Implementation Research to Improve Access, Equity, and Delivery of Evidence-Based Care for Unhealthy Alcohol and Other Substance Use in Medical Settings





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Acknowledgments

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- National Institute on Alcohol Abuse and Alcoholism (R21 AA022866 and R21AA025973).
- Patient Safety Center of Inquiry Program, Department of Veterans Affairs

Outline

- Positionality/Disclosure
- Implementation Science
 - Definitions, resources, and select tools we use in our work
- Application of Tools: Selected Research
 - Implementing alcohol-related care in VA Primary Care + Lessons learned
 - Current Application to VA Liver Care: Tailoring an implementation intervention for testing
- Questions

Positionality/Disclosure

Positionality/Disclosure Statement



Implementation Scientist and Addictions Health Services Researcher:





Educator, Mentor, and Administrator:

Adda

Patient: Living with chronic condition with regular need to navigate a health

CONFLICT OF INTEREST STATEMENT:

I have no financial or other business conflicts of interest, but I come with biases as a result of socialization and life experiences.

Implementation Science

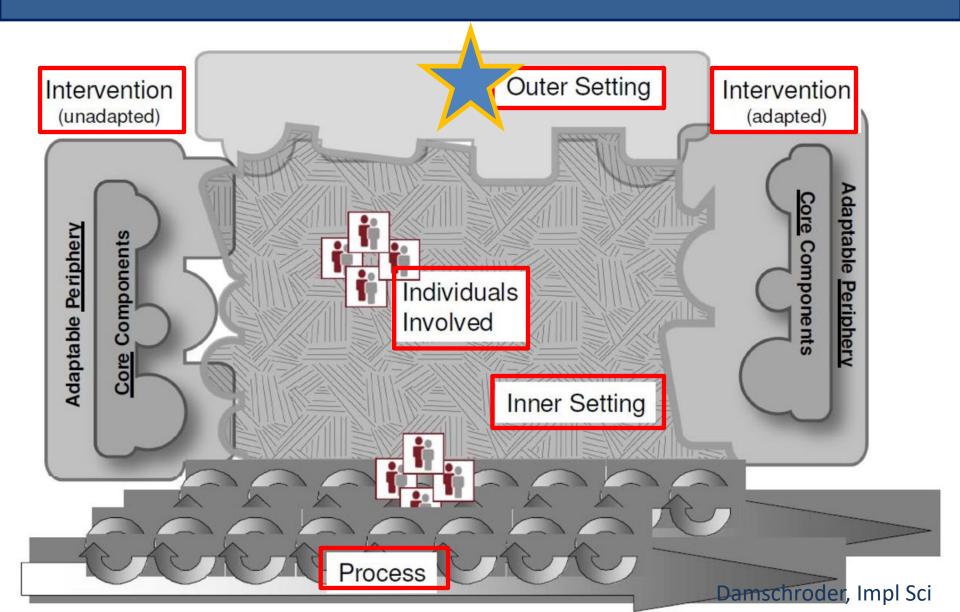
Implementation Science: Definitions

Implementation Science is:

- "The scientific study of methods and strategies that facilitate the uptake of evidence-based practice and research into regular use by practitioners and policymakers." —UW Imple Sci
- "The scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices (EBPs) into routine practice, and, hence, to improve the quality and effectiveness of health services." —Eccles and Mittman, Impl Sci, 2006

"Implementation scientists aim to understand barriers (what makes it harder to implement) and facilitators (what makes it easier to implement), and design and test different strategies to scale evidence-based practices, to ensure that the promise of scientific discovery is realized"—Rinad Beidas, Penn Medicine

Consolidated Framework for Implementation Research



Formative Evaluation as a Tool of Implementation Science

The Role of Formative Evaluation in Implementation Research and the QUERI Experience

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This article descr es of formative e ing of how to imp in order to improv

"In an action-oriented improvement program, summative data are essential but insufficient to meet the needs of implementation/QI researchers...

Implementation researchers need to answer critical questions about the feasibility of implementation strategies, degree of realtime implementation, status and potential influence of contextual factors, response of participants, and any adaptations necessary to achieve optimal change"

Uses of Formative Evaluation in Implementation Science

Table 2. Potential Uses of Formative Evaluation 10,13,16,20-27

Understand the nature of the local implementation setting

Assess whether a program or intervention addresses a significant need

Modify a proposed program or intervention, as needed

 $Determine \ the \ extent, \ fidelity, \ and \ qualities \ of \ the \ implementation \ of \ an \ intervention \ program \dots (e.g., \ to) \ describe \ the \ activities \ actually \ implemented.$

... (and) ... explain program operations²¹

Systematically detect and monitor unanticipated events (and adjust if appropriate)

Optimize/control implementation to improve the potential for success

Obtain ongoing input for short-term adjustments

Document continual progress

Inform future similar implementation efforts, e.g., within other health care sites or a larger system

Avoid type III errors: "Failing to detect differences between the original intervention plan and the ultimate manner of implementation" or failure to understand how complex the phenomena of interest really are

Understand the extent/dose, consistency, usefulness, co

Understand the nature and implications of local adaptat

Assist interpretation of program outcomes or worth in te

Foster an understanding of the causal events leading to

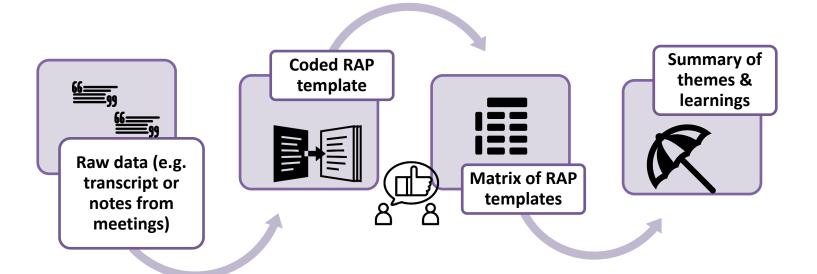
Standardize on-going implementation

Understand the experience of those directly affected by it

- **☑** Understanding the nature of the local implementation setting
- **☑** Understanding the experience of those directly affected by implementation efforts
- **☑** Modifying intervention as needed
- **☑** Informing future similar implementation efforts

Rapid Assessment/Analysis Process (RAP)

Rapid assessment is defined as **intensive team-based** qualitative inquiry using **triangulation**, **iterative data analysis**, and additional data collection to quickly develop a **preliminary understanding** of a situation from the insider's perspective."



https://www.hsrd.research.va.gov/for researchers/cyber seminars/archives/3846-notes.pdf

RAP Example

TEMPLATED TRANSCRIPT SUMMARY - ROUND 2 SSP COVID-19 INTERVIEWS

RAP template created by:	
Interview ID#:	
Interview conducted by:	
Interview date:	

Background SSP information:

SSP name:	
Program organizational affiliation:	
Program location (city, state):	
Interviewee role (please describe):	

*When adding quotations, please use quotations marks and indicate the interview PID in brackets (example: "quote" [ID123])

*Please" use [brackets and italics] for any additional context/comments, including items not directly discuinferences made

Current approach to syringe / exchange distribution services		
Distribution approach (in general	•	
and COVID-specific)		
Facilitators to distribution (e.g.	•	
mail order distribution, secondary		
distribution, home delivery)		
Barriers to distribution	•	
changes to service moder they	•	
intend to maintain after COVID		
Financial impacts of COVID		
Changes to program financing due	*Descriptive summaries of data	
to COVID (in general, and for		
specific aspects of service	& strong representative	
delivery)		
Other financial changes (not	•quotes	
COVID specific)		
Program response to financial	•	
impacts (e.g. planned or actual		
changes)		
Current approach to HIV & HCV testing		
Current HIV / HCV testing	•	
approach (if restarted, when/why		
did it restart?)		
Changes to HIV and/or HCV		

Example RAP Matrix

Site ID	Distribution approach	Facilitators to distribution	Barriers to distribution
Site 1	Mostly mobile delivery, less use of fixed sites "We hardly do any onsite distribution now; most of our approach involves our staff getting out there to meet people where they are at." [S2]	Partnerships with other agencies "We couldn't have maintained our outreach without the help of the clinic we partner with" [S1]	 Many staff are volunteers and unable to work as much Difficulty getting enough syringe supply "It's been so hard to find syringe suppliers that aren't back-ordered." [S1]
Site 2	More mobile Increase in secondary exchanges	Client "appreciation" of new approaches like mail order or text-based delivery scheduling There was so much appreciation for these new methods, clients kept telling us how much they wished we had provided this earlier" [S2]	 Supply shortages (e.g. syringes) Need to maintain COVID social distancing precautions "We can't give out as many syringes as we'd like, it would wipe out our supply" [S2]

Example RAP Template

RAP Gets The Job Done!

