specialty addiction care and to capitalize on the Stepped Care for Opioid Use Disorder Train the Trainer (SCOUTT) training that occurred in August of 2018, where VISN teams are learning two models to integrate stepped care into VA facilities, and will be accomplished through a series national and VISN-level face-to-face meetings and regular and ad-hoc community of practice webinars.

<p>Table of Contents</p>	<p>SCOUTT Calendar</p>	<p>Webinars</p>	<p>Pilot Teams Documents</p>	<p>Available Training</p>
<p>SCOUTT VISN Pilot Team Rosters</p>	<p>Planning Committee Members</p>	<p>Resources</p>	<p>Discussion</p>	<p>Questions</p>



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SCOUTT MODELS OF CARE

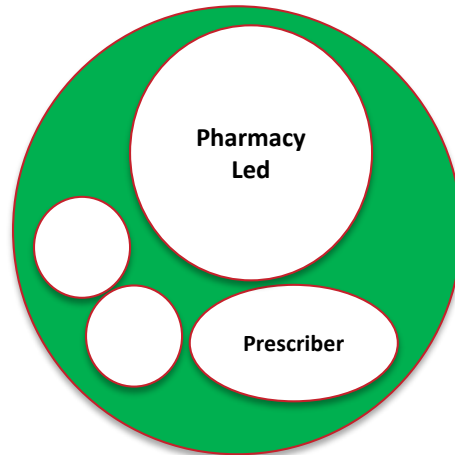
IN-CLINIC Models of Care	REFERAL/REMOTE Models of Care
Physician/Clinician-led/Medical Management	Referral
Nurse Care Manager Collaborative Care	ED-Bridge/Triage
Pharmacy Collaborative Care	Hub and Spoke
Co-location	Mentor
PC-MHI	Tele-health (home)
Group Treatment	Tele-health (clinic)
(more...)	(more...)



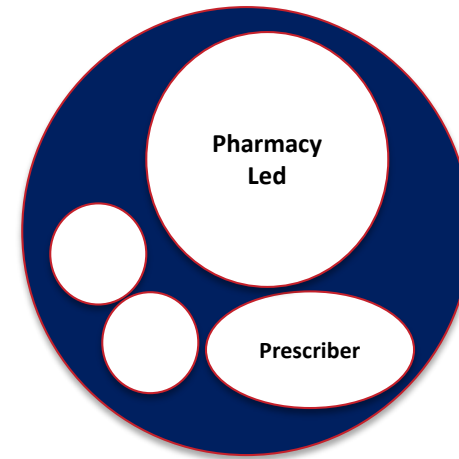
MODEL OF CARE: PHARMACY COLLABORATIVE CARE



PAIN CLINIC



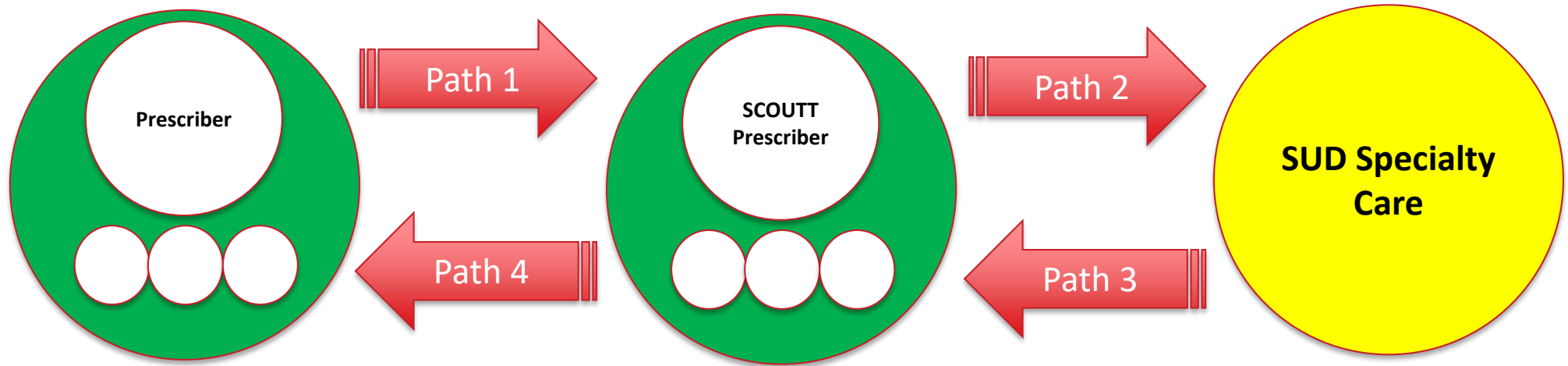
PRIMARY CARE



MENTAL HEALTH

In the Pharmacy led model, also called Pharmacy Care Management model, the Pharmacist is the primary conduit to the patient, completes medication management, and coordinates care. The prescriber makes diagnoses and prescribes. The prescriber supports the pharmacist in the conduct of his/her care.

