

# Best Practices for Approaching Cognitive Processing Therapy and Prolonged Exposure During the COVID-19 Pandemic

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The COVID-19 pandemic presents major challenges for mental health care providers. In particular, providers who treat posttraumatic stress disorder (PTSD) are now tasked with determining whether to initiate trauma-focused therapy during the pandemic and, if so, whether and how to adapt treatment. The purpose of this communication is to identify and organize key considerations for whether and how to deliver commonly used evidence-supported therapy protocols for trauma treatment—specifically, cognitive processing therapy (CPT) and prolonged exposure (PE) therapy—during the ongoing COVID-19 pandemic for adults who currently meet the criteria for PTSD. Based on relevant public health and clinical literature, we present a structured guide that can be used by treatment teams and individual providers to evaluate whether initiating CPT or PE is indicated given a particular patient–provider pair and system context amidst pandemic conditions. In addition, we suggest appropriate action steps, including problem-solving strategies, evidence-informed modifications to CPT and PE, and alternative intervention approaches.

The COVID-19 pandemic is forcing the United States health care system to adapt dynamically with little time to prepare. Mental health care providers across residential, outpatient, and intensive outpatient treatment contexts are now faced with determining whether and how to adapt their programming to meet the public health and clinical needs of their communities and patients, respectively. The purpose of this article is to advance a framework of relevant factors, along with corresponding action steps, to provide guidance when considering the initiation of cognitive processing therapy (CPT) or prolonged exposure (PE) with an adult who meets the criteria for posttraumatic stress disorder (PTSD) in the context of the COVID-19 pandemic. Our decision to focus on CPT and PE is based on converging guidance that suggests CPT and PE are first-line interventions for PTSD (Department of Veterans Affairs [VA] and Department of Defense [DoD], 2010; American Psychiatric Association [APA], 2017; Hamblen et al., 2019).

We argue that the decision of whether and how to initiate treatment should consider factors across three key levels of

analysis: (a) patient-level considerations, such as individual circumstances and clinical presentations of patients; (b) provider-level considerations, such as personal and professional circumstances that affect individual trauma-therapy providers; and (c) system-level considerations, such as issues related to the organizational environment, leadership, and treatment team in which care is being delivered. Some of the factors we identify are highly specific to the COVID-19 pandemic. We also consider factors that are not unique to the pandemic context but have heightened importance under pandemic conditions. Finally, we provide proposed actions or ideas for alternative interventions, depending on the situation, including evidence-informed ways of modifying CPT and PE as applicable. Our proposed framework is summarized in Table 1, which is complemented by a flowchart (Figure 1a–1c) that visually represents key factors to consider along with decision points, ideas for problem-solving treatment initiation barriers, proposed treatment modifications, and alternative intervention approaches.

## Patient-Level Considerations

We suggest that several patient-level factors are important to consider when deciding whether a given patient is likely to benefit from CPT or PE if treatment is initiated during the

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**Table 1**

*Summary of Key Deciding Factors to Consider Before Initiating Cognitive Processing Therapy (CPT) or Prolonged Exposure (PE) During the COVID-19 Pandemic*

Key factor	Comments	Possible action steps and modifications
1. The patient's PTSD diagnostic status	Evaluate whether patient meets <i>DSM-5</i> criteria for PTSD: The Criterion A traumatic event could be distal or could have occurred during the current pandemic as long as > 1 month has elapsed since the patient experienced clinically significant disturbance	<ul style="list-style-type: none"> <li>• If the patient does not meet the criteria, consider appropriate alternative interventions (e.g., PFA, brief trauma-informed CBT)</li> <li>• If the Criterion A event or onset of disturbance took place &lt; 1 month before screening, plan to reevaluate later</li> <li>• If psychosocial functioning and needs are impacted, consider the following based on the nature and extent of impact:               <ul style="list-style-type: none"> <li>○ Postpone nonurgent specialty treatment until immediate impacts have been addressed.</li> <li>○ Focus services on addressing basic needs, increasing social and community support, resource referrals (e.g., PFA), and coping skills</li> </ul> </li> <li>• Offer residential trauma treatment if patients could derive benefit from CPT or PE in a stable residential environment and otherwise indicated</li> <li>• Consider the following CPT/PE modifications:               <ul style="list-style-type: none"> <li>○ Engage patient in CPT with added “stressor sessions,”</li> <li>○ Encourage use of CPT skills for confronting acute stressors/cognitions, integrate psychoeducation and breathing practices into PE for acute distress tolerance</li> <li>○ Deliver CPT/PE in massed format to shorten treatment course</li> </ul> </li> </ul>
2. The extent of the immediate impact on the patient, by pandemic conditions	Evaluate the extent to which the patient's psychosocial functioning and needs are immediately impacted (e.g., unmet basic health, safety or security needs, involvement with IPV, extensive caregiving responsibilities, or grieving process for loved ones or community members)	
3. The known effectiveness of CPT/PE during ongoing emergency or threat	Existing evidence suggests that CPT has demonstrated effectiveness at reducing patients' PTSD symptoms while patients are experiencing ongoing threats, including when Criterion A trauma exposure occurred in the same context as the ongoing threat. Given the scope of the current crisis, it is not clear whether this literature generalizes to our current situation.	<ul style="list-style-type: none"> <li>• Consider prioritizing CPT over PE if the patient's current life context is characterized by significant distress or psychosocial concerns</li> <li>• If the patient is experiencing ongoing pandemic-related threat, consider prioritizing CPT over PE</li> </ul>

