**Appendix 1: Literature Search Strategies**

### Clinical Literature Search

<table>
<thead>
<tr>
<th>OVERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interface:</td>
</tr>
<tr>
<td>Databases:</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Note:</strong> Subject headings have been customized for each database. Duplicates between databases were removed in Ovid.</td>
</tr>
<tr>
<td>Date of Search:</td>
</tr>
<tr>
<td>Alerts:</td>
</tr>
<tr>
<td>Study Types:</td>
</tr>
<tr>
<td>Limits:</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

### SYNTAX GUIDE

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>/</td>
<td>At the end of a phrase, searches the phrase as a subject heading</td>
</tr>
<tr>
<td>MeSH</td>
<td>Medical Subject Heading</td>
</tr>
<tr>
<td>.fs</td>
<td>Floating subheading</td>
</tr>
<tr>
<td>exp</td>
<td>Explode a subject heading</td>
</tr>
<tr>
<td>*</td>
<td>Before a word, indicates that the marked subject heading is a primary topic; or, after a word, a truncation symbol (wildcard) to retrieve plurals or varying endings</td>
</tr>
<tr>
<td>#</td>
<td>Truncation symbol for one character</td>
</tr>
<tr>
<td>?</td>
<td>Truncation symbol for one or no characters only</td>
</tr>
<tr>
<td>adj#</td>
<td>Requires terms to be adjacent to each other within # number of words (in any order)</td>
</tr>
<tr>
<td>.ti</td>
<td>Title</td>
</tr>
<tr>
<td>.ab</td>
<td>Abstract</td>
</tr>
<tr>
<td>.hw</td>
<td>Heading word; usually includes subject headings and controlled vocabulary</td>
</tr>
<tr>
<td>.kf</td>
<td>Author keyword heading word (MEDLINE)</td>
</tr>
<tr>
<td>.kw</td>
<td>Author keyword (Embase, Cochrane Cent)</td>
</tr>
<tr>
<td>.id.</td>
<td>Author keyword (PsycINFO)</td>
</tr>
<tr>
<td>.pt</td>
<td>Publication type</td>
</tr>
<tr>
<td>.mp</td>
<td>Mapped term</td>
</tr>
<tr>
<td>.rn</td>
<td>Registry number</td>
</tr>
<tr>
<td>.yr</td>
<td>Publication year</td>
</tr>
<tr>
<td>.jw</td>
<td>Journal word title</td>
</tr>
<tr>
<td>freq=#</td>
<td>Requires terms to occur # number of times in the specified fields</td>
</tr>
<tr>
<td>medall</td>
<td>Ovid database code: MEDLINE All, 1946 to present, updated daily</td>
</tr>
<tr>
<td>oemezd</td>
<td>Ovid database code; Embase, 1974 to present, updated daily</td>
</tr>
<tr>
<td>cctr</td>
<td>Ovid database code; Cochrane Central Register of Controlled Trials</td>
</tr>
<tr>
<td>psyh</td>
<td>Ovid database code: PsycINFO 1806 to present, updated weekly</td>
</tr>
</tbody>
</table>
## Multi-Database Strategy

<table>
<thead>
<tr>
<th>Line #</th>
<th>Search History</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Stress Disorders, Post-Traumatic/</td>
</tr>
<tr>
<td>2</td>
<td>Stress Disorders, Traumatic/</td>
</tr>
<tr>
<td>3</td>
<td>Combat Disorders/</td>
</tr>
<tr>
<td>4</td>
<td>Stress Disorders, Traumatic, Acute/</td>
</tr>
<tr>
<td>5</td>
<td>((posttrauma* or post-trauma*) adj3 (stress* or disorder* or psych* or symptom*)).ti,ab,kw.</td>
</tr>
<tr>
<td>6</td>
<td>PTSD.ti,ab,kw.</td>
</tr>
<tr>
<td>7</td>
<td>(acute stress disorder* or combat disorder* or war neuros*).ti,ab,kw.</td>
</tr>
<tr>
<td>8</td>
<td>or/1-7</td>
</tr>
<tr>
<td>9</td>
<td>(android or app or apps or audio* or blog or iCBT or cCBT or i-CBT or c-CBT or CD-ROM or cell phone* or cellphone or chat or computer* or cyber* or distance* or DVD or eHealth or e-health or electronic health* or e-Portal or ePortal or etherap* or etherap* or forum* or gaming or information technolog* or instant messag* or internet* or interapy or ipad or i-pad or iphone or i-phone or ipod or i-pod or web* or WWW or smartphone or mobile phone* or e-mail* or email* or mHealth or m-health or mobile or multi-media or multimedia or online* or on-line or personal digital assistant* or PDA or SMS or social medi* or Facebook or software or telecomm* or telehealth* or telemed* or telemimonitor* or telepsych* or teletherap* or text messag* or texting or tape or taped or video* or YouTube or podcast or virtual* or remote).ti,ab,kw.</td>
</tr>
<tr>
<td>10</td>
<td>(self adj3 (care or change or guide* or help or intervention or manag* or support* or train*))).ti,ab,kw.</td>
</tr>
<tr>
<td>11</td>
<td>9 or 10</td>
</tr>
<tr>
<td>12</td>
<td>8 and 11</td>
</tr>
<tr>
<td>13</td>
<td>limit 12 to yr=“2017 -Current”</td>
</tr>
<tr>
<td>14</td>
<td>posttraumatic stress disorder/</td>
</tr>
<tr>
<td>15</td>
<td>(PTSD or ((posttrauma* or post-trauma* or post trauma*) adj3 (stress* or disorder* or psych* or symptom?))) or acute stress disorder* or combat disorder* or war neuros*,ti,ab,kw.</td>
</tr>
<tr>
<td>16</td>
<td>(((acute or traumatic) adj stress*) and (expos* or psyc*)).ti,ab,kw.</td>
</tr>
<tr>
<td>17</td>
<td>(traumati#ed adj (victim? or survivor?)).ti,ab,kw.</td>
</tr>
<tr>
<td>18</td>
<td>(trauma* adj2 (event? or memor* or flashback* or nightmare?)).ti,ab,kw.</td>
</tr>
<tr>
<td>19</td>
<td>(((trauma* or posttrauma* or post-trauma* or victim* or survivor?) and (exposure adj3 (therap* or psychotherap* or training or counsel*)))).ti,ab,kw.</td>
</tr>
<tr>
<td>20</td>
<td>or/14-19</td>
</tr>
<tr>
<td>21</td>
<td>(((internet or web or online) adj3 (cognitive or behavio*)) or iCBT or i-CBT or ePsych* or e-Psych* or cCBT or c-CBT).ti,ab,kw.</td>
</tr>
<tr>
<td>22</td>
<td>(android or app or apps or blog* or CD-ROM or cell phone or cellphone or chat room or computer* or cyber* or digital or technology based or DVD or eHealth or e-health or electronic health or e-mail* or email* or e-Portal or ePortal or eTherap* or e-therap* or forum* or gaming or information technolog* or instant messag* or messaging or internet* or ipad or i-pad or iphone or i-phone or ipod or i-pod or podcast or smart phone or smartphone or social network* site* or social networking or mHealth or m-health or mobile or multi-media or multimedia or online* or on-line or personal digital assistant or PDA or SMS or social medi* or software or telecomm* or telehealth* or telemed* or telemimonitor* or telepsych* or teletherap* or tele-health* or tele-med* or tele-monitor* or tele-psych* or tele-therap* or text messag* or texting or virtual* or web* or WWW).ti,ab,kw, hw.</td>
</tr>
<tr>
<td>23</td>
<td>internet/</td>
</tr>
<tr>
<td>24</td>
<td>blogging/ or e-mail/ or social media/ or text messaging/ or videoconferencing/ or webcast/ or wireless communication/</td>
</tr>
<tr>
<td>25</td>
<td>telecommunication/ or teleconference/</td>
</tr>
<tr>
<td>26</td>
<td>telemedicine/ or telehealth/ or telepsychiatry/ or teletherapy/</td>
</tr>
<tr>
<td>27</td>
<td>mobile phone/ or smartphone/</td>
</tr>
</tbody>
</table>
OPTIMAL USE REPORT
Internet-Delivered Cognitive Behavioural Therapy for Post-Traumatic Stress Disorder

mobile application.hw.

*technology/
computer program/ or digital computer/ or personal computer/ or computer assisted therapy/
*computer/
(telecomm* or tele-comm*).ti,ab,kw.
(eLearning or blended learning).ti,ab,kw.
(videoconferenc* or video conferenc*).ti,ab,kw.
(synchronous or asynchronous or (electronic adj2 deliver*)).ti,ab,kw.
or/22-35

(behavior* or cognitive).ti. or (psychotherap* or psychological therap* or cognitive behavio* or ((cognitive or behavio*) adj2 (activat* or component? or defusion or modif* or restructur* or technique* or intervention or treatment* or therap* or train*))) or ((acceptance* or commitment*) adj3 therap*) or rational emotive or RET or problem sol* or PST or problem focus* or solution focus* or trauma focus* or psychoeduca* or psycho-educa* or psychoenergetica* or psychoenergetica* or mindfulness* or third wave or self-control or (self* adj3 (control or efficacy)) or stress manage* or exposure or reality therap* or (anxiety adj3 (management or therap* or train*))) or relaxation or guided imagery or present cent* or person cent* or person* construct* or therapeutic process* or schema? or schemata or (thought* adj3 suppress*) or rumination.mp.

36 and 37
randomized controlled trial/
randomization.de.
controlled clinical trial/ and (Disease Management or Drug Therapy or Prevention or Rehabilitation or Therapy).fs.
*cclinical trial/ placebo.de.
placebo.ti,ab.
trial.ti.
(randomi#ed or randomi#ation or randomi#ing).ti,ab,kw.
(RCT or "at random" or (random* adj3 (administ* or allocat* or assign* or class* or control* or determine* or divide* or division or distribut* or expose* or fashion or number* or place* or recruit* or subsitut* or treat*))).ti,ab,kw.
((singl$ or doubl$ or trebl$ or tripl$) adj3 (blind$ or mask$ or dummy))).mp.
(control* and (trial or study or group) and (placebo or waitlist* or wait* list* or ((treatment or care) adj2 usual))).ti,ab,kw.
or/39-49
((animal or nonhuman) not (human and (animal or nonhuman))).de.
50 not 51
20 and (21 or 38) and 52
(2017* or 2018* or 2019*).yr,dp,dt,ed,ep.
53 and 54
"Trauma and Stressor Related Disorders"/ or stress disorders, traumatic/ or combat disorders/ or psychological trauma/ or stress disorders, post-traumatic/ or stress disorders, traumatic, acute/
(PTSD or ((posttrauma* or post-trauma* or post trauma*) adj3 (stress* or disorder* or psych* or symptom?))) or acute stress disorder* or combat disorder* or war neurosis*).ti,ab,kf.
(((acute or traumatic) adj stress*) and (expos* or psych*))).ti,ab,kf.
(tramati#ed adj (victim? or survivor?)).ti,ab,kf.
(trau#a* adj2 (event? or memor* or flashback? or nightmare?)).ti,ab,kf.
<table>
<thead>
<tr>
<th>Line</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>61</td>
<td>((trauma* or posttrauma* or post-trauma* or victim* or survivor?) and (exposure adj3 (therap* or psychotherap* or training or counsel*))).ti,ab,kf.</td>
</tr>
<tr>
<td>62</td>
<td>or/56-61</td>
</tr>
<tr>
<td>63</td>
<td>(((internet or web or online) adj3 (cognitive or behavio*)) or iCBT or i-CBT or ePsych* or e-Psych* or cCBT or c-CBT).ti,ab,kf.</td>
</tr>
<tr>
<td>64</td>
<td>(android or app or apps or blog* or CD-ROMor cell phone or cellphone or chat room or computer* or cyber* or digital or technology based or DVD or eHealth or e-health or electronic health or e-mail* or email* or e-Portal or ePortal or eTherap* or e-therap* or forum* or gaming or information technology* or instant messag* or messaging or internet* or ipad or i-pad or iphone or i-phone or ipod or i-pod or podcast or smart phone or smartphone or social network* site* or social networking or mHealth or m-health or mobile or multi-media or multimedia or online* or on-line or personal digital assistant or PDA or SMS or social medi* or software or telecomm* or telehealth* or telemed* or telemonitor* or telepsych* or teletherap* or tele-health* or tele-med* or tele-monitor* or tele-psych* or tele-therap* or text messag* or texting or virtual* or web* or WWW).ti,ab,kf.</td>
</tr>
<tr>
<td>65</td>
<td>computer communication networks/ or internet/ or blogging/ or social media/</td>
</tr>
<tr>
<td>66</td>
<td>cell phones/ or smartphone/ or text messaging/ or videoconferencing/ or webcasts as topic/ or wireless technology/</td>
</tr>
<tr>
<td>67</td>
<td>(telecomm* or tele-comm*).ti,ab,kf.</td>
</tr>
<tr>
<td>68</td>
<td>Telemedicine/</td>
</tr>
<tr>
<td>69</td>
<td>(eLearning or blended learning).ti,kf.</td>
</tr>
<tr>
<td>70</td>
<td>(videoconferenc* or video conferenc*).ti,kf.</td>
</tr>
<tr>
<td>71</td>
<td>(synchronous or asynchronous or (electronic adj2 deliver*)).ti,kf.</td>
</tr>
<tr>
<td>72</td>
<td>or/64-71</td>
</tr>
<tr>
<td>73</td>
<td>(behavio* or cognitive).ti. or (psychotherap* or psychological therap* or cognitive behavio* or ((cognitive or behavio*) adj2 (activat* or component? or defusion or modif* or restructur* or technique* or intervention or treatment* or therap* or train*)) or ((acceptance* or commitment*) adj3 therap*) or rational emotive or RET or problem sol* or PST or problem focus* or solution focus* or trauma focus* or psychoeducat* or psycho-educat* or psychotherap* or psycho-drama* or mindfulness* or third wave or self-control or (self* adj3 (control or efficacy)) or stress manage* or exposure or reality therap* or (anxiety adj3 (management or therap* or train*)) or relaxation or guided imagery or present cent* or person cent* or person* construct* or therapeutic process* or schema? or schemata or (thought* adj3 suppress*) or ruminat).mp.</td>
</tr>
<tr>
<td>74</td>
<td>72 and 73</td>
</tr>
<tr>
<td>75</td>
<td>controlled clinical trial.pt.</td>
</tr>
<tr>
<td>76</td>
<td>randomized controlled trial.pt.</td>
</tr>
<tr>
<td>77</td>
<td>(random#ed or random#ation or random#ing).ti,ab,kf.</td>
</tr>
<tr>
<td>78</td>
<td>(RCT or at random or (random* adj3 (assign* or allocat* or control* or crossover or cross-over or design* or divide* or division or number))).ti,ab,kf.</td>
</tr>
<tr>
<td>79</td>
<td>placebo*.ab,ti,kf.</td>
</tr>
<tr>
<td>80</td>
<td>trial.ab,ti,kf.</td>
</tr>
<tr>
<td>81</td>
<td>groups.ab.</td>
</tr>
<tr>
<td>82</td>
<td>(control* and (trial or study or group*) and (placebo or waitlist* or wait* list* or ((treatment or care) adj2 usual))).ti,ab,kf,hw.</td>
</tr>
<tr>
<td>83</td>
<td>double-blind method/ or random allocation/ or single-blind method/</td>
</tr>
<tr>
<td>84</td>
<td>((single or double or triple or treble) adj2 (blind* or mask* or dummy))).ti,ab,kf.</td>
</tr>
<tr>
<td>85</td>
<td>or/75-84</td>
</tr>
<tr>
<td>86</td>
<td>exp animals/ not humans.sh.</td>
</tr>
<tr>
<td>87</td>
<td>85 not 86</td>
</tr>
<tr>
<td>88</td>
<td>62 and (63 or 74) and 87</td>
</tr>
</tbody>
</table>
Internet-Delivered Cognitive Behavioural Therapy for Post-Traumatic Stress Disorder