MODEL OF CARE: HUB AND SPOKE



PRIMARY CARE

PRIMARY CARE

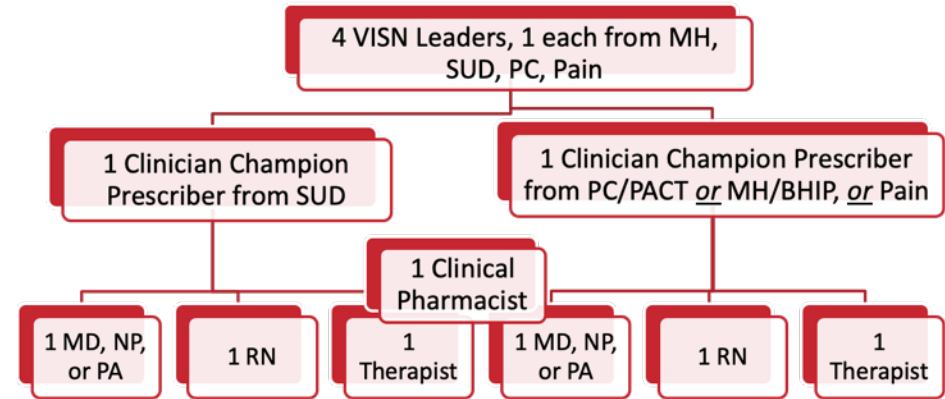
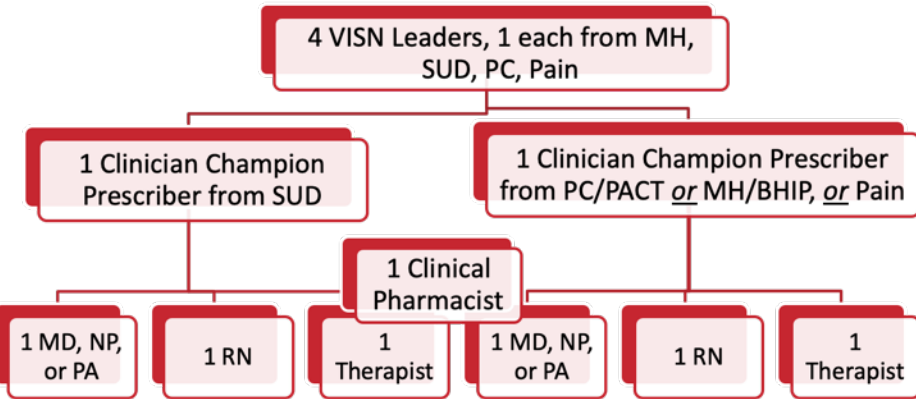
In a variant of the traditional Hub and Spoke model of care, in the Hub and Spoke (SCOUTT step care approach), the prescriber refers patients to be stabilized in a SCOUTT clinic (within same Level 1 environment), that SCOUTT clinic may refer and coordinate care with SUD Specialty Care (if needed), and when the patient is stabilized, the patient can return to their normal primary care provider for ongoing care. Paths 1, 2, 3 may be optional. Helps in patients reluctant to seek SUD Specialty care.