Open access Research,

BMJ Open Can rapid approaches to qualitative analysis deliver timely, valid findings to clinical leaders? A mixed methods study comparing rapid and thematic analysis

Beck Taylor, Catherine Henshall, Sara Kenyon, Ian Litchfield, Sheila Greenfield

To cite: Taylor B, Hershall C, Kenyon S, et al. Can rapid approaches to qualitative analysis deliver timely, valid findings to clinical leaders? A mixed methods study comparing rapid and thematic analysis. BMJ Open 2018;8:e019993. doi:10.1136/bmjopen.2017-019993

► Prepublication history and additional material for this paper are available online. To view these files, please visit the journal online (http://dx.doi.org/10.1136/bmjopen-2017-019993).

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ABSTRACT

Objectives This study compares rapid and traditional analyses of a UK health service evaluation dataset to explore differences in researcher time and consistency of outputs.

Design Mixed methods study, quantitatively and qualitatively comparing qualitative methods.

Setting Data from a home birth service evaluation study in a hospital in the English National Health Service, which took place between October and December 2014. Two research teams independently analysed focus group and interview transcript data: one team used a thematic analysis approach using the framework method, and the second used rapid analysis.

Participants Home birth midwives (6), midwifery support workers (4), commissioners (4), managers (6), and community midwives (12) and a patient representative (1) participated in the original study.

Primary outcome measures Time taken to complete analysis in person hours; analysis findings and recommendations matched, partially matched or not matched across the two teams.

Results Rapid analysis data management took less time than thematic analysis (43 hours vs 116.5 hours). Rapid analysis took 100 hours, and thematic analysis took 126.5 hours in total, with interpretation and write up taking much longer in the rapid analysis (52 hours vs 8 hours). Rapid analysis findings overlapped with 79% of thematic analysis findings, and thematic analysis overlapped with 63% of the rapid analysis findings. Rapid analysis recommendations overlapped with 55% of those from the thematic analysis, and thematic analysis overlapped with 59% of the rapid analysis recommendations.

Strengths and limitations of this study

- Our stu lag in re policym into pra
- This is method both restudy d
- The wo and an plannin
- Due to to study d particip
- paring teams this are

time than thematic analysis (43 hours vs 116.5 hours).
Rapid analysis took 100 hours, and thematic analysis took 126.5 hours in total, with interpretation and write up taking much longer in the rapid analysis (52 hours vs 8 hours)

Rapid analysis findings overlapped with 79% of thematic analysis findings, and thematic analysis overlapped with 63% of the rapid analysis findings. Rapid analysis

Results Rapid analysis data management took less

methods include: early work to identify areas for focus; throughout a study to explore processes and user experience; and following a trial or intervention implementation to explain outcomes and/or identify stakeholder experiences, to explore in more depth questions or issues identified through quantitative work and to problematise or 'unpack' issues or topics taken for granted.

Common IS Study Designs

Effectiveness-implementation Hybrid Designs

Combining Elements of Clinical Effectiveness and Implementation Research to Enhance Public Health Impact

> Geoffrey M. Curran, F Jeffrey M. F

Objectives: This study proposes methods for ble components of clinical effectiveness and implementa Such blending can provide benefits over pursuing research independently; for example, more rapid trans more effective implementation strategies, and mo formation for decision makers. This study proposes fectiveness-implementation" typology, describes a their use, outlines the design decisions that must provides several real-world examples.

Results: An effectiveness-implementation hybrid desitakes a dual focus a priori in assessing clinical effeimplementation. We propose 3 hybrid types: (1) testiclinical intervention on relevant outcomes while of gathering information on implementation; (2) dual testand implementation interventions/strategies; and (3) implementation strategy while observing and gathering on the clinical intervention's impact on relevant outcomes.

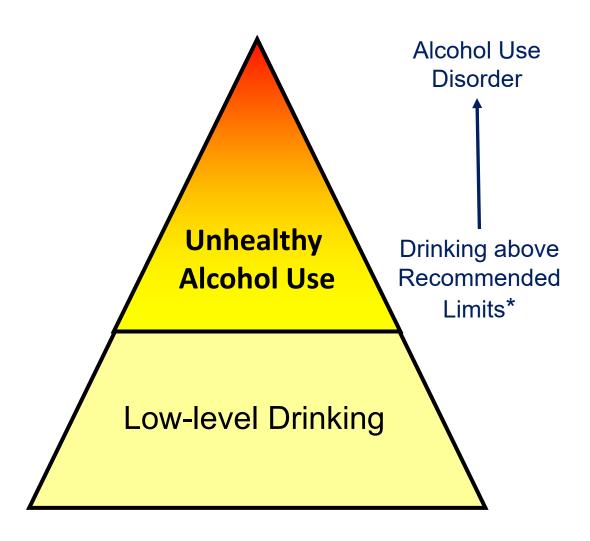
Conclusions: The hybrid typology proposed herein sidered a construct still in evolution. Although tradi effectiveness and implementation trials are likely most common approach to moving a clinical intervention efficacy research to public health impact, judici

	brid Design Characteristics and Key C	nallenges	
Study Characteristic	Hybrid Trial Type 1	Hybrid Trial Type 2	Hybrid Trial Type 3
Research aims	Primary aim: determine effectiveness of a clinical intervention Secondary aim: better understand context for implementation	Coprimary aim*: determine effectiveness of a clinical intervention Coprimary aim: determine feasibility and potential utility of an implementation intervention/strategy	Primary aim: determine utility of an implementation intervention/strategy Secondary aim: assess clinical outcomes associated with implementation trial
Research questions (examples)	Primary question: will a clinical treatment work in this setting/these patients? Secondary question: what are potential barriers/ facilitators to a treatment's widespread implementation?	Coprimary question*: will a clinical treat- ment work in this setting/these patients? Coprimary question: does the implementa- tion method show promise (either alone or in comparison with another method) in facilitating implementation of a clinical treatment?	Primary question: which method works better in facilitating implementation of a clinical treatment? Secondary question: are clinical outcomes acceptable?
Units of random- ization	Patient, clinical unit	Clinical effectiveness: see type I Implementation: see type III, although may be nonrandomized, for example, case study	Provider, clinical unit, facility, system
Comparison conditions	Placebo, treatment as usual, competing treatment	Clinical effectiveness: see type I Implementation: see type III, although may be nonrandomized, for example, case study	Provider, clinical unit, facility, system: implementation as usual, competing implementation strategy
Sampling frames	Patient: limited restrictions, but some inclusion/ exclusion criteria Provider, clinical unit, facility, system: choose subsample from relevant participants	Patient: limited restrictions, but some inclusion/ exclusion criteria Providers/clinics/facility/systems; consider "optimal" cases	Provider/clinic/facility/system: either "optimal" cases or a more heterogeneous group Secondary: all or selected patients included in study locations
Evaluation methods	Primary aim: quantitative, summative Secondary aim: mixed methods, qualitative, process-oriented, could also inform interpretation of primary aim findings	Clinical effectiveness aim: quantitative, summative Implementation aim: mixed method; quantitative, qualitative; formative and summative	Primary aim: mixed-method, quantitative, qualitative, formative, and summative Secondary aim: quantitative, summative
Measures	Primary aim: patient symptoms and functioning, possibly cost Secondary aim: feasibility and acceptability of implementing clinical treatment, sustainability potential, barriers and facilitators to implementation	Clinical effectiveness aim: patient symptoms and functioning, possibly cost effectiveness Implementation aim: adoption of clinical treatment and fidelity to it, as well as related factors	Primary aim: adoption of clinical treatment and fidelity to it, as well as related factors Secondary aim: patient symptoms, functioning, services use
Potential design challenges	Generating "buy in" among clinical researchers for implementation aims Insuring appropriate expertise on study team to conduct rigorous Secondary aim These studies will likely require more research expertise and personnel, and larger budgets, than nonhybrids	Generating "buy in" among implementation researchers for clinical intervention aims These studies will require more research expertise and personnel, as well as larger budgets, than nonhybrids Insuring appropriate expertise on study team to rigorously conduct both aims "Creep" of clinical treatment away from	Primary data collection with patients in large, multisite implementation trials can be unfeasible, and studies might need to rely on subsamples of patients medical record review, and/or administrative data. Patient outcomes data will not be as extensive as in traditional effective-

Questions?