89 (2017* or 2018* or 2019*).yr,dp,dt,ed,ep.
90 88 and 89
91 posttraumatic stress disorder/ or complex ptsd/ or acute stress disorder/ or combat experience/ or "debriefing
 psychological")/ or emotional trauma/ or post-traumatic stress/ or exp stress reactions/ or traumatic neurosis/
92 exp DISASTERS/
93 (PTSD or ((posttrauma* or post-trauma* or post trauma*) adj3 (stress* or disorder* or psych* or symptom?))) or acute
94 stress disorder* or combat disorder* or war neurosis*).ti,ab,id.
95 (((acute or traumatic) adj stress*) and (expos* or psyc*)).ti,ab,id.
96 (trauma* adj2 (event? or memor* or flashback* or nightmare?)).ti,ab,id.
97 ((trauma* or posttrauma* or post-trauma* or victim* or survivor?) and (exposure adj3 (therap* or psychotherap* or
98 training or counsel*))).ti,ab,id,hw.
99 (traumati#ed adj (victim? or survivor?))).ti,ab,id.
100 or/91-97
101 (((internet or web or online) adj3 (cognitive or behavio*)) or iCBT or i-CBT or ePsych* or e-Psych* or cCBT or c-
102 CBT)).ti,ab,kf.
103 (android or app or apps or blog* or CD-ROM or cell phone or cellphone or chat room or computer* or cyber* or digital
104 or technology based or DVD or eHealth or e-health or electronic health or e-mail* or email* or e-Portal or ePortal or
105 eTherap* or etherap* or forum* or gaming or information technolog* or instant messag* or messaging or internet* or
106 ipad or i-pad or iphone or ipod or i-pod or podcast or smart phone or smartphone or social network* site* or
107 social networking or mHealth or m-health or mobile or multi-media or multimedia or online* or on-line or personal digital
108 assistant or PDA or SMS or social medi* or software or telecomm* or telehealth* or telemed* or telemonitor* or
telepsych* or teletherap* or tele-health* or tele-med* or tele-monitor* or tele-therap* or text messag* or
109 or/100-113
texting or virtual* or web* or WWW).ti,ab,id,hw.
110 (telecomm* or tele-comm*).ti,ab,id.
111 (eLearning or blended learning).ti,ab,id.
112 (videoconferenc* or video conferenc*).ti,ab,id.
113 (synchronous or asynchronous or (electronic adj2 deliver*)).ti,ab,id.
114 internet/ or websites/
115 mobile devices/ or cellular phones/
116 social media/ or online social networks/ or blog/ or online community/ or text messaging/
117 electronic communication/ or exp computer mediated communication/ or electronic learning/
118 online therapy/ or telemedicine/
119 telecommunications media/
120 teleconferencing/
121 technology/ or information technology/ or exp computer applications/ or computer software/
122 computers/ or computer games/ or digital computers/ or microcomputers/
123 or/100-113
124 (behavio* or cognitive).ti. or (psychotherap* or psychological therap* or cognitive behavio* or ((cognitive or behavio*)
125 adj2 (activat* or component? or defusion or modif* or restructur* or technique* or intervention or treatment* or therap*
or train*) or (acceptance* or commitment*) adj3 therap*)) or rational emotive or RET or problem sol* or PST or problem
126 focus* or solution focus* or trauma focus* or psychoeducat* or psycho-educat* or psychodrama or psycho-drama*
or mindfulness* or third wave or self-control or (self* adj3 (control or efficacy)) or stress manage* or exposure or reality
127 therap* or (anxiety adj3 (management or therap* or train*) or relaxation or guided imagery or present cent* or person
128 cent* or person* construct* or therapeutic process* or schema? or schemata or (thought* adj3 suppress*) or
129 ruminati*).ti,ab,id,hw.
130 (self adj (care or change or guide* or help or intervention or manag* or support* or train*)).ti,ab,kf.
Internet-Delivered Cognitive Behavioural Therapy for Post-Traumatic Stress Disorder

CLINICAL TRIAL REGISTRIES

| ClinicalTrials.gov | Produced by the U.S. National Library of Medicine. Targeted search used to capture registered clinical trials. Search: internet | post traumatic stress disorder | CBT |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| WHO ICTRP            | International Clinical Trials Registry Platform, produced by the World Health Organization. Targeted search used to capture registered clinical trials. Search: (internet or web or app or apps or mobile or self) AND ptsd AND CBT |
Patients’ Preferences and Experiences Literature Search #1 (iCBT + PTSD)

OVERVIEW

Interface: Ovid
Databases: MEDLINE All (1946-May 21, 2019)
             PsycINFO (1806-May week 3, 2019)
             Note: Subject headings have been customized for each database. Duplicates between databases were removed in Ovid for the Ovid searches.
Date of Search: May 23, 2019
Alerts: Monthly search updates until project completion
Study Types: Qualitative studies
Limits: Publication date limit: January 1, 2008 – May 23, 2019
         Language limit: English- and French-language