SCOUTT SITES per VISN

ORIGINAL SCOUTT SITE

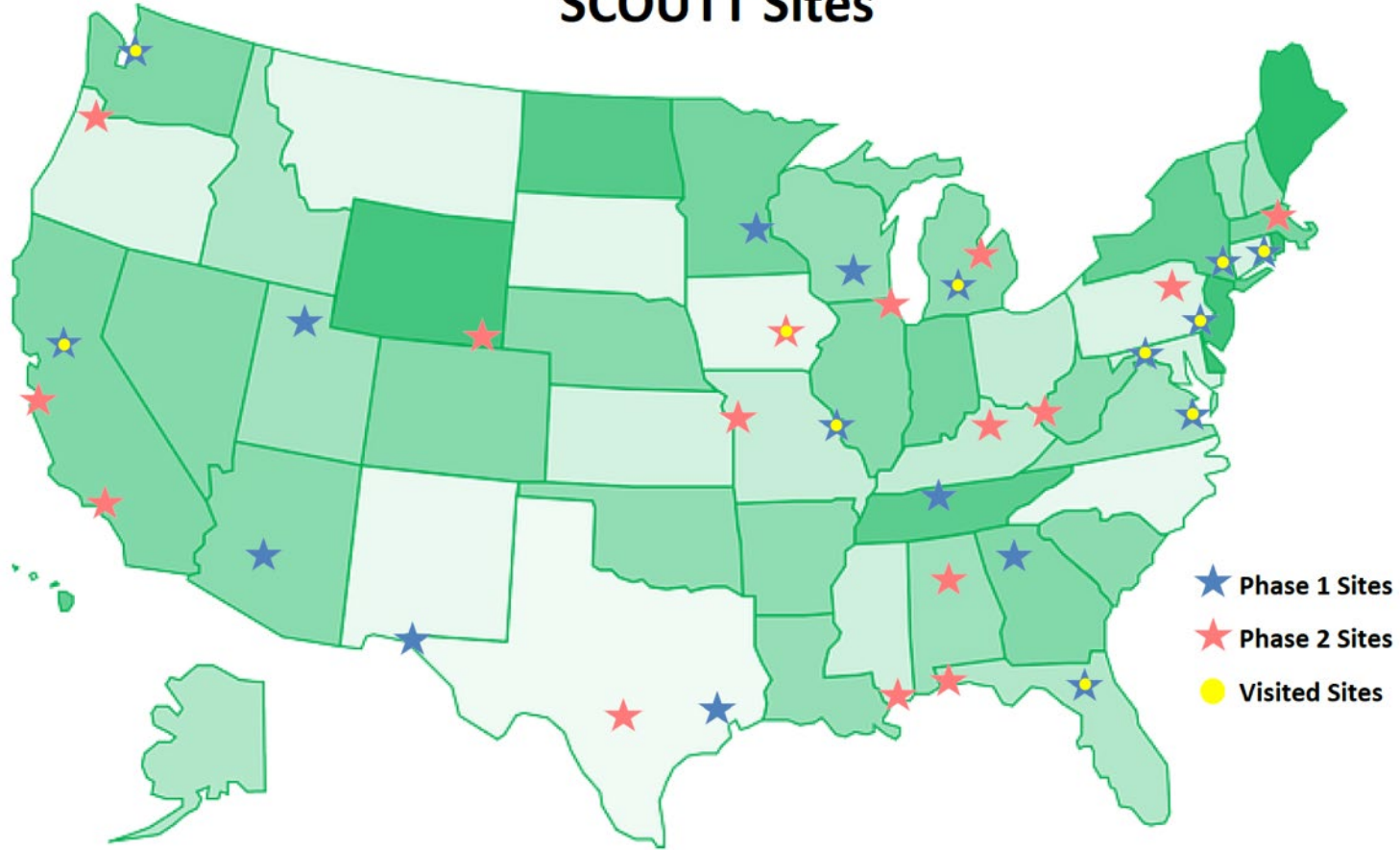
SPREAD SCOUTT SITE



- + SUD Specialists
- + Facility Directors/designates

MOVING ON TO PHASE 2 ...

SCOUTT Sites



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FEEDBACK FOR CLINICS REGARDING PROGRESS

- Hawkins and team provide monthly reports to operations and quarterly reports to SCOUTT facilities
- Include:
 - Break down of implementation clinics and implementation providers, and facility metrics
 - Number of prescribers
 - Number of patients prescribed
 - Length of prescribing



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FEEDBACK FOR CLINICS REGARDING PROGRESS

Buprenorphine Prescribing

Includes patients with a diagnosis of OUD who received a buprenorphine prescription in the specified clinic.

VISN	Sta3n	Division	Name	Clinic	Targeted Clinic?	Counts	Pre-Implementation												Implementation																						
							Sep 17	Oct 17	Nov 17	Dec 17	Jan 18	Feb 18	Mar 18	Apr 18	May 18	Jun 18	Jul 18	Aug 18	Sep 18	Oct 18	Nov 18	Dec 18	Jan 19	Feb 19	Mar 19	Apr 19	May 19	Jun 19	Jul 19	Aug 19	Sep 19	Oct 19	Nov 19	Dec 19	Jan 20	Feb 20	Mar 20	Apr 20	May 20	Jun 20	Jul 20
19	660	660	Salt Lake City HCS - George E. Wahlen VAMC	MH	No	Patients Providers	2		1		1	2		3	4	2	3	4	3		2	1		2		1	2	2	1	4	2	1	1	1	22	60	53	34	7		
				Pain	Yes	Patients Providers	2		1		1	1		2	4	2	3	4	3		1	1		2		1	2	2	1	1	1	1	3	4	3	3	4				
				PC	Yes	Patients Providers	14	15	14	21	21	25	27	28	28	25	21	28	30	29	25	27	24	28	32	33	34	32	34	41	36	40	42	45	51	55	56	55	50	56	58
		660GB	Ogden VA Clinic	MH	No	Patients Providers	2	2	2	2	5	3	3	3	4	3	4	3	3	3	4	4	4	5	5	5	5	5	5	6	5	4	5	7	4	7	7	7	6	6	
				PC	Yes	Patients Providers																					1	1	2	2	2	2	3	5	4	4	5	3			
		660GJ	Western Salt Lake VA Clinic	PC	Yes	Patients Providers																					1	1	1	1	1	1	2	1	1	1	1	2			
		660GA	Pocatello VA Clinic	CBOC	No	Patients Providers																																			
		660GE	Orem VA Clinic	CBOC	No	Patients Providers																																			
		660GG	St. George VA Clinic	CBOC	No	Patients Providers		3		1		1	1	2	1	1	2	2	2	2							1		1												
		660QA	Idaho Falls VA Clinic	CBOC	No	Patients Providers		1		1		1	1	1	1	1	1	1	1	1							1		1									1	1	1	
		660QC	WEBER COUNTY VA CLINIC	CBOC	No	Patients Providers																					1	1	1				1	1	1	1	1	1	1		



