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Clinical Practice Guidelines for PTSD

Clinical practice guidelines (CPGs) offer treatment recommendations informed through a systematic process that includes an evidence review and application of decisional rules (Brignardello-Petersen et al., 2021). They are intended to offer patients and providers choices in determining the most effective treatments that are consistent with a patient's values and preferences. In 2011, the National Academy of Medicine (formerly called the Institute of Medicine, or IOM) published a seminal book specifying criteria for what makes a guideline trustworthy (IOM, 2011), the most critical of which was that guidelines should be based on evidence and not clinical consensus. Other criteria included convening a panel of experts from different disciplines, a consideration of patient subgroups and preferences, a transparent process that works to reduce bias and conflict of interest, the inclusion of ratings of the quality of evidence and strength of outcome, and that guidelines should be revised as new evidence emerges.

The literature on guidelines for PTSD includes three types of materials: reviews of guidelines, articles about the use of guidelines, and articles about the impact of guideline use. In addition, there are the guidelines themselves.

Current Clinical Practice Guidelines for PTSD

In 2023, the Department of Veterans Affairs (VA) and the Department of Defense (DoD) updated their CPG for the Management of Posttraumatic Stress

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Disorder and Acute Stress Disorder (Department of Veterans Affairs and Defense, 2023). All VA/DoD CPGs follow a standardized process informed by the IOM report. Recommendations followed the Grading of Recommendations Assessment, Development and Evaluation (GRADE; Siemieniuk & Guyatt, nd) which considers four domains that contribute to the strength of the recommendations: confidence in the magnitude of the estimate of effect; balance of desirable and undesirable outcomes; patient values and preferences; and other considerations such as resource use, equity, and acceptability. According to GRADE, a For or Against recommendation can either be Strong (specified as "We recommend...") or Weak (specified as, "We suggest..."). When there is limited or inconclusive evidence, a Neither for nor against recommendation can be made (specified as "There is insufficient evidence to recommend for or against"). For the VA/DoD CPG, the Workgroup determined the critical outcome to be clinician-rated PTSD symptoms. Other important outcomes included self-reported PTSD symptoms and other clinical outcomes such as dropout and comorbid symptoms, quality of life, and safety.

There are four other current national or international guidelines for PTSD from the American Psychological Association (APA, 2017), International Society for Traumatic Stress Studies (ISTSS, 2018), National Institute for Health and Care Excellence (NICE, 2018), and Phoenix Australia Centre for Posttraumatic Mental Health (Phoenix Australia, 2021).

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Reviews of Clinical Practice Guidelines for PTSD

Readers can review each guideline to determine its scope and key questions, as well as the specific processes for the evidence review, determination of study quality, and procedures for making a recommendation. Two “Guide to Guidelines” papers ([Forbes et al., 2010](#); [Hamblen et al., 2019](#)), compared the specific methodologies used in each CPG and provided a side-by-side comparison of the recommendations (note that since the publication of Hamblen et al., the Phoenix Australia CPG has been updated and the APA CPG is currently under revision). One aspect that stands out is the increase in methodological rigor in the newer CPGs reviewed by Hamblen as compared to the older CPGs reviewed by Forbes. For example, in Forbes, none of the CPGs used GRADE whereas in Hamblen all the CPGs used GRADE, or a procedure based on GRADE.

In 2021, [Martin and colleagues \(2021\)](#) published a systematic review comparing the quality of CPGs for adults with PTSD. The authors identified 14 CPGs that focused on stress, PTSD or PTSD-related nightmares, 5 of which were published within 5 years of the evidence review. Each CPG was rated with the AGREE II instrument, a validated tool that rates 23 items in six domains: scope and purpose; stakeholder involvement; rigor of development; clarity and presentation; applicability; and editorial independence ([Brouwers et al., 2016](#)). All of the guidelines reviewed in Hamblen 2019 were recommended for use (except the ISTSS guideline, which was recommended with modifications because Martin et al. were unable to review the complete source materials). When reading this review, it is important to consider that only one rater scored the criteria and each domain seems to be given equal weight even though some domains (e.g., rigor of development) are likely more important than others (e.g., applicability, which focuses on barriers to implementation).

