



PTSD *Research Quarterly*

ADVANCING SCIENCE AND PROMOTING UNDERSTANDING OF TRAUMATIC STRESS

Published by:

National Center for PTSD
VA Medical Center (116D)
215 North Main Street
White River Junction
Vermont 05009-0001 USA

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All issues of the PTSD Research Quarterly are available online at: www.ptsd.va.gov

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Massed and Brief Treatments for PTSD

In recent years, there has been increasing interest in PTSD treatments that can be delivered in a short period. Being able to deliver treatment in a short amount of time may increase client engagement in treatment and thus reduce dropout rates. In addition, there is increased recognition that PTSD treatments are needed in settings in which only short-term treatments are feasible, including 30-day residential treatment programs, intensive outpatient programs (IOPs), inpatient settings, and primary care. As a result of the increased interest and need for short-term PTSD treatments, there is a growing body of research examining evidence-based PTSD treatments delivered using a massed format (also known as accelerated service delivery), as well as brief PTSD treatments. This issue of the *PTSD Research Quarterly* provides a bibliography of key studies examining massed and brief PTSD treatments and provides directions for future work in this burgeoning area. Given the extent of literature in this area, we focus on the treatments with the strongest recommendation in the VA/DoD Clinical Practice Guidelines.

Massed PTSD treatments

Although the current first-line recommended evidence-based psychotherapies (EBPs) for PTSD (i.e., prolonged exposure (PE), cognitive processing therapy (CPT), and eye movement desensitization and reprocessing therapy (EMDR)) typically have been delivered in 8-18 weekly sessions, massed delivery of these interventions involves three or

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more sessions per week. Massed treatments have been delivered in clinical and research settings, both as stand-alone interventions or within intensive outpatient or residential programs that include additional programming. Much of the research to date on massed treatment has been conducted with military and Veteran samples. Although there are a limited number of randomized clinical trials (RCTs) to date examining massed treatment, data from these programs and other trial designs contribute to the growing evidence base for massed treatment.

Prolonged Exposure

Several large RCTs support the efficacy of massed PE. The first published study examined the differential effects of weekly PE therapy (10 sessions delivered over 8 weeks), massed PE (delivered in 10 sessions over 2 weeks), present-centered therapy (10 sessions over 8 weeks), and a minimal-contact control (MCC) on PTSD severity in a sample of 366 active-duty military personnel. Massed PE reduced PTSD symptom severity significantly more than MCC at a 2-week follow-up and was non-inferior to weekly PE (Foa et al., 2018). A more recent study in a similar military sample ($N = 234$) compared massed PE (15 90-minute sessions over 3 weeks) to an intensive outpatient program PE (IOP-PE) that included 15 full-day therapy sessions over 3 weeks with 8 treatment augmentations. At one month follow-up, both conditions showed significant improvements in PTSD symptoms with no differences between the two conditions. This

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finding suggests that the more intensive IOP-PE intervention was not necessary to improve outcomes, although participants in the massed-PE condition showed a slight increase in symptoms from 1-month to 6-month follow-up while the IOP-PE condition-maintained symptom improvement (Peterson et al., 2023). Both groups had high levels of treatment completion (70% IOP-PE; 77% massed PE).

Another large RCT with Australian Veterans and Service members across 12 health clinics found 2-week massed PE to be non-inferior to weekly 10-week PE (Dell et al., 2023a), with significantly more participants completing treatment in the massed PE condition. Treatment gains and non-inferiority were maintained at 12-month follow-up (Dell et al., 2023b). Data from a 2-week IOP for Veterans and Service members involving daily PE and adjunctive interventions demonstrated high retention (91%) and large effect size reductions in self-reported PTSD and depression symptoms after two weeks. Although there was a small increase in PTSD symptoms after 3 months and between 3 and 6 months, these stabilized and large reductions compared to baseline were maintained for up to 12 months (Yasinski et al., 2022).

There has been less study of massed PE in civilian samples. One open trial examined intensive PE (i-PE; 12 90-minute sessions over four days followed by four weekly 90-minute booster PE sessions) in patients with complex PTSD in a Dutch mental health clinic. Findings demonstrated significant reductions in PTSD symptoms with large effects that persisted through a 6-month follow-up assessment (Hendriks et al., 2018).

Cognitive Processing Therapy

The majority of research to date on massed CPT has occurred in military and Veteran samples in the context of structured programs that include additional interventions. Massed CPT was first studied in a small pilot open trial of a 2-week intensive program for Veterans and military personnel in which daily CPT was augmented with recreational activities and psychoeducational sleep classes (Bryan et al., 2018). There was a significant improvement in PTSD symptoms from pre- to post-treatment. By the 6-month follow-up, there was a significant increase in symptoms, although pre- to follow-up symptom changes remained significant.

Several studies report outcomes from military/Veteran IOPs offering CPT in 2- or 3-week massed formats along with adjunctive programming (e.g., coping skills, mindfulness, physical activity). Results show significant PTSD symptom improvements from baseline through 6- to 12-month follow-ups, with small increases in symptoms from posttreatment through follow-up (Goetter et al., 2021; Held et al., 2020). These findings support the efficacy of these IOP programs, although the effect of massed CPT alone cannot be determined.

Some research has explored outcomes of CPT alone in the context of treatment delivery within VA clinics. Weinstein and colleagues (2023) examined the effectiveness of CPT delivered in a massed format (3 or more times per week) in a VA outpatient clinic compared to patients matched on baseline self-reported PTSD symptoms, age, and sex who opted to receive weekly CPT. Patients who elected to engage in massed CPT were twice as likely to complete treatment (88.9%) as those who elected to engage in weekly CPT (44.4%). Moreover, those who received massed CPT on average completed treatment about 25% of the time as the patients who

received weekly CPT, and a higher percentage of those in massed CPT reported clinically significant improvement in self-reported PTSD symptoms. Another study examined data from a VA specialty clinic offering massed CPT (as well as PE) in a 2- and 4-week IOP format as well as weekly treatment. They found large treatment effect sizes for both IOP and weekly treatment, but rates of treatment completion were significantly higher for the IOP (87.3%) compared to weekly treatment (46.2%) (Yamokoskiet al., 2023). Taken together, these studies suggest the potential for massed treatment to improve treatment retention in clinical practice.

There is also some evidence that massed CPT can be delivered effectively in as little as one week. Several small open trial studies examined the delivery of one-week CPT in civilian samples, with large reductions in PTSD symptoms through the 3-month follow-up (Galovski et al., 2022; Held et al., 2022). In addition, a recently completed non-inferiority RCT examined a one-week combined group and individual CPT compared to standard CPT in an active-duty sample with results forthcoming (Wachen et al., 2024).