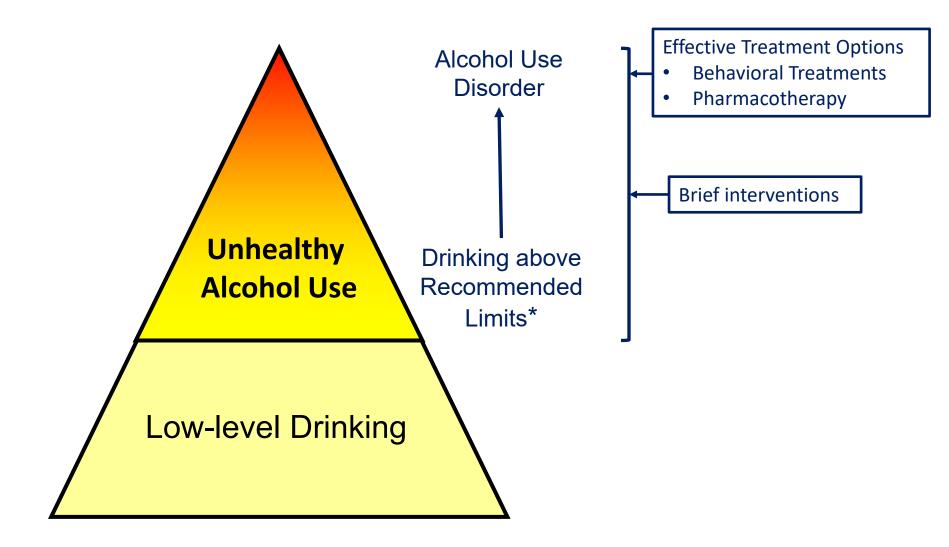
Applications: Select Research

Spectrum of Unhealthy Alcohol Use



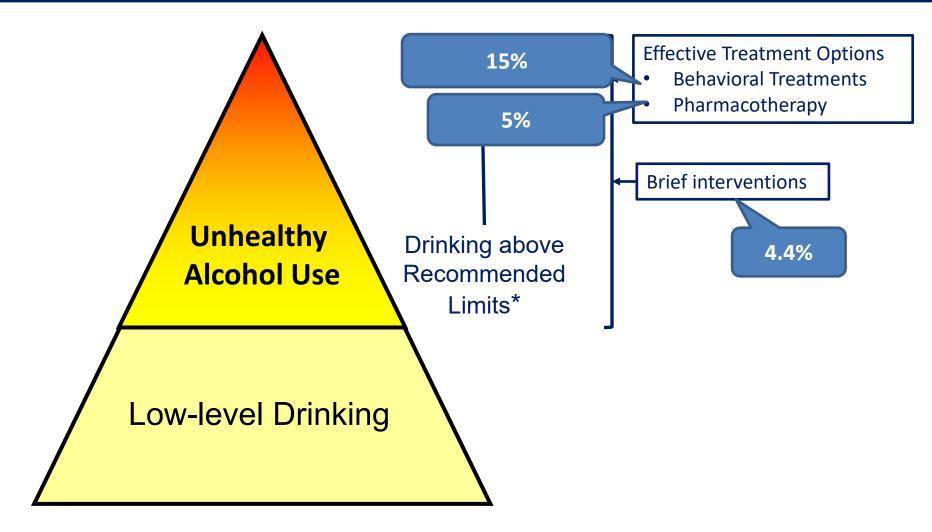
^{*} \leq 14 drinks/week or 3/occasion for men; < $\frac{7}{2}$ drinks/week or 3/occasion women

Evidence-Based Care: Unhealthy Alcohol Use



^{*≤ 14} drinks/week or 3/occasion for men; < 7 drinks/week or 3/occasion women

These Interventions are Historically Rarely Received by Patients Who Need Them



^{*} \leq 14 drinks/week or 3/occasion for men; < $\frac{7}{2}$ drinks/week or 3/occasion women

Historically Challenging to Implement

Scandinavian Journal of Primary Health Care, 2006; 24: 5-15



REVIEW ARTICLE

Effectiveness of strategies to implement brief alcohol intervention in primary healthcare

A systematic review

PER NILSEN1, MAURI AALTO2, PREBEN 1

¹Department of Health and Society, Division of Social Medic ²Department of Mental Health and Alcohol Research, Nation Practice, University of Tampere, Finland, and ⁴Department of

Abstract

Objective. To review systematically the available literature of healthcare in order to determine the effectiveness of the question. To what extent have the efforts to implement ments been successful? Method. Literature search from healthcare. Material. A total of 11 studies encompassing physicians* from Europe, the USA, and Australia. Main intervention rates. Answer. Intervention effectiveness (ma generally increased with the intensity of the intervention Nevertheless, the overall effectiveness was rather modest. I scientifically rigorous enough, and applied too brief follow Journal of Public Health | Vol. 33, No. 3, pp. 412-421 | doi:10.1093/pubmed/fdq095 | Advance Access Publication 17 December 2010

Barriers and facilitators to implementing screening and brief intervention for alcohol misuse: a systematic review of

qualitative evidence

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ABSTRACT

Background This review aimed to synthesize qualitative evidence for barriers and facilitate intervention for alcohol misuse in adults and children over 10 years.

Methods: A search of medical and social science databases was carried out and augmente of key journals. Qualitative evidence was synthesized thematically.

Results: A total of 47 papers varying in design and quality were included in the review. Mo settings. Implementation was reported to be limited by lack of resources, training and supp appropriateness of context in which discussions take place was reported as an acceptability professionals require sufficient knowledge about alcohol guidelines and risk in order to imp need.

Conclusions Whilst brief screening and brief intervention have been shown to be effective number of barriers and facilitators to implementation. Adequate resources, training and the are the main facilitators in primary care. More research is needed to assess implementation

Keywords alcohol consumption, health services, public health

Psychology of Addictive Behaviors

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Strategies to Implement Alcohol Screening and Brief Intervention in Primary Care Settings: A Structured Literature Review

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Katharine A. Bradley VA Puget Sound Health Care System, Seattle, Washington, University of Washington, and Group Health Research Institute

Although alcohol screening and brief intervention (SBI) reduces drinking in primary care patients with unhealthy alcohol use, incorporating SBI into clinical settings has been challenging. We systematically reviewed the literature on implementation studies of alcohol SBI using a broad conceptual model of implementation, the Consolidated Framework for Implementation Research (CFIR), to identify domains addressed by programs that achieved high rates of screening and/or brief intervention (BI). Seventeen articles from 8 implementation programs were included; studies were conducted in 9 countries and

Large study, well-funded by the WHO, described rates of 10% of screen-positive patients being offered brief intervention as "high" rates in 2004.

CFIR during implementation is associated with successful implementation of alcohol screening, as we as which elements may be associated with successful, sustained implementation of BI.

VA Offered Prime Opportunity for Implementation ~2003/2004

- National electronic health record
- Performance Measures to incentivize quality care
 - Performance feedback given to networks quarterly
- Clinical Decision Support ("clinical reminders")
- Condition-specific research/clinical partnerships (former SUD QUERI program) enabled expert input
- Large Health Study—most Veterans with unhealthy alcohol use reported not getting needed help

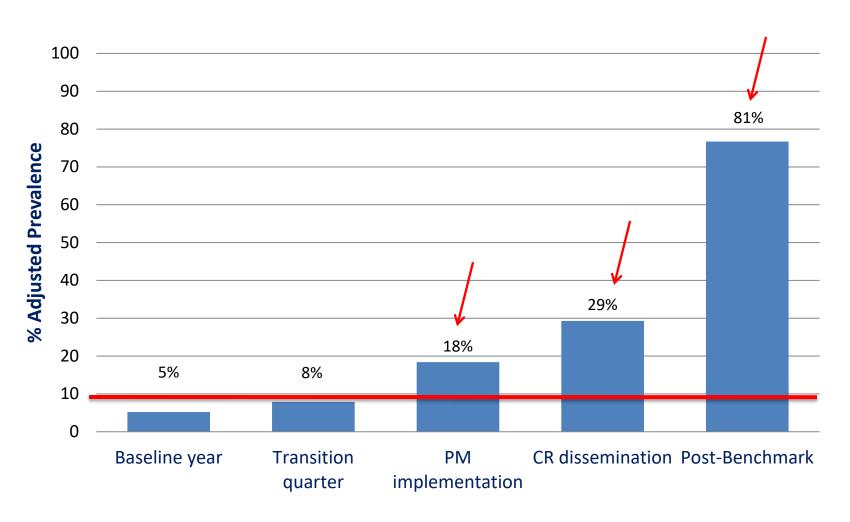
VA's Iterative Implementation: Started with Screening

- VA implemented annual screening for unhealthy alcohol use starting in 2004:
 - National performance measure incentivized screening
 - Self-scoring electronic clinical reminder disseminated nationally to prompt and document results of screening with the validated Alcohol Use Disorders Identification Test Consumption (AUDIT-C) Questionnaire
- The AUDIT-C clinical reminder was used 1.5 million times in its first year
- >90% of all established outpatients have had documented screening since 2004
 - >30 million screens documented in last 5 years