Knowledge and Use of Guidelines

For CPGs to have an impact on patient outcomes, clinicians need to be aware of their existence and they have to use them. Following the release of APA’s 2017 CPG, APA conducted a web-based survey of psychologists to learn about their awareness, attitudes and adoption of the PTSD guideline ([Purtle et al., 2020](#)). Five hundred ninety-one members (29.8% response rate) responded to a survey link and 407 who were currently providing clinical services to adults with PTSD were retained in the analyses. Only 17% reported that they were familiar with the PTSD CPG, and only 11% said they used the guideline to inform their clinical practice ([Purtle et al., 2020](#)). In a subsequent paper ([Kwon et al., 2023](#)), additional analyses identified subgroups of psychologists by the type of information they use to inform clinical decision making such as colleagues, empirical literature, professional societies, and guidelines. Forty-five percent reported no use of guidelines or information from government or professional societies and minimal use of systematic reviews; their main source of information came from colleagues.

A study of 688 community providers raises questions about whether clinicians can accurately report on whether they are, in fact, delivering guideline-concordant care ([Finley et al., 2019](#)). Although over half of clinicians reported the use of recommended treatments, far fewer endorsed using one of the core-treatment

components, received prior training in the treatment, or adhered to a treatment manual, suggesting they were unlikely to deliver these treatments with fidelity to the models.

A survey by the RAND Corporation of just under 1,500 military providers, who had treated a patient with PTSD in the last 30 days, found that 59% said they selected one of the recommended psychotherapies as their primary approach ([Hepner et al., 2017](#)). Guideline-concordant care was highest among doctoral-level psychologists (79%). Among prescribers, nearly 90% said they prescribed one of the first-line medications but 11% endorsed prescribing a potentially harmful medication such as a benzodiazepine. These high numbers suggest that the use of guideline-concordant care is much greater in DoD than in civilian settings. Given Finley et al.’s (2019) finding that providers who said they used an approach did not use core elements of that approach, it is possible that reports of CPG use may be higher than actual use. We were unable to identify survey data of VA providers’ knowledge or use of CPGs.

Since 2008, all VA patients with PTSD are required to be offered a guideline-concordant treatment (Department of Veteran Affairs, 2008). While there is no comparable study in VA on provider awareness and use of guidelines, clinical data (specifically treatment note templates) provides information on the use of specific treatments for Veterans who receive their care in VA. A recent study of over 260,000 Veterans, who initiated PTSD treatment in VA from 2017 to 2019, found that 11.6% received a guideline-concordant psychotherapy within their first year of being diagnosed ([Cameron et al., 2023](#)).

The reasons why clinicians may not use guidelines optimally are multifaceted. A systematic review of qualitative studies on provider perceptions of barriers and facilitators of psychotherapies recommended in clinical practice guidelines across mental health disorders identified five factors that impact the delivery of care ([Bell et al., 2022](#)); most of the 18 studies focused on Prolonged Exposure (PE) or Cognitive Processing Therapy (CPT) for PTSD or Cognitive-Behavioral Therapy (CBT) for depression or anxiety disorder. Confidence in the evidence was assessed using a version of GRADE for rating qualitative studies. For PTSD, the researchers found high confidence in the factor focused on provider perceptions of a patient’s perceived readiness for treatment. In many cases, providers mentioned that they believed pretreatment preparation was required to provide stabilization or improve stress tolerance to use an evidence-based treatment. Other factors for PTSD were rated as having moderate confidence and included therapist training and self-efficacy; outcome expectancies; organizational barriers (e.g., lack of time, lack of trained providers); and professional support. Another systematic review ([Finch, 2020](#)) that was focused solely on PTSD identified similar themes but also included a concern that psychotherapy manuals are too inflexible and cannot be individualized to meet clients’ specific needs.