SYNTAX GUIDE

/ At the end of a phrase, searches the phrase as a subject heading
.fs Floating subheading
.exp Explode a subject heading
* Before a word, indicates that the marked subject heading is a primary topic; or, after a word, a truncation symbol (wildcard) to retrieve plurals or varying endings
# Truncation symbol for one character
? Truncation symbol for one or no characters only
.adj# Requires terms to be adjacent to each other within # number of words (in any order)
.ti Title
.ab Abstract
.hw Heading word; usually includes subject headings and controlled vocabulary
.kf Author keyword heading word (MEDLINE)
.id Author keyword (PsycINFO)
.pt Publication type
.mp Mapped term
.yr Publication year
.dp Date of publication
.dt Create date
.ed Entry date
.ep Electronic date of publication
.medall Ovid database code: MEDLINE All, 1946 to present, updated daily
.psyh Ovid database code: PsycINFO, 1806 to present, updated weekly
<table>
<thead>
<tr>
<th>Line #</th>
<th>Search History</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cognitive Behavioral Therapy/ or &quot;Acceptance and Commitment Therapy&quot;/ or Psychotherapy/ or Desensitization, Psychologic/ or Implosive Therapy/</td>
</tr>
<tr>
<td>2</td>
<td>(((cognitive or behavio* or facilitate* or guided or saturat* or unguided) adj2 (therap* or psychotherap* or psychotherap*) or cognitive behavio* or cognition therap* or CBT*).ti,ab,kf,kw,id.</td>
</tr>
<tr>
<td>3</td>
<td>(self-manag* or selfmanag* or self-help* or selfhelp*).ti,ab,kf,kw.id.</td>
</tr>
<tr>
<td>4</td>
<td>((psycholog* adj3 desensiti*) or imaginal flooding* or (imager* adj3 exposure*).ti,ab,kf,kw.id.</td>
</tr>
<tr>
<td>5</td>
<td>((exposure or flooding* or implosive or saturation) adj3 therap*).ti,ab,kf,kw.id.</td>
</tr>
<tr>
<td>6</td>
<td>or/1-5</td>
</tr>
<tr>
<td>7</td>
<td>Internet/ or exp Computers/ or Therapy, Computer-Assisted/ or Computer-Assisted Instruction/ or Distance Counseling/ or Cell Phone/ or Mobile Applications/ or Remote Consultation/ or exp Telemedicine/ or exp Videoconferencing/</td>
</tr>
<tr>
<td>8</td>
<td>(internet* or Beacon or app or apps or computer* or cyber-therap* or cybertherap* or e mail* or email* or electronic mail* or &quot;Information and communication technology&quot; or &quot;Information and communication technologies&quot; or emedicine or e medicine or e health* or ehealth* or ehealth* or e mental health* or etherap* or e therap* or epsychiatr* or e psychiatrist* or epsychol* or e psychol* or media deliver* or mobile* or online* or smartphone* or smart phone* or telemedicine or tele medicine or telehealth* or tele health* or telemental health* or telecare or tele health* or tele mental health* or telematic* or tele care or teletherap* or tele therap* or telepsychiatr* or telepsychol* or tel<em>psychotherap</em> or telepsychotherap* or telepsychotherap* or tele-psychotherap* or telepsychotherap* or tele-psychotherap* or tele-psychotherap* or tele-psychotherap* or virtual* or virtualist? or webbased or web based or web deliver* or webdeliver*).ti,ab,kf,kw.id.</td>
</tr>
<tr>
<td>9</td>
<td>or/7-8</td>
</tr>
<tr>
<td>10</td>
<td>exp Stress Disorders, Traumatic/</td>
</tr>
<tr>
<td>11</td>
<td>(PTSD or posttrauma* or post-trauma* or panic disorder* or panic attack* or shell shock or war neurosis or war neuroses or acute stress disorder* or operational stress or past trauma* or PTD or complex trauma* or traumatic stress or moral injur* or trauma-base* or trauma-focus*).ti,ab,kf,kw,id.</td>
</tr>
<tr>
<td>12</td>
<td>(combat* adj3 (neuroses* or neurosis* or stress* or fatigue* or disorder*).ti,ab,kf,kw,id.</td>
</tr>
<tr>
<td>13</td>
<td>or/10-12</td>
</tr>
<tr>
<td>14</td>
<td>(cCBT* or iCBT* or eCBT*).ti,ab,kf,kw.id.</td>
</tr>
<tr>
<td>15</td>
<td>((computer* or cyber* or digital* or technolog* or web*) adj6 (CBT or coach* or deliver* or intervention* or psychiatrist* or psycho-dynamic or psychodynamic or psycholog* or psycho-therap* or psychotherap* or therap* or technique* or training or treatment*).ti,ab,kf,kw,id.</td>
</tr>
<tr>
<td>16</td>
<td>(MoodGym or Big White Wall or Beating the Blues or Fear Fighter or E compass or Ecompass or Deprexis or Moodkit or &quot;Living Life to the Full&quot; or Woebot).ti,ab,kf,kw.id.</td>
</tr>
<tr>
<td>17</td>
<td>(e-mental health or emental health).ti,ab,kf,kw.id.</td>
</tr>
<tr>
<td>18</td>
<td>(ACT Coach or (&quot;Anger and Irritability Management Skills&quot; or AIMS) adj5 app*) or Behavior Tracker Pro or Breathe2Relax or CBT-I Coach or CPT Coach or (cognitive processing therap* adj2 coach*) or Dream EZ or Life Armor or Mood Coach or Moving Forward or PE Coach or PTSD Coach or &quot;T2 Mood Tracker&quot; or Tactical Breather or VetChange or Interapy).ti,ab,kf,kw.id.</td>
</tr>
<tr>
<td>19</td>
<td>or/14-18</td>
</tr>
<tr>
<td>20</td>
<td>6 and 9 and 13</td>
</tr>
<tr>
<td>21</td>
<td>13 and 19</td>
</tr>
<tr>
<td>22</td>
<td>20 or 21</td>
</tr>
<tr>
<td>23</td>
<td>22 use medall</td>
</tr>
<tr>
<td>24</td>
<td>exp Cognitive Behavior Therapy/ or Cognitive Therapy/</td>
</tr>
<tr>
<td>25</td>
<td>(((cognitive or behavio* or facilitate* or guided or saturat* or unguided) adj2 (therap* or psychotherap* or psychotherap*) or cognitive behavio* or cognition therap* or CBT*).ti,ab,kf,kw.id.</td>
</tr>
<tr>
<td>Line</td>
<td>Query</td>
</tr>
<tr>
<td>------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>26</td>
<td>(self-manag* or selfmanag* or self-help* or selfhelp*).ti,ab,kf,kw,id.</td>
</tr>
<tr>
<td>27</td>
<td>((psycholog* adj3 desensiti*) or imaginal flooding* or (imagier* adj3 exposure*)).ti,ab,kf,kw,id.</td>
</tr>
<tr>
<td>28</td>
<td>((exposure or flooding* or implosive or saturation) adj3 therap*).ti,ab,kf,kw,id.</td>
</tr>
<tr>
<td>29</td>
<td>or/24-28</td>
</tr>
<tr>
<td>30</td>
<td>Telemedicine/ or Computer-Assisted therapy/ or Computer-Assisted Instruction/ or Internet/ or exp Mobile Devices/ or Online Therapy/</td>
</tr>
<tr>
<td>31</td>
<td>(internet* or Beacon or app or apps or computer* or cyber-therap* or cybertherap* or e mail* or email* or electronic mail* or &quot;Information and communication technology* or &quot;Information and communication technologies* or emedicine or e medicine or ehealth* or e health* or emental health* or e mental health* or etherap* or e therap* or epsychiatr* or e psychiatr* or e psychol* or e psychol* or media deliver* or mobile* or online* or smartphone* or smart phone* or telemedicine or tele medicine or telehealth* or tele health* or telemental health* or tele mental health* or telecare or tele care or teletherap* or tele therap* or telepsychiatr* or tele psychiatr* or telepsychol* or tele psychol* or telepsycho-therap* or tele-psycho-therap* or telepsychotherap* or tele-psychotherap* or tele-coach* or telecoach* or virtual* or virtualist? or webbased or web based or web deliver* or webdeliver*).ti,ab,kf,kw,id.</td>
</tr>
<tr>
<td>32</td>
<td>or/30-31</td>
</tr>
<tr>
<td>33</td>
<td>exp Posttraumatic Stress Disorder/ or Combat Experience/ or Emotional Trauma/ or Post-Traumatic Stress/ or Traumatic Neurosis/</td>
</tr>
<tr>
<td>34</td>
<td>(PTSD or posttrauma* or post-trauma* or panic disorder* or panic attack* or shell shock or war neurosis or war neuroses or acute stress disorder* or operational stress or past trauma* or PTD or complex trauma* or traumatic stress or moral injur* or trauma-base* or trauma-focus*).ti,ab,kf,kw,id.</td>
</tr>
<tr>
<td>35</td>
<td>(combat* adj3 (neuroses* or neurosis* or stress* or fatigue* or disorder*)).ti,ab,kf,kw,id.</td>
</tr>
<tr>
<td>36</td>
<td>or/33-35</td>
</tr>
<tr>
<td>37</td>
<td>((cCBT* or iCBT* or eCBT*).ti,ab,kf,kw,id.</td>
</tr>
<tr>
<td>38</td>
<td>((computer* or cyber* or digital* or technolog* or web*).adj6 (CBT or coach* or deliver* or intervention* or psychiatr* or psycho-dynamic or psychodynamic or psycholog* or psycho-therap* or psychotherap* or therap* or technique* or training or treatment*).ti,ab,kf,kw,id.</td>
</tr>
<tr>
<td>39</td>
<td>(MoodGym or Big White Wall or Beating the Blues or Fear Fighter or E compass or Ecompass or Deprexis or Moodkit or &quot;Living Life to the Full&quot; or Woebot).ti,ab,kf,kw,id.</td>
</tr>
<tr>
<td>40</td>
<td>(e-mental health or emental health).ti,ab,kf,kw,id.</td>
</tr>
<tr>
<td>41</td>
<td>(ACT Coach or (&quot;Anger and Irritability Management Skills&quot; or AIMS).adj5 app*).Behavior Tracker Pro or Breathe2Relax or CBT-i Coach or CPT Coach or (cognitive processing therap* adj2 coach*) or Dream EZ or Life Armor or Mood Coach or Moving Forward or PE Coach or PTSD Coach or &quot;T2 Mood Tracker&quot; or Tactical Breather or VetChange or Interapy).ti,ab,kf,kw,id.</td>
</tr>
<tr>
<td>42</td>
<td>or/37-41</td>
</tr>
<tr>
<td>43</td>
<td>29 and 32 and 36</td>
</tr>
<tr>
<td>44</td>
<td>36 and 42</td>
</tr>
<tr>
<td>45</td>
<td>43 or 44</td>
</tr>
<tr>
<td>46</td>
<td>45 use psyh</td>
</tr>
<tr>
<td>47</td>
<td>23 or 46</td>
</tr>
<tr>
<td>48</td>
<td>47 and (english or french).la.</td>
</tr>
<tr>
<td>49</td>
<td>limit 48 to yr=&quot;2008 -Current&quot;</td>
</tr>
<tr>
<td>50</td>
<td>exp Empirical Research/ or Interviews as Topic/ or Personal Narratives/ or Focus Groups/ or exp Narration/ or Nursing Methodology Research/ or Narrative Medicine/</td>
</tr>
<tr>
<td>51</td>
<td>Interview/</td>
</tr>
<tr>
<td>52</td>
<td>Qualitative Research/ or Grounded Theory/ or Narratives/ or Storytelling/ or exp Life Experiences/ or exp Interviews/</td>
</tr>
<tr>
<td>53</td>
<td>interview*.ti,ab,kf,ld.</td>
</tr>
</tbody>
</table>
54 qualitative*.ti,ab,kf,jw,fd.
55 (theme* or thematic).ti,ab,kf,fd.
56 ethnological research.ti,ab,kf,fd.
57 ethnograph*.ti,ab,kf,fd.
58 ethnomedicine.ti,ab,kf,fd.
59 ethnonursing.ti,ab,kf,fd.
60 phenomenol*.ti,ab,kf,fd.
61 (grounded adj (theor* or study or studies or research or analys?s)).ti,ab,kf,fd.
62 (life stor* or women* stor*).ti,ab,kf,fd.
63 (emic or etic or hermeneutic* or heuristic* or semiotic*).ti,ab,kf,fd.
64 (data adj1 saturat$).ti,ab,kf,fd.
65 participant observ*.ti,ab,kf,fd.
66 (social construct* or postmodern* or post-structural* or post structural* or poststructural* or post modern* or post-modern* or feminis*).ti,ab,kf,fd.
67 (action research or cooperative inquir* or co operative inquir* or co-operative inquir*).ti,ab,kf,fd.
68 (humanistic or existential or experiential or paradigm*).ti,ab,kf,fd.
69 (field adj (study or studies or research or work)).ti,ab,kf,fd.
70 (human science or social science).ti,ab,kf,fd.
71 biographical method.ti,ab,kf,fd.
72 theoretical samp*l*.ti,ab,kf,fd.
73 ((purpos* adj4 samp*l*) or (focus adj group*)).ti,ab,kf,fd.
74 (open-ended or narrative* or textual or texts or semi-structured).ti,ab,kf,fd.
75 (life world* or life-world* or conversation analys?s or personal experience* or theoretical saturation).ti,ab,kf,fd.
76 ((lived or life) adj experience*).ti,ab,kf,fd.
77 cluster samp*l*.ti,ab,kf,fd.
78 observational method*.ti,ab,kf,fd.
79 content analysis.ti,ab,kf,fd.
80 (constant adj (comparative or comparison)).ti,ab,kf,fd.
81 ((discourse* or discurs*) adj3 analys?s).ti,ab,kf,fd.
82 (heidegger* or colaizzi* or spiegelberg* or merleau* or husserl* or foucault* or ricouer or glaser*).ti,ab,kf,fd.
83 (van adj manen*).ti,ab,kf,fd.
84 (van adj kaam*).ti,ab,kf,fd.
85 (corbin* adj2 strauss*).ti,ab,kf,fd.
86 or/50-85
87 49 and 86
88 remove duplicates from 87
OTHER DATABASES

<table>
<thead>
<tr>
<th>Database</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PubMed</td>
<td>Searched to capture records not found in MEDLINE. Same MeSH, keywords, limits, and study types used as per MEDLINE search, with appropriate syntax used.</td>
</tr>
<tr>
<td>CINAHL</td>
<td>Same MeSH, keywords, and limits used as per MEDLINE search, excluding study types and human restrictions. Syntax adjusted for EBSCO platform, including the addition of CINAHL headings.</td>
</tr>
</tbody>
</table>

Patients’ Preferences and Experiences Literature Search #2 (CBT + PTSD)

OVERVIEW

Interface: Ovid
Databases: MEDLINE All (1946-July 15, 2019)
PsycINFO (1806-July week 2, 2019)

Note: Subject headings have been customized for each database. Duplicates between databases were removed in Ovid for the Ovid searches.

Date of Search: July 16, 2019
Alerts: Monthly search updates until project completion
Study Types: Qualitative studies
Limits: Publication date limit: January 1, 2014 – July 16, 2019
Language limit: English- and French-language

SYNTAX GUIDE

/ At the end of a phrase, searches the phrase as a subject heading
.fs Floating subheading
.exp Explode a subject heading
* Before a word, indicates that the marked subject heading is a primary topic; or, after a word, a truncation symbol (wildcard) to retrieve plurals or varying endings
# Truncation symbol for one character
? Truncation symbol for one or no characters only
adj# Requires terms to be adjacent to each other within # number of words (in any order)
.ti Title
.ab Abstract
.hw Heading word; usually includes subject headings and controlled vocabulary
.kf Author keyword heading word (MEDLINE)
.id Author keyword (PsycINFO)
.pt Publication type
.mp Mapped term
.yr Publication year
.dp Date of publication
.dt Create date
.ed Entry date
.ep Electronic date of publication
.medall Ovid database code: MEDLINE All, 1946 to present, updated daily
.psyh Ovid database code: PsycINFO, 1806 to present, updated weekly
### MULTI-DATABASE STRATEGY

