



Influence of a targeted performance measure for brief intervention on gender differences in receipt of brief intervention among patients with unhealthy alcohol use in the Veterans Health Administration☆☆☆☆

Emily C. Williams^{a,d,f,*}, Gwen T. Lapham^f, Anna D. Rubinsky^g, Laura J. Chavez^h, Douglas Berger^{c,e}, Katharine A. Bradley^{b,c,e,f}

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

^b Center of Excellence for Substance Abuse Treatment and Education (CESATE), Veterans Affairs (VA) Puget Sound Health Care System, Seattle, WA, United States

^c General Medicine Service, Veterans Affairs (VA) Puget Sound Health Care System, Seattle, WA, United States

^d Department of Health Services, University of Washington, Seattle, WA, United States

^e Department of Medicine, University of Washington, Seattle, WA, United States

^f Kaiser Permanente Washington Health Research Institute, Seattle, WA, United States

^g The Kidney Health Research Collaborative, University of California, San Francisco and San Francisco VA Medical Center, San Francisco, CA, United States

^h Ohio State University, School of Public Health, Columbus, OH, United States

ARTICLE INFO

Article history:

Received 14 March 2017

Received in revised form 9 May 2017

Accepted 18 July 2017

Available online xxxx

Keywords:

Alcohol

Brief intervention

Women

Gender

Alcohol use disorders

Disparities

ABSTRACT

Aims: Women are less likely than men to receive brief intervention (BI) for unhealthy alcohol use. In 2007, the U.S. Veterans Health Administration (VA) used a national performance measure to implement BI. Although AUDIT-C scores ≥ 3 for women and ≥ 4 for men optimize sensitivity and specificity for identifying unhealthy alcohol use, VA's performance measure required BI only among a targeted subgroup defined by a non-gender-specific score threshold (AUDIT-C ≥ 5). This may have influenced gender differences in receipt of BI among those optimally eligible for BI. Therefore, we evaluate differences in proportions of women and men offered BI before and after BI implementation.

Methods: National secondary chart review data (7/06–6/10) identified all outpatients with unhealthy alcohol use for whom BI would be indicated (AUDIT-C ≥ 3 women, ≥ 4 men). Logistic regression, including a time-by-gender interaction, estimated the prevalence and 95% confidence interval (CI) of BI for women and men pre- and post-implementation.

Findings: Among patients optimally eligible for BI ($n = 51,272$, 8206 women and 43,066 men), the prevalence of BI increased more steeply for men than women after implementation (interaction p -value < 0.0001). Pre-implementation rates of BI were 21% (95% CI, 18–24) for women and 26% (95% CI, 24–29) for men, and post-implementation rates were 32% (95% CI, 30–34) for women and 47% (95% CI, 45–49) for men.

Conclusions: Healthcare systems implementing BI with performance measures may wish to consider that specifying a single alcohol screening threshold for men and women may increase gender differences in receipt of BI among patients likely to benefit.

© 2017 Published by Elsevier Inc.

☆ Sources of support: Data for this study were provided by the VA Office of Analytics and Business Intelligence. This work was supported by the VA Substance Use Disorders Quality Enhancement Research Initiative (QLP 59-047; Williams PI). Dr. Williams is supported by a Career Development Award from VA HSR&D (CDA 12-276), and Dr. Bradley is supported by a mid-career mentorship award from NIAAA (K24-AA022128). Views expressed in this article are those of the authors and do not necessarily represent the views of the Department of Veterans Affairs, the University of Washington, or Kaiser Permanente Washington Health Research Institute.

☆☆ Contributors: All authors contributed to the article. ECW served as the principal investigator of the study, guiding all aspects of study design, analysis, interpretation, and preparation of the manuscript prior to submission and serving as the lead author of the manuscript. KAB served as senior investigator and senior author guiding analytic design and interpretation throughout the study; ECW and GTL conducted all data analyses; ADR contributed to data management and analysis; LJC and DB contributed to study design and interpretation. All authors contributed to study design and interpretation reviewed and contributed to iterative drafts of the manuscript prior to submission.