In 2020, VA convened a workgroup to provide recommendations on improving reach and fidelity of guideline-concordant treatments ([Crowe et al., 2020](#)). The workgroup suggested four strategies that included enhancing leadership support, improving policies and support for training, using clinical data to monitor outcomes and provide additional consultation as needed, and increasing consumer awareness of clinical practice guidelines.

While most research focuses on increasing provider awareness of CPGs as a strategy to improve implementation, some work has studied different approaches to motivate patients themselves to seek more information about treatment. [Wertz and colleagues \(2020\)](#) studied the impact of changing several different headings on APA's CPG website to learn which types of messages had the largest impact on consumer behavior. On the landing and treatment pages, changes in headings made no difference in whether users engaged with the site. For example, there were no differences between "Find a treatment supported by the best available research" and "Find a treatment to help you take back your life". However, there were differences in engagement on the page for patients and families, where "Treatment works: say good-bye to symptoms" led to the highest click rate to find a psychologist, lowest bounce rate, and longest session duration.

Effects of Guideline Implementation in Practice

Although CPGs recommend the treatments that have the best outcomes in research studies, few studies have examined how these treatments work in clinical practice. Using data from VA's corporate data warehouse, [Maguen and colleagues \(2023\)](#) compared outcomes in VA patients who received PTSD treatment between 2007 and 2017. They compared (CPT) and (PE) therapy, two treatments that received strong recommendations in all current guidelines (Hamblen et al., 2019), to matched controls who received other individual psychotherapy. Among Veterans who attended 8 or more sessions, completer analyses of PTSD Checklist (PCL) data showed that those who received CPT improved 6.4 more points and those who received PE improved 9.7 more points relative to those who received other psychotherapy.

Another approach to considering the effectiveness of CPGs is to examine their impact on healthcare settings, such as cost-effectiveness. Cost is not a consideration in most guidelines, although feasibility of delivering a treatment can be a factor. However, more cost-effective treatments are more likely to receive organizational support, which has been shown to be a facilitator of implementation. [Mihalopoulos and colleagues \(2015\)](#) examined the cost-effectiveness of the Australian treatment guideline (Phoenix Australia, 2013) that included recommended trauma-focused treatments and selective serotonin reuptake inhibitors. Using economic modeling that considered both quality-adjusted life years (mortality and morbidity) and disability-adjusted life years (premature death and years of healthy life lost to premature death), there were cost savings for trauma-focused treatments as compared to treatment as usual.

Conclusions

The development of CPGs has changed considerably over the past 25 years. The first PTSD practice guideline was based on expert consensus ([Foa, Davidson, & Francis, 1999](#)). Today, our PTSD guidelines are based on scientific evidence and follow a transparent process and rigorous methodological standards (IOM, 2011). As a result, there is considerable consistency in the recommendations across the CPGs (Hamblen et al., 2019). Unfortunately, more research is needed on the dissemination and implementation of the CPGs and on the impacts of implementing guideline-concordant care. Far too few clinicians are aware of the CPGs and even fewer use guidelines to inform clinical practice.

Current Clinical Practice Guidelines

Author, Date	Guideline Name
American Psychological Association, 2017	Clinical Practice Guideline for the Treatment of PTSD in Adults
Department of Veterans Affairs/ Department of Defense, 2023	Clinical Practice Guideline for the Management of Posttraumatic Stress Disorder and Acute Stress Disorder
International Society for Traumatic Stress Studies, 2018	ISTSS Posttraumatic Stress Disorder Prevention and Treatment Guidelines: Methodology and Recommendations
National Institute for Health and Care Excellence, 2018	Post-traumatic Stress Disorder: Management (update)
Phoenix Australia, 2021	Australian Guidelines for the Treatment of Acute Stress Disorder and Posttraumatic Stress Disorder

FEATURED ARTICLES

Bell, L. V., Hogan, E. A., Fitzgerald, S. F., Saunders, E. R., Gerwing, A. M. A., & Rash, J. A. (2022). **Barriers and facilitators of healthcare provider uptake of clinical practice guideline recommendations for the management of common mental health concerns: A qualitative evidence synthesis.** *Canadian Psychology/Psychologie Canadienne*, 63(2), 179–202. doi:10.1037/cap0000315