(Continued)

**Table 1**  
*Continued*

Key factor	Comments	Possible action steps and modifications
4. The likelihood of the patient completing the CPT/PE protocol	Evaluate the likelihood a patient will complete the full treatment sequence, based on the extent to which the pandemic threat is affecting the patient's life circumstances (e.g., housing stability, personal or professional responsibilities) and the resources needed to engage consistently in treatment (e.g., access to technology)	<ul style="list-style-type: none"> <li>• Problem-solve addressable barriers to consistent treatment engagement (e.g., assist the patient with technology if treatment delivered via telehealth, consider lower-bandwidth alternatives, such as telephone sessions)</li> <li>• Use smartphone app-based support to increase communication with patient and enhance consistent and sustained engagement</li> <li>• If completion is unlikely, delay the initiation of CPT/PE and consider alternative interventions</li> <li>• Consider massed treatment to reduce the time needed for treatment completion</li> </ul>
5. The availability/feasibility of engaging in exposure activities that are safe, relevant to the patient's clinical presentation, and consistent with PE intervention	Evaluate the availability/feasibility of incorporating exposure activities into treatment that are consistent with public health guidelines, governmental ordinances, and the providers' case conceptualization of the patient	<ul style="list-style-type: none"> <li>• If certain in vivo exercises are not available/feasible, collaboratively brainstorm with the patient to generate alternative exposure activities that include the use of auditory or visual stimuli (e.g., pictures or video clips)</li> <li>• If exposure activities not available/feasible and alternatives are not viable, consider prioritizing CPT over PE</li> </ul>
6. Finding balance among the patient's risks associated with initiating treatment, the benefits associated with initiating CPT/PE, and the risks associated with delaying treatment	Evaluate whether the risks associated with initiating CPT/PE (e.g., life-threatening risks, substance use concerns) outweigh the benefits of timely initiation of treatment or the risks of delaying treatment; consider the impact of the pandemic on the providers' ability to manage risks during treatment given treatment format and environment (e.g., providers would be possibly less able to mitigate risks if treatment is conducted via telehealth)	<ul style="list-style-type: none"> <li>• Delay initiation of PE until exposure activities become feasible as pandemic evolves and/or restrictions loosen</li> <li>• Problem-solve ways to monitor and mitigate risks and manage problem behaviors using risk and behavior management strategies that match the treatment setting and format</li> <li>• Use safe inclusionary and exclusionary criteria</li> <li>• Establish clear treatment agreement at the onset of treatment</li> <li>• If the risks of initiation outweigh the benefits, delay CPT/PE and refer the patient to the appropriate level of care</li> </ul>
7. The provider's professional capacity to provide a full course of CPT/PE	<p style="text-align: center;">Provider-level factors</p> <p>Evaluate the extent to which provider's professional role has changed or is expected to change in response to the dynamic demands that result from the pandemic and assess whether possible shifting demands will result in a limited professional capacity (including time) to provide CPT/PE</p>	<ul style="list-style-type: none"> <li>• Transfer care or arrange back-up with another provider who has the capacity for the full protocol</li> <li>• Delay CPT/PE initiation or refer the patient to an outside care team if necessary</li> </ul>