<table>
<thead>
<tr>
<th>Line #</th>
<th>Search History</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cognitive Behavioral Therapy/ or &quot;Acceptance and Commitment Therapy&quot;/ or Psychotherapy/ or Desensitization, Psychologic/ or Implosive Therapy/ ((cognitive or behavio* or facilitate* or guided or saturat* or unguided) adj2 (therap* or psychotherap* or psychotherap*)) or cognitive behavio* or cognition therap* or CBT*),ti,ab,kf,kw,ld.</td>
</tr>
<tr>
<td>2</td>
<td>(self-manag* or selfmanag* or self-help* or selfhelp*).ti,ab,kf,kw,ld.</td>
</tr>
<tr>
<td>3</td>
<td>((psycholog* adj3 desensiti*) or imaginal flooding* or (imager* adj3 exposure*)).ti,ab,kf,kw,ld.</td>
</tr>
<tr>
<td>4</td>
<td>((exposure or flooding* or implosive or saturation) adj3 therap*).ti,ab,kf,kw,ld.</td>
</tr>
<tr>
<td>5</td>
<td>or/1-5</td>
</tr>
<tr>
<td>6</td>
<td>exp Stress Disorders, Traumatic/ (PTSD or posttrauma* or post-trauma* or panic disorder* or panic attack* or shell shock or war neurosis or war neuroses or acute stress disorder* or operational stress or past trauma* or PTD or complex trauma* or traumatic stress or moral injur* or trauma-base* or trauma-focus*).ti,ab,kf,kw,ld.</td>
</tr>
<tr>
<td>7</td>
<td>(cognitive behavio* or cognition therap* or CBT*).ti,ab,kf,kw,ld.</td>
</tr>
<tr>
<td>8</td>
<td>(self-manag* or selfmanag* or self-help* or selfhelp*).ti,ab,kf,kw,ld.</td>
</tr>
<tr>
<td>9</td>
<td>((psycholog* adj3 desensiti*) or imaginal flooding* or (imager* adj3 exposure*)).ti,ab,kf,kw,ld.</td>
</tr>
<tr>
<td>10</td>
<td>or/7-9</td>
</tr>
<tr>
<td>11</td>
<td>6 and 10</td>
</tr>
<tr>
<td>12</td>
<td>11 use medall</td>
</tr>
<tr>
<td>13</td>
<td>exp Cognitive Behavior Therapy/ or Cognitive Therapy/ ((cognitive or behavio* or facilitate* or guided or saturat* or unguided) adj2 (therap* or psychotherap* or psychotherap*)) or cognitive behavio* or cognition therap* or CBT*).ti,ab,kf,kw,ld.</td>
</tr>
<tr>
<td>14</td>
<td>(self-manag* or selfmanag* or self-help* or selfhelp*).ti,ab,kf,kw,ld.</td>
</tr>
<tr>
<td>15</td>
<td>((psycholog* adj3 desensiti*) or imaginal flooding* or (imager* adj3 exposure*)).ti,ab,kf,kw,ld.</td>
</tr>
<tr>
<td>16</td>
<td>or/13-17</td>
</tr>
<tr>
<td>17</td>
<td>exp Posttraumatic Stress Disorder/ or Combat Experience/ or Emotional Trauma/ or Post-Traumatic Stress/ or Traumatic Neurosis/ (PTSD or posttrauma* or post-trauma* or panic disorder* or panic attack* or shell shock or war neurosis or war neuroses or acute stress disorder* or operational stress or past trauma* or PTD or complex trauma* or traumatic stress or moral injur* or trauma-base* or trauma-focus*).ti,ab,kf,kw,ld.</td>
</tr>
<tr>
<td>18</td>
<td>(cognitive behavio* or cognition therap* or CBT*).ti,ab,kf,kw,ld.</td>
</tr>
<tr>
<td>19</td>
<td>(self-manag* or selfmanag* or self-help* or selfhelp*).ti,ab,kf,kw,ld.</td>
</tr>
<tr>
<td>20</td>
<td>((psycholog* adj3 desensiti*) or imaginal flooding* or (imager* adj3 exposure*)).ti,ab,kf,kw,ld.</td>
</tr>
<tr>
<td>21</td>
<td>or/19-21</td>
</tr>
<tr>
<td>22</td>
<td>18 and 22</td>
</tr>
<tr>
<td>23</td>
<td>23 use psyh</td>
</tr>
<tr>
<td>24</td>
<td>12 or 24</td>
</tr>
<tr>
<td>25</td>
<td>25 and (english or french),la.</td>
</tr>
<tr>
<td>26</td>
<td>limit 26 to yr=&quot;2014 -Current&quot;</td>
</tr>
<tr>
<td>27</td>
<td>exp Empirical Research/ or Interview/ or Interviews as Topic/ or Personal Narratives/ or Focus Groups/ or exp Narration/ or Nursing Methodology Research/ or Narrative Medicine/ Interview/ Qualitative Research/ or Grounded Theory/ or Narratives/ or Storytelling/ or exp Life Experiences/ or exp Interviews/ interview*.ti,ab,kf,id.</td>
</tr>
<tr>
<td>28</td>
<td>qualitative*.ti,ab,kf,jw,ld.</td>
</tr>
<tr>
<td>29</td>
<td>(theme* or thematic).ti,ab,kf,ld.</td>
</tr>
<tr>
<td>34</td>
<td>ethnological research.ti,ab,kf,id.</td>
</tr>
<tr>
<td>35</td>
<td>ethnograph*.ti,ab,kf,id.</td>
</tr>
<tr>
<td>36</td>
<td>ethnomedicine.ti,ab,kf,id.</td>
</tr>
<tr>
<td>37</td>
<td>ethnonursing.ti,ab,kf,id.</td>
</tr>
<tr>
<td>38</td>
<td>phenomenol*.ti,ab,kf,id.</td>
</tr>
<tr>
<td>39</td>
<td>(grounded adj (theor* or study or studies or research or analys?s)).ti,ab,kf,id.</td>
</tr>
<tr>
<td>40</td>
<td>(life stor* or women* stor*).ti,ab,kf,id.</td>
</tr>
<tr>
<td>41</td>
<td>(emic or etic or hermeneutic* or heuristic* or semiotic*).ti,ab,kf,id.</td>
</tr>
<tr>
<td>42</td>
<td>(data adj1 saturat$).ti,ab,kf,id.</td>
</tr>
<tr>
<td>43</td>
<td>participant observ*.ti,ab,kf,id.</td>
</tr>
<tr>
<td>44</td>
<td>(social construct* or postmodern* or post-structural* or post structural* or poststructural* or post modern* or post-modern* or feminis*).ti,ab,kf,id.</td>
</tr>
<tr>
<td>45</td>
<td>(action research or cooperative inquir* or co operative inquir* or co-operative inquir*).ti,ab,kf,id.</td>
</tr>
<tr>
<td>46</td>
<td>(humanistic or existential or experiential or paradigm*).ti,ab,kf,id.</td>
</tr>
<tr>
<td>47</td>
<td>(field adj (study or studies or research or work)).ti,ab,kf,id.</td>
</tr>
<tr>
<td>48</td>
<td>(human science or social science).ti,ab,kf,id.</td>
</tr>
<tr>
<td>49</td>
<td>biographical method.ti,ab,kf,id.</td>
</tr>
<tr>
<td>50</td>
<td>theoretical sampl*.ti,ab,kf,id.</td>
</tr>
<tr>
<td>51</td>
<td>((purpos* adj4 sampl*) or (focus adj group*)).ti,ab,kf,id.</td>
</tr>
<tr>
<td>52</td>
<td>(open-ended or narrative* or textual or texts or semi-structured).ti,ab,kf,id.</td>
</tr>
<tr>
<td>53</td>
<td>(life world* or life-world* or conversation analys?s or personal experience* or theoretical saturation).ti,ab,kf,id.</td>
</tr>
<tr>
<td>54</td>
<td>((lived or life) adj experience*).ti,ab,kf,id.</td>
</tr>
<tr>
<td>55</td>
<td>cluster sampl*.ti,ab,kf,id.</td>
</tr>
<tr>
<td>56</td>
<td>observational method*.ti,ab,kf,id.</td>
</tr>
<tr>
<td>57</td>
<td>content analysis.ti,ab,kf,id.</td>
</tr>
<tr>
<td>58</td>
<td>(constant adj (comparative or comparison)).ti,ab,kf,id.</td>
</tr>
<tr>
<td>59</td>
<td>((discourse* or discurs*) adj3 analys?s).ti,ab,kf,id.</td>
</tr>
<tr>
<td>60</td>
<td>(heidegger* or colaitzz* or spiegelberg* or merleau* or husserl* or foucault* or ricoeur or glaser*).ti,ab,kf,id.</td>
</tr>
<tr>
<td>61</td>
<td>(van adj manen*).ti,ab,kf,id.</td>
</tr>
<tr>
<td>62</td>
<td>(van adj kaam*).ti,ab,kf,id.</td>
</tr>
<tr>
<td>63</td>
<td>(corbin* adj2 strauss*).ti,ab,kf,id.</td>
</tr>
<tr>
<td>64</td>
<td>or/28-63</td>
</tr>
<tr>
<td>65</td>
<td>27 and 64</td>
</tr>
<tr>
<td>66</td>
<td>remove duplicates from 65</td>
</tr>
</tbody>
</table>

**OTHER DATABASES**

<table>
<thead>
<tr>
<th>PubMed</th>
<th>Searched to capture records not found in MEDLINE. Same MeSH, keywords, limits, and study types used as per MEDLINE search, with appropriate syntax used.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CINAHL</td>
<td>Same MeSH, keywords, and limits used as per MEDLINE search, excluding study types and human restrictions. Syntax adjusted for EBSCO platform, including the addition of CINAHL headings.</td>
</tr>
</tbody>
</table>
### Grey Literature

<table>
<thead>
<tr>
<th>Dates for Search:</th>
<th>June 10, 2019 - July 4, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keywords:</td>
<td>Internet, Cognitive Behavioural Therapy, PTSD</td>
</tr>
<tr>
<td>Limits:</td>
<td>Publication years: January 1, 2008 – present</td>
</tr>
</tbody>
</table>

Relevant websites from the following sections of the CADTH grey literature checklist, Grey Matters: A Practical Tool For Searching Health-Related Grey Literature (https://www.cadth.ca/grey-matters), were searched:

- health technology assessment agencies
- health economics
- clinical practice guidelines
- clinical trial registries
- databases (free)
- Internet search
- open access journals.
Appendix 2: Study Selection Flow Diagram — Clinical Review

515 citations identified from electronic literature search update and screened

505 citations excluded

10 potentially relevant articles retrieved for scrutiny (full text, if available)

7 potentially relevant reports retrieved from other sources (grey literature, hand search, search alerts)

17 potentially relevant reports

17 reports excluded:
- irrelevant population (1)
- irrelevant intervention (8)
- irrelevant comparator (3)
- irrelevant study design (review articles, editorials, protocols, guidelines) (5)

0 reports included from the search update
Appendix 3: List of Included Studies — Clinical Review

The citations provided in the following list are the primary studies that were included in the Cochrane review. No additional studies eligible for inclusion were identified as part of our update to the Cochrane search.


Studies Identified for the Discussion Section

The citations provided in the following list met the eligibility criteria for the CADTH Rapid Response report but not for the body of the review. A brief summary of its findings was provided in the discussion section of the health technology assessment.

Appendix 4: List of Excluded Studies and Reasons for Exclusion — Clinical Review

The citations provided in the following list are studies that were excluded after full-text assessment by two independent reviewers as part of the update to the Cochrane search. A list of articles excluded after full-text review from the original Cochrane search is available in the Cochrane review.40

Irrelevant Population


Irrelevant Intervention


Irrelevant Comparator


Irrelevant Study Design


### Appendix 5: Summary of the Cochrane Review

#### Table 14: Study Characteristics of the Cochrane Systematic Review

<table>
<thead>
<tr>
<th>Study Citation, Country, Funding Source</th>
<th>Study Designs, Search Time Frame, Number of Studies Included, Quality Assessment Tool, Objective</th>
<th>Population Characteristics</th>
<th>Intervention and Comparator(s)</th>
<th>Clinical Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lewis et al., 201840 UK</td>
<td><strong>Objective</strong>: To evaluate the effectiveness of iCBT for the treatment of PTSD in adults.</td>
<td>Adults (≥ 16 years of age) with traumatic stress symptoms. At least 70% of participants in any given study were required to meet diagnostic criteria for PTSD according to the DSM-III, DSM-III-R, DSM-IV, DSM-V, ICD-9, or the ICD-10, as assessed by clinical interview or a validated questionnaire. There were no restrictions placed on sex or gender, ethnicity, comorbidities, setting, type of traumatic event, severity of symptoms, or length of time since trauma.</td>
<td><strong>Intervention</strong>: Guided or unguided iCBT delivered via a computer or mobile device. Interventions based on EMDR or online psychoeducation alone, and interventions using mindfulness-based approaches apart from mindfulness-based iCBT, were excluded.</td>
<td>• Severity of PTSD symptoms (as measured by standardized scales, e.g., CAPS-5, PCL-5) • Dropout rates • Diagnosis of PTSD after treatment (i.e., number of participants who met diagnostic criteria for PTSD in each arm of the study) • Depression symptoms (as measured by standardized scales; e.g., BDI) • Anxiety symptoms (as measured by standardized scales; e.g., BAI) • Cost-effectiveness • Adverse events (e.g., symptoms worsening, relapses to substance use, hospitalizations, suicide attempts, work absenteeism) • Quality of life (using any measures)</td>
</tr>
<tr>
<td><strong>Funding source</strong>: The authors acknowledge the Cochrane Common Mental Disorder Group, whose single largest funder is the National Institute for Health Research (NIHR). Internal support was received from Cardiff University.</td>
<td><strong>Study design</strong>: SR and MA of RCTs, randomized crossover trials, and cluster-randomized trials. <strong>Literature search time frame</strong>: Initial searches were conducted on September 24th, 2015, and May 6th, 2016. An update was performed on March 1st, 2018. The searches were not restricted by date, language, or publication status.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Number of studies included</strong>: 10 studies were identified and included in the quantitative synthesis (MA).</td>
<td><strong>Quality assessment tool</strong>: The criteria in the Cochrane Handbook for Systematic Reviews of Interventions44 were applied to each included primary study to judge each potential source of bias as high, low, or unclear. The overall quality of available evidence was evaluated using the GRADE approach.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note**: Studies that met the inclusion criteria were included regardless of whether they reported on these outcomes.

---

BAI = Beck Anxiety Inventory; BDI = Beck Depression Inventory; CAPS = Clinician-Administered Post-Traumatic Stress Disorder Scale; CBT = cognitive behavioural therapy; DSM = Diagnostic and Statistical Manual of Mental Disorders; EMDR = eye movement desensitization and reprocessing; GRADE = Grading of Recommendations Assessment, Development and Evaluation; iCBT = internet-delivered cognitive behavioural therapy; ICD = The International Statistical Classification of Diseases and Health Related Problems; MA = meta-analysis; PCL = Post-Traumatic Stress Disorder Checklist; PTSD = post-traumatic stress disorder; RCT = randomized controlled trial; SR = systematic review.
### Appendix 6: Critical Appraisal of the Cochrane Review

#### Table 15: A Measurement Tool to Assess Systematic Reviews II Checklist

<table>
<thead>
<tr>
<th>AMSTAR II Item</th>
<th>Lewis (2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did the research questions and inclusion criteria for the review include the components of PICO?</td>
<td>⊕</td>
</tr>
<tr>
<td>a Did the report of the review contain an explicit statement that the review methods were established prior to the conduct of the review and did the report justify any significant deviations from the protocol?</td>
<td>⊕</td>
</tr>
<tr>
<td>Did the review authors explain their selection of the study designs for inclusion in the review?</td>
<td>X</td>
</tr>
<tr>
<td>a Did the review authors use a comprehensive literature search strategy?</td>
<td>⊕</td>
</tr>
<tr>
<td>Did the review authors perform study selection in duplicate?</td>
<td>⊕</td>
</tr>
<tr>
<td>Did the review authors perform data extraction in duplicate?</td>
<td>⊕</td>
</tr>
<tr>
<td>a Did the review authors provide a list of excluded studies and justify the exclusions?</td>
<td>⊕</td>
</tr>
<tr>
<td>Did the review authors describe the included studies in adequate detail?</td>
<td>⊕</td>
</tr>
<tr>
<td>a Did the review authors use a satisfactory technique for assessing the RoB in individual studies that were included in the review?</td>
<td>⊕</td>
</tr>
<tr>
<td>Did the review authors report on the sources of funding for the studies included in the review?</td>
<td>⊕</td>
</tr>
<tr>
<td>a If meta-analysis was performed, did the review authors use appropriate methods for statistical combination of results?</td>
<td>⊕</td>
</tr>
<tr>
<td>If meta-analysis was performed, did the review authors assess the potential impact of RoB in individual studies on the results of the meta-analysis or other evidence synthesis?</td>
<td>⊕</td>
</tr>
<tr>
<td>a Did the review authors account for RoB in individual studies when interpreting/discussing the results of the review?</td>
<td>⊕</td>
</tr>
<tr>
<td>Did the review authors provide a satisfactory explanation for, and discussion of, any heterogeneity observed in the results of the review?</td>
<td>⊕</td>
</tr>
<tr>
<td>a If they performed quantitative synthesis did the review authors carry out an adequate investigation of publication bias (small study bias) and discuss its likely impact on the results of the review?</td>
<td>⊕</td>
</tr>
<tr>
<td>Did the review authors report any potential sources of conflict of interest, including any funding they received for conducting the review?</td>
<td>⊕</td>
</tr>
</tbody>
</table>