Clinical practice guidelines synthesize the best available evidence and recommend treatments with the intention of enhancing client outcomes. Despite evidence for effectiveness, guideline-recommended treatments are often under-utilized. We conducted a systematic review of six bibliographic databases published prior to May 6, 2020. Qualitative studies that reported on mental healthcare provider perceived barriers and facilitators to the delivery of evidence-based treatments (EBTs) recommended by practice guidelines for the management of depression, anxiety-related disorders, and posttraumatic stress disorder (PTSD) within usual care were eligible. A meta-synthesis approach was used to synthesize barriers and facilitators that were coded in accordance with the Theoretical Domains Framework. Confidence in evidence was graded with the Grading of Recommendation, Assessment, Development, and Evaluation-Confidence in the Evidence from Reviews of Qualitative Research (GRADE-CERQual) approach. Eighteen studies that reported on 705 mental healthcare providers (primarily psychologists and social workers) met inclusion criteria. Evidence synthesized pertained primarily to the delivery of (a) cognitive processing therapy (CPT) and prolonged exposure (PE) for the management of PTSD among Veterans; and (b) cognitive behavioral therapy (CBT) for the management of depression and anxiety-related disorders. Factors that reliably influenced the delivery of EBTs included the following: (a) knowledge and self-efficacy; (b) anticipation of client outcomes in the presence of complex comorbidity; (c) client preference and readiness to engage in treatment; (d) available time, presence of trained staff, and institutional policies; and (e) availability of professional supports. Findings could

influence the delivery of EBPs but must be taken in context with the tripartite model of evidence-based practice.

Brignardello-Petersen, R., Carrasco-Labra, A., Guyatt, G. H. (2021). **How to interpret and use a clinical practice guideline or recommendation: Users' guides to the medical literature.** *JAMA*, 326(15), 1516–1523. doi:10.1001/jama.2021.15319
Importance: Clinicians may rely on recommendations from clinical practice guidelines for management of patients. *Observations:* A clinical practice guideline is a published statement that includes recommendations that are intended to optimize patient care. In the guideline development process, a panel of experts formulates recommendation questions that guide the retrieval of evidence that is used to inform the recommendations. Typically, methods of guideline development, a summary of the supporting evidence, and a justification of the panel's decisions accompany the recommendations. To use such guidelines optimally, clinicians must understand the implications of the recommendations, assess the trustworthiness of the development process, and evaluate the extent to which the recommendations are applicable to patients in their practice settings. Helpful recommendations are clear and actionable, and explicitly specify whether they are strong or weak, are appropriate for all patients, or depend on individual patients' circumstances and values. Rigorous guidelines and recommendations are informed by appropriately conducted, up-to-date systematic reviews that consider outcomes important to patients. Because judgments are involved in the interpretation of the evidence and the process of moving from evidence to recommendations, useful guidelines consider all relevant factors that have a bearing in a clinical decision and are not influenced by conflicts of interest. *Conclusions and relevance:* In considering a guideline's recommendations, clinicians must decide whether there are important differences between the factors the guideline panel has considered in making recommendations and their own practice setting.

Cameron, D., Shiner, B., O'Neill, A., & O'Neil, M. (2023). **Factors associated with engaging in evidence-based psychotherapy during the first year of posttraumatic stress disorder treatment between 2017 and 2019.** *Administration and Policy in Mental Health and Mental Health Services Research*, 50, 813–823. doi:10.1007/s10488-023-01280-z To address the burden of posttraumatic stress disorder (PTSD), the Veterans Health Administration (VHA) implemented evidence-based psychotherapies (EBPs) for PTSD at all VHA medical centers. Prior investigations show EBP utilization has increased following the initial nationwide implementation. However, most patients still do not engage in EBPs and those who do often have substantial delays between diagnosis and treatment which is associated with poorer treatment outcomes. The goal of the current study is to identify patient and clinical factors associated with initiating EBP and completing a minimally adequate dose of treatment within the first year of a new PTSD diagnosis. Overall, 263,018 patients started PTSD treatment between 2017 and 2019 and 11.6% ($n = 30,462$) initiated EBP during their first year of treatment. Of those who initiated EBP, 32.9% ($n = 10,030$) received a minimally adequate dose. Older patients were less likely to initiate EBP, but more likely to receive an adequate dose when they did initiate. Black, Hispanic/Latino/a, and Pacific Islander patients'

