Figure 1 PRISMA Diagram of Systematic Review

Figure 1 about here

Supplementary Table 1 Downs' Risk-of-bias assessment of Studies Included in Systematic Review

	Characteristics of patients clearly described	Distribution of confounds clearly described	Subjects representative of population	Evidence based practice compliance	Adequate Amount adjustment Confounding	Other bias
Baker 2015	-	-	+	?	-	+
Chen 2013	-	+	+	+	+	+
DeViva 2017	-	-	+	-	+	+
Feeny 2009	-	-	+	+	+	+
Grubbs 2015	-	-	+	-	-	+
Harnard 2013	-	+	+	+	+	+
Hundt 2017	-	-	+	-	+	+
Hundt 2017b	+	+	+	-	+	+
Iverson 2017	+	+	-	-	-	+
Kehle 2014	-	+	+	-	+	+
Kehle 2016	-	-	-	-	-	+
Keller 2016	+	+	-	-	+	+
Lamp 2014	-	+	-	-	-	+
Lu 2016	-	-	-	-	-	+
Maguen 2018	+	+	-	-	+	+
Mott 2014	-	-	-	-	-	+
Rosen 2017	+	+	-	+	+	+
Shalev 2012	+	+	-	+	-	+
Shiner 2013	+	+	-	-	+	+
Shiner 2018	-	-	-	-	-	+
Sripada 2017	+	+	-	-	-	+
Sripada 2018	-	-	-	-	-	+
Stecker 2013	-	+	+	-	+	+
Tuerk 2013	+	-	-	?	-	+
Watts 2014	+	+	-	-	+	+
Zayfert 2005	-	+	+	?	+	+

- Low risk of bias
+ High risk of bias
? Not sure

Supplementary Table 2 All Included Studies Assessing Initiation and Engagement of Evidence Based Practices

First Author, Year	Data Collection, Years	Study Group	Military Era	Type of Evidence Based Practice
	VA Administrative Data			
Kehle et al., 2016	2013	National Guard	OIF	PE, SSRI
Maguen et al., 2018	2001-2015	Veterans	OIF/OEF	CPT, PE
Mott et al., 2014b	2008-2012	Veterans	OIF/PEF, Gulf, Vietnam	CPT, PE
Shiner 2018	2014-2016	Veterans	OIF/PEF, Gulf, Vietnam	CPT, PE
Sripada et al., 2017	2015-2016	Veterans	OIF/OEF, Gulf, Vietnam	CPT, PE
Sripada et al., 2018	2015-2016	Veterans	OIF/OEF, Gulf, Vietnam	CPT, PE
Stecker et al., 2013	2009-2012	National Guard	OIF/OEF	CBT

Comment [c1]: Added line to separate and clarify distinction

	VA PTSD Clinic Data			
Baker et al., 2015	2008-2012	Veterans	OIF/OEF, Gulf, Vietnam	CPT, PE
Hundt et al., 2017	2015-2016	Veterans	OIF/OEF, Gulf, Vietnam	CPT, PE
Keller & Tuerk, 2016	2015	Veterans	OIF/OEF, Gulf, Vietnam	CPT, PE
Kehle et al., 2014	2013	National Guard	OIF/OEF	PE, SSRI
Lamp et al., 2014	Before 2014	Veterans	OIF/OEF, Gulf, Vietnam	CPT, PE
Lu et al., 2016	2008	Veterans	OIF/OEF, Gulf, Vietnam, WWII, Korea	CPT, PE
Tuerk et al., 2013	2007-2009	Veterans	OIF/OEF, Vietnam	PE
	VA New England Repository Data			
Shiner et al., 2013	2009-2010	Veterans	OIF/OEF, Gulf, Vietnam	CPT, PE, EMDR, SIT
Watts et al., 2014	2009-2010	Veterans	OIF/OEF, Gulf, Vietnam	CPT, PE
	Project Specific Military Datasets			
DeViva et al., 2017	2015-2016	Veterans	OIF/OEF, Gulf, Vietnam	CPT/PE orientation, CPT/PE
Grubbs et al., 2015	2013-2015	Veterans	OIF/OEF, Gulf, Vietnam	Telemedicine Outreach, CPT
Hundt et al., 2017b	2015-2016	Veterans	OIF/OEF, Gulf, Vietnam	PE
Iverson et al., 2017	2003	UK Military Personnel	Iraq War	CBT
Rosen et al., 2017	2015-2016	Veterans	OIF/OEF, Gulf, Vietnam	CPT, PE
	Civilian Datasets			
Chen et al., 2013	2012-2015	PTSD Tx Study	n/a	PE, SSRI
Feeny et al., 2009	2008-2009	Convenience	n/a	PE, SSRI
Harnard et al., 2013	2012-2013	Behavioral Therapy Clinic	n/a	PE+DB, DB
Shalev et al., 2012	2003-2007	Emergency Room	n/a	PE, SSRI
Zayfert et al., 2005	2002-2004	Anxiety Disorder Clinic	n/a	CBT