Prolonged Exposure + EMDR

There have been two published studies examining massed delivery of EMDR, but both studies have combined EMDR with other treatment components. Both studies tested a 2-week IOP intervention combining daily PE, EMDR, psychoeducation, and physical activity in European civilian samples. The first large open trial in a Dutch sample found a significant reduction in PTSD symptoms with large effects, with significant improvements maintained over 6 months (Van Woudenberg et al., 2018). A smaller replication study in a Norwegian clinic found similar significant effects maintained through the 3-month follow-up (Auren et al., 2022). Dropout was very low in both studies (0-2.3%). These results suggest that this IOP intervention is promising, although the standalone effect of EMDR remains untested.

Brief PTSD Treatments

Brief treatments (i.e., 6 or fewer sessions) can be delivered in settings where only a limited number of sessions are feasible (e.g., primary care, in-patient settings). Brief treatments are also an option for clients who are unwilling or unable to engage in more time-intensive treatments. Although there is growing evidence that PTSD treatment can be efficacious with less treatment dose than what was previously believed to be necessary, there are currently limited options for brief PTSD treatments that have strong research support. There is one brief treatment option that has strong, and growing, evidence and is included in the recently published clinical practice guidelines by VA/DoD.

Written exposure therapy (WET; Sloan & Marx, 2019) is a five-session treatment that has strong evidence to support its use in treating PTSD symptom severity (see, Sloan & Marx, 2024 for a review). Three RCTs have directly compared WET to more time-intensive evidence-based PTSD treatments. The first of these studies was published by Sloan et al. in 2018. This study sought to investigate whether WET was non-inferior to CPT+A (full CPT protocol that includes written accounts) in a sample of primarily civilian adults diagnosed with PTSD. Findings indicated that both treatments resulted in a significant reduction of PTSD symptom severity, and WET was non-inferior compared to the more time-intensive CPT+A.

To examine how well WET worked in the treatment of a military sample, Sloan and colleagues (2023) conducted a second non-inferiority study that compared WET to CPT (without written accounts) in the treatment of active-duty Service members diagnosed with PTSD. Findings indicated that WET was again non-inferior to CPT in PTSD symptom severity outcome, while participants randomized to both treatments displayed significant reductions in PTSD symptom severity. A more recently published RCT examined whether WET was non-inferior to PE in treating a sample of Veterans diagnosed with PTSD (Sloan et al., 2023). Results indicated that participants randomized to either treatment had a significant reduction in PTSD symptom severity, but WET was non-inferior to PE in PTSD treatment outcome. The treatment dropout rate for WET was low in each of the studies (6-24%), and significantly lower compared with the more time-intensive EBPs for PTSD.

More recently WET was examined using a massed format delivered to Veterans during admission to an acute inpatient mental health unit (Ennis et al., 2024). Most Veterans (96%) met diagnostic criteria for PTSD. Sessions were delivered once a day over the course of five days. Due to the short length of stay in the acute inpatient unit, 20.8% of the participants completed the last WET sessions after discharge. The participants who completed treatment (96%) reported a significant reduction in PTSD symptom severity from baseline to post-treatment and at a one-month follow-up assessment. This is the first published study to examine WET using a massed format, although additional studies are underway (e.g., Marx et al., 2021).

Future Directions

Research support for massed and brief interventions for PTSD is growing (see Sciarrino et al., 2020 for a review), however, greater attention to this area is needed. More RCTs investigating massed delivery of standalone trauma-focused treatments in diverse populations are necessary to further the evidence base for these interventions. As massed treatment programs are increasingly being delivered in clinical settings such as the Veterans Healthcare System (Yamokoski et al., 2023), implementation studies to address the feasibility and effectiveness will be important areas of study. Additionally, some studies of massed interventions report some increase in symptoms following completion of treatment. This finding needs to be further examined to determine whether booster sessions may be needed to facilitate maintenance of treatment gains. Another important area for future work is to better understand whether certain clinical settings are able to offer massed treatments, and whether offering massed and brief treatments increases client engagement, as the currently available literature suggests. In addition, there has been some work investigating brief PTSD treatments other than WET, but the work in this area has been sparse. Continued investigation of brief PTSD treatments is an important area to pursue. Further, as most research to date has focused on PTSD symptom reduction, additional investigation of the impact of massed and brief treatments on broader outcomes, including psychosocial functioning, is warranted.

Conclusions

The growing evidence supports the use of massed and brief trauma-focused treatments in reducing PTSD symptoms. These approaches can provide effective treatment for PTSD in a fraction of the time of traditionally delivered and longer EBPs and appears

to be associated with low dropout rates. As much of the support for massed EBPs is drawn from small or uncontrolled trials, or from specific treatment populations (e.g., military-serving IOPs), more robust RCTs with diverse samples are needed. Nevertheless, the research conducted to date is promising, and suggests that both massed and brief treatments can promote a rapid reduction in PTSD symptoms with potentially lower dropout rates.

FEATURED ARTICLES

Auren, T. J. B., Klæth, J. R., Jensen, A. G., & Solem, S. (2022). **Intensive outpatient treatment for PTSD: An open trial combining prolonged exposure therapy, EMDR, and physical activity.** *European Journal of Psychotraumatology*, 13(2), 2128048. doi:10.1080/20008066.2022.2128048 *Background:* Intensive outpatient treatment could be a promising option for patients with post-traumatic stress disorder (PTSD). *Objective:* The aim of the study was to test the effectiveness of an eight-day (two-week) intensive treatment for PTSD within a public health care setting (open trial design). *Method:* Eighty-nine patients were offered the choice between intensive treatment and spaced individual treatment, of which 34 (38.2%) chose the intensive format. Patients were assessed with self-report batteries and interviews at pre-treatment, start of treatment, post-treatment and three-month follow-up. Each day consisted of individual Prolonged Exposure therapy, Eye Movement Desensitization and Reprocessing therapy, group psychoeducation, and physical activity. Therapists rotated between patients. *Results:* Between 55 and 62% of the patients showed a clinically significant change (recovery) in symptoms of PTSD, and the effect sizes were large ($d = 1.38-1.52$). Patients also showed reduction in symptoms of depression and anxiety, along with improved well-being and interpersonal functioning. Changes in social and work functioning were more ambiguous. There were no dropouts, attendance was high, and patients were highly satisfied with the treatment. *Conclusions:* The intensive programme was an attractive and effective treatment option for patients with PTSD.