★ Acknowledgments and competing interests: The views expressed in this article are those of the authors and do not necessarily reflect the position or policy of the Department of Veterans Affairs, the University of Washington, Kaiser Permanente Washington Health Research Institute, or Ohio State University. All authors declare no potential competing interests. This study, including a HIPAA waiver of written consent, was approved by Institutional Review Board at VA Puget Sound.

* Corresponding author at: Health Services Research & Development (HSR&D) Center of Innovation for Veteran-Centered and Value-Driven Care, Veterans Affairs (VA) Puget Sound Health Care System, Seattle, WA, United States.

E-mail addresses: Emily.Williams3@va.gov (E.C. Williams), Lapham.g@ghc.org (G.T. Lapham), Anna.Rubinsky@va.gov (A.D. Rubinsky), Chavez.105@osu.edu (L.J. Chavez), douglas.berger@va.gov (D. Berger), Bradley.k@ghc.org (K.A. Bradley).

1. Introduction

Brief intervention for primary care patients with unhealthy alcohol use identified by population-based alcohol screening reduces drinking (Jonas et al., 2012), is widely recommended (Moyer, 2013; National Institute on Alcohol Abuse and Alcoholism, 2007), and considered a top prevention priority (Maciosek et al., 2006). Despite strong recommendations for its use and rigorous tests of diverse implementation strategies, implementing brief intervention into care has proven challenging (Nilsen, Aalto, Bendtsen, & Seppa, 2006; Williams et al., 2011). However, the U.S. Veterans Health Administration (VA) has had success implementing first population-based alcohol screening and then brief intervention for screen-positive patients using national performance measures linked to financial incentives for network directors (Bradley et al., 2006; Lapham et al., 2012; Williams et al., 2014). These successes have highlighted performance measurement as a potentially successful implementation strategy (Williams et al., 2011) and the VA as a leader in implementation (Moyer & Finney, 2010).

In recent years, both in and outside of the U.S., national guidelines (National Health Service, 2010) and/or policies (Bendtsen et al., 2016; Centers for Medicare and Medicaid Services, 2011; HealthCare.gov, 2013a, 2013b) have incentivized implementation of brief intervention. Thus, healthcare systems are increasingly implementing this clinical service. In this context, the performance measure used by the VA may be replicated in other systems. Indeed, in collaboration with the Centers for Medicare & Medicaid Services, the Joint Commission developed a brief intervention quality measure similar to VA's that is recommended as a common national hospital performance measure (The Joint Commission, 2016). Thus, understanding intended and unintended consequences of VA's performance measure may optimize implementation of brief intervention across systems.

One important aspect to understand when evaluating implementation efforts is "reach," which includes both the extent to which the target population for the intervention receives it and the extent to which the intervention is received equitably across sub-populations of the eligible population (Fitzgerald, Angus, Emslie, Shipton, & Bauld, 2016; Glasgow, McKay, Piette, & Reynolds, 2001; Glasgow, Vogt, & Boles, 1999). Historically, while randomized controlled trials of brief intervention suggest similar efficacy among women and men with unhealthy alcohol use (Fleming, Barry, Manwell, Johnson, & London, 1997; Fleming et al., 2000; Gebara, Bhona, Ronzani, Lourenco, & Noto, 2013; Kaner, Heather, Brodie, Lock, & McAvoy, 2001; Manwell, Fleming, Mundt, Stauffacher, & Barry, 2000), women have been less likely than men to receive brief interventions in practice (Bertakis & Azari, 2007; Burman et al., 2004; Kaner et al., 2001; Volk, Steinbauer, & Cantor, 1996). These differences have been hypothesized to result from increased stigma regarding alcohol use by women and the historically higher—though now increasingly equal (Slade et al., 2016)—prevalence of alcohol use disorders among men (Weisner & Schmidt, 1992).

Performance measurement is promoted as a means for incentivizing quality care via transparency and feedback (Austin, McGlynn, & Pronovost, 2016). Because it can help standardize practice, performance measurement also holds promise for reducing healthcare disparities (Institute of Medicine, 2006). However, the ability of performance measurement to realize these goals will depend on the extent to which measures are valid and well-specified (Pearson et al., 2002; Saitz, 2010) and the extent to which they do not result in unintended consequences (Austin et al., 2016; Chassin, Loeb, Schmaltz, & Wachter, 2010). It is unknown whether and how VA's performance measure for brief intervention influenced gender differences in receipt of brief intervention.