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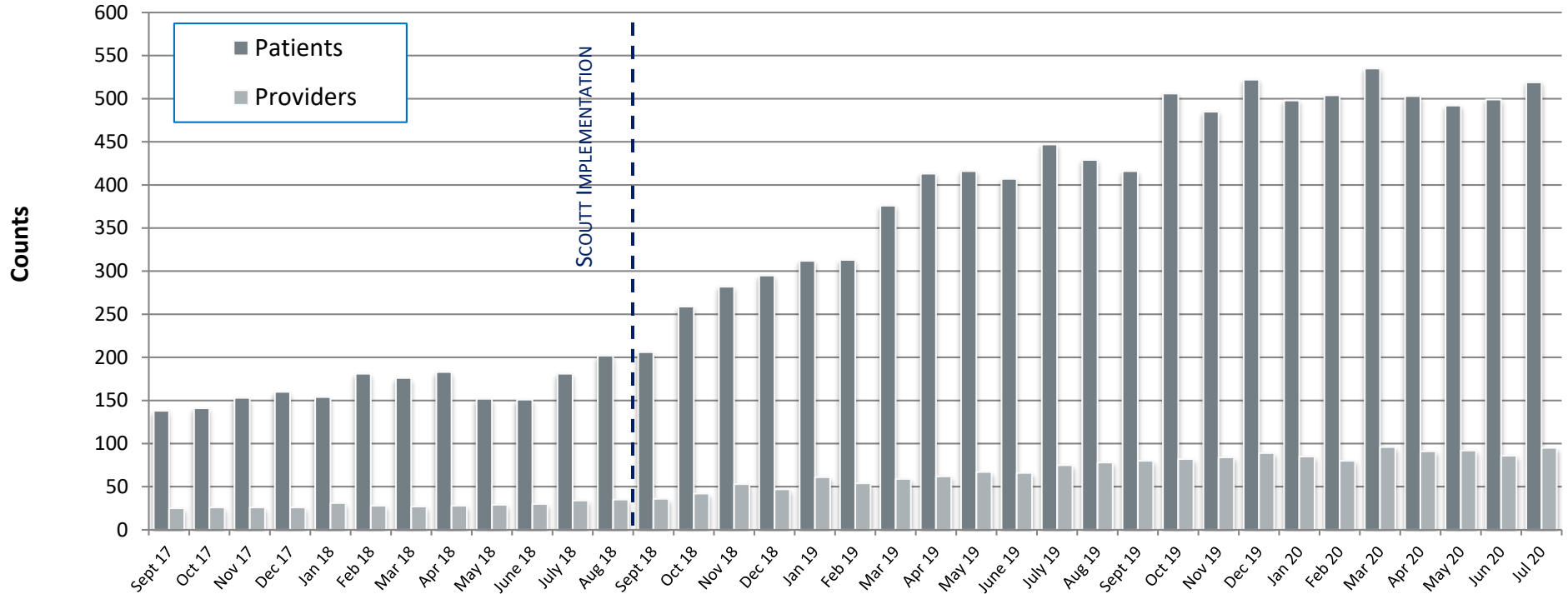
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BUP FOR OUD (SCOUTT CLINICS)