Bryan, C. J., Leifker, F. R., Rozek, D. C., Bryan, A. O., Reynolds, M. L., Oakey, D. N., & Roberge, E. (2018). **Examining the effectiveness of an intensive, 2-week treatment program for military personnel and veterans with PTSD: Results of a pilot, open-label, prospective cohort trial.** *Journal of Clinical Psychology*, 74(12), 2070–2081. doi:10.1002/jclp.22651 *Objective:* This study aimed to examine the effectiveness of cognitive processing therapy (CPT) for posttraumatic stress disorder (PTSD) when administered on a daily basis during a 2-week period of time. *Method:* In an open-label, prospective cohort pilot trial, 20 U.S. military personnel and veterans diagnosed with PTSD or subthreshold PTSD participated in 12 daily sessions of CPT. Primary outcomes included Clinician Administered PTSD Scale for DSM-5 and PTSD Checklist for DSM-5 scores. Secondary outcomes included Patient Health Questionnaire-8 and Beck Scale for Suicide Ideation (BSSI) scores. Interviews and self-report scales were completed at pretreatment, posttreatment, and 6 months after the treatment. *Results:* Relative to baseline, PTSD symptom severity and rates of PTSD diagnosis were significantly reduced at posttreatment and 6-month follow-up. Depression symptom severity did not significantly improve, but suicide ideation significantly decreased at 6-month follow-up. *Conclusions:* Daily administration of CPT is associated with significant reductions in PTSD and suicide ideation.

Dell, L., Sbisa, A. M., Forbes, A., O'Donnell, M., Bryant, R., Hodson, S., Morton, D., Battersby, M., Tuerk, P. W., Wallace, D., & Forbes, D. (2023a). **Effect of massed v. standard prolonged exposure therapy on PTSD in military personnel and veterans: A non-inferiority randomised controlled trial.** *Psychological Medicine*, 53(9), 4192–4199. doi:10.1017/S0033291722000927 *Background:* A short, effective therapy for posttraumatic stress disorder (PTSD) could decrease barriers to implementation and uptake, reduce dropout, and ameliorate distressing symptoms in military personnel and veterans. This non-inferiority RCT evaluated the efficacy of 2-week massed prolonged exposure (MPE) therapy compared to standard 10-week prolonged exposure (SPE), the current gold standard treatment, in reducing PTSD severity in both active serving and veterans in a real-world health service system. *Methods:* This single-blinded multi-site non-inferiority RCT took place in 12 health clinics across Australia. The primary outcome was PTSD symptom severity measured by the Clinician-Administered PTSD Scale for DSM-5 (CAPS-5) at 12 weeks. 138 military personnel and veterans with PTSD were randomised. 71 participants were allocated to SPE, with 63 allocated to MPE. *Results:* The intention-to-treat sample included 138 participants, data were analysed for 134 participants (88.1% male, $M = 46$ years). The difference between the mean MPE and SPE group PTSD scores from baseline to 12 weeks-post therapy was 0.94 [95% confidence interval (CI) -4.19 to +6.07]. The upper endpoint of the 95% CI was below +7, indicating MPE was non-inferior to SPE. Significant rates of loss of PTSD diagnosis were found for both groups (MPE 53.8%, SPE 54.1%). Dropout rates were 4.8% (MPE) and 16.9% (SPE). *Conclusions:* MPE was non-inferior to SPE in significantly reducing symptoms of PTSD. Significant reductions in symptom severity, low dropout rates, and loss of diagnosis indicate MPE is a feasible, accessible, and effective treatment. Findings demonstrate novel methods to deliver gold-standard treatments for PTSD should be routinely considered.

Dell, L., Sbisa, A. M., Forbes, A., O'Donnell, M., Bryant, R., Hodson, S., Morton, D., Battersby, M., Tuerk, P. W., Elliott, P., Wallace, D., & Forbes, D. (2023b). **Massed v. standard prolonged exposure therapy for PTSD in military personnel and veterans: 12-month follow-up of a non-inferiority randomised controlled trial.** *Psychological Medicine*, 53(15), 7070–7077. doi:10.1017/S0033291723000405 *Background:* The utilisation of massed therapy for treating posttraumatic stress disorder (PTSD) is gaining strength, especially prolonged exposure. However, it is unknown whether massed prolonged exposure (MPE) is non-inferior to standard prolonged exposure (SPE) protocols in the long term. The current study aimed to assess whether MPE was non-inferior to SPE at 12 months post-treatment, and to ascertain changes in secondary measure outcomes. *Methods:* A multi-site non-inferiority randomised controlled trial (RCT) compared SPE with MPE in 12 clinics. The primary outcome was PTSD symptom severity (CAPS-5) at 12 months post-treatment commencement. Secondary outcome measures included symptoms of depression, anxiety, anger, disability, and quality of life at 12 weeks and 12 months post-treatment commencement. Outcome assessors were blinded to treatment allocation. The intention-to-treat sample included 138 Australian military members and veterans and data were analysed for 134 participants (SPE = 71, MPE = 63). *Results:* Reductions in PTSD severity were maintained at 12 months and MPE remained

non-inferior to SPE. Both treatment groups experienced a reduction in depression, anxiety, anger, and improvements in quality of life at 12 weeks and 12 months post-treatment commencement. Treatment effects for self-reported disability in the SPE group at 12 weeks were not maintained, with neither group registering significant effects at 12 months. *Conclusions:* The emergence of massed protocols for PTSD is an important advancement. The current study provides RCT evidence for the longevity of MPE treatment gains at 12 months post-treatment commencement and demonstrated non-inferiority to SPE. Promisingly, both treatments also significantly reduced the severity of comorbid symptoms commonly occurring alongside PTSD.

Ennis, C. R., Raines, A. M., Boffa, J. W., Shapiro, M. O., Dornbach-Bender, A., Ferrie, M. L., Fondren, A. H., Vidaurri, D. N., Walton, J. L., Chambliss, J. L., & Franklin, C. L. (2024). **Massed written exposure therapy delivered to veterans with posttraumatic stress symptoms on an acute inpatient mental health unit.** *Journal of Traumatic Stress*. Advance online publication. doi:10.1002/jts.23042 Written exposure therapy (WET) is a brief, manualized trauma-focused treatment typically delivered in five individual weekly sessions. Given the brevity and effectiveness of WET, researchers have begun to focus on its delivery in a massed format. However, only one case study examining massed delivery has been published to date. As such, the objective of the current study was to examine the acceptability, feasibility, and preliminary effectiveness of massed WET among veterans with a trauma- and stressor-related disorder receiving care on an acute inpatient mental health unit. Veterans ($N = 26$) were assessed prior to, immediately after, and 1 month following massed WET. Most veterans found massed WET to be useful and acceptable. Recruitment and retention rates suggested that the treatment was feasible. Notably, the results revealed statistically significant reductions in overall posttraumatic stress symptoms, $\eta_p^2 = .81$, $p < .001$; depressive symptoms, $\eta_p^2 = .71$, $p < .001$; and functional impairment, $\eta_p^2 = .42$, $p = .002$. These findings add to a growing body of literature highlighting the preliminary effectiveness of WET across various settings, populations, and delivery formats. Limitations include the small sample size and uncontrolled design.