National Implementation of Brief Intervention in VA

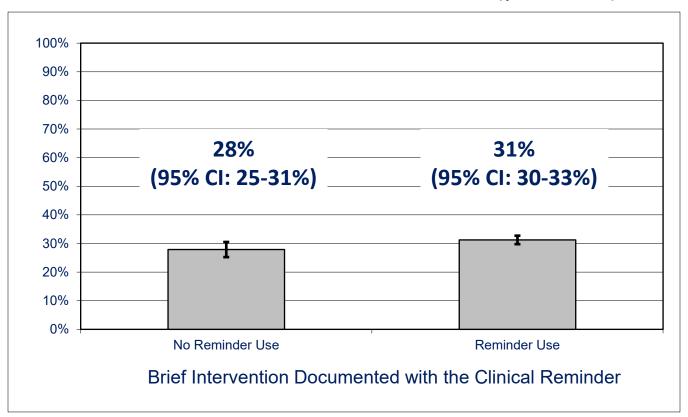
- Brief intervention implementation took more time and was preceded by development and local pilot tests of the electronic clinical reminder.
- National Implementation had four phases:
 - Medical record review began monitoring follow-up on positive screening (2006)
 - Performance measure for brief intervention announced (2007)
 - National dissemination of revised clinical reminder for brief intervention (2008)
 - Benchmark goal set (2010)

National Implementation of Brief Intervention in VA



Documented Brief Intervention Associated with Reduced Drinking at Follow-up

Adjusted odds of screening negative at follow-up: 1.18,95% Confidence Interval 1.03 - 1.34 (p=0.013); NNT = 25

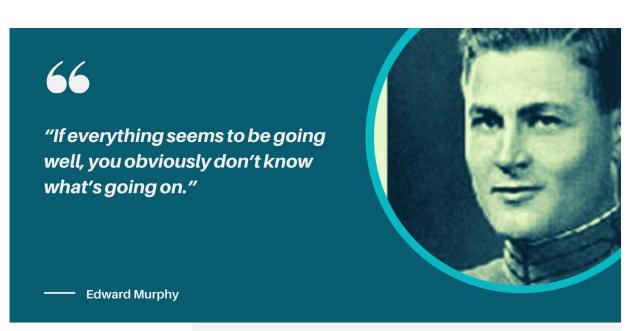


Summary of VA's Implementation Successes

 Both screening and brief intervention reached high rates after announcement of performance measures and dissemination of clinical reminders

 Results of an early pilot evaluation of the clinical reminder were hopeful regarding the effectiveness of brief intervention when offered in practice.

Too Good to Be True?



Identification of Quality Issues

Examining Quality Issues in Alcohol Misuse Screening

Eric J. Hawkins, PhD Daniel R. Kivlahan, PhD Emily C. Williams, MPH Steven M. Wright, PhD Thomas Craig, MD, MPH Katharine A. Bradley, MD, MPH

SUMMARY. The Veterans Health Administration (VHA) has success dence-based alcohol misuse screening with the AUDIT-C. The purpose of ate clinical alcohol screening during the first year after implementation review and mailed patient surveys collected during 2004 by VHA Office mance, this study analyzed concordance of screening results among pati both data sources. Among 1,637 patients with AUDIT-C from both sour medical record screening prevalence rate of alcohol misuse, 24.6% (95% was significantly lower than the survey rate, 33.4% (31.1% to 35.7%). Of a sa nondrinkers in medical records, 24% reported past year alcohol are after alcohol misuse on surveys. Lower rates of alcohol use and misuse do

Quality Concerns with Routine Alcohol Screening in VA Clinical Settings

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BACKGROUND: Alcohol screening questionnaires have typically been validated when self- or researcher-administered. Little is known about the performance of alcohol screening questionnaires administered in clin.

CONCLUSION: Use of a validated alcohol screening questionnaire does not—by itself—ensure the quality of alcohol screening. This study suggests that the quality of clinical alcohol screening should be monitored even.

KEY FINDINGS

- Approximately one-quarter of patients identified as "non-drinkers" in clinical screening reported past-year drinking on survey screen.
- 61% of patients who screened positive on surveys screened negative during clinical screening.

but not both. Multivariable logistic regression was used to estimate the prevalence of discordance in different patient subgroups based on demographic and clinical characteristics, VA network and temporal factors (e.g. the order of screens).

KEY RESULTS: Whereas 11.1% (95% CI 10.4-11.9%) of

The Veterans Affairs (VA) Health Care System implemented routine screening for alcohol misuse in 2004, ⁶ and since 2006 has required that the Alcohol Use Disorders Identification Test—Consumption Questions (AUDIT-C) be used for screening. Each VA is expected to meet performance targets, but the approach used to implement alcohol screening is left up to individual

Identification of Quality Issues

Addiction



RESEARCH REPORT

dol:10.1111/add.12600

An early evaluation of implementation of brief intervention for unhealthy alcohol use in the US Veterans Health Administration

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ABSTRACT

Aims The US Veterans Health Administration [Veterans Affairs (VA)] used performance measures and electronic clinical reminders to implement brief intervention for unhealthy alcohol use. We evaluated whether documented

KEY FINDING

 Documented brief intervention was NOT associated with resolution of unhealthy alcohol use at follow-up screening in the 6 months following brief intervention implementation

unhealthy alcohol use than those without (P-values < 0.05). Adjusted prevalences of resolution were 47% [95% confidence interval (CI) = 42–52%] and 48% (95% CI = 42–54%) for patients with and without documented brief intervention, respectively (P = 0.50). Conclusions During early implementation of brief intervention in the US Veterans Health Administration, documented brief intervention was not associated with subsequent changes in drinking among outpatients with unhealthy alcohol use and repeat alcohol screening.

Keywords Alcohol, brief intervention, implementation, unhealthy alcohol use, veterans.

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Other Gaps in Care: AUD Pharmacotherapy

Pharmacotherapy of Alcohol Use Disorders in the Veterans Health Administration

Alex H. S. Harris, Ph.D. Daniel R. Kivlahan, Ph.D. Thomas Bowe, Ph.D. Keith N. Humphreys, Ph.D.

Objective: Acamprosate, oral and long-acting injectable naltrexone, and disulfiram are approved for treatment of alcohol dependence. Their availability and consideration of their use in treatment are now standards of high-quality care. This study determined rates of medication initiation among Veterans Health Administration (VHA) patients. Methods: VHA pharmacy and administrative data were used to identify patients with alcohol use disorder diagnoses in fiscal years (FY) 2006 and 2007 and the proportion (nationally and by facility) who received each medication. Patient characteristics associated with receipt were also examined. Results: Among more than a quarter-million patients with alcohol use disorder diagnoses, the percentage receiving any of the medications increased from 2.8% in FY 2006 to 3.0% in FY 2007. Receipt of these medications was more likely among patients who received specialty addiction care, those with alcohol dependence (compared with abuse), those younger than 55 years, and females. In the patient subgroups examined, the largest proportion to receive any of the medications was 11.6%. Across 128 VHA facilities, rates of use among patients in the sample who had received past-year specialty addiction treatment ranged from 0% to 20.5%; rates ranged from 0% to 4.3% among those with no specialty treatment. Patient preferences and medical contraindications could not be determined from the data. Conclusions: Findings suggest the need to better understand systemwide variation in use of these medications and their use as a rough proxy for availability and consideration of pharmacotherapy—a standard of care with strong

only 139,000 ar macotherapy wit those seeking (2,3). Other estirates among per disorders vary f 13%, depending tions, setting o medication, wit found for naltre dependent patie tion treatment s large surveys of programs have versal adoption for alcohol use put this in persp prevalence of al roughly half that (3.8% and 7.2% however, 336 scriptions were

Pharmacotherapy of Alcohol Use Disorders by the Veterans Health Administration: Patterns of Receipt and Persistence

Alex H. S. Harris, Ph.D., M.S. Elizabeth Oliva, Ph.D. Thomas Bowe, Ph.D. Keith N. Humphreys, Ph.D. Daniel R. Kivlahan, Ph.D. Jodie A. Trafton, Ph.D.