Buprenorphine for Opioid Use Disorder*

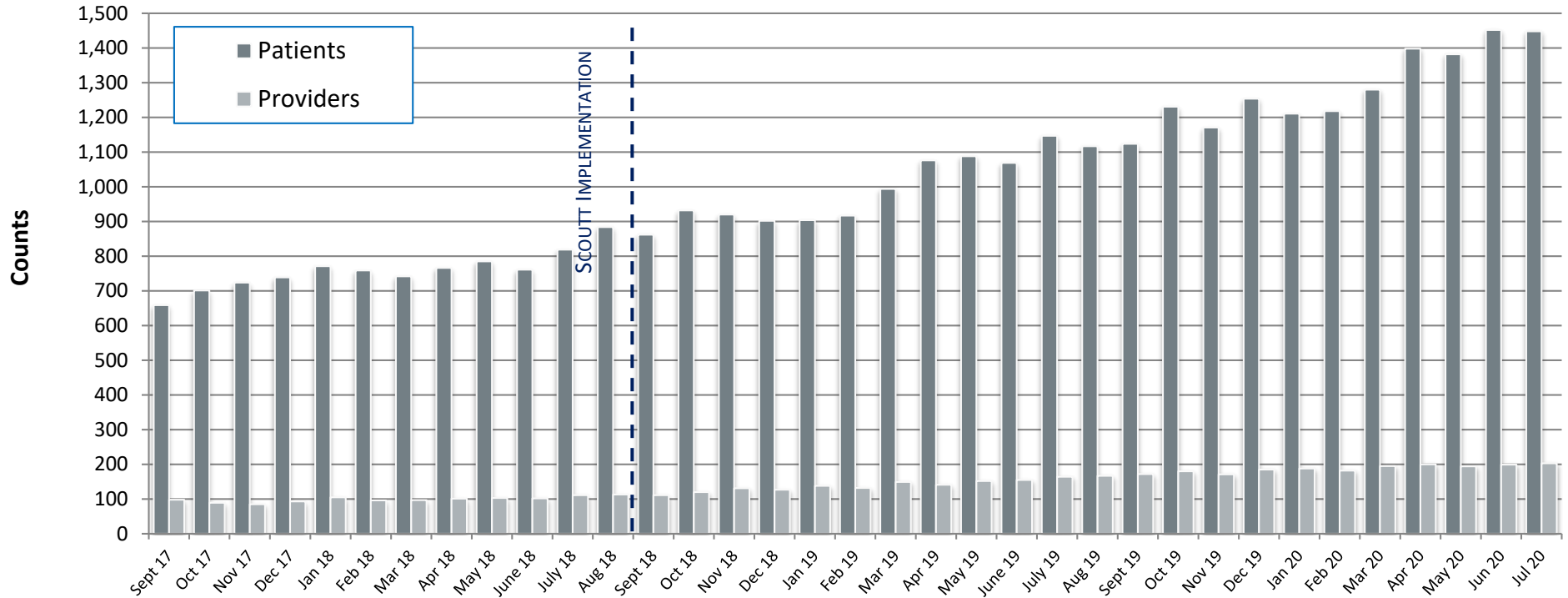


Buprenorphine for OUD – Phase 1 Level 1 Clinics Only

*Includes patients with a diagnosis of OUD seen in the implementation clinic.

BUP FOR OUD (SCOUTT FACILITIES)

Buprenorphine for Opioid Use Disorder*



*Includes patients with a diagnosis of OUD seen in the facility

Buprenorphine for OUD – All Level 1 Clinics Phase 1 Facilities



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EVALUATION METHODS

- Design: Interrupted time series approach
 - Useful approach when random assignment is not feasible
 - Compares the trend in an outcome before and after an intervention is implemented, allowing the effect of the intervention to be distinguished from secular change
 - Other confounding factors can be potentially addressed using comparators
- Comparison clinics
 - Selected a priori based on similarity to implementation clinics
 - Factors used to match included baseline delivery of MOUD, clinic size, medical center complexity, available clinical services, and percentage of rural patients treated

Hawkins E. First Year Evaluation Findings. SCOUTT Webinar. September 9, 2020

DATA SOURCE: VA CORPORATE DATA WAREHOUSE

- Patient Cohort
 - Encounter data and clinic codes used to identify patients with OUD who were seen in the SCOUTT and comparison clinics in the 12 months before and 12 months after launch
 - Identified patients were characterized using demographic and diagnostic data
- MOUD (defined as buprenorphine and injectable naltrexone) prescriptions
 - Pharmacy files used to identify fills for patient cohort
 - Clinic codes used to determine origin of prescription
 - Prescribers associated with prescriptions
- Prescribers
 - Encounter and staff tables used to identify prescribers in implementation clinics