Foa, E. B., McLean, C. P., Zang, Y., Rosenfield, D., Yadin, E., Yarvis, J. S., Mintz, J., Young-McCaughan, S., Borah, E. V., Dondanville, K. A., Fina, B. A., Hall-Clark, B. N., Lichner, T., Litz, B. T., Roache, J., Wright, E. C., Peterson, A. L., & STRONG STAR Consortium (2018). **Effect of prolonged exposure therapy delivered over 2 weeks vs 8 weeks vs present-centered therapy on PTSD symptom severity in military personnel: A randomized clinical trial.** *JAMA*, 319(4), 354–364. doi:10.1001/jama.2017.21242 *Importance:* Effective and efficient treatment is needed for posttraumatic stress disorder (PTSD) in active duty military personnel. *Objective:* To examine the effects of massed prolonged exposure therapy (massed therapy), spaced prolonged exposure therapy (spaced therapy), present-centered therapy (PCT), and a minimal-contact control (MCC) on PTSD severity. *Design, setting, and participants:* Randomized clinical trial conducted at Fort Hood, Texas, from January 2011 through July 2016 and enrolling 370 military personnel with PTSD who had returned from Iraq, Afghanistan, or both. Final follow-up was July 11, 2016. *Interventions:* Prolonged exposure therapy, cognitive behavioral therapy involving exposure to trauma memories/reminders,

administered as massed therapy ($n = 110$; 10 sessions over 2 weeks) or spaced therapy ($n = 109$; 10 sessions over 8 weeks); PCT, a non-trauma-focused therapy involving identifying/discussing daily stressors ($n = 107$; 10 sessions over 8 weeks); or MCC, telephone calls from therapists ($n = 40$; once weekly for 4 weeks). *Main outcomes and measures:* Outcomes were assessed before and after treatment and at 2-week, 12-week, and 6-month follow-up. Primary outcome was interviewer-assessed PTSD symptom severity, measured by the PTSD Symptom Scale-Interview (PSS-I; range, 0-51; higher scores indicate greater PTSD severity; MCID, 3.18), used to assess efficacy of massed therapy at 2 weeks posttreatment vs MCC at week 4; noninferiority of massed therapy vs spaced therapy at 2 weeks and 12 weeks posttreatment (noninferiority margin, 50% [2.3 points on PSS-I, with 1-sided $\alpha = .05$]); and efficacy of spaced therapy vs PCT at posttreatment. *Results:* Among 370 randomized participants, data were analyzed for 366 (mean age, 32.7 [SD, 7.3] years; 44 women [12.0%]; mean baseline PSS-I score, 25.49 [6.36]), and 216 (59.0%) completed the study. At 2 weeks posttreatment, mean PSS-I score was 17.62 (mean decrease from baseline, 7.13) for massed therapy and 21.41 (mean decrease, 3.43) for MCC (difference in decrease, 3.70 [95% CI, 0.72 to 6.68]; $P = .02$). At 2 weeks posttreatment, mean PSS-I score was 18.03 for spaced therapy (decrease, 7.29; difference in means vs massed therapy, 0.79 [1-sided 95% CI, $-\infty$ to 2.29; $P = .049$ for noninferiority]) and at 12 weeks posttreatment was 18.88 for massed therapy (decrease, 6.32) and 18.34 for spaced therapy (decrease, 6.97; difference, 0.55 [1-sided 95% CI, $-\infty$ to 2.05; $P = .03$ for noninferiority]). At posttreatment, PSS-I scores for PCT were 18.65 (decrease, 7.31; difference in decrease vs spaced therapy, 0.10 [95% CI, -2.48 to 2.27]; $P = .93$). *Conclusions and relevance:* Among active duty military personnel with PTSD, massed therapy (10 sessions over 2 weeks) reduced PTSD symptom severity more than MCC at 2-week follow-up and was noninferior to spaced therapy (10 sessions over 8 weeks), and there was no significant difference between spaced therapy and PCT. The reductions in PTSD symptom severity with all treatments were relatively modest, suggesting that further research is needed to determine the clinical importance of these findings.

Galovski, T. E., Werner, K. B., Weaver, T. L., Morris, K. L., Dondanville, K. A., Nanne, J., Wamser-Nanne, R., McGlinchey, G., Fortier, C. B., & Iverson, K. M. (2022). **Massed cognitive processing therapy for posttraumatic stress disorder in women survivors of intimate partner violence.** *Psychological Trauma: Theory, Research, Practice and Policy*, 14(5), 769–779. doi:10.1037/tra0001100 *Objective:* Survivors of intimate partner violence (IPV) report significant trauma histories, high rates of posttraumatic stress disorder (PTSD), head injuries and comorbid disorders, and multiple barriers to treatment that often preclude the regular attendance and engagement required in typical therapy protocols. The significant challenges faced by IPV survivors needing treatment may be ameliorated by condensing effective treatments for PTSD, such as cognitive processing therapy (CPT), in an accelerated delivery timeline. *Method:* Using a multiple subject, single case design of six matched pairs of 12 female IPV survivors, we preliminarily tested the relative effectiveness of individual massed CPT delivered over 5 days (mCPT) as compared with standard CPT (sCPT) delivery in women IPV survivors. Assessments included full psychiatric diagnostic interviews, clinical interviews assessing trauma

history and head injury prior to treatment, symptom monitoring during treatment, and full repeat assessments at 1 month and 3 months following treatment. *Results:* No treatment group effect was found for PTSD severity between mCPT and sCPT among intention-to-treat, $F(1, 10) = .01, p = .93$. Both mCPT and sCPT were associated with significant improvement in PTSD, $F(2, 20) = 45.05, p < .001, ds = 1.32-2.38$. *Conclusion:* Overall, findings indicate mCPT appears effective in reducing psychological symptoms for women IPV survivors and suggest that condensed treatment is both palatable and feasible. Accelerated treatment delivery in this population may provide a necessary lifeline for women with IPV-related PTSD.