likelihood of initiating EBP was not significantly different than White patients, but these patients were less likely to receive an adequate dose. Patients with comorbid depressive disorders, bipolar disorder, psychotic disorders, or substance use disorders were less likely to initiate EBP, while patients reporting MST were more likely to initiate EBP. This study identifies several patient-level disparities that could be prioritized to increase EBP utilization. In our evaluation, most patients did not engage in EBP during their first year of PTSD treatment, which is consistent with previous evaluations of EBP utilization. Future research should focus on understanding the flow of patients from PTSD diagnosis to treatment to support effective PTSD care delivery.

Finley, E. P., Mader, M., Haro, E. K., Noël, P. H., Bernardy, N., Rosen, C. S., Bollinger, M., Garcia, H. A., Sherrieb, K., & Pugh, M. J. V. (2019). **Use of guideline-recommended treatments for PTSD among community-based providers in Texas and Vermont: Implications for the Veterans Choice Program.** *Journal of Behavioral Health Services and Research*, 46, 217–233. doi:10.1007/s11414-018-9613-z Implementation of the Veterans Choice Program (VCP) allows Veterans to receive care paid for by the Department of Veterans Affairs (VA) in community settings. However, the quality of that care is unknown, particularly for complex conditions such as posttraumatic stress disorder (PTSD). A cross-sectional survey was conducted of 668 community primary care and mental health providers in Texas and Vermont to describe use of guideline-recommended treatments (GRTs) for PTSD. Relatively few providers reported using guideline-recommended psychotherapy or prescribing practices. More than half of psychotherapists reported the use of at least one guideline-recommended psychotherapy for PTSD, but fewer reported the use of core treatment components, prior training in the GRT(s) they use, or adherence to a treatment manual. Suboptimal prescribing for PTSD patients was reported more commonly than optimal prescribing. Findings raise critical questions regarding how to ensure Veterans seeking PTSD care in community settings receive psychotherapy and/or prescribing consistent with clinical practice guidelines.

Hamblen, J. L., Norman, S. B., Sonis, J. H., Phelps, A. J., Bisson, J. I., Nunes, V. D., Megnin-Viggars, O., Forbes, D., Riggs, D. S., & Schnurr, P. P. (2019). **A guide to guidelines for the treatment of posttraumatic stress disorder in adults: An update** *Psychotherapy*, 56(3), 359–373. doi:10.1037/pst0000231 Clinical practice guidelines (CPGs) are used to support clinicians and patients in diagnostic and treatment decision-making. Along with patients' preferences and values, and clinicians' experience and judgment, practice guidelines are a critical component to ensure patients are getting the best care based on the most updated research findings. Most CPGs are based on systematic reviews of the treatment literature. Although most reviews are now restricted to randomized controlled trials, others may consider nonrandomized effectiveness trials. Despite a reliance on similar procedures and data, methodological decisions and the interpretation of the evidence by the guideline development panel can result in different recommendations. In this article, we will describe key methodological points for 5 recently released CPGs on the treatment of posttraumatic stress disorder in adults and highlight some of the differences in both the process and the subsequent recommendations.