⊕ = yes; X = no; AMSTAR = A Measurement Tool to Assess Systematic Reviews; RoB = risk of bias.

a = AMSTAR II critical domains.
### Table 16: Study and Patient Characteristics of Included Primary Clinical Studies

<table>
<thead>
<tr>
<th>Author(s) (Publication Year), Country, Funding Source</th>
<th>Study Design, Setting, and Objective</th>
<th>Patient Characteristics</th>
<th>Intervention(s)</th>
<th>Comparator(s)</th>
<th>Clinical Outcomes; Length of Follow Up</th>
</tr>
</thead>
</table>
| Krupnick et al. (2017), US | Study design: RCT, open label, 1:1 ratio  
Setting: Participants were recruited from the Trauma Services Program, an outpatient program that specialized in the assessment and treatment of veterans with military-related PTSD  
Objective: To determine the feasibility, acceptability, safety, and preliminary effectiveness of an online writing intervention based on principles of CBT compared with treatment as usual  
Inclusion criteria: Veterans (≥ 18 years of age) who served in Iraq or Afghanistan with a PCL-M score > 50  
Excluded: Individuals with current substance dependence, acute suicidality, psychosis, gross cognitive impairment, or current participants in CBT  
Number of participants: 34 (18 in iCBT group, 16 in usual care group)  
Mean age: 35.44 (SD = NR) years in the iCBT + TAU group; 44.75 (SD = NR) years, in the TAU group  
Sex: 8.8% female; 91.2% male  
Type of trauma: Military trauma  
Mean time since trauma: NR  
Baseline PTSD severity: Baseline PCL-M score (mean item score) of 3.6 (SD = 0.3) in therapist-guided iCBT (WIRED, based on interapy) plus treatment as usual (details not provided). The program involved trauma confrontation, cognitive restructuring of maladaptive thoughts, and discussion of leave-taking and social sharing  
Number of sessions: 10  
Treatment duration: NR  
Guidance: Support was provided by a psychologist as required by the study participants. A short response and further instructions were sent by the therapist after each writing session. Guidance was provided online  | Treatment as usual with no restrictions. A chart review conducted at the end of the study showed that participants in this group received cognitive processing therapy (n = 4), antidepressant medication (n = 8), or acupuncture (n = 1)  | Outcomes:  
• PCL-M  
• PHQ-9  
• AUDIT  
Follow up: 12 weeks and 24 weeks |
### Author(s) (Publication Year), Country, Funding Source
Kuhn et al. (2017), US

#### Study Design, Setting, and Objective
- **Study design**: RCT, open label, 1:1 ratio
- **Setting**: Participants were recruited using advertisements through fliers, media coverage, social media, and websites (Craigslist)
- **Objective**: The aim of the study was to evaluate the efficacy of a freely available smartphone app (PTSD Coach), which includes CBT-based tools for the treatment of PTSD

### Patient Characteristics
- **Inclusion criteria**: Adults (≥ 18 years of age) who were fluent in English, owned a mobile device capable of using PTSD Coach, had exposure to a traumatic event more than one month ago, and who had a PCL-C score of ≥ 35
- **Excluded**: Individuals who were receiving any treatment for PTSD
- **Number of participants**: 120 (62 in iCBT group, 58 in WL group)
- **Mean age**: 39.43 (SD = 15.16) years in the iCBT group; 39.12 (SD = 14.08) years in the WL group
- **Sex**: 69.2% female, 30.8% male
- **Type of trauma**: Physical assault (n = 56), sexual assault (n = 17), serious accident (n = 25), life-threatening illness

### Intervention(s)
- Unguided internet program based on CBT (PTSD Coach). While PTSD Coach includes sections that provide participants with CBT-based tools, the program appears to be much less structured than other iCBT software

### Comparator(s)
- WL control. Participants were on a wait-list for 14 weeks and then received information on PTSD Coach, allowing them to use it if they would like

### Clinical Outcomes; Length of Follow Up
- **Primary outcomes**: • PCL
- **Secondary outcomes**: • PTSD symptom coping self-efficacy • PHQ-8 • B-IPF
- **Follow up**: 3 months (post-treatment) and 6 months (there no data for the wait-list group available at second follow up)
<table>
<thead>
<tr>
<th>Author(s) (Publication Year), Country, Funding Source</th>
<th>Study Design, Setting, and Objective</th>
<th>Patient Characteristics</th>
<th>Intervention(s)</th>
<th>Comparator(s)</th>
<th>Clinical Outcomes; Length of Follow Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lewis et al. (2017), 52 UK Funding source: Knowledge Transfer Partnership (KTP008512)</td>
<td>Study design: RCT, single blind (the outcome assessor was blinded), 1:1 ratio Setting: Participants were recruited from mental health services at a primary care level and at a specialist secondary care traumatic stress service. 95% of participants were referred by treating clinicians and 5% were recruited by advertisements in the media</td>
<td>or injury (n = 7), disaster exposure (n = 3), combat exposure (n = 4), and other events (n = 8) were reported as index traumas for participants in both groups Mean time since trauma: 9.88 (SD = 11.59) years in the iCBT group; 9.77 (SD = 10.22) years in the WL group Baseline PTSD severity: Mean PCL-C score of 63.19 (SD = 11.78) in the iCBT group; mean PCL-C score of 60.59 (SD = 10.24) in the WL group Comorbidities: NR</td>
<td>Therapist-guided trauma-focused iCBT. The modules included psycho-educational materials, grounding techniques, relaxation exercises, imaginal exposure, cognitive techniques to address negative thoughts, and graded in vivo exposure work Number of sessions: 8 modules</td>
<td>WL control (delayed treatment group). Participants were on a wait-list for 14 weeks and then received the iCBT intervention This group did not receive any therapist contact until they crossed over</td>
<td>Primary outcomes: • CAPS-5 Secondary outcomes: • PTSD symptoms (PCL-5) • Depression symptoms (BDI) • Anxiety symptoms (BAI) • Signs of harmful drinking or dependence (AUDIT) • Perceived social support (SSQ) • Functional impairment (SDS)</td>
</tr>
<tr>
<td>Author(s) (Publication Year), Country, Funding Source</td>
<td>Study Design, Setting, and Objective</td>
<td>Patient Characteristics</td>
<td>Intervention(s)</td>
<td>Comparator(s)</td>
<td>Clinical Outcomes; Length of Follow Up</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>------------------------------------</td>
<td>--------------------------</td>
<td>----------------</td>
<td>--------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td><strong>Objective:</strong> “To evaluate a novel trauma-focused internet-based guided self-help program for PTSD” (p. 556)</td>
<td><strong>Number of participants:</strong> 42 (21 in iCBT group; 21 in WL group)</td>
<td>Psychotropic medication in the previous month, concurrent psychological therapy, and suicidal intent</td>
<td><strong>Treatment duration:</strong> 8 weeks</td>
<td></td>
<td>Follow up: 10 weeks (post-treatment), 14 weeks (1 month post-treatment), and 22 weeks (3 months post-treatment)</td>
</tr>
<tr>
<td><strong>Mean age:</strong> 38.86 (SD = 11.91) years, range = 20 to 65 years in the iCBT group; 37.71 (SD = 13.8) years, range = 21-64 years in the WL (delayed treatment) group</td>
<td><strong>Sex:</strong> 59.5% female; 40.5% male</td>
<td></td>
<td><strong>Guidance:</strong> The intervention allowed up to three hours of therapist assistance, which was offered to provide support, monitoring, motivation, and problem-solving. This guidance was provided by a psychiatrist, a clinical psychologist, and three cognitive behavioral therapists who were experienced in the delivery of trauma-focused CBT. Guidance was provided in face-to-face meetings, over the telephone, or by email</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Type of trauma:</strong> Transportation accidents (n = 9); witnessing a sudden, violent, or accidental death (n = 9); traumatic childbirth or stillbirth (n = 8); sexual assault or rape (n = 5); physical attack (n = 4); life-threatening illness or injury (n = 3); serious accident (n = 1); learning of the violent death of a loved one (n = 1); seeing a mutilated body (n = 1); and being held hostage or detained (n = 1). The average time since trauma was 37.33 months (SD = 46.95, range = 3 to 228 months)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Author(s) (Publication Year), Country, Funding Source</td>
<td>Study Design, Setting, and Objective</td>
<td>Patient Characteristics</td>
<td>Intervention(s)</td>
<td>Comparator(s)</td>
<td>Clinical Outcomes; Length of Follow Up</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>-------------------------------------</td>
<td>-------------------------</td>
<td>----------------</td>
<td>--------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>Miner et al. (2016). 67 US</td>
<td>Study design: RCT, open label, 1:1 ratio Setting: Participants were recruited using fliers posted in the San Francisco Bay Area as well as through website postings (e.g., Craigslist) seeking volunteers who had experienced trauma, had PTSD symptoms from it, and were willing to use a mobile app Objective: To assess the feasibility, acceptability, and preliminary efficacy of the iCBT-based app (PTSD Coach) to inform a larger-scale trial</td>
<td>Mean time since trauma: 2.72 (SD = 4.34) years in the iCBT group; 3.54 (SD = 3.45) years in the WL (delayed treatment) group Baseline PTSD severity: Mean CAPS-5 score of 35.99 (SD = 6.29) in the iCBT group; mean CAPS-5 score of 37.12 (SD = 6.95) in the WL (delayed treatment) group Comorbidities: NR</td>
<td>Unguided internet program based on CBT (PTSD Coach). While PTSD Coach includes sections that provide participants with CBT-based tools, the program appears to be much less structured than other iCBT software Number of sessions: The program was not broken down into sessions Treatment duration: 4 weeks</td>
<td>WL control. Participants were on a wait-list for 4 weeks and then received information on PTSD Coach, allowing them to use it if they would like This group received no intervention during the treatment period</td>
<td>Primary outcomes: • PCL-C Secondary outcomes: • Acceptability • Feasibility Follow up: 1 month (post-treatment)</td>
</tr>
<tr>
<td>Author(s) (Publication Year), Country, Funding Source</td>
<td>Study Design, Setting, and Objective</td>
<td>Patient Characteristics</td>
<td>Intervention(s)</td>
<td>Comparator(s)</td>
<td>Clinical Outcomes; Length of Follow Up</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>
| Engel et al. (2015), US | Study design: RCT, single blind (the outcome assessor was blinded), 1:1 ratio  
Setting: Participants were referred from one of three Veterans Affairs and four Army clinics by their primary care providers after screening positive for PTSD  
Objective: To examine the effectiveness of a nurse-assisted online CBT intervention for war-related PTSD compared with optimized usual care PTSD treatment | Sex: 81.6% female; 18.4% male  
Type of trauma: Various; details were NR  
Mean time since trauma: NR  
Baseline PTSD severity: Mean PSS-I score of 63.00 (SD = 11.28) in the iCBT group; mean PSS-I score of 59.33.4 (SD = 11.34) in the WL group  
Comorbidities: NR | Nurse-guided trauma-focused iCBT (DESTRESS-PC) plus optimized usual primary care PTSD treatment. The program included educational information about PTSD, stress, trauma, depression, and survivors’ guilt, as well as strategies to manage anger and promote better sleep hygiene and cognitive reframing techniques  
Number of sessions: 3 modules per week for 6 weeks (18 modules total) | Optimized usual PTSD care that consisted of usual primary care PTSD treatment augmented with low intensity care management, feedback to the primary care provider, and training of the clinic providers in management of PTSD. The treatment was designed to approximate the level of PTSD care normally available in primary care while incorporating nonspecific treatment elements of the DESTRESS intervention (e.g., participants received | Primary outcomes:  
• PCL-C  
Secondary outcomes:  
• PHQ-8  
• PHQ-15  
• SF-36  
Follow up: 6 weeks, 12 weeks (post-treatment), and 18 weeks |
<table>
<thead>
<tr>
<th>Author(s) (Publication Year), Country, Funding Source</th>
<th>Study Design, Setting, and Objective</th>
<th>Patient Characteristics</th>
<th>Intervention(s)</th>
<th>Comparator(s)</th>
<th>Clinical Outcomes; Length of Follow Up</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>within the past two years; active substance dependence in the past year; active suicidal or homicidal ideation within the past two months; current antipsychotic or mood-stabilizing medication; unstable administration schedule or dosing of any antidepressant, anxiolytic, or sedative-hypnotic during the last month; or acute or unstable physical illness.</td>
<td>Treatment duration: 6 weeks with access to the program for 8 weeks (extended to 10 weeks in very rare cases)</td>
<td>three 15 minute phone calls from the DESTRESS nurse</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Number of participants: 80 (43 in iCBT group, 37 in optimized usual care group)</td>
<td>Guidance: Participants were encouraged to contact the study nurses for assistance if needed. The study nurses had access to a private portion of the website where they could monitor compliance and symptom severity</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean age: 36.2 (SD = 7.75) years in the iCBT group; 36.7 (SD = 9.75) years in the optimized usual care group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sex: 18.75% female; 81.25% male</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Type of trauma: War-related trauma (including military sexual trauma)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean time since trauma: NR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Baseline PTSD severity: Mean PCL-C score of 58.00 (SD = 9.85) in the iCBT group; mean PCL-C score of 54.48 (SD = 11.23) in the optimized usual care group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Author(s) (Publication Year), Country, Funding Source</td>
<td>Study Design, Setting, and Objective</td>
<td>Patient Characteristics</td>
<td>Intervention(s)</td>
<td>Comparator(s)</td>
<td>Clinical Outcomes; Length of Follow Up</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>-------------------------------------</td>
<td>-------------------------</td>
<td>----------------</td>
<td>--------------</td>
<td>----------------------------------------</td>
</tr>
</tbody>
</table>
| Knaevelsrud et al. (2015), Iraq                      | Study design: RCT, open label, 1:1 ratio  
Setting: Participants were recruited between January 2009 and November 2011 using radio, TV, newspaper, and health-related websites in Iraq. Information about the study was regularly posted to a Facebook page  
Objective: To evaluate the effectiveness of an iCBT intervention for the treatment of PTSD in a highly unstable setting (Iraq)  
Comorbidities: The study did not screen for comorbid conditions | Inclusion criteria: Arabic-speaking adults (≥ 18 and ≤ 65 years of age) with a history of trauma (according to the DSM-IV criteria) accompanied by post-traumatic stress symptoms. The PDS was used to identify if patients reported the minimum number of symptoms required by DSM-IV for each of the symptom clusters. The minimum score on the PDS to be included in the trial was 11 (indicating moderate symptom severity)  
Excluded: Individuals who were receiving treatment elsewhere, had substance abuse or dependence, high risk of suicide, psychotic symptoms, or low symptom severity  
Number of participants: 159 (79 in iCBT group, 80 in WL group)  
Mean age: 29.11 (SD = 8.20) years in the iCBT group; 27.15 (SD = 6.48) years in the WL group  
Sex: 76% female; 24% male  
Therapist-guided trauma-focused iCBT (interapy, which was translated into Arabic and culturally adapted). Treatment involved structured writing activities over three phases: one, self-confrontation with the traumatic event; two, cognitive restructuring; and three, social sharing  
Number of sessions: 10 writing assignments  
Treatment duration: 5 weeks  
Guidance: Support was provided weekly either in face-to-face sessions of via Skype. Assignment reminders were provided by email and telephone  
WL control. Participants were on a wait-list for six weeks (until after post-treatment assessments) and then received the iCBT intervention | Primary outcomes:  
- PDS  
Secondary outcomes:  
- HSCL-25  
- SCL  
- EUROHIS-QOL  
Follow up: 5 weeks (post-treatment) and 3 months (there no data for the wait-list group available at second follow up) |
<table>
<thead>
<tr>
<th>Author(s) (Publication Year), Country, Funding Source</th>
<th>Study Design, Setting, and Objective</th>
<th>Patient Characteristics</th>
<th>Intervention(s)</th>
<th>Comparator(s)</th>
<th>Clinical Outcomes; Length of Follow Up</th>
</tr>
</thead>
</table>
| Ivarsson et al. (2014), 69 Sweden                    | Study design: RCT, single blind (the outcome assessor was blinded), 1:1 ratio | **Type of trauma:** War-related; specifically killing of a family member (n = 24), sexual violence related to war or sexual abuse (n = 63), violence of war or torture (n = 30), others (e.g., kidnapping, witnessing bomb attacks; n = 42)  
**Mean time since trauma:** NR as a mean. Within the CBT group, 13%, 22%, and 65% of participants experienced trauma less than 6 months prior, 6 months to 3 years prior, or more than 3 years prior, respectively. Within the WL group, 10%, 18%, and 70% of participants experienced trauma less than 6 months prior, 6 months to 3 years prior, or more than 3 years prior, respectively  
**Baseline PTSD severity:** Mean PDS score of 30.87 (SD = 8.13) in the iCBT group; mean PDS score of 31.81 (SD = 7.13) in the WL group  
**Comorbidities:** NR | Therapist-guided trauma-focused iCBT. The program included psychoeducation, anxiety coping skill training, imaginal | Minimal support via the internet control group. Participants were presented with general questions on wellbeing, stress, and sleep on a computer | Primary outcomes:  
• IES-R  
• PDS  
Secondary outcomes:  
• BDI-II |
<table>
<thead>
<tr>
<th>Author(s) (Publication Year), Country, Funding Source</th>
<th>Study Design, Setting, and Objective</th>
<th>Patient Characteristics</th>
<th>Intervention(s)</th>
<th>Comparator(s)</th>
<th>Clinical Outcomes; Length of Follow Up</th>
</tr>
</thead>
</table>
| Setting: Participants were recruited from the general population using advertisements in national and local newspapers that sought participants with PTSD willing to receive treatment over the internet | stable dose of medication (for at least the last 3 months) or were medication-free, and who met the DSM-IV criteria for chronic PTSD | exposure, and cognitive restructuring | weekly basis. The purpose of this group was to stay in touch and provide support during the waiting period. This group was offered the iCBT treatment after post-treatment measured outcomes were collected | • BAI  
• QOLI  
• CGI-I | Follow up: 8 weeks (post-treatment) and 1 year (there no data for the wait-list group available at second follow up) |
<p>| Objective: To investigate the effectiveness of a guided iCBT program for the treatment of PTSD | Excluded: Individuals with imminent suicide risk, concurrent psychologic treatment, alcohol abuse, ongoing trauma or trauma within the past three months, or those who reported symptoms following childhood abuse | Number of sessions: 8 text-based modules | | | |
| | Number of participants: 62 (31 in iCBT group; 31 in control group) | Treatment duration: 8 weeks | | | |
| | Mean age: 44.8 (SD = 11.2) years in the iCBT group; 47.2 (SD = 12.2) years in the control group | Guidance: Support was provided by therapist students in their later semester of a five year clinical psychology program who had received clinical supervision in CBT. Support consisted of guidance, encouragement, and individual feedback on completed assignments. Therapist feedback was provided once every week via an encrypted web service (through emails). The average time spent with the participants was 28 minutes per week | | | |
| | Sex: 82.3% female; 17.7% male | | | | |
| | Type of trauma: Sexual, physical, and/or psychological abuse by partner (n = 14); life-threatening disease (n = 8); severe offense by significant other (perceived as threatening to integrity; n = 6); life-threatening accident (n = 5); non-sexual assault by a stranger (n = 5); murder of close relative (n = 4); non-sexual assault by a | | | |</p>
<table>
<thead>
<tr>
<th>Author(s) (Publication Year), Country, Funding Source</th>
<th>Study Design, Setting, and Objective</th>
<th>Patient Characteristics</th>
<th>Intervention(s)</th>
<th>Comparator(s)</th>
<th>Clinical Outcomes; Length of Follow Up</th>
</tr>
</thead>
</table>
| Spence et al. (2011), Australia                      | Study design: RCT, open-label, 1:1 ratio | Family member (n = 3); death of a close relative (n = 3); severe maltreatment in health care (n = 3); multiple stressors (n = 3); life-threatening disease of a close relative (n = 2); military combat (n = 2); torture (n = 1); rape by stranger (n = 1); rape by family member (n = 1); and tsunami disaster (n = 1). Mean time since trauma: NR | Therapist-guided trauma-focused iCBT. The program included psycho-educational materials, strategies for monitoring and challenging thoughts, education, and guidelines about practising exposure and challenging dysfunctional beliefs, and information about relapse prevention | WL control. Participants were on a wait-list for eight weeks (until after post-treatment assessments) and then received the iCBT intervention | Primary outcomes: • PCL-C
Secondary outcomes: • PHQ-9 • GAD-7 • SDS
Follow up: 8 weeks (post-treatment) and 3 months (there no data for the wait-list group available at second follow up) |
<p>| Setting: Participants were recruited from a website that offers participation in online psychological interventions (virtualclinic.org.au) and advertisements in a local newspaper and in an email newsletter sent by a government institution | Inclusion criteria: Adult (≥ 18 years of age) residents of Australia who had access to a computer and printer, were on a stable dose of medication for at least one month (with no intention of changing the dose throughout the study) or were medication-free, and met the DSM-IV criteria for PTSD (as assessed with the MINI) | Excluded: Individuals who were currently participating in CBT, | | | |
| Patient Characteristics: The study did not screen for comorbid conditions | Baseline PTSD severity: Mean IES-R score of 54.65 (SD = 13.16) in the iCBT group; mean IES-R score of 54.87 (SD = 15.48) in the control group | | | | |
| | Comorbidities: The study did not screen for comorbid conditions | | | | |</p>
<table>
<thead>
<tr>
<th>Author(s) (Publication Year), Country, Funding Source</th>
<th>Study Design, Setting, and Objective</th>
<th>Patient Characteristics</th>
<th>Intervention(s)</th>
<th>Comparator(s)</th>
<th>Clinical Outcomes; Length of Follow Up</th>
</tr>
</thead>
</table>
| **Objective**: To explore the efficacy of an iCBT program for the treatment of PTSD | experiencing a psychotic mental illness, or who had severe symptoms of depression or were highly dissociative | **Number of participants**: 42 (23 in iCBT group; 19 in WL group)  
**Mean age**: 43.0 (SD = 15.2) years in the iCBT group; 42.0 (SD = 10.4) years in the WL group  
**Sex**: 81% female; 19% male | **Number of sessions**: 7 modules  
**Treatment duration**: 8 weeks  
**Guidance**: Support was provided by a clinical psychologist via telephone, email, and forum posts. The purpose of the guidance was to monitor mood and provide support and encouragement. The mean therapist time per participant was 103.91 (SD = 96.53) minutes throughout the course of the program | | |
| **Type of trauma**: Various; most participants had experienced multiple types of trauma. Most common traumas were physical assault (74%), unwanted sexual experience (70%), sexual assault (57%), transportation accidents (52%), and other stressful experiences (52%) | **Mean time since trauma**: NR  
**Baseline PTSD severity**: Mean PCL-C score of 60.78 (SD = 10.03) in the iCBT group; mean PCL-C score of 57.00 (SD = 9.69) in the WL group | **Comorbidities**: Participants were screened for comorbid depression, generalized anxiety disorder, panic disorder with or | | | |