Goetter, E. M., Blackburn, A. M., Stasko, C., Han, Y., Brenner, L. H., Lejeune, S., Tanev, K. S., Spencer, T. J., & Wright, E. C. (2021). **Comparative effectiveness of prolonged exposure and cognitive processing therapy for military service members in an intensive treatment program.** *Psychological Trauma: Theory, Research, Practice and Policy*, 13(6), 632–640. doi:10.1037/tra0000956

Objective: While the comparative efficacy of prolonged exposure (PE) and cognitive processing therapy (CPT) has been examined in outpatient settings, there is a dearth of literature on the relative effectiveness of these interventions when adapted for an intensive treatment format. In an expanded secondary analysis of a previous study, we sought to examine the comparative effectiveness of PE and CPT delivered in the naturalistic setting of an intensive treatment format including maintenance of outcomes through a 6-month follow-up period. *Method:* A sample of 296 veterans with posttraumatic stress disorder (PTSD) received either PE ($n = 186$) or CPT ($n = 90$), alongside other trauma-informed interventions, in a 2-week intensive clinical program. Treatment selection was determined collaboratively between patient and therapist. Our primary outcome was self-reported PTSD symptom severity (i.e., PTSD Checklist for DSM-5, PCL-5); secondarily, we examined self-reported depression (i.e., Patient Health Questionnaire) symptom severity outcomes. *Results:* A mixed-model regression controlling for age and gender revealed a significant effect of time from baseline to endpoint ($p < .001$), 3-month ($p < .001$), and 6-month follow-up ($p < .001$) on PCL-5 scores but no significant effect of treatment or effect of treatment by time interaction (all $ps > .05$; model: Wald's $\chi^2 = 232.38, p < .001$). Results were similar for depression outcomes. Attrition at posttreatment was not significantly different between groups: 7.2% for CPT and 6.5% PE (z score = 0.22). *Conclusions:* Both PE and CPT are associated with comparable improvements when delivered as part of a 2-week intensive outpatient program.

Held, P., Zalta, A. K., Smith, D. L., Bagley, J. M., Steigerwald, V. L., Boley, R. A., Miller, M., Brennan, M. B., Van Horn, R., & Pollack, M. H. (2020). **Maintenance of treatment gains up to 12-months following a three-week cognitive processing therapy-based intensive PTSD treatment programme for veterans.** *European Journal of Psychotraumatology*, 11(1), 1789324. doi:10.1080/20008198.2020.1789324 *Background:* Intensive treatment programmes (ITPs) have shown promise for reducing PTSD and depression symptoms. It is still unknown whether treatment gains are maintained following completion. *Objective:* This study examined whether veterans were able to maintain treatment gains for up to 12 months after an ITP for PTSD and whether reductions in negative posttrauma cognitions

predicted treatment gain maintenance. *Methods:* 209 veterans (62.7% male, mean age = 40.86 years) completed a 3-week, CPT-based ITP for PTSD. Participants' PTSD (PCL-5) and depression (PHQ-9) symptoms were assessed at pre-treatment, post-treatment, and at 3-, 6-, and 12-month follow-up timepoints. *Results:* Despite small symptom increases from post-treatment to 3-month follow-up, significant and clinically meaningful reductions in PTSD and depression symptoms were reported from intake to 12 months follow-up (averaging >18 points on the PCL-5 and >6 points on the PHQ-9; $d = 1.28$, and $d = 1.18$, respectively). Greater reductions in negative posttrauma cognitions during treatment were associated with lower PTSD ($p < .001$) and depression ($p = .005$) severity at follow-up. Most veterans who completed the aftercare survey followed treatment recommendations and reported seeing a mental health provider at 3-, 6-, and 12-months post-treatment. Aftercare treatment did not significantly predict whether veterans maintained treatment gains at follow-up. *Conclusions:* Overall maintenance of treatment gains long-term suggests veterans may be able to apply skills acquired during the ITP following treatment. These findings further support the feasibility and effectiveness of intensive, trauma-focused, evidence-based therapy delivery.

Held, P., Kovacevic, M., Petrey, K., Meade, E. A., Pridgen, S., Montes, M., Werner, B., Miller, M. L., Smith, D. L., Kaysen, D., & Karnik, N. S. (2022). **Treating posttraumatic stress disorder at home in a single week using 1-week virtual massed cognitive processing therapy.** *Journal of Traumatic Stress, 35*(4), 1215–1225. doi:10.1002/jts.22831 Posttraumatic stress disorder (PTSD) treatments are increasingly delivered in massed formats and have shown comparable results to standard, weekly treatment. To date, massed cognitive processing therapy (CPT), delivered daily, has been delivered primarily in combination with adjunctive services and among veteran populations, but it has not been rigorously evaluated as a standalone intervention. The present study evaluated 1-week massed CPT delivered virtually (i.e., via telehealth) to a community sample of trauma-exposed individuals ($N = 24$). Using a single-arm open-label design, participants received CPT twice per day for 5 days. The results indicated that most participants completed treatment ($n = 23$, 95.8%), and no adverse events were reported. Participants exhibited large reductions in clinician-rated, $d = 2.01$, and self-reported PTSD symptoms, $d = 2.55$, as well as self-reported depressive symptoms, $d = 1.46$. On average, participants reported a 5-point PTSD symptom reduction and 1-point reduction in depressive symptoms for each treatment day. Reductions in PTSD and depressive symptoms were maintained at 3-month follow-up. Overall, 1-week massed CPT delivered virtually was shown to be feasible and to result in rapid symptom reductions that were sustained over time. Virtual massed CPT has the potential to increase access to effective treatments and help trauma survivors restore aspects of their lives in short amounts of time.

Hendriks, L., de Kleine, R. A., Broekman, T. G., Hendriks, G.-J., & van Minnen, A. (2018). **Intensive prolonged exposure therapy for chronic PTSD patients following multiple trauma and multiple treatment attempts.** *European Journal of Psychotraumatology, 9*(1), 1425574. doi:10.1080/20008198.2018.1425574 *Background:* Suboptimal response and high dropout rates leave room for improvement of trauma-focused treatment (TFT) effectiveness

in ameliorating posttraumatic stress disorder (PTSD) symptoms. *Objective:* To explore the effectiveness and safety of intensive prolonged exposure (iPE) targeting chronic PTSD patients with a likely diagnosis of ICD-11 Complex PTSD following multiple interpersonal trauma and a history of multiple treatment attempts. *Method:* Participants ($N = 73$) received iPE in 12 × 90-minute sessions over four days (intensive phase) followed by four weekly 90-minute booster prolonged exposure (PE) sessions (booster phase). The primary outcomes, clinician-rated severity of PTSD symptoms, and diagnostic status (Clinician-Administered PTSD Scale; CAPS-IV) were assessed at baseline, post-treatment, and at three and six months. Treatment response trajectories were identified and predictors of these trajectories explored. *Results:* Mixed model repeated measures analysis of CAPS-IV scores showed a baseline-to-posttreatment decrease in PTSD symptom severity ($p < .001$) that persisted during the three- and six-month follow-ups with large effect sizes (Cohen's $d > 1.2$); 71% of the participants responded. None of the participants dropped out during the intensive phase and only 5% during the booster phase. Adverse events were extremely low and only a minority showed symptom exacerbation. Cluster analysis demonstrated four treatment response trajectories: Fast responders (13%), Slow responders (26%), Partial responders (32%), and Non-responders (29%). Living condition and between-session fear habituation were found to predict outcome. Participants living alone were more likely to belong to the Partial responders than to the Non-responders cluster, and participants showing more between-session fear habituation were more likely to belong to the Fast responders than to the Non-responders cluster. *Conclusions:* The results of this open study suggest that iPE can be effective in PTSD patients with multiple interpersonal trauma and after multiple previous treatment attempts. In addition, in this chronic PTSD population iPE was safe.