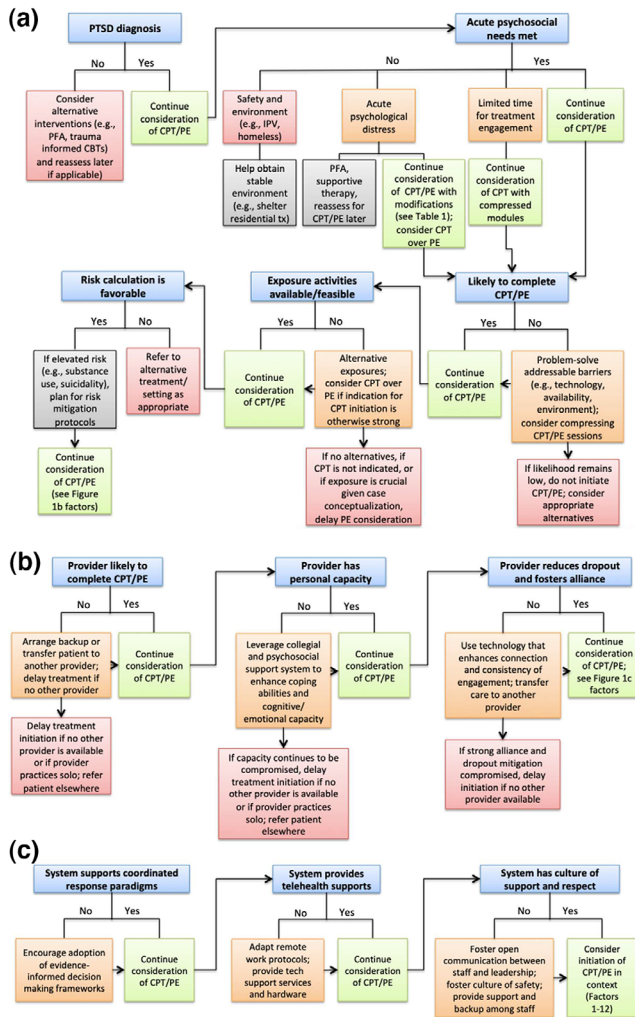
*(Continued)*

**Table 1**  
*Continued*

Key factor	Comments	Possible action steps and modifications
8. The pandemic's impact on the provider's personal capacity to deliver consistent, effective CPT/PE	Evaluate whether personal circumstances will allow the provider to maintain the cognitive, emotional, and psychological capacity to effectively deliver treatment throughout the CPT/PE protocol	<ul style="list-style-type: none"> <li>• When the provider's capacity is compromised or likely to change dynamically, transfer care or arrange back-up care with another provider</li> <li>• Leverage collegial or personal support systems to enhance coping abilities and support</li> <li>• Transfer care to another provider with access to resources</li> <li>• Leverage technological resources that might be available through the provider's treatment environment or on the open market (e.g., smartphone applications, video-enabled telehealth devices) to enhance connection and consistent engagement with the patient</li> </ul>
9. The provider's ability to provide care in a manner that is consistent with key predictors of treatment success, including reducing patient dropout and fostering a strong therapeutic alliance	Evaluate whether the provider has access to the tools necessary to engage patients in CPT/PE consistently in a way that fosters a strong therapeutic alliance and reduces dropout (e.g., reliable access to technology if treatment conducted over telehealth format).	
<b>System-level factors</b>		
10. The system's current capacity for coordinated, flexible, and evidence-informed response to pandemic conditions	Evaluate the extent to which the provider works in a professional environment that promotes flexible, evidence-informed approaches to system coordination and decision-making regarding clinical care and procedures in the context of the pandemic	<ul style="list-style-type: none"> <li>• Encourage the adoption of and provide support for the insights derived from evidence-informed decision-making procedures or frameworks (e.g., the use of this framework)</li> </ul>
11. The system's logistic and technological capacity for effective and consistent service delivery via telehealth	If care is conducted in the context of a system that uses a telehealth format, evaluate the extent to which the system that provides the technological infrastructure and support (e.g., reliable remote access to the network, access to electronic devices for patients and providers, flexible remote working policies) to support the feasibility and consistency of care delivery	<ul style="list-style-type: none"> <li>• Advocate for improved electronic device and technological infrastructure supports</li> <li>• Improve support for creative solutions by flexibly