*OPTIMAL USE REPORT Internet-Delivered Cognitive Behavioural Therapy for Post-Traumatic Stress Disorder*
<table>
<thead>
<tr>
<th><strong>Author(s) (Publication Year), Country, Funding Source</strong></th>
<th><strong>Study Design, Setting, and Objective</strong></th>
<th><strong>Patient Characteristics</strong></th>
<th><strong>Intervention(s)</strong></th>
<th><strong>Comparator(s)</strong></th>
<th><strong>Clinical Outcomes; Length of Follow Up</strong></th>
</tr>
</thead>
</table>
| Littleton et al. (2016), US | **Study design:** RCT, open-label, 1:1 ratio  
**Setting:** “Participants were recruited via posted advertisements on all four campuses (e.g., fliers, campus bus advertisements, advertisements in campus newspapers), postings on university psychology department participant management websites, as well as via social media (e.g., a study Facebook page, postings in student Facebook groups)”70 (p. 3). | without agoraphobia, social phobia, and obsessive-compulsive disorder and pre-treatment and at three-month follow up | Therapist-guided iCBT (The From Survivor to Thriver Program). The program consisted of three phases: one, psychoeducation relating to PTSD; two, an introduction to the cognitive model and how to identify and respond to distorted or unhelpful automatic thoughts; three, the use of cognitive behavioural techniques to address specific concerns common among women following sexual assault (e.g., difficulties with trust, self-blame for the assault) | Access to a psycho-educational website that contained informational content from the first three treatment modules (which focused on relaxation, grounding, and coping strategies). The website did not contain multimedia content or interactive exercises from the iCBT program | **Primary outcomes:**  
• PSS-I  
**Secondary outcomes:**  
• Interference (at school, work, relationships, and overall; scored between 0 and 3)  
• CES-D  
• FDAS  
• Therapist competence  
• Therapist and treatment satisfaction (STTS-R)  
• Working alliance (WAI-S)  
**Follow up:** 14 weeks (post-treatment) and 24 weeks |
| **Funding source:** NR | **Inclusion criteria:**  
Women who were enrolled as a student at one of four universities or community colleges, had suffered rape-related trauma, and met the diagnostic criteria for PTSD (according to PSS-I)  
**Excluded:** Individuals currently receiving psychotherapy, change in psychotropic medication in past three months, active suicidality, or that met the DSM-IV criteria for current substance dependence | **Number of participants:** 87 (46 in iCBT group; 41 in i-non-CBT group)  
**Mean age:** 22 years (range = 18 to 42 years) for the whole sample  
**Sex:** 100% female in both groups  
**Type of trauma:** All participants had experienced a completed rape since the age of 14 | **Number of sessions:** 9 modules  
**Treatment duration:** 14 weeks  
**Guidance:** Therapist guidance was provided |  | |

**iCBT Versus i-non-CBT Interventions**

- **Type of trauma:** All participants had experienced a completed rape since the age of 14
**Study Design, Setting, and Objective**

**Baseline PTSD severity:** Mean PSS-I score of 11.2 (SD = 5.8) in the iCBT group; mean PSS-I score of 10.4 (SD = 8.5) in the i-non-CBT group

**Comorbidities:** NR

**Inclusion criteria:** Department of Defense service members (≥ 21 and ≤ 65 years of age) who had PTSD (according to DSM-IV criteria) as a result of the Pentagon attack on September 11th or combat in Iraq or Afghanistan

**Excluded:** Individuals with active substance dependence, current suicidal ideation, history of psychotic disorder, PTSD or depression prior to most recent trauma, current psychiatric treatment, marked ongoing stressors, inadequate social support, or recent changes in medication

**Number of sessions:** 7 trauma writing sessions

**Treatment duration:** 8 weeks

**Guidance:** Support was provided by a therapist using initial face-to-face contact, telephone, and emails (both scheduled and unscheduled) and informal contact via the website.

**Comparator(s):**

- Internet-delivered supportive counselling. This control group received monitoring of non–trauma-related concerns and online writing about these experiences. Psycho-educational materials were available. Participants were asked to visit the website daily to log their symptoms, read about stress and stress management, and to write about current concerns. Support was provided to the participants at their convenience.