Hepner, K. A., Farris, C., Farmer, C. M., Iyiewuare, P. O., Tanielian, T., Wilks, A., Robbins, M., Paddock, S. M., & Pincus, H. A. (2017). **Delivering clinical practice guideline—concordant care for PTSD and major depression in military treatment facilities.** Santa Monica, CA: RAND Corporation. Retrieved January 10, 2024, from https://www.rand.org/pubs/research_reports/RR1692.html

Providing accessible, high-quality care for psychological health (PH) conditions, such as posttraumatic stress disorder (PTSD) and major depressive disorder (MDD), is important to maintaining a healthy, mission-ready force. It is unclear whether the current system of care meets the needs of service members with PTSD or MDD, and little is known about the barriers to delivering guideline-concordant care. RAND used existing provider workforce data, a provider survey, and key informant interviews to (1) provide an overview of the PH workforce at military treatment facilities (MTFs), (2) examine the extent to which care for PTSD and MDD in military treatment facilities is consistent with Department of Veterans Affairs/Department of Defense clinical practice guidelines, and (3) identify facilitators and barriers to providing this care. This report provides a comprehensive assessment of providers' perspectives on their capacity to deliver PH care within MTFs and presents detailed results by provider type and service branch. Findings suggest that most providers report using guideline-concordant psychotherapies, but use varied by provider type. The majority of providers reported receiving at least minimal training and supervision in at least one recommended psychotherapy for PTSD and for MDD. Still, more than one-quarter of providers reported that limits on travel and lack of protected time in their schedule affected their ability to access additional professional training. Finally, most providers reported routinely screening patients for PTSD and MDD with a validated screening instrument, but fewer providers reported using a validated screening instrument to monitor treatment progress.

Kwon, N., Stewart, R. E., Wang, X., Marzalik, J. S., Bufka, L. F., Halfond, R. W., & Purtle, J. (2023). **Where do psychologists turn to inform clinical decisions? Audience segmentation to guide dissemination strategies.** *Implementation Research and Practice, 4*. doi:10.1177/26334895231185376 *Background:* Audience segmentation is an analysis technique that can identify meaningful subgroups within a population to inform the tailoring of dissemination strategies. We have conducted an empirical clustering audience segmentation study of licensed psychologists using survey data about the sources of knowledge they report most often consulting to guide their clinical decision-making. We identify meaningful subgroups within the population and inform the tailoring of dissemination strategies for evidence-based practice (EBP) materials. *Method:* Data come from a 2018-2019 web-based survey of licensed psychologists who were members of the American Psychological Association (APA; $N = 518$, response rate = 29.8%). Ten dichotomous variables assessed sources that psychologists regularly consult to inform clinical decision-making (e.g., colleagues, academic literature, and practice guidelines). We used latent class analysis to identify segments of psychologists who turn to similar sources and named each segment based on the segment's most salient characteristics. *Results:* Four audience segments were identified: the No-guidelines (45% of psychologists), Research-driven (16%), Thirsty-for-knowledge (9%), and No-reviews (30%). The four segments differed not only in their preferred sources of knowledge, but also in the types

of evidence-based posttraumatic stress disorder (PTSD) treatments they provide, their awareness and usage intention of the APA PTSD clinical practice guideline, and attitudes toward clinical practice guidelines. *Conclusion:* The results demonstrate that licensed psychologists are heterogeneous in terms of their knowledge-seeking behaviors and preferences for knowledge sources. The distinctive characteristics of these segments could guide the tailoring of dissemination materials and strategies to subsequently enhance the implementation of EBP among psychologists.