Hawkins E. First Year Evaluation Findings. SCOUTT Webinar. September 9, 2020

PATIENT-RELATED OUTCOMES + COVARIATES

- Primary Outcomes
 - Change in proportion of patients prescribed MOUD in implementation clinics in the 12 months before and 12 months after SCOUTT launch
 - Comparison of changes in MOUD trends in implementation clinics to those in comparison clinics without involvement in SCOUTT
- Covariates
- Demographic, mental health and medical comorbidity from year prior to launch
 - Time varying indicators of:
 - Attendance in implementation and comparison clinics for each quarter,
 - SUD specialty-care for each month,
 - Receipt of MOUD prescriptions (including methadone) from non-VA implementation clinics and non-VA sources

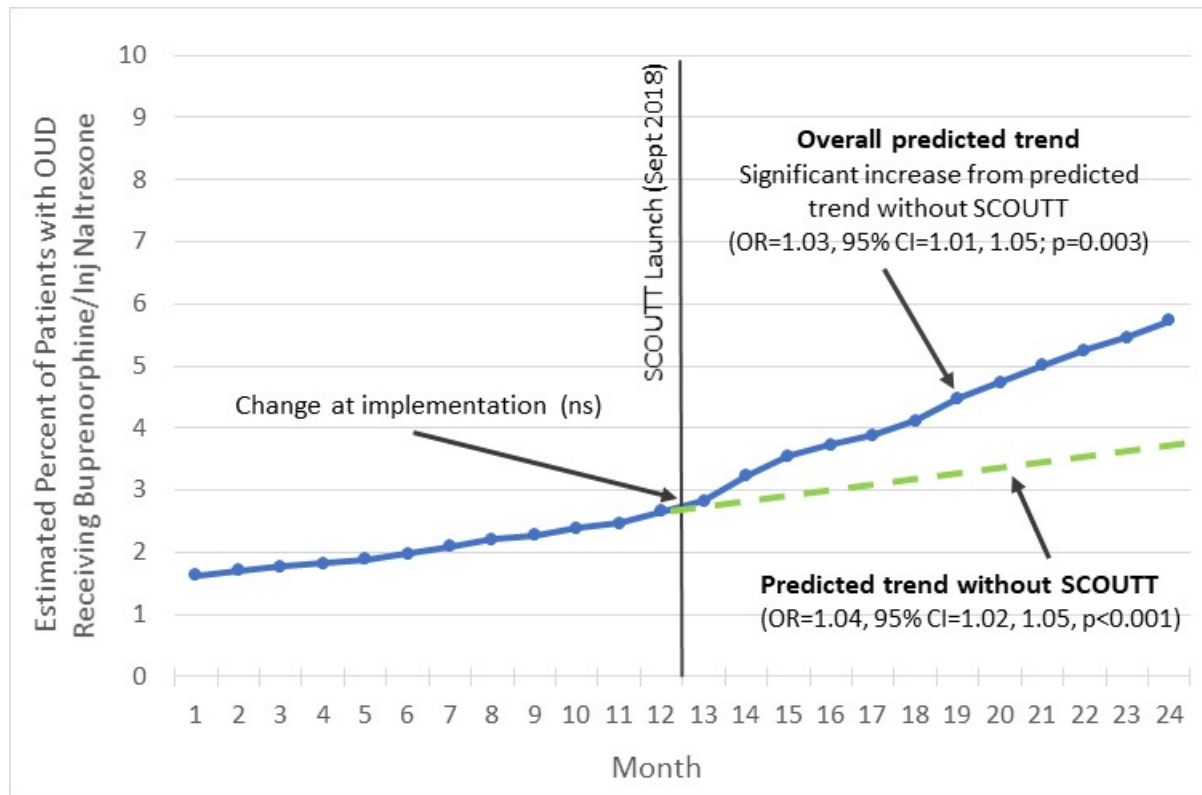
Hawkins E. First Year Evaluation Findings. SCOUTT Webinar. September 9, 2020

DATA ANALYSES

- Descriptive statistics used to characterize patients seen in comparison and implementation clinics
- Segmented logistic regression with interrupted series design to estimate change over time in the proportion of patients with an OUD who were prescribed MOUD in an implementation clinic after SCOUTT launch
 - Adjusting for covariates and prescribing trends in the 12-months prior to launch
 - Analyses comparing changes in prescribing trends at SCOUTT clinics to the comparison clinics used similarly adjusted models with interaction terms for clinic (implementation vs. comparison)
- Model estimates
 - Change immediately after launch
 - Change in trend post-implementation
 - Change over the full pre- and post-implementation period