**Clinical Outcomes; Length of Follow Up**

- Primary outcomes: PSS-I
- Secondary outcomes: BDI, BAI
- Follow up: 8 weeks (post-treatment), 3 months, and 6 months
<table>
<thead>
<tr>
<th>Author(s) (Publication Year), Country, Funding Source</th>
<th>Study Design, Setting, and Objective</th>
<th>Patient Characteristics</th>
<th>Intervention(s)</th>
<th>Comparator(s)</th>
<th>Clinical Outcomes; Length of Follow Up</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>Number of participants:</strong> 45 (24 in iCBT group; 21 in i-non-CBT group)</td>
<td>and when requested by the participant)</td>
<td>request through initial face-to-face contact, telephone, and email. Therapists were instructed to be empathetic and validating, non-directive and supportive, and to focus on non-trauma-related present-day concerns</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Mean age:</strong> 38.63 (SD = 9.41) years in the iCBT group; 39.86 (SD = 7.72) years in the i-non-CBT group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Sex:</strong> 22.2% female; 77.8% male</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Type of trauma:</strong> Combat exposure (9/11 attack on the Pentagon or combat in Iraq or Afghanistan)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Mean time since trauma:</strong> NR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Baseline PTSD severity:</strong> Mean PSS-I score of 26.72 (SD = 9.02) in the iCBT group; mean PSS-I score of 29.16 (SD = 9.93) in the i-non-CBT group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Comorbidities:</strong> NR</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Lewis et al. (2018).[^40]

[^40]: AUDIT = Alcohol Use Disorders Identification Test; BAI = Beck Anxiety Inventory; BDI = Beck Depression Inventory; B-IPF = Brief Inventory of Psychosocial Functioning; CAPS = Clinician-Administered PTSD Scale; CBT = cognitive behavioural therapy; CES-D = Center for Epidemiological Studies – Depression Scale; CGI = Clinical Global Impression – Improvement; DESTRESS = Delivery of Self Training and Education for Stressful Situations; DESTRESS-PC = Delivery of Self Training and Education for Stressful Situations – Primary Care version; DSM = Diagnostic and Statistical Manual of Mental Disorders; FDAS = Four Dimensional Anxiety Scale; GAD-7 = Generalized Anxiety Disorder 7-Item Scale; HSCL = Hopkins Symptom Checklist; iCBT = internet-delivered cognitive behavioural therapy; i-non-CBT = internet-delivered non-CBT; IES-R = Impact of Event Scale – Revised; MINI = Mini International Neuropsychiatric Interview Version 5.0.0; NR = not reported; PCL-5 = Post-Traumatic Stress Disorder Checklist for Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition; PCL-C = PTSD Checklist – Civilian; PCL-M = Post-Traumatic Stress Disorder Checklist – Military; PDS = Post-Traumatic Stress Diagnostic Scale; PHQ-8 = Patient Health Questionnaire – 8 Item; PHQ-9 = Patient Health Questionnaire – 9 Item; PSS-I = Post-Traumatic Stress Disorder Symptom Scale – Interview; PTSD = post-traumatic stress disorder; QOLI = Quality of Life Inventory; RCT = randomized controlled trial; SCL = The somatization subscale of the Symptom Checklist – 90; SD = standard deviation; SDS = Sheehan Disability Scale; SF-36 = Medical Outcomes Study Short Form-36; SSQ = Social Support Questionnaire; STTS-R = Satisfaction with Therapy and Therapist Scale – Revised; TAU = treatment as usual; WAI-S = Working Alliance Inventory – Short Form; WIRED = Warriors Internet Recovery & Education; WL = wait-list.
Table 17: Brief Description of Common Outcome Assessment Scales

<table>
<thead>
<tr>
<th>Outcome Assessment Scale</th>
<th>Reference</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAI</td>
<td>Julian, 2011&lt;sup&gt;222&lt;/sup&gt;</td>
<td>A 21-question multiple-choice self-report inventory used to evaluate the severity of anxiety symptoms. The total score (sum of the 21 items) classifies anxiety severity: 0-9 (normal to minimal anxiety), 10-18 (mild-to-moderate anxiety), 19-29 (moderate to severe anxiety) and ≥30 (severe anxiety).</td>
</tr>
<tr>
<td>BDI (I or II)</td>
<td>Beck, 1961&lt;sup&gt;223&lt;/sup&gt;</td>
<td>A 21-question multiple-choice self-report inventory used to evaluate the severity of depressive symptoms. Each answer is scored on a value of 0 to 3. A total score is calculated: 0-13 (minimal depression), 14-19 (mild depression), 20-28 (moderate depression), and ≥29 (severe depression).</td>
</tr>
<tr>
<td>CAPS (CAPS-5)</td>
<td>Lewis, 2017&lt;sup&gt;52&lt;/sup&gt;</td>
<td>A 30-item structured interview that corresponds to the DSM-V criteria for PTSD. This scale has been considered the “gold standard” for PTSD assessment. Higher scores indicate more severe PTSD symptoms.</td>
</tr>
<tr>
<td>CES-D</td>
<td>Littleton, 2016&lt;sup&gt;70&lt;/sup&gt;</td>
<td>A 20-item, self-report measure of depressive symptoms occurring within the past week. Total scores can range from 0 to 60. A total score above 12 suggest clinically significant depressive symptoms.</td>
</tr>
<tr>
<td>FDAS</td>
<td>Littleton, 2016&lt;sup&gt;70&lt;/sup&gt;</td>
<td>A 35-item measured used to quantify physiological, cognitive, emotional, and behavioral anxiety symptoms occurring within the past week. Total scores can range between 35 and 175. Higher scores indicate more severe symptoms of anxiety.</td>
</tr>
<tr>
<td>IES-R</td>
<td>Kersting, 2013&lt;sup&gt;224&lt;/sup&gt;</td>
<td>A 22-item scale used to assess post-traumatic stress symptoms categorized into three symptom clusters (intrusions, avoidance, and hyperarousal). Frequency of symptoms over the past week is scores on a 4-point measurement scale. Higher scores indicate increased symptom severity.</td>
</tr>
<tr>
<td>PCL-C or PCL-M</td>
<td>Cernvall, 2017&lt;sup&gt;225&lt;/sup&gt;</td>
<td>A 17-item self-report instrument used to measure PTSD symptoms. Each item is rated between 1 (not at all) and 5 (extremely). Higher scores indicate increased PTSD symptom severity. A score of 44 has been suggested as a cut-off for the diagnosis of PTSD. Total score ranges from 17 to 85, with higher scores indicating more severe PTSD symptoms.</td>
</tr>
<tr>
<td>PDS</td>
<td>Franklin, 2017&lt;sup&gt;226&lt;/sup&gt;</td>
<td>A 48-item self-report measure of PTSD symptom severity. Total scores can range between 0 and 51, with higher scores indicating higher symptom severity.</td>
</tr>
<tr>
<td>PHQ-9</td>
<td>Johnston, 2011&lt;sup&gt;227&lt;/sup&gt;</td>
<td>A 9-item measure of the symptoms and severity of major depressive disorder based on the DSM-IV criteria. Each question is scored on a value of 0 to 3, with higher scores indicating more severe symptoms. A total score of 10 on the PHQ-9 has been identified as an important threshold for identifying major depression that meets the DSM-IV criteria.</td>
</tr>
<tr>
<td>PSS-I</td>
<td>Littleton, 2016&lt;sup&gt;70&lt;/sup&gt;</td>
<td>An interview measure that consists of 17 items, each rated on a scale of 0 (does not interfere at all) to 3 (interferes very much). Total score ranges from 0 to 51, with higher scores indicating more severe PTSD symptoms.</td>
</tr>
</tbody>
</table>

BDI-II = Beck Depression Inventory – II; CAPS = Clinician-Administered Post-Traumatic Stress Disorder Scale; CES-D = Center for Epidemiological Studies – Depression Scale; DSM = Diagnostic and Statistical Manual of Mental Disorders; FDAS = Four Dimensional Anxiety Scale; IES-R = Impact of Event Scale – Revised; PCL-C = Post-Traumatic Stress Disorder Checklist – Civilian Version; PCL-M = Post-Traumatic Stress Disorder Checklist – Military Version; PDS = Post-Traumatic Stress Diagnostic Scale; PHQ-9 = Patient Health Questionnaire; PSS-I = Post-Traumatic Stress Disorder Symptom Scale – Interview; PTSD = post-traumatic stress disorder.
## Appendix 8: Critical Appraisal of Primary Studies

### Table 18: Cochrane Risk of Bias Assessment for Included Randomized Controlled Trials

<table>
<thead>
<tr>
<th>Study Citation</th>
<th>Selection Bias</th>
<th>Performance Bias</th>
<th>Detection Bias</th>
<th>Attrition Bias</th>
<th>Reporting Bias</th>
<th>Other Bias</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engel (2015)(^54)</td>
<td>Low</td>
<td>Unclear</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Ivarsson (2014)(^69)</td>
<td>Low</td>
<td>Unclear</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Knaevelsrud (2015)(^68)</td>
<td>Low</td>
<td>Unclear</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Kuhn (2017)(^53)</td>
<td>Unclear</td>
<td>Unclear</td>
<td>High</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Lewis (2017)(^52)</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Littleton (2016)(^70)</td>
<td>Low</td>
<td>Unclear</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Litz (2007)(^71)</td>
<td>Unclear</td>
<td>Unclear</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Miner (2016)(^67)</td>
<td>Unclear</td>
<td>Unclear</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Spence (2011)(^55)</td>
<td>Low</td>
<td>Unclear</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>Unclear</td>
</tr>
</tbody>
</table>

Note: The assessment rating judgements in the table were made by the authors of the Cochrane review.

Source: Lewis et al. (2018).\(^40\)
Appendix 9: Clinical Efficacy of Guided Internet-Delivered Cognitive Behavioural Therapy Versus Wait-List

In order to support the scenario analysis of guided internet-delivered cognitive behavioural therapy (iCBT) compared with wait-list or usual care, findings from the CADTH clinical review were reanalyzed using the six studies that examined nurse- or therapist-guided iCBT programs, excluding data from the two studies on PTSD Coach, an unguided iCBT program. This very low-quality evidence indicated that guided iCBT was more effective than wait-list or usual care for severity of post-traumatic stress disorder symptoms at post-treatment (standard mean deviation [95% confidence interval] = −0.80 [−1.18 to −0.42]; participants = 391; randomized controlled trials = 6; I² = 65%; Figure 17). Although this analysis was not conducted as part of the Cochrane review, these results were used for scenario analyses in the economic section of this health technology assessment.

**Figure 17: Comparison of Guided Internet-Delivered Cognitive Behavioural Therapy and Wait-List; Outcome: Severity of Post-Traumatic Stress Disorder Symptoms (Post-Treatment)**

<table>
<thead>
<tr>
<th>Study or Subgroup</th>
<th>Guided iCBT</th>
<th>Wait List</th>
<th>Std. Mean Difference IV, Random, 95% CI</th>
<th>Std. Mean Difference IV, Random, 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engel 2015</td>
<td>43.3</td>
<td>30.7</td>
<td>−0.20 [−0.73, 0.34]</td>
<td></td>
</tr>
<tr>
<td>Ivansson 2014</td>
<td>17.32</td>
<td>18.05</td>
<td>−0.72 [−1.24, −0.21]</td>
<td></td>
</tr>
<tr>
<td>Knaeveland 2015</td>
<td>20.29</td>
<td>12.45</td>
<td>−0.92 [−1.24, −0.60]</td>
<td></td>
</tr>
<tr>
<td>Kiupnick 2017</td>
<td>3.58</td>
<td>0.3</td>
<td>−0.81 [−1.66, −0.01]</td>
<td></td>
</tr>
<tr>
<td>Lewis 2017</td>
<td>17.53</td>
<td>12.25</td>
<td>−1.62 [−2.55, −0.69]</td>
<td></td>
</tr>
<tr>
<td>Spence 2011</td>
<td>44.78</td>
<td>17.25</td>
<td>−0.45 [−1.06, 0.17]</td>
<td></td>
</tr>
<tr>
<td>Total (95% CI)</td>
<td>191</td>
<td>191</td>
<td>−0.80 [−1.18, −0.42]</td>
<td></td>
</tr>
</tbody>
</table>

Heterogeneity: Tau² = 0.14, Chi² = 14.39, df = 5 (P = 0.01); I² = 65%
Test for overall effect: Z = 4.15 (P < 0.0001)

CI = confidence interval; iCBT = internet-delivered cognitive behavioural therapy; IV = inverse variance; SD = standard deviation; Std. = standard; WL = wait-list.