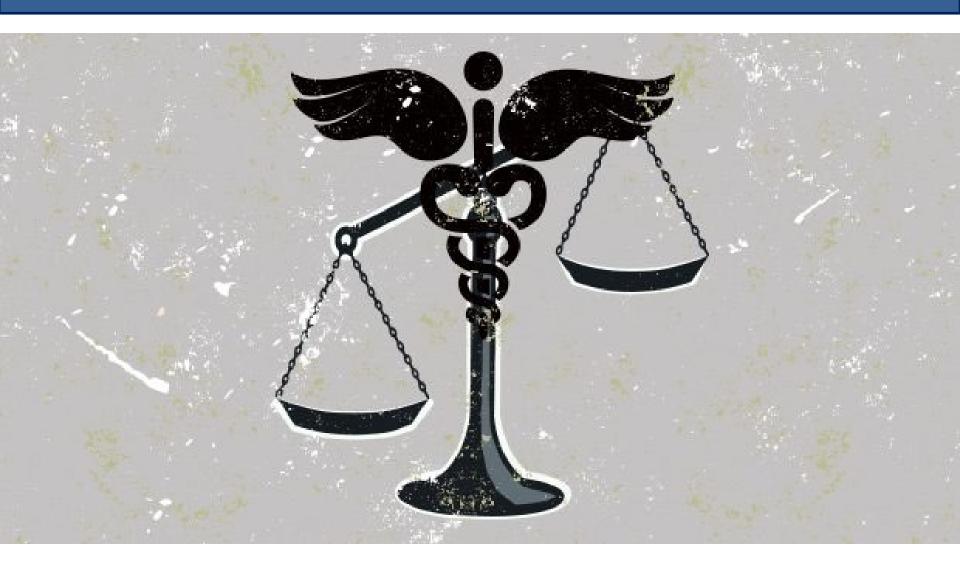
Objective: This study assessed changes since 2007 at Veterans Health Administration (VHA) facilities (N=129) in use of the medications approved by the U.S. Food and Drug Administration for treatment of alcohol use disorders. Methods: VHA data from fiscal years (FYs) 2008 and 2009 were used to identify patients with a diagnosis of an alcohol use disorder who received oral or extended-release naltrexone, disulfiram, or acamprosate as well as the proportion of days covered (PDC) in the 180 days after initiation and the time to first ten-day gap in possession (persistence) for each medication. Multilevel, mixed-effects logistic regression models examined the association between patient and facility characteristics and use of medications. Results: Nationally, 3.4% of VHA patients with an alcohol use disorder received medications in FY 2009 (11,165 of 331,635 patients), up from 3.0% in FY 2007. Use of medications by patients at the facilities ranged from 0% to 12%. In fully adjusted analyses, facilities offering

rum (1) and adopted as a performance measure by the American Psychiatric Association Physician Consortium for Performance Improvement and the National Committee for Quality Assurance (2). All Veterans Health Administration (VHA) facilities are mandated to make available and consider the use of medications for alcohol dependence (3). Nevertheless, receipt of the medications by patients is rare overall and varies highly among and within health care systems (4,5).

In 2009 in the VA, *only 4.7% of patients with diagnosed alcohol use disorder* filled prescriptions for AUD medications

across the VHA system. Interventions are needed to optimize initiation of and persistence in use of these medications. (*Psychiatric Services* 63: 679–685, 2012; doi: 10.1176/appi.ps.201000553) cialty addiction care, patients with alcohol dependence (versus abuse), patients younger than 55 years old,

Unequal Treatment



Mulia et al 2014; Glass et al DAD 2010; Dobscha et al JSAD 2010; Williams et al ACER 2012, Williams et al ACER 2016; Williams et al DAD 2017; Glass et al Soc Pysch Psych Epi, 2017; Lehavot et al DAD 2017; Owens et al DAD, 2018; Williams et al JSAT 2017; Zemore et al JSAD 2017

Receipt of Alcohol-Related Care among PLWH





Contents lists available at ScienceDirect

Drug and Alcohol Dependence





Full length article

Among patients with unhealthy alcohol use, those with HIV are less likely than those without to receive evidence-based alcohol-related care: A national VA study



Emily C. Williams a,c,f,*, Gwen T. Lapham a,f, Susan M. Shortreed f,g, Anna D. Rubinsky a,h, Jennifer F. Bobb f, Kara M. Bensley a,c, Sheryl L. Catz e, Julie E. Richards c,f, Katharine A. Bradley a,b,c,d,f

^a Health Services Research and Development (HSR and D) Veterans Affairs (VA) Puget Sound Health Care System, Center of Innovation for Veteran-Centered Value-Driven Care(COIN) Veterans Affairs (VA) Puget Sound Health Care System, Seattle, WA, United States

KEY FINDING

Among VA patients screening positive for unhealthy alcohol use, PLWH were less likely than HIV-uninfected persons to receive brief intervention, specialty addictions treatment, and pharmacotherapy for alcohol use disorders

Received in revised form 10 January 2017 Accepted 11 January 2017 Available online 6 March 2017

Keywords: Alcohol HIV Brief intervention received by PLWH and HIV- patients.

Methods: Outpatients from the Veterans Health Administration who had one or more positive screen(s) for unhealthy alcohol use (AUDIT-C≥5) documented in their medical records 10/2009-5/2013 were eligible. Primary and secondary outcomes were brief intervention documented ≤14 days after a positive alcohol screen, and a composite measure of any alcohol-related care (brief intervention, specialty addictions treatment or pharmacotherapy documented ≤365 days), respectively. Unadjusted and adjusted regression analyses compared alcohol-related care outcomes in PLWH and HIV- patients.

b Center of Excellence in Substance Abuse Treatment and Education (CESATE) Veterans Affairs (VA) Puget Sound Health Care System – Seattle Division,

Similar Lower Access to Care for Other Groups



Eric J. Hawkins, PHD; 1,4,5 & Emily C. Williams, PhD, MPH1,3

Qualitative Data: Barriers to High-Quality Alcohol-Related Care

Three Qualitative Studies Identified Barriers

Factors Underlying Quality Problems with Alcohol Screening Prompted by a Clinical Reminder in Primary Care: A Multi-site Qualitative Study

Emily C. Williams, PhD, MPH^{1,5}, Carol E. Achtmeyer, MN, ARNP^{1,2,3}, Rachel M. Thomas, MPH¹, Joel R. Grossbard, PhD³, Gwen T. Lapham, PhD, MSW, MPH^{1,7}, Laura J. Chavez, MPH^{1,5}, Evette J. Ludman, PhD^{6,7}, Douglas Berger, MD, M Litt^{2,4}, and Katharine A. Bradley, MD, MPH^{1,3,4,5,7}



Contents lists available at ScienceDirect

Journal of Substance Abuse Treatment



Local Implementation of Alcohol Screening and Brief Intervention at Five Veterans Health Administration Primary Care Clinics: Perspectives of Clinical and Administrative Staff **



Emily C. Williams, Ph.D., M.P.H. ^{a,e,g,*}, Carol E. Achtmeyer, M.N., A.R.N.P. ^{a,b,c}, Jessica P. Young, M.S.W., M.P.H. ^a, Stacey E. Rittmueller, M.P.H. ^h, Evette J. Ludman, Ph.D. ^{f,g}, Gwen T. Lapham, Ph.D., M.S.W., M.P.H. ^{a,c,g}, Amy K. Lee, M.P.H. ^{a,g}, Laura J. Chavez, M.P.H. ^{a,e}, Douglas Berger, M.D., M.Litt. ^{b,d}, Katharine A. Bradley, M.D., M.P.H. ^{a,c,d,e,g}



Barriers to and Facilitators of Alcohol Use Disorder Pharmacotherapy in Primary Care: A Qualitative Study in Five VA Clinics

Emily C. Williams, PhD, MPH^{1,2}, Carol E. Achtmeyer, MN, ARNP^{1,3,4}, Jessica P. Young, MSW, MPH¹, Douglas Berger, MD, M Litt^{3,5}, Geoffrey Curran, PhD⁶, Katharine A. Bradley, MD, MPH^{1,2,4,5}, Julie Richards, MPH^{1,2}, Michael B. Siegel, MD, MPH⁷, Evette J. Ludman, PhD⁸, Gwen T. Lapham, PhD, MSW, MPH^{1,4}, Mark Forehand, PhD⁹, and Alex H. S. Harris, PhD¹⁰

Three Qualitative Studies: Overview

Study #1:

Understanding factors underlying quality issues in screening

 Observational ethnographic study at 9 primary care clinics.