Maguen, S., Madden, E., Holder, N., Li, Y., Seal, K. H., Neylan, T. C., Lujan, C., Patterson, O. V., DuVall, S. L., & Shiner, B. (2023). **Effectiveness and comparative effectiveness of evidence-based psychotherapies for posttraumatic stress disorder in clinical practice.** *Psychological Medicine, 53*(2), 419–428. doi:10.1017/S0033291721001628 *Background:* While evidence-based psychotherapy (EBP) for posttraumatic stress disorder (PTSD) is a first-line treatment, its real-world effectiveness is unknown. We compared cognitive processing therapy (CPT) and prolonged exposure (PE) each to an individual psychotherapy comparator group, and CPT to PE in a large national healthcare system. *Methods:* We utilized effectiveness and comparative effectiveness emulated trials using retrospective cohort data from electronic medical records. Participants were Veterans with PTSD initiating mental healthcare ($N = 265\ 566$). The primary outcome was PTSD symptoms measured by the PTSD Checklist (PCL) at baseline and 24-week follow-up. Emulated trials were comprised of 'person-trials,' representing 112 discrete 24-week periods of care (10/07-6/17) for each patient. Treatment group comparisons were made with generalized linear models, utilizing propensity score matching and inverse probability weights to account for confounding, selection, and non-adherence bias. *Results:* There were 636 CPT person-trials matched to 636 non-EBP person-trials. Completing ≥ 8 CPT sessions was associated with a 6.4-point greater improvement on the PCL (95% CI 3.1-10.0). There were 272 PE person-trials matched to 272 non-EBP person-trials. Completing ≥ 8 PE sessions was associated with a 9.7-point greater improvement on the PCL (95% CI 5.4-13.8). There were 232 PE person-trials matched to 232 CPT person-trials. Those completing ≥ 8 PE sessions had slightly greater, but not statistically significant, improvement on the PCL (8.3-points; 95% CI 5.9-10.6) than those completing ≥ 8 CPT sessions (7.0-points; 95% CI 5.5-8.5). *Conclusions:* PTSD symptom improvement was similar and modest for both EBPs. Although EBPs are helpful, research to further improve PTSD care is critical.

Martin, A., Naunton, M., Kosari, S., Peterson, G., Thomas, J., & Christenson, J. K. (2021). **Treatment guidelines for PTSD: A systematic review.** *Journal of Clinical Medicine, 10*(18), 4175. doi:10.3390/jcm10184175 *Background:* The aim of this review was to assess the quality of international treatment guidelines for post-traumatic stress disorder (PTSD), and identify differences between guideline recommendations, with a focus on the treatment of nightmares. *Methods:* Guidelines were identified through electronic searches of MEDLINE, CINAHL, PubMed, Embase and Science Direct, as well as web-based searches of international guideline repositories, websites of psychiatric organisations and targeted web-searches for guidelines from the three most populous English-speaking countries in each continent. Data in relation

to recommendations were extracted and the AGREE II criteria were applied to assess for quality. *Results:* Fourteen guidelines, published between 2004–2020, were identified for inclusion in this review. Only five were less than 5 years old. Three guidelines scored highly across all AGREE II domains, while others varied between domains. Most guidelines consider both psychological and pharmacological therapies as first-line in PTSD. All but one guideline recommended cognitive behavioural therapy (CBT) as first-line psychological treatment, and selective serotonin reuptake inhibitors (SSRIs) as first-line pharmacological treatment. Most guidelines do not mention the targeted treatment of nightmares as a symptom of PTSD. Prazosin is discussed in several guidelines for the treatment of nightmares, but recommendations vary widely. Most PTSD guidelines were deemed to be of good quality; however, many could be considered out of date. Recommendations for core PTSD symptoms do not differ greatly between guidelines. However, despite the availability of targeted treatments for nightmares, most guidelines do not adequately address this. *Conclusions:* Guidelines need to be kept current to maintain clinical utility. Improvements are most needed in the AGREE II key domains of ‘applicability’, ‘rigour of development’ and ‘stakeholder involvement’. Due to the treatment-resistant nature of nightmares, guideline development groups should consider producing more detailed recommendations for their targeted treatment. More high-quality trials are also required to provide a solid foundation for making these clinical recommendations for the management of nightmares in PTSD.

Mihalopoulos, C., Magnus, A., Lal, A., Dell, L., Forbes, D., & Phelps, A. (2015). **Is implementation of the 2013 Australian treatment guidelines for posttraumatic stress disorder cost-effective compared to current practice? A cost-utility analysis using QALYs and DALYs.** *Australian and New Zealand Journal of Psychiatry, 49*(4), 360–376. doi:10.1177/0004867414553948