Peterson, A. L., Blount, T. H., Foa, E. B., Brown, L. A., McLean, C. P., Mintz, J., Schobitz, R. P., DeBeer, B. R., Mignogna, J., Fina, B. A., Evans, W. R., Synett, S., Hall-Clark, B. N., Rentz, T. O., Schrader, C., Yarvis, J. S., Dondanville, K. A., Hansen, H., Jacoby, V. M., Lara-Ruiz, J., ... Consortium to Alleviate PTSD (2023). **Massed vs intensive outpatient prolonged exposure for combat-related posttraumatic stress disorder: A randomized clinical trial.** *JAMA Network Open, 6*(1), e2249422. doi:10.1001/jamanetworkopen.2022.49422 *Importance:* Improved, efficient, and acceptable treatments are needed for combat-related posttraumatic stress disorder (PTSD). *Objective:* To determine the efficacy of 2 compressed prolonged exposure (PE) therapy outpatient treatments for combat-related PTSD. *Design, setting, and participants:* This randomized clinical trial was conducted among military personnel and veterans at 4 sites in Texas from 2017 to 2019. Assessors were blinded to conditions. Data were analyzed from November 2020 to October 2022. *Interventions:* The interventions were massed-PE, which included 15 therapy sessions of 90 minutes each over 3 weeks, vs intensive outpatient program PE (IOP-PE), which included 15 full-day therapy sessions over 3 weeks with 8 treatment augmentations. The IOP-PE intervention was hypothesized to be superior to massed-PE. *Main outcomes and measures:* Coprimary outcomes included the Clinician-Administered PTSD Scale for Diagnostic and Statistical Manual of Mental Disorders (Fifth Edition) (DSM-5) (CAPS-5) and the PTSD Checklist for DSM-5 (PCL-5) administered at baseline and posttreatment follow-

ups. Measures ranged from 0 to 80, with higher scores indicating greater severity. Diagnostic remission and reliable change were secondary outcomes. **Results:** Among 319 military personnel and veterans screened, 234 were randomized (mean [SD] age, 39.20 [7.72] years; 182 [78%] male participants), with 117 participants randomized to IOP-PE and 117 participants randomized to massed-PE. A total of 61 participants (26%) were African American, 58 participants (25%) were Hispanic, and 102 participants (44%) were White; 151 participants (65%) were married. Linear mixed-effects models found that CAPS-5 scores decreased in both treatment groups at the 1-month follow-up (IOP-PE: mean difference, -13.85 [95% CI, -16.47 to -11.23]; $P < .001$; massed-PE: mean difference, -14.13 [95% CI, -16.63 to -11.62]; $P < .001$). CAPS-5 change scores differed from 1- to 6-month follow-ups (mean difference, 4.44 [95% CI, 0.89 to 8.01]; $P = .02$). PTSD symptoms increased in massed-PE participants during follow-up (mean difference, 3.21 [95% CI, 0.65 to 5.77]; $P = .01$), whereas IOP-PE participants maintained treatment gains (mean difference, 1.23 [95% CI, -3.72 to 1.27]; $P = .33$). PCL-5 scores decreased in both groups from baseline to 1-month follow-up (IOP-PE: mean difference, -21.81 [95% CI, -25.57 to -18.04]; $P < .001$; massed-PE: mean difference, -19.96 [95% CI, -23.56 to -16.35]; $P < .001$) and were maintained at 6 months (IOP-PE: mean change, -0.21 [95% CI, -3.47 to 3.06]; $P = .90$; massed-PE: mean change, 3.02 [95% CI, -0.36 to 6.40]; $P = .08$). Both groups had notable PTSD diagnostic remission at posttreatment (IOP-PE: 48% [95% CI, 36% to 61%] of participants; massed-PE: 62% [95% CI, 51% to 73%] of participants), which was maintained at 6 months (IOP-PE: 53% [95% CI, 40% to 66%] of participants; massed-PE: 52% [95% CI, 38% to 66%] of participants). Most participants demonstrated reliable change on the CAPS-5 (61% [95% CI, 52% to 69%] of participants) and the PCL-5 (74% [95% CI, 66% to 81%] of participants) at the 1-month follow-up. **Conclusions and relevance:** These findings suggest that PE can be adapted into compressed treatment formats that effectively reduce PTSD symptoms.

Sloan, D. M., Marx, B. P., Lee, D. J., & Resick, P. A. (2018). **A brief exposure-based treatment vs cognitive processing therapy for posttraumatic stress disorder: A randomized non-inferiority clinical trial.** *JAMA Psychiatry, 75*(3), 233-239. doi:10.1001/jamapsychiatry.2017.4249 **Importance:** Written exposure therapy (WET), a 5-session intervention, has been shown to efficaciously treat posttraumatic stress disorder (PTSD). However, this treatment has not yet been directly compared with a first-line PTSD treatment such as cognitive processing therapy (CPT). **Objective:** To determine if WET is noninferior to CPT in patients with PTSD. **Design, setting, and participants:** In this randomized clinical trial conducted at a Veterans Affairs medical facility between February 28, 2013, and November 6, 2016, 126 veteran and nonveteran adults were randomized to either WET or CPT. Inclusion criteria were a primary diagnosis of PTSD and stable medication therapy. Exclusion criteria included current psychotherapy for PTSD, high risk of suicide, diagnosis of psychosis, and unstable bipolar illness. Analysis was performed on an intent-to-treat basis. **Interventions:** Participants assigned to CPT ($n = 63$) received 12 sessions and participants assigned to WET ($n = 63$) received 5 sessions. The CPT protocol that includes written accounts was delivered individually in 60-minute weekly sessions. The first WET session requires 60 minutes while the remaining 4 sessions require 40 minutes. **Main outcomes**

and measures: The primary outcome was the total score on the Clinician-Administered PTSD Scale for DSM-5; noninferiority was defined by a score of 10 points. Blinded evaluations were conducted at baseline and 6, 12, 24, and 36 weeks after the first treatment session. Treatment dropout was also examined. **Results:** For the 126 participants (66 men and 60 women; mean [SD] age, 43.9 [14.6] years), improvements in PTSD symptoms in the WET condition were noninferior to improvements in the CPT condition at each of the assessment periods. The largest difference between treatments was observed at the 24-week assessment (mean difference, 4.31 points; 95% CI, -1.37 to 9.99). There were significantly fewer dropouts in the WET vs CPT condition (4 [6.4%] vs 25 [39.7%]; $\chi^2_1 = 12.84$, Cramer $V = 0.40$). **Conclusions and relevance:** Although WET involves fewer sessions, it was noninferior to CPT in reducing symptoms of PTSD. The findings suggest that WET is an efficacious and efficient PTSD treatment that may reduce attrition and transcend previously observed barriers to PTSD treatment for both patients and providers.