Observed staff

Study #2:

Understanding perspective of the frontline post-implementation

Qualitative interview study with staff,

Study #3:

Understanding barriers to provision of AUD

All analyzed with both inductive and deductive methods as guided by the broad domains of the Consolidated Framework for Implementation Research (CFIR)

➤Interviewed 24 providers

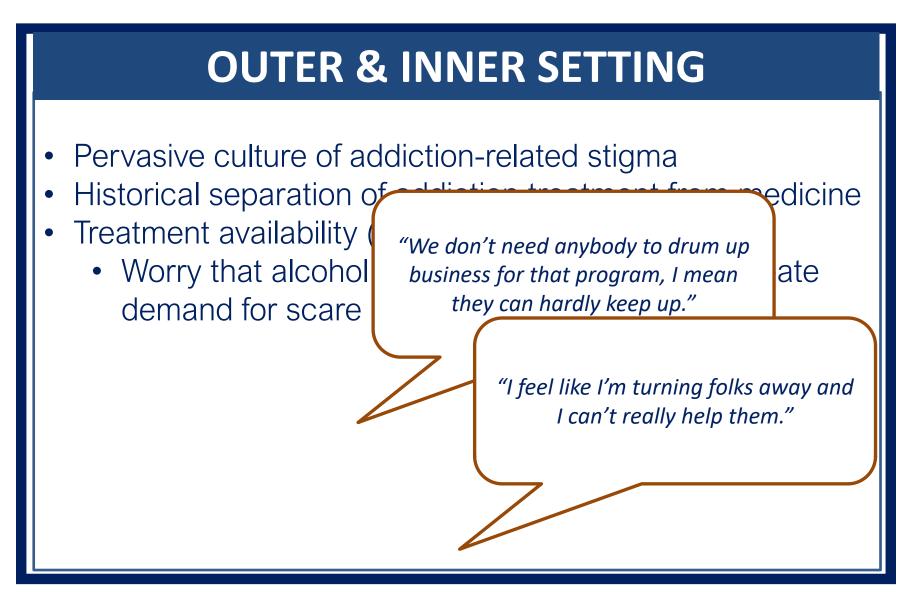
OUTER SETTING INNER SETTING

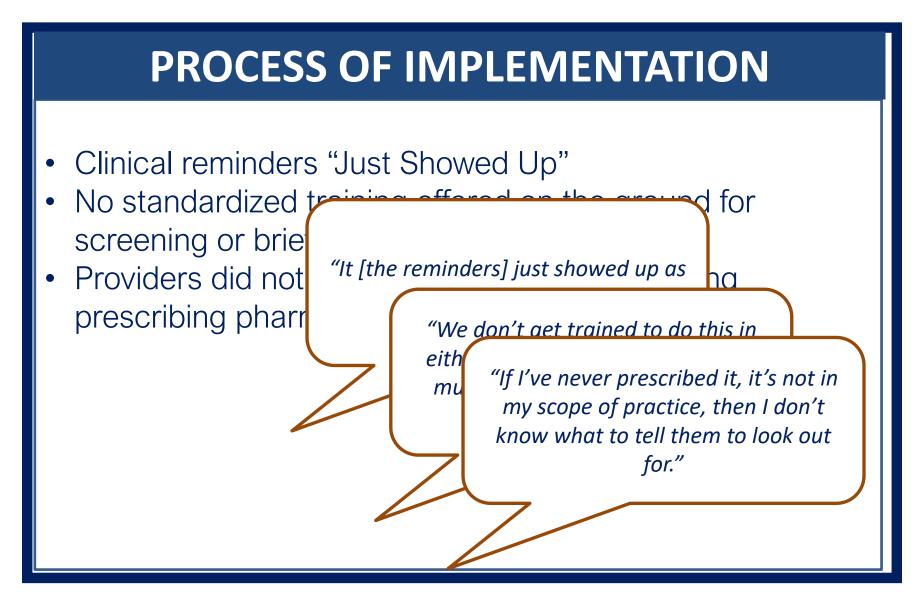
PROCESS OF IMPLEMENTATION

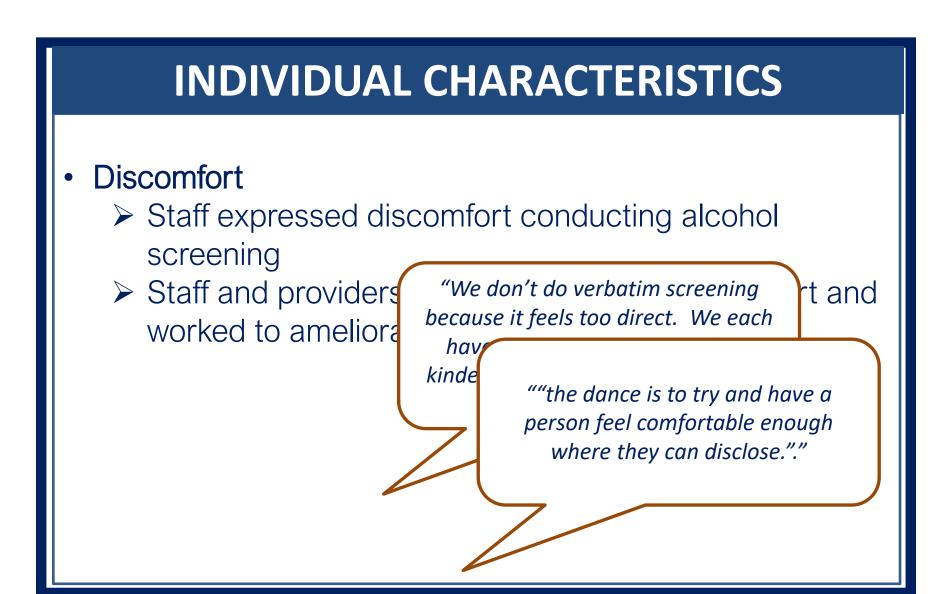


INDIVIDUAL CHARACTERISTICS









INDIVIDUAL CHARACTERISTICS

- Beliefs
 - Misundersta
 - Perceive
 - Focused AUD
 - Believed was needed

"If we really think they've got a problem, and we think they need help overcoming it, as most pe

would l

subsi

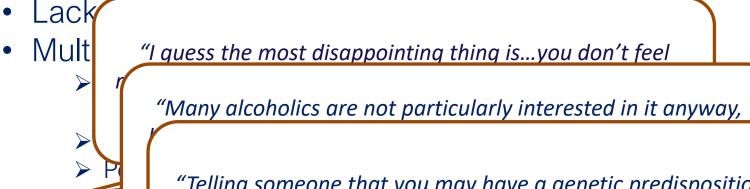
"Do I think you can start somebody on naltrexone and then pat them on the back and then send them on their way? No I don't. ... my impression is, if this is where it stops we're not going to be successful."

• Belief that medications to be offered in conjunction with specialty addictions treatment

ncitive

INDIVIDUAL CHARACTERISTICS

Attitudes / Expressions of societally-driven biases



"Telling someone that you may have a genetic predisposition to this issue is, what's the word, kind of. . .it doesn't excuse them from their choices and their behavior."

Also Several Facilitators Identified

FACILITATORS

Outer/Inner Setting

Support from VA and local clinical leadership

Process of Implementation

- Training and information
- Reframing goals and purposes
 - e.g., reframing medications as a potential "foot in the door"
- Sharing success Stories

Individual Characteristics

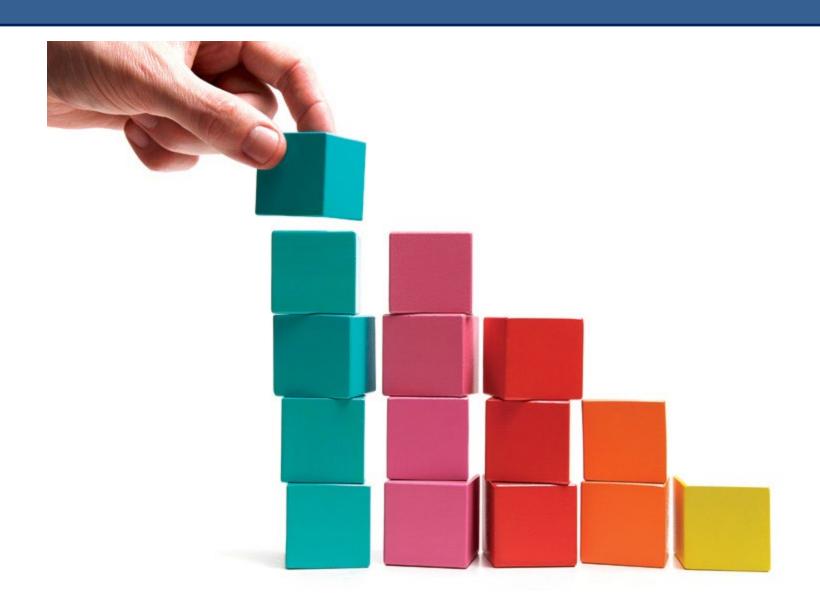
- Beliefs in importance of addressing alcohol use
- Belief that providing AUD treatment in PC might catalyze change while reducing stigma and other barriers to care

Summary: Implementation of Alcohol-Related Care in VA

- Despite successes in provision of alcohol-related care in VA:
 - Quality issues and continued gaps in care exist
- Factors Underlying Gaps Appeared to Reflect:
 - Lack of Training
 - Discomfort
 - Misunderstanding the preventive agenda
 - Lack of optimism
 - Beliefs
 - Alcohol-related Stigma (cultural and individual-level)
 - May be heightened for people with multiple marginalized identities
- Identification of key facilitators offered opportunity to build and improve



So, We Are Now Building on These Learnings



PRACTICE FACILITATION: An Evidence-Based Implementation Strategy

<u>Practice Facilitation:</u> a process of <u>interactive problem solving</u> and <u>support</u> that occurs in a context of a <u>recognized need for</u> <u>improvement</u> and a <u>supportive interpersonal relationship</u>.