Source: Lewis et al. (2018).46
Appendix 10: Proportion of Patients by Health State Over Time — Economic Evaluation

Figure 18: Proportion of Patients by Health State Over Time — Reference Case, No Additional Treatment

- Active PTSD
- Active PTSD + Depression
- Active PTSD + Substance Abuse
- Remission
- Deceased

PTSD = post-traumatic stress disorder.
Figure 19: Proportion of Patients by Health State Over Time — Reference Case, Internet-Delivered Cognitive Behavioural Therapy

PTSD = post-traumatic stress disorder.
# Appendix 11: Additional Scenario and Sensitivity Analysis Results — Economic Evaluation

## Table 19: Additional Scenario and Sensitivity Analysis Results

<table>
<thead>
<tr>
<th>Scenario or Sensitivity Analysis</th>
<th>Strategies</th>
<th>Expected Costs, $</th>
<th>Expected QALYs</th>
<th>Incremental Costs, $</th>
<th>Incremental QALYs</th>
<th>Sequential ICUR, $/QALY Gained</th>
<th>Probability of Being Cost-Effective at a Willingness-to-Pay of $50,000/QALY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Societal Perspective</td>
<td>No additional treatment</td>
<td>36,327</td>
<td>22.80</td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>iCBT</td>
<td>34,768</td>
<td>23.12</td>
<td>-1,559</td>
<td>0.32</td>
<td></td>
<td>Dominant</td>
</tr>
<tr>
<td>Therapist Support Provided by a Registered Non-Physician Therapist</td>
<td>No additional treatment</td>
<td>16,174</td>
<td>22.81</td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>iCBT</td>
<td>16,098</td>
<td>23.13</td>
<td>-77</td>
<td>0.32</td>
<td></td>
<td>Dominant</td>
</tr>
<tr>
<td>All Patients Receive Referral to iCBT</td>
<td>No additional treatment</td>
<td>16,179</td>
<td>22.79</td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>iCBT</td>
<td>16,009</td>
<td>23.11</td>
<td>-170</td>
<td>0.32</td>
<td></td>
<td>Dominant</td>
</tr>
<tr>
<td>Comorbidities Develop After Entry Into Model Over Course of One Year</td>
<td>No additional treatment</td>
<td>16,234</td>
<td>23.30</td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>iCBT</td>
<td>16,051</td>
<td>23.55</td>
<td>-183</td>
<td>0.25</td>
<td></td>
<td>Dominant</td>
</tr>
<tr>
<td>Sensitivity Analyses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional Costs for Comorbid Conditions Applied</td>
<td>No additional treatment</td>
<td>21,570</td>
<td>22.78</td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>iCBT</td>
<td>21,027</td>
<td>23.09</td>
<td>-542</td>
<td>0.32</td>
<td></td>
<td>Dominant</td>
</tr>
<tr>
<td>No Change in Recovery for Patients With Comorbidities Compared With Patients Without Comorbidities</td>
<td>No additional treatment</td>
<td>15,452</td>
<td>23.81</td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>iCBT</td>
<td>15,213</td>
<td>23.52</td>
<td>-240</td>
<td>0.33</td>
<td></td>
<td>Dominant</td>
</tr>
<tr>
<td>One-Year Time Horizon</td>
<td>No additional treatment</td>
<td>511</td>
<td>0.60</td>
<td></td>
<td></td>
<td></td>
<td>91%</td>
</tr>
</tbody>
</table>

**Notes:**
- iCBT: Internet-Delivered Cognitive Behavioural Therapy
<table>
<thead>
<tr>
<th>Scenario or Sensitivity Analysis</th>
<th>Strategies</th>
<th>Expected Costs, $</th>
<th>Expected QALYs</th>
<th>Incremental Costs, $</th>
<th>Incremental QALYs</th>
<th>Sequential ICUR, $/QALY Gained</th>
<th>Probability of Being Cost-Effective at a Willingness-to-Pay of $50,000/QALY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>iCBT</td>
<td>999</td>
<td>0.62</td>
<td>487</td>
<td>0.028</td>
<td>17,435</td>
<td></td>
</tr>
<tr>
<td>Assumed Any Recurrence Was Not</td>
<td>No additional treatment</td>
<td>9,451</td>
<td>24.56</td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Related to Initial Trauma</td>
<td>iCBT</td>
<td>8,690</td>
<td>25.01</td>
<td>−762</td>
<td>0.46</td>
<td>Dominant</td>
<td></td>
</tr>
</tbody>
</table>

ICUR = incremental cost-utility ratio; iCBT = internet-delivered cognitive behavioural therapy; QALY = quality-adjusted life-year.
Appendix 12: Selection of Included Studies — Perspectives and Experiences Review

282 citations identified from electronic literature search and screened

727 citations identified from second electronic literature search and screened

263 citations excluded

677 citations excluded

68 potentially relevant articles retrieved for scrutiny (full text, if available)

1 potentially relevant report retrieved from other sources (grey literature, hand search)

69 potentially relevant reports

10 reports excluded:
• irrelevant study design (3)
• not focused on an intervention (7)

59 eligible reports

13 eligible reports included in analysis
### Table 20: Characteristics of Included Studies

<table>
<thead>
<tr>
<th>First Author (Publication Year, Country)</th>
<th>Study Design (Data Analysis)</th>
<th>Study Objectives</th>
<th>Participant Characteristics, Sample Size (n)</th>
<th>Inclusion Criteria</th>
<th>Intervention Type</th>
<th>Data Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hundt (2018), US99</td>
<td>NS (grounded theory)</td>
<td>To understand the attitudes, experiences, and barriers and facilitators to treatment for veterans who enrolled in a VA PTSD specialty clinic and were offered either PE or CPT</td>
<td>24 veterans</td>
<td>Veterans with a primary psychiatric diagnosis of PTSD who were admitted to the PTSD clinic and judged to be appropriate to for PE or CPT, offered PE or CPT, but not starting PE or CPT within 12 months</td>
<td>PE and CPT</td>
<td>Interviews</td>
</tr>
<tr>
<td>Cook (2017), US100</td>
<td>NS (grounded theory)</td>
<td>To assess how residential treatment providers within the VA conceptualize and address patient readiness for trauma-focused EBTs for PTSD</td>
<td>99 psychologists, 62 social workers, 4 psychiatrists, 3 nurses, 4 “other”</td>
<td>NS</td>
<td>PE and CPT</td>
<td>Semi-structured telephone interview</td>
</tr>
<tr>
<td>Hundt (2017), US101</td>
<td>NS (grounded theory)</td>
<td>To explore how veterans living with PTSD experience the use of EBT in their treatment</td>
<td>23 veterans</td>
<td>Veterans who had completed at least 8 sessions of PE or CPT in a VA PTSD clinic</td>
<td>PE and CPT</td>
<td>Interviews</td>
</tr>
<tr>
<td>Stige (2017), Norway102</td>
<td>NS (hermeneutic phenomenological approach)</td>
<td>To explore how former trauma clients experienced the inclusion of skill training in their treatment, their ways of relating</td>
<td>13 patients</td>
<td>NS</td>
<td>Skills training components of a trauma specific stabilization group</td>
<td>Semi-structured interviews conducted over two time points</td>
</tr>
<tr>
<td>First Author (Publication Year), Country</td>
<td>Study Design (Data Analysis)</td>
<td>Study Objectives</td>
<td>Participant Characteristics, Sample Size (n)</td>
<td>Inclusion Criteria</td>
<td>Intervention Type</td>
<td>Data Collection</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>-------------------------------</td>
<td>-----------------</td>
<td>-----------------------------------------------</td>
<td>-------------------</td>
<td>------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Tong (2017), Australia&lt;sup&gt;103&lt;/sup&gt;</td>
<td>NS (interpretive phenomenological approach)</td>
<td>To explore young people’s reactions to a trauma-focused treatment for PTSD in FEP</td>
<td>8 participants</td>
<td>Individuals aged 15 to 25 years with a DSM-IV psychotic disorder or mood disorder with psychotic features and having current trauma symptoms that meet the full criteria for PTSD using CAPS</td>
<td>Intervention drawing on principles of CBT</td>
<td>Semi-structured interviews</td>
</tr>
<tr>
<td>Whealin (2016), US&lt;sup&gt;111&lt;/sup&gt;</td>
<td>Mixed-methods (content analysis)</td>
<td>To identify the types of eHealth tools that veterans with PTSD and comorbid CMCs use, understand how they currently use eHealth technology to self-manage their unique health care needs, and identify new e-health resources that veterans feel would empower them to better manage their health</td>
<td>10 veterans</td>
<td>Veterans with three or more chronic conditions and experience using technology to help them care for their health or manage their health care, and having received care at the VA facility</td>
<td>NS</td>
<td>Focus groups</td>
</tr>
<tr>
<td>Hamblen (2015), US&lt;sup&gt;104&lt;/sup&gt;</td>
<td>NS (NS)</td>
<td>To examine VA PTSD clinic director perspectives on the implementation of PE and CPT in PTSD</td>
<td>31 psychologists, 5 social workers, 2 psychiatrists</td>
<td>NS</td>
<td>PE and CPT</td>
<td>Semi-structured interviews</td>
</tr>
<tr>
<td>First Author (Publication Year), Country</td>
<td>Study Design (Data Analysis)</td>
<td>Study Objectives</td>
<td>Participant Characteristics, Sample Size (n)</td>
<td>Inclusion Criteria</td>
<td>Intervention Type</td>
<td>Data Collection</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>-----------------------------</td>
<td>-----------------</td>
<td>---------------------------------------------</td>
<td>-------------------</td>
<td>------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Hundt (2015), US&lt;sup&gt;105&lt;/sup&gt;</td>
<td>NS (grounded theory)</td>
<td>To enhance knowledge of facilitators to EBP initiation by examining veterans’ real-world experiences initiating EBP for PTSD and how they overcame barriers to EBP in their own lives</td>
<td>23 veterans</td>
<td>Veterans who had completed at least 8 sessions of EBP in a VA PTSD clinic</td>
<td>PE and CPT</td>
<td>Interviews</td>
</tr>
<tr>
<td>McCormack (2015), Australia&lt;sup&gt;106&lt;/sup&gt;</td>
<td>NS (interpretive phenomenological analysis)</td>
<td>To explore the “lived” experience of trauma-focused therapists working with mental health in-patients with complex trauma histories</td>
<td>2 psychiatric consultants, 1 clinical psychologist, 1 psychologist/clinical manager</td>
<td>NS</td>
<td>NS</td>
<td>Interviews</td>
</tr>
<tr>
<td>Cook (2014), US&lt;sup&gt;107&lt;/sup&gt;</td>
<td>NS (NS)</td>
<td>To present VA residential PTSD treatment provider perceptions of dissuading factors to the use of PE and CPT</td>
<td>110 psychologist, 66 social workers, 11 nurses, 5 psychiatrists, 6 “other”</td>
<td>NS</td>
<td>PE and CPT</td>
<td>Semi-structured telephone interviews</td>
</tr>
<tr>
<td>Lawrence (2014), UK&lt;sup&gt;108&lt;/sup&gt;</td>
<td>NS (interpretive phenomenological analysis)</td>
<td>To produce an in-depth understanding of the experience of completing a course of compassion-focused therapy for PTSD and the process of</td>
<td>9 patients</td>
<td>People who had completed two CFT groups for PTSD</td>
<td>CFT</td>
<td>Interviews</td>
</tr>
<tr>
<td>First Author (Publication Year), Country</td>
<td>Study Design (Data Analysis)</td>
<td>Study Objectives</td>
<td>Participant Characteristics, Sample Size (n)</td>
<td>Inclusion Criteria</td>
<td>Intervention Type</td>
<td>Data Collection</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>-----------------------------</td>
<td>-----------------</td>
<td>---------------------------------------------</td>
<td>-------------------</td>
<td>------------------</td>
<td>-----------------</td>
</tr>
</tbody>
</table>
| **Lowe (2014), UK**
109 | Phenomenological and idiographic (interpretive phenomenological analysis) | To gain an understanding of the aspects of trauma-focused CBT for PTSD that service users find important in contributing to their improvement | 9 patients | NS | Trauma-focused CBT | Interviews |
| **Reeves (2014), Canada**
110 | Naturalistic paradigm informed by Indigenous inquiry (grounded theory) | Investigate the use of traditional Indigenous healing alongside Western mental health services to address issues related to recovery from sexual trauma at a culture-based multiservice health centre | 3 traditional healers/medicine people, 5 traditional counsellors, 1 traditional counsellor/traditional teacher, 1 Elder | NS | NS | Two sets of interviews |

CAPS = clinician-administered PTSD scale; CBT = cognitive behavioural therapy; CFT = compassion-focused therapy; CMC = chronic medical conditions; CPT = cognitive processing therapy; DSM = Diagnostic and Statistical Manual of Mental Disorders; EBP = evidence-based psychotherapies; EBT = evidence-based therapies; FEP = first-episode psychosis; NS = not specified; PE = prolonged exposure; PTSD = post-traumatic stress disorder; VA = Department of Veterans Affairs (US).
## Appendix 14: Critical Appraisal of Included Publications — Perspectives and Experiences Review

<table>
<thead>
<tr>
<th>First Author (Year), Country</th>
<th>Clear statement of the aims of the research?</th>
<th>Qualitative methodology appropriate?</th>
<th>Research design appropriate to address the aims of the research?</th>
<th>Recruitment strategy appropriate to the aims of the research?</th>
<th>Data collected in a way that addressed the research issue?</th>
<th>Relationship between researcher and participants been adequately considered?</th>
<th>Ethical issues been taken into consideration?</th>
<th>Data analysis sufficiently rigorous?</th>
<th>Clear statement of findings?</th>
<th>Relevant to the current review?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hundt (2018), US100</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Cook (2017), US100</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Hundt (2017), US101</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Stige (2017), Norway102</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Tong (2017)103</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Whealin (2016)111</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Hamblen (2015), US104</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
</tbody>
</table>
## Qualitative Studies Assessed Using CASP Qualitative Checklist

<table>
<thead>
<tr>
<th>First Author (Year), Country</th>
<th>Clear statement of the aims of the research?</th>
<th>Qualitative methodology appropriate?</th>
<th>Research design appropriate to address the aims of the research?</th>
<th>Recruitment strategy appropriate to the aims of the research?</th>
<th>Data collected in a way that addressed the research issue?</th>
<th>Relationship between researcher and participants been adequately considered?</th>
<th>Ethical issues been taken into consideration?</th>
<th>Data analysis sufficiently rigorous?</th>
<th>Clear statement of findings?</th>
<th>Relevant to the current review?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hundt (2015), US(^{105})</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>–</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>–</td>
</tr>
<tr>
<td>McCormack (2015)(^{106})</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>–</td>
</tr>
<tr>
<td>Cook (2014), US(^{107})</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>–</td>
<td>–</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>–</td>
</tr>
<tr>
<td>Lawrence (2014)(^{108})</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>–</td>
</tr>
<tr>
<td>Lowe (2014), UK(^{109})</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>–</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>–</td>
</tr>
<tr>
<td>Reeves (2014), Canada(^{110})</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>–</td>
</tr>
</tbody>
</table>

\(^{+}\) = yes; \(^{-}\) = no; CASP = Critical Appraisal Skills Programme.