Sloan, D.M., Marx, B. P., Aciermo, R., Messina, M., Muzzy, W., Gallagher, M. W., Litwack, S., & Sloan, C. (2023). **Written exposure therapy vs prolonged exposure therapy in the treatment of posttraumatic stress disorder: A randomized clinical trial.** *JAMA Psychiatry, 80*(11), 1093-1100. doi:10.1001/jamapsychiatry.2023.2810 **Importance:** Evidence-based treatments for posttraumatic stress disorder (PTSD) exist, but all require 8 to 15 sessions and thus are less likely to be completed than brief treatments. Written exposure therapy (WET) is a brief and efficacious treatment that has not been directly compared with prolonged exposure therapy (PE), a more time-intensive, exposure-based treatment. **Objective:** To determine whether WET is noninferior to PE in treating PTSD among veterans. **Design, setting, and participants:** A randomized noninferiority clinical trial was conducted between September 9, 2019, and April 30, 2022. Participants were 178 veterans with PTSD presenting to 1 of 3 Veterans Affairs medical centers. Inclusion criteria consisted of a primary diagnosis of PTSD and stable medication. Exclusion criteria included current psychotherapy for PTSD, high suicide risk, active psychosis, unstable bipolar disorder, and severe cognitive impairment. Independent evaluations were conducted at baseline and 10, 20, and 30 weeks after the first treatment session. Data were analyzed from January 1 to March 31, 2023. **Interventions:** Participants assigned to WET ($n = 88$) received five to seven 45- to 60-minute sessions. Participants assigned to PE ($n = 90$) received eight to fifteen 90-minute sessions. The WET sessions included 30 minutes of writing-based imaginal exposure conducted in session, whereas PE sessions included 40 minutes of in-session imaginal exposure and between-session in vivo exposures. **Main outcomes and measures:** The primary outcome was change in PTSD symptom severity measured with the Clinician-Administered PTSD Scale for DSM-5 (CAPS-5) from baseline to the 20-week assessment; noninferiority was defined as a less than 10-point difference between the 2 treatment groups. Difference in treatment dropout was also examined. **Results:** Of the 178 participants, 134 (75.3%) were men, and the mean (SD) age was 44.97 (13.66) years. In terms of race, 37 participants (20.8%) were Black, 112 (62.9%) were White, 11 (6.2%) were more than 1 race, and 18 (10.1%) were of other race (including American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander [some participants did not

specify their race when selecting the category "other"]); in terms of ethnicity, 19 participants (10.7%) were Hispanic. Changes in PTSD symptom severity from baseline to all subsequent assessments among individuals randomized to WET were noninferior relative to individuals randomized to PE. The largest difference between treatments was observed at 10 weeks and was in favor of WET (mean difference, 2.42 [95% CI, 0.35-1.46] points). Participants were significantly less likely to drop out of WET compared with PE (11 [12.5%] vs 32 [35.6%]; $\chi^2 = 12.91$; Cramer $V = 0.27$).

Conclusions and relevance: In this study, WET was noninferior to PE in PTSD symptom change and was associated with significantly less attrition. Findings suggest that WET may transcend previously observed barriers to PTSD treatment for both patients and clinicians.

Van Woudenberg, C., Voorendonk, E. M., Bongaerts, H., Zoet, H. A., Verhagen, M., Lee, C. W., van Minnen, A., & De Jongh, A. (2018). **Effectiveness of an intensive treatment programme combining prolonged exposure and eye movement desensitization and reprocessing for severe post-traumatic stress disorder.** *European Journal of Psychotraumatology*, 9(1), 1487225. doi:10.1080/20008198.2018.1487225

Background: There is room for improvement regarding the treatment of severe post-traumatic stress disorder (PTSD). Intensifying treatment to increase patient retention is a promising development. **Objective:** The aim of this study was to determine the effectiveness of an intensive trauma-focused treatment programme over 8 days for individuals suffering from severe PTSD. **Method:** Treatment was provided for 347 PTSD patients (70% women; mean age = 38.32 years, $SD = 11.69$) and consisted of daily sessions of prolonged exposure and eye movement desensitization and reprocessing (EMDR) therapy (16 sessions in total), physical activity, and psycho-education. All participants had experienced multiple traumas, including sexual abuse (74.4%), and suffered from multiple comorbidities (e.g. 87.5% had a mood disorder). Suicidal ideation was frequent (73.9%). PTSD symptom severity was assessed by both clinician-rated [Clinician Administered PTSD Scale (CAPS)] and self-report [PTSD Symptom Scale Self Report (PSS-SR) and Impact of Event Scale (IES)] inventories. For a subsample ($n = 109$), follow-up data at 6 months were available. **Results:** A significant decline in symptom severity was found (e.g. CAPS intention-to-treat sample Cohen's $d = 1.64$). At post-treatment, 82.9% showed a clinically meaningful response and 54.9% a loss of diagnosis. Dropout was very low (2.3%). **Conclusions:** Intensive trauma-focused treatment programmes including prolonged exposure, EMDR therapy, and physical activity can be effective for patients suffering from severe PTSD and are associated with low dropout rates.