Internal and External facilitators: Apply multiple discrete implementation strategies with both flexibility and strong interpersonal skills

PRACTICE FACILITATION: An Evidence-Based Implementation Strategy

Practice Facilitation: a process of interactive problem solving and support that occurs in a context of a recognized need for improvement and a supportive interpersonal relationship.

Internal and External facilitators: Apply multiple discrete implementation strategies with both flexibility and strong interpersonal skills

Employing humble inquiry to link and align ourselves with and train interested clinical staff to create an environment of collaboration toward shared goals.

TESTING INTERNAL AND EXTERNAL FACILITATION IMPLEMENTATION STRATEGIES

<u>Facilitation:</u> a process of <u>interactive problem solving</u> and support that occurs in a context of a <u>recognized need for improvement</u> and a <u>supportive interpersonal relationship</u>.

Internal and External facilitators: Apply multiple discrete implementation strategies with both flexibility and strong interpersonal skills

SPARC

(Bradley):

- Alcohol
- 25 PC clinics
- KP WA

VA Liver Clinics (Williams):

- Alcohol
- 4 VA Liver Clinics
- Western U.S.

SUPPORT

(Williams,

Hawkins):

- Opioids
- VA PC

Bachrach

<u>CDA</u>

(Bachrach):

- Alcohol
- 1 VA PC clinic

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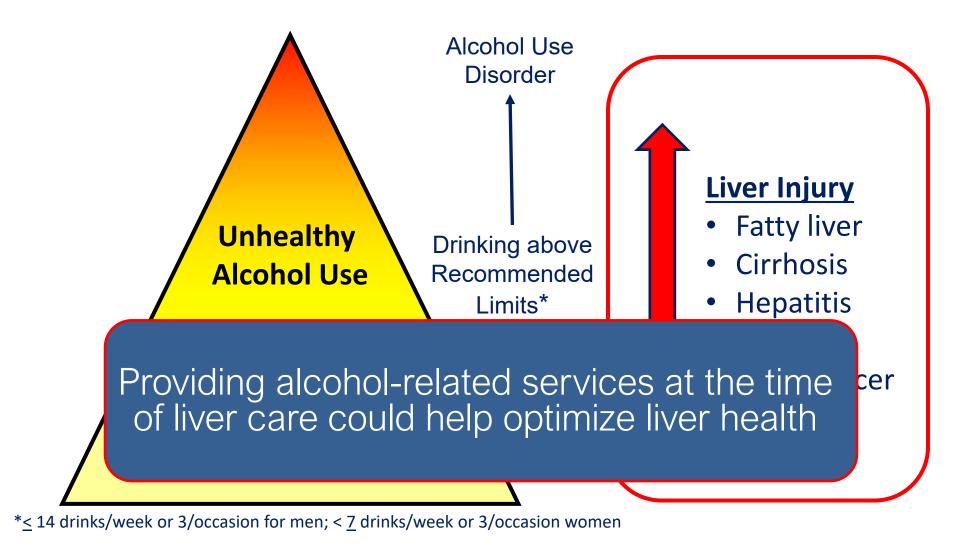
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(Bachrach):

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- 1 VA PC clinic

ALCOHOL USE AND LIVER HEALTH



NIAAA Clinician's Guide; Saitz, New Eng J Med, 2005; Younossi ZM et al. Aliment Pharm Ther 2013; Singal AK et al. J Clin Gastro 2007; Campbell JV et al. Drug Alcohol Depend 2006;

HCV ELIMINATION AS A CATALYST



I'm free of hepatitis C You can be, too

Tens of thousands of Veterans enrolled in VA care have been cured of hepatitis C.

Ask about hepatitis C testing and treatment. Learn more at www.hepatitis.va.gov



100,000
Veterans

HCV ELIMINATION AS A CATALYST

August 27, 2018

Chronic Hepatitis C Virus (HCV) Infection: Treatment Considerations

from the Department of Veterans Affairs National Hepatitis C Resource Center and the HIV, Hepatitis, and Related Conditions Program in the Office of Specialty Care Services

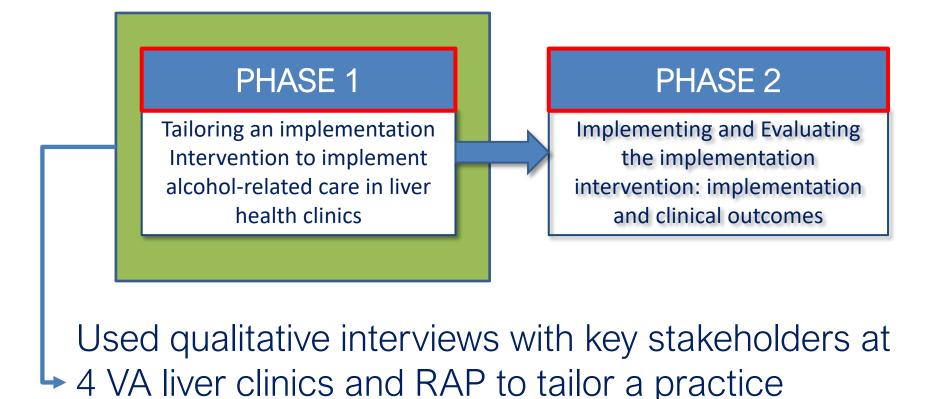
Updated: August 27, 2018

"Ongoing substance use. . .should not be an automatic exclusion criterion for HCV treatment. There are no published data supporting. . .that these patients are less likely to achieve SVR with HCV treatment.

OPPORTUNITY FOR IMPROVEMENT



2-PHASE HYBRID TYPE III STUDY



facilitation intervention

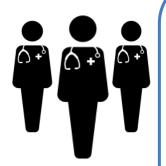
PLANNED PRACTICE FACILITATION



PLANNED PRACTICE FACILITATION

Liver Clinic Teams

Practice Coach



Practice Coach

- Content training and support in developing systems for communication and workflow
- Local implementation team/champion
- 3 Hour Design Events
- Ongoing support via monthly teleconferences
- Patient Educational Materials



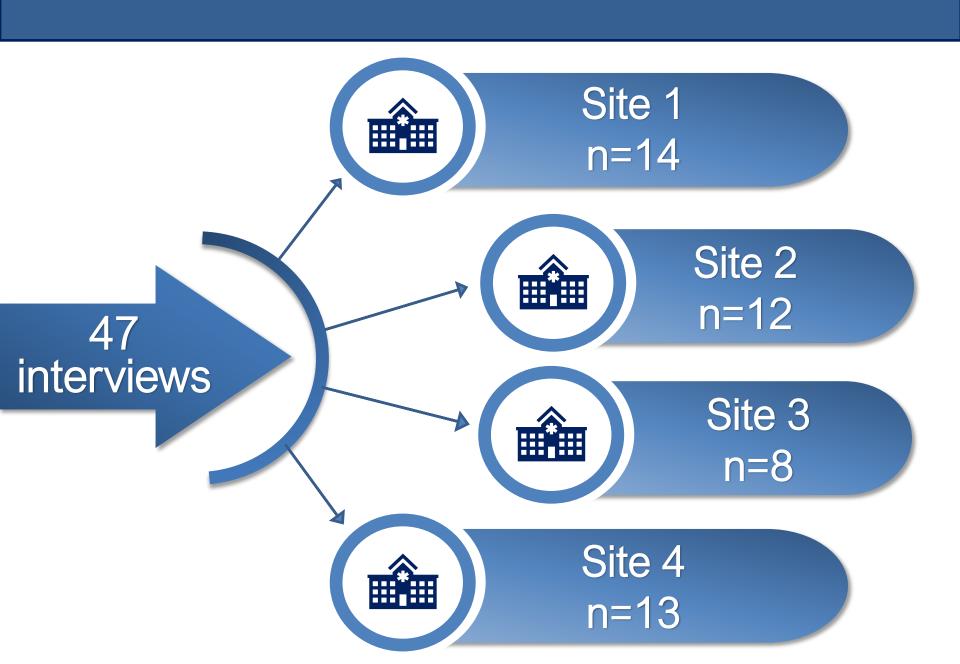
Informatics Tools

- Order set for Rx
- Consultation Menu

Performance Feedback

 Monitoring and data feedback of screening, brief intervention, and AUD Rx

STAKEHOLDER INTERVIEWS



OUTER SETTING

> INNER SETTING

> > INDIVIDUAL CHARACTERISTICS





OUTER SETTING

• <u>VA's HCV elimination effort and related treatment</u> <u>guidelines</u> were generally viewed positively and served as facilitators, but also created some challenges (e.g., some providers not aware of new guidelines and some still concerned about treatment adherence with alcohol use).