The performance measure used by VA to implement brief intervention targets only a sub-population of the larger population of optimally eligible patients. Specifically, although AUDIT-C scores ≥ 3 for women and ≥ 4 for men optimize sensitivity and specificity for identifying unhealthy alcohol use (Bradley et al., 2003; Bradley et al., 2007; Bush, Kivlahan, McDonnell, Fihn, & Bradley, 1998), VA's performance measure

requires documentation of brief intervention for all patients with AUDIT-C scores ≥ 5 . While the decision to use a single cut-point was made to minimize the clinical burden of false-positive screens (Lapham et al., 2012), it could have inadvertently increased gender differences in receipt of brief intervention among patients likely to benefit.

Thus, among the total population of optimally eligible patients with unhealthy alcohol use, as well as among subpopulations of patients who were and were not targeted by VA's implementation, we describe the proportion of women and men who were offered brief intervention both before and after implementation and evaluate whether gender differences in receipt of brief intervention changed in relation to implementation of brief intervention with a performance measure.

2. Materials and methods

2.1. Data source and study sample

This national cross-sectional study used secondary chart review data collected by a VHA independent contractor, West Virginia Medical Institute (WVMI), through the External Peer Review Program (EPRP) 7/1/2006–11/30/2010. Each month, EPRP randomly samples both inpatients and outpatients at every VA medical center for standardized record review to monitor facility-level adherence to national performance measures and other recommended care. In order to monitor gender- and disease-specific care, EPRP oversamples patients with specific chronic diseases and women ages 20–69. Outpatients eligible for each month's EPRP sample include those with an outpatient visit in the month preceding medical record review and another outpatient visit 13–24 months prior to the date of record review to establish VA care engagement. Patients included in the current fiscal year's EPRP sampling are not eligible. Demographic and diagnostic information were obtained from the VA's National Patient Care Databases (NPCD) and Patient Treatment Files (PTF). The study, including waivers of both informed consent and HIPAA authorization, was approved by the VA Puget Sound IRB.

Patients were included in the *total study sample* if they screened positive on their first documented AUDIT-C at optimal screening thresholds for unhealthy alcohol use (≥ 3 points for women and ≥ 4 points for men) (Bradley et al., 2003; Bush et al., 1998) and had at least 30 days between alcohol screening and chart abstraction to allow time for documentation of brief intervention. Two non-overlapping sub-samples of the total study sample were defined based on whether they were targeted by implementation of brief intervention. The first—*patients not targeted by VA's performance measure*—included patients who screened positive for mild unhealthy alcohol use (women with AUDIT-C scores of 3–4 and men with AUDIT-C scores of 4) but were not targeted by the performance measure. The second—*patients targeted by VA's performance measure*—included patients with AUDIT-C scores ≥ 5 , the denominator of VA's brief intervention performance measure.

2.2. Measures

Documented brief intervention was defined as (1) advice to abstain from drinking or drink within recommended limits and/or (2) feedback linking alcohol use to the patient's specific or general health, documented in the electronic medical record. These elements of brief intervention are consistent with those offered in randomized controlled trials of its efficacy (Whitlock, Polen, Green, Orleans, & Klein, 2004), and documentation of these elements is required to meet VA's performance measure (Williams et al., 2014) and often facilitated with electronic clinical decision support (Williams et al., 2016). Gender was based on administrative documentation of male or female sex.

In preparation for the brief intervention performance measure, EPRP started monitoring receipt of brief intervention on 7/1/06, and VA's performance measure for brief intervention was announced on 10/1/07 (Williams et al., 2014). Patients were categorized into 2 groups based on whether their positive alcohol screen occurred before (7/1/2006–9/

Download English Version:

<https://daneshyari.com/en/article/4932248>

Download Persian Version:

<https://daneshyari.com/article/4932248>

[Daneshyari.com](https://daneshyari.com)