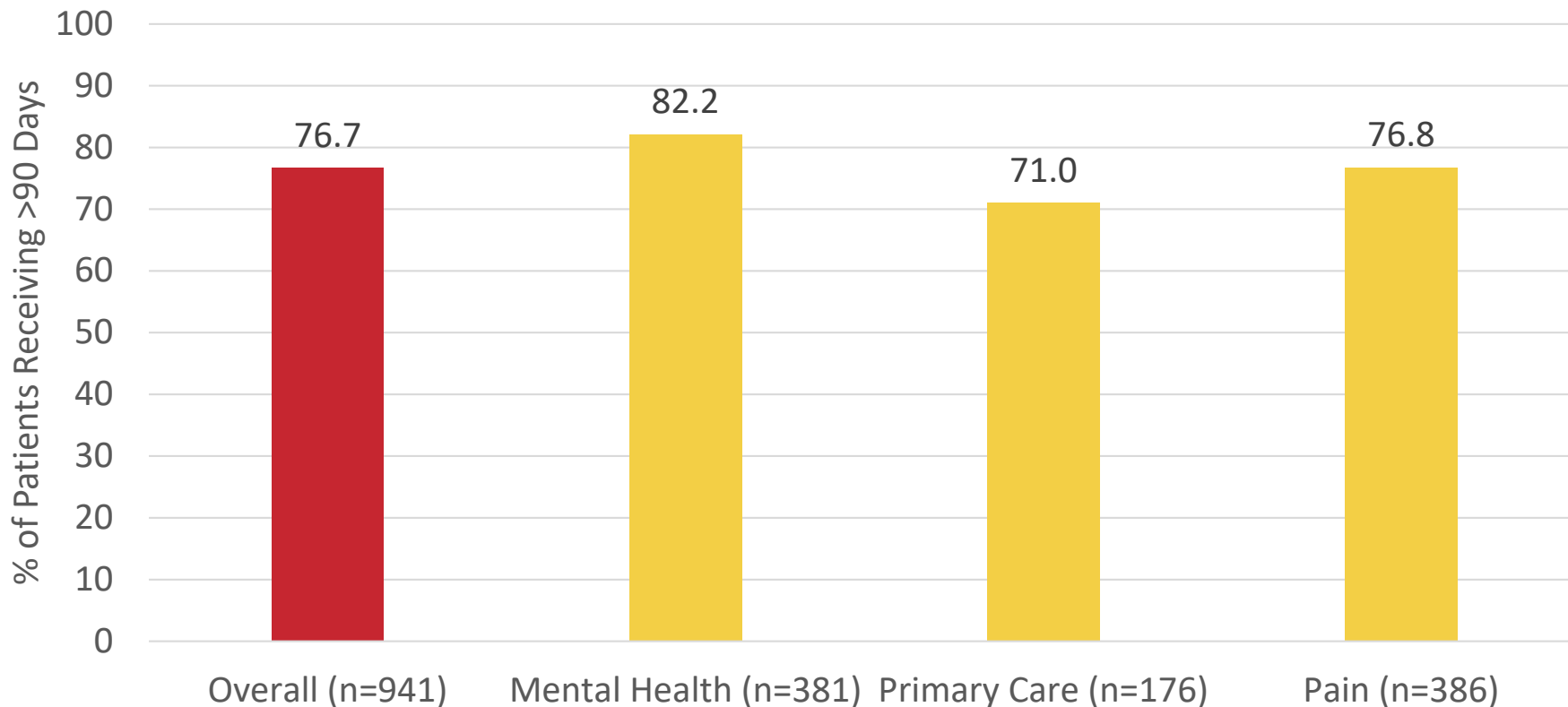
Hawkins E. First Year Evaluation Findings. SCOUTT Webinar. September 9, 2020

MOUD RX IN IMPLEMENTATION CLINICS



Hawkins E. First Year Evaluation Findings. SCOUTT Webinar. September 9, 2020

PATIENTS RECEIVING >90 DAYS SUPPLY MOUD



Hawkins E. First Year Evaluation Findings. SCOUTT Webinar. September 9, 2020

CURRENT AND FUTURE DIRECTIONS

- Use of OUD big data to improve access and facilitate retention
- “A Foundation to Examine Reasons for Discontinuation for Buprenorphine Care in the Veterans Health Administration (CTN 0087)”
- The overall objectives of this line of research are to *understand the reasons for discontinuation of medication treatment for opioid use disorder (MOUD)* and *identify patient, provider, and system targets to reduce unnecessary or inappropriate discontinuation*
 - Establish a registry of Veterans receiving VA buprenorphine
 - Establish a prospective cohort
 - Prelude to intervention studies
 - Assist providers and national stakeholders

Co-Leads

Adam J. Gordon, MD MPH
Brian Sauer, PhD
Gavin Bart, MD
Hong Yu, PhD

Co-Investigators/collaborators

Fran Cunningham, PharmD
Lewei (Allison) Lin, MD
Stefan Kertesz, MD MSc
Ajay Manhapra, MD
Andrew J. Saxon MD
Jessica Wyse, PhD