INNER SETTING

Facilitators

- Leadership support
- Foundational knowledge and experience
 - Both alcohol use & quality improvement efforts

Barriers

- No standard approach to alcohol screening
- Logistical challenges (time, space)
- Staffing challenges and wants (e.g., belief/want for care offered by behavioral health)





INDIVIDUAL CHARACTERISTICS

- Variability in belief in importance of addressing alcohol use within liver clinics (Some strong advocates, some resisters)
- Variability in interest in, knowledge of, and comfort with addressing unhealthy alcohol use (Need/wants for training!)

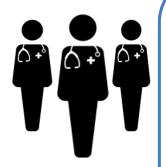




PLANNED PRACTICE FACILITATION

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KEY SITE-LEVEL VARIATION

SITES DIFFER IN:

- Structure and size
- Staffing models
- Availability of onsite mental health resources
- QI History
- Communication mechanisms
- Influential people
- Etc. . .

TAILORED PRACTICE FACILITATION

Liver Clinic Teams



Facilitation

- Content training
- Patient education materials
- Monthly meetings
- Information re: treatment resources
- Engagement of key advocates
- Support in developing systems for communication and workflow

Practice Coach



EHR Tools

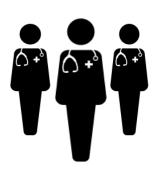
- Standard screening tool
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Performance Feedback

- Screening, brief intervention, AUD Rx
- Prevalence of unhealthy alcohol use
- Liver Outcomes

TAILORED PRACTICE FACILITATION

Hepatology Teams





- Content training
- Patient education materials
- Monthly meetings
- Information re: treatment resources
- Engagement of key advocates
- Support in developing systems for communication and workflow

Practice Coach



EHR Tools

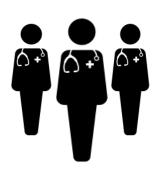
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TAILORED PRACTICE FACILITATION

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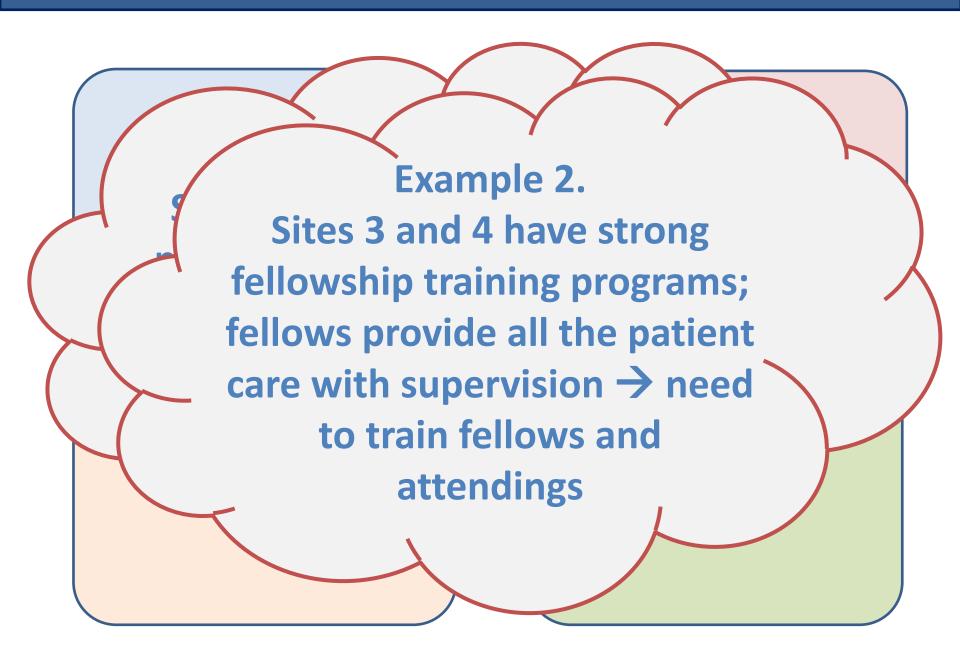
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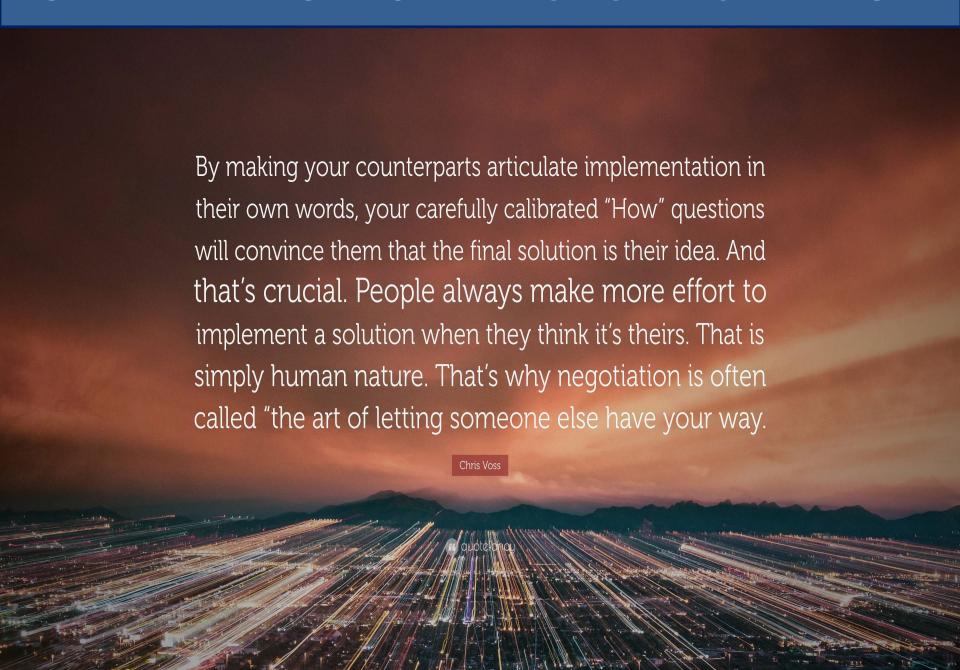
TAILORED ACCORDING TO SITES



WHERE WE ARE NOW

- Feedback from semi-structured interviews with clinical stakeholders at 4 VA liver clinics was useful for refining a practice facilitation implementation intervention when analyzed rapidly using RAP!!
- Currently testing the revised intervention which:
 - Capitalizes on key facilitators: strong context for change, leadership support, foundations in both alcohol use and QI, and key advocates for the importance.
 - Addresses key barriers: particularly re: knowledge, skills, attitudes, and role changes.

ONE FINAL NOTE ON PRACTICE FACILITATION



BIRD'S EYE VIEW SUMMARY

- We work with clinics to integrate evidence-based care for unhealthy alcohol use (and other substance use—particularly opioids) using implementation science principles and strategies
 - We've seen big successes + learned to address challenges!
- Our research is generally mixed methods, which is key to iterative adaptation of implementation efforts
 - You saw some of this in our refining of the liver clinic intervention, but I have more examples if you want to know
- Our efforts have helped get alcohol SBI (and pharmacotherapy) on the VA's primary care and liver agendas:
 - CFIR, formative evaluation, and RAP = key

OTHER RELATED WORK



Addressing Inequity

- ➤ New NIDA R01 (Chen/Williams
 - Mixed methods
 - Guided by Critical Race Theory
- Operationally-partnered VA research
 - ➤ Led by Jess Chen/Rachel Bachrach
 - Qualitative inquiry to understand high and low performing sites on AUD pharm and MOUD

Implementing Medications for OUD

- Patient Safety Center
 - > VA Primary Care
 - Internal Facilitation
 - Evaluation Submitted for Publication
- > CHAMP—NIMH HEAL Study
 - ➤ 12 Primary Care Clinics Nationally
 - > External Practice Faciltiation
 - Recent pub on OUD screening (<u>Austin</u> et al JGIM)



Questions?

UNSOLICITED WORDS OF WISDOM

deas are easy. Implementation is hard. Guy Kawasaki