Objective: To assess, from a health sector perspective, the incremental cost-effectiveness of three treatment recommendations in the most recent Australian clinical practice guidelines for posttraumatic stress disorder (PTSD). The interventions assessed are trauma-focused cognitive behavioural therapy (TF-CBT) and selective serotonin reuptake inhibitors (SSRIs) for the treatment of PTSD in adults and TF-CBT in children, compared to current practice in Australia. *Method:* Economic modelling, using existing databases and published information, was used to assess cost-effectiveness. A cost-utility framework using both quality-adjusted life-years (QALYs) gained and disability-adjusted life-years (DALYs) averted was used. Costs were tracked for the duration of the respective interventions and applied to the estimated 12 months prevalent cases of PTSD in the Australian population of 2012. Simulation modelling was used to provide 95% uncertainty around the incremental cost-effectiveness ratios. Consideration was also given to factors not considered in the quantitative analysis but could determine the likely uptake of the proposed intervention guidelines. *Results:* TF-CBT is highly cost-effective compared to current practice at \$19,000/QALY, \$16,000/DALY in adults and \$8900/QALY, \$8000/DALY in children. In adults, 100% of uncertainty iterations fell beneath the \$50,000/QALY or DALY value-for-money threshold. Using SSRIs in people already on medications is cost-effective at \$200/QALY, but has considerable uncertainty around the costs and benefits. While there is a 13% chance of health loss there is

a 27% chance of the intervention dominating current practice by both saving dollars and improving health in adults. *Conclusion:* The three Guideline recommended interventions evaluated in this study are likely to have a positive impact on the economic efficiency of the treatment of PTSD if adopted in full. While there are gaps in the evidence base, policy-makers can have considerable confidence that the recommendations assessed in the current study are likely to improve the efficiency of the mental healthcare sector.

Purtle, J., Marzalik, J. S., Halfond, R. W., Bufka, L. F., Teachman, B. A., & Aarons, G. A. (2020). **Toward the data-driven dissemination of findings from psychological science.** *American Psychologist, 75*(8), 1052–1066. doi:10.1037/amp0000721

The public health impact of psychological science is maximized when it is disseminated clearly and compellingly to audiences who can act on it. Dissemination research can generate knowledge to help achieve this, but dissemination is understudied in the field of implementation science. As a consequence, the designs of dissemination strategies are typically driven by anecdote, not evidence, and are often ineffective. We address this issue by synthesizing key theory and findings from consumer psychology and detailing a novel research approach for "data-driven dissemination." The approach has 3 parts: (a) formative audience research, which characterizes an audience's awareness about, adoption of, and attitudes toward an intervention, as well as preferences for receiving information about it; (b) audience segmentation research, which identifies meaningful subgroups within an audience to inform the tailoring of dissemination strategies; and (c) dissemination effectiveness research, which determines the strategies that are most effective. This approach is then illustrated using the dissemination of the American Psychological Association's (APA, 2017) Clinical Practice Guideline for the Treatment of Posttraumatic Stress Disorder (PTSD) in Adults as a case study. Data are presented from a 2018-2019 survey of licensed APA-member psychologists who treat adults with PTSD ($n = 407$, response rate = 29.8%). We present survey findings on awareness about, attitudes toward, and adoption of the guideline and find significant differences across these domains between psychologists who do and do not regularly use clinical practice guidelines. We conclude by discussing future directions to advance dissemination research and practice.

Werntz, A., Bufka, L., Adams, B. E., & Teachman, B. A. (2020). **Improving the reach of clinical practice guidelines: An experimental investigation of message framing on user engagement.** *Clinical Psychological Science, 8*(5), 825-838. doi:10.1177/2167702620920722

Despite strong evidence for the efficacy of PTSD treatments, most affected individuals are not receiving these treatments, in part because they may not know that evidence-based treatments exist. The American Psychological Association published a website to disseminate information about their clinical practice guideline for treating PTSD. In Study 1, Google Optimize was used in a field study to examine whether altering the subheadings to three of the website pages would increase site visitor engagement. On the main page and page describing treatments, no subheading alterations improved engagement. On the Patients and Families page, the subheading "say goodbye to symptoms" improved engagement on three outcome variables, including clicking a link to find a psychologist (though there were a

small number of clicks). In a preregistered conceptual replication in a sample not actively seeking information about the PTSD guideline ($N=578$), results did not replicate. Results highlight challenges of evidence-based treatment information dissemination.

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