Background: There is room for improvement regarding the treatment of severe post-traumatic stress disorder (PTSD). Intensifying treatment to increase patient retention is a promising development. **Objective:** The aim of this study was to determine the effectiveness of an intensive trauma-focused treatment programme over 8 days for individuals suffering from severe PTSD. **Method:** Treatment was provided for 347 PTSD patients (70% women; mean age = 38.32 years, $SD = 11.69$) and consisted of daily sessions of prolonged exposure and eye movement desensitization and reprocessing (EMDR) therapy (16 sessions in total), physical activity, and psycho-education. All participants had experienced multiple traumas, including sexual abuse (74.4%), and suffered from multiple comorbidities (e.g. 87.5% had a mood disorder). Suicidal ideation was frequent (73.9%). PTSD symptom severity was assessed by both clinician-rated [Clinician Administered PTSD Scale (CAPS)] and self-report [PTSD Symptom Scale Self Report (PSS-SR) and Impact of Event Scale (IES)] inventories. For a subsample ($n = 109$), follow-up data at 6 months were available. **Results:** A significant decline in symptom severity was found (e.g. CAPS intention-to-treat sample Cohen's $d = 1.64$). At post-treatment, 82.9% showed a clinically meaningful response and 54.9% a loss of diagnosis. Dropout was very low (2.3%). **Conclusions:** Intensive trauma-focused treatment programmes including prolonged exposure, EMDR therapy, and physical activity can be effective for patients suffering from severe PTSD and are associated with low dropout rates.

Weinstein, H. R., Roberge, E. M., & Parker, S. C. (2023). **Intensive cognitive processing therapy associated with reduced PTSD treatment dropout in a case-controlled study of treatment-seeking veterans.** *Cognitive and Behavioral Practice*, 30(3), 314-325. doi:10.1016/j.cbpra.2022.05.004 Cognitive Processing Therapy (CPT) is an empirically supported psychotherapy for posttraumatic stress disorder (PTSD). The complex issue of treatment attrition is a frequently cited concern regarding CPT and other evidence-based psychotherapies for PTSD. The current study investigated the feasibility and effectiveness of "intensive"

CPT, a treatment-consistent modification of CPT in which sessions are conducted more frequently than standard protocol. Fifty-four military veterans (20% female; $M_{age} = 46$; 80% Caucasian) seeking outpatient treatment for PTSD were included in this study. Patients who elected to receive intensive CPT ($n = 27$) were matched with archival records of individuals who received standard CPT ($n = 27$). Patients across treatment conditions were matched based on baseline symptom severity as measured by the PTSD Checklist for DSM-5 (PCL-5; $M_{PCL-5} = 52.61$). Treatment outcomes were compared and longitudinal multilevel modeling was used to compare rate of symptom change over time. Patients who elected to engage in intensive CPT were twice as likely to complete treatment (88.9%) as those who received standard CPT (44.4%), $\chi^2(1, N = 54) = 12.00, p = .001$. On average, intensive CPT patients completed treatment in about 25% of the time as standard CPT patients (33.8 days vs. 125.7 days). Patients in intensive CPT also demonstrated greater benefit: 81.4% reported a clinically significant improvement in PCL-5 scores compared to 51.8% of those in standard CPT, $\chi^2(1, N = 54) = 5.33, p = .020, \phi = -0.314$. Intensive and standard CPT performed comparably in regard to final PCL-5 score, change over time, and screening cutoff. In addition, there were no differences in treatment outcomes based on licensure status of the provider nor whether treatment was delivered in person or virtually. Intensive CPT represents a novel, treatment-consistent adaptation that was utilized to treat a group of veterans with PTSD with minimal treatment dropout. Patients who elected to engage in more frequent treatment were more likely to complete treatment, did so in one quarter of the time, and reported similar to better treatment outcomes. Providers may consider encouraging their patients to participate in treatment as frequently as they are able. However, preliminary findings are based on a nonrandom sample and design limitations temper conclusions.

Yamokoski, C., Flores, H., Facemire, V., Maieritsch, K., Perez, S., & Fedynich, A. (2023). **Feasibility of an intensive outpatient treatment program for posttraumatic stress disorder within the veterans health care administration.** *Psychological Services*, 20(3), 506–515. doi:10.1037/ser0000628 Trauma-focused treatments for posttraumatic stress disorder (PTSD), such as Prolonged Exposure (PE) therapy and Cognitive Processing Therapy (CPT), are effective and supported by various Clinical Practice Guidelines; however, drop-out rates for the treatments are as high as 40% within clinical programs. One promising solution is delivering the evidence-based psychotherapies (EBPs) three or more times per week within an intensive outpatient program (IOP) for PTSD. The present study examined the feasibility and effectiveness of a relatively low-resourced PTSD IOP within a larger PTSD program at the Veterans Healthcare Administration. The intensive program offers two tracks (2 week or 4 week) grounded in the massed delivery of PE and CPT. Over a 12-month period, 351 veterans completed an assessment for PTSD and 172 started within one of the local PTSD programs (e.g., weekly, IOP, or residential). Results of the study demonstrated that the IOP is an acceptable (i.e., 87.3% completion rate) and effective (e.g., PTSD Checklist for Diagnostic and Statistical Manual [DSM-5] [PCL-5] decrease effect size $d = 1.80$) treatment option. There was also adequate demand for the program (e.g., 37.2% of patients engaged in care with the PTSD programs started the IOP), and

the program was implemented with fidelity to the design. Taken together, the results of this study demonstrate that this low-resource IOP model is a promising approach to improve completion rates within the continuum of care for the treatment of PTSD.

Yasinski, C. W., Watkins, L. E., Maples-Keller, J. L., Ragsdale, K. A., Sherrill, A. M., Burton, M. S., Rauch, S. A. M., & Rothbaum, B. O. (2022). **Long-term effectiveness of a prolonged exposure-based intensive outpatient program for veterans with posttraumatic stress disorder.** *Journal of Psychiatric Research, 152*, 313–320. doi:10.1016/j.jpsychires.2022.06.029 Empirically-supported psychotherapies for posttraumatic stress disorder (PTSD) are highly effective and recommended as first-line treatments, yet dropout rates from standard outpatient therapy are high. Intensive outpatient programs (IOPs) that provide these therapies in condensed format with complementary interventions show promise, as they have demonstrated similar efficacy and higher retention rates. The current study examined initial and long-term outcomes up to 12-months following a 2-week PTSD IOP involving daily prolonged exposure therapy (PE) and adjunctive interventions for veterans and military service members. Participants ($N = 376$) demonstrated high retention (91%) and large effect size reductions in self-reported PTSD and depression symptoms after two weeks. Small increases in symptoms occurred after 3 months but these stabilized and large reductions compared to baseline were maintained up to 12 months. Piecewise multilevel modeling indicated that demographic variables did not predict PTSD or depression symptom trajectories. Higher PTSD and depression severity at intake predicted higher symptomatology across timepoints and larger relative gains during treatment. Greater alcohol use prior to treatment was associated with higher PTSD symptomatology but did not affect the magnitude of gains. A history of childhood sexual abuse was associated with greater reduction in depression symptoms over treatment, although this effect faded over follow-up. Together these findings underscore the long-term effectiveness of a PE-based IOP across a diverse range of veterans and service members.

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