BACKGROUND

- Retention in treatment is the primary outcome in Buprenorphine Medication OUD (BUP-MOUD) treatment
- Discontinuation (Inappropriate/Appropriate) of BUP-MOUD can occur:
 - Patient factors
 - Relapse, Insurance, “I don’t like your treatment rules”, employment, housing, geography, ...
 - “I got better, I want to get off”
 - Provider factors
 - “You are using cocaine/marijuana”, “not following rules”, provider moves, “you are not doing counseling”, ...
 - Quality of Care...
 - Stigma ...
 - System factors
 - Protocols of treatment, arbitrary rules of coverage, mandates on provision of care, ...
- We really don’t know what is happening ...
 - Can we abort inappropriate discontinuation?

Bentzley, BS, et.al. Journal of substance abuse treatment, 2015;52

Bentzley, BS, et.al. Journal of substance abuse treatment, 2015;56

Manhapa A, et.al.. Psychiatric Services. 2018;69

Weinstein ZM, et.al. Journal of substance abuse treatment. 2017;74

Weinstein ZM, et.al. Drug and Alcohol Dependence. 2018;189

OUD COHORT CHARACTERISTICS

		No BUP During Study Period (n=210,314)		BUP During Study Period (n=37674)	
		Mean	95% CI	Mean	95% CI
AGE		54.7	(45.7, 61.2)	43.6	(30.6, 54.5)
		Count	Percent	Count	Percent
RACE	White	142760	67.9%	30353	80.6%
	Black	51093	24.3%	5066	13.4%
	Other	4627	2.2%	713	1.9%
	Unknown	11834	5.6%	1542	4.1%
SEX (male)		196972	93.7%	34976	92.8%
OUD Dx prior to Period		36083	17.2%	7215	19.2%
DEATH		49685	23.6%	4817	12.8%



BUPRENORPHINE COURSES OF CARE

- 25,012 (66%) had only 1 BUP course
 - 60-day gap in treatment ends a BUP course

Number of BUP Courses	Frequency	Percentage (%)	Cum. (%)
1	25012	66.36	66.36
2	7626	20.23	86.59
3	2940	7.80	94.39
4	1205	3.20	97.58
5	521	1.38	98.97
6	205	0.54	99.51
7	101	0.27	99.78
8	41	0.11	99.89
9	27	0.07	99.96
10	9	0.02	99.98
11	5	0.01	99.99
12	1	0.00	100.00
15	1	0.00	100.00
Total:	37694	100	



SUMMARY

- Introduction of buprenorphine care for the treatment of OUD in the VA is a ***perfect example of a data-driven operation-research partnership***
 - A model of a learning health care system
 - A model where research drives operational initiatives
 - A model where operation drives research questions
 - A model for research platforms and career development
 - A model exemplifying tangible patient-, provider-, and system-level outcome improvements

GROUP DISCUSSION



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VIReC Options for Specific Questions

HSRData Listserv

Community knowledge sharing

~1,400 VA data users

Researchers, operations, data
stewards, managers

Subscribe by visiting

<http://vaww.virec.research.va.gov/Support/HSRData-L.htm> (VA Intranet)



HelpDesk

- Individualized support



virec@va.gov

(708) 202-2413

Quick links for VA data resources

Quick Guide: Resources for Using VA Data:

<http://vaww.virec.research.va.gov/Toolkit/QG-Resources-for-Using-VA-Data.pdf> (VA Intranet)

VIREC: <http://vaww.virec.research.va.gov/Index.htm> (VA Intranet)

Archived cyberseminar: *Meet VIREC: The Researcher's Guide to VA Data*

https://www.hsrd.research.va.gov/for_researchers/cyber_seminars/archives/video_archive.cfm?SessionID=3696&Seriesid=22

VIREC Cyberseminars (overview of series and link to archive): <http://www.virec.research.va.gov/Resources/Cyberseminars.asp>

VHA Data Portal (data source and access information): <http://vaww.vhadatportal.med.va.gov/Home.aspx> (VA Intranet)

Quality Enhancement Research Initiative (QUERI): <https://www.queri.research.va.gov>

QUERI Implementation Network Archived Cyberseminars:

<https://www.hsrd.research.va.gov/cyberseminars/catalog-archive.cfm?SeriesSortParam=y&SeriesIDz=83>

Implementation Research Group (IRG) Archived Cyberseminars:

<https://www.gotostage.com/channel/implementresearchgrpchristinekowalski>

Center for Evaluation and Implementation Resources (CEIR): <https://www.queri.research.va.gov/ceir/default.cfm>