Note: CPT=Cognitive Processing Therapy, CBT=Cognitive Behavioral Therapy, PE=Prolonged Exposure, ENDR=Eye Movement Desensitization and Reprocessing Therapy, SSRI=Selective Serotonin Reuptake Inhibitors, SIT=Stress Inoculation Therapy, DB=Dialectical Behavior Therapy

Supplementary Table 3 Heterogeneity (n=14 studies)

Component	Total Sample	# Studies	Hetero-geneity X^2	Df	p	i^2
Demographics						
Age	645407	9	950.83	7	.001	99.2%
Military Era (Vietnam)	964	3	0.41	2	.816	0.0%
Gender (female)	288848	8	26.13	7	.001	73.2%
Race/Ethnicity (Minority/AA)	288470	9	44.24	8	.001	81.9%
Marital Status	496	4	4.06	3	.255	26.2%
Income	116	2	0.03	2	.866	0.0%
Education (HS)	406	4	4.56	3	.207	34.2%
Mental Health Beliefs						
Concerns about stigma	58	1	-	-	-	-
Readiness/ambivalence	58	1	-	-	-	-
Side effects	58	1	-	-	-	-
Preference for medication	58	1	-	-	-	-
Previous psychotherapy	274206	5	7.22	2	.125	44.6%
Trauma-focused interest	476	1	-	-		-
Motivators						
Disability claim	133	1	-	-	-	-
Logistic Issues						
Time	58	1	-	-	-	-
Relocation	58	1	-	-	-	-
Affordability	58	1	-	-	-	-
PTSD Service Connection	631067	3	7.46	2	.02	73.2%
Organizational Structure						
Referral source	61452	2	0.45	1	.503	0.0%
Staff training	76849	4	22.74	3	.001	86.8%
Staff exposure	693796	3	107.8	2	.001	98.1%
Workflow	63052	2	102.08	1	.001	99.0%
Need						
PTSD severity	1890	8	3507.2	7	.001	99.8%
Six months delayed treatment	274490	2	4.48	1	.034	77.7%
Co-morbid depression	288486	9	487.88	8	.001	98.4%
Co-morbid substance misuse	287562	5	17.27	4	.002	76.8%

Note: AA=African American

Supplementary Table 4 PRISMA 2009 Checklist

Section/topic	#	Checklist item	Reported on page #
TITLE			
Title	1	Identify the report as a systematic review, meta-analysis, or both.	1
ABSTRACT			
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.	1
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known.	2-3
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	3
METHODS			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	1
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	4
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	4
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	4
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	4-5
Data collection	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in	4-5

process		duplicate) and any processes for obtaining and confirming data from investigators.	
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	4-5
Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	5, Supp
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).	5
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I^2) for each meta-analysis.	5
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).	5
Additional analyses	16	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.	10
RESULTS			
Study selection	17	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.	Fig 2
Study characteristics	18	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations.	Tab. 1
Risk of bias within studies	19	Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12).	5, Supp
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot.	Tab. 5, p 7-10
Synthesis of results	21	Present results of each meta-analysis done, including confidence intervals and measures of consistency.	Tab. 5, p 7-10
Risk of bias	22	Present results of any assessment of risk of bias across studies (see Item 15).	5, Supp

across studies			
Additional analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).	10
DISCUSSION			
Summary of evidence	24	Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers).	11-12
Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias).	13-14
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.	12-13
FUNDING			
Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review.	14

Note: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(7): e1000097. doi:10.1371/journal.pmed1000097. Supp=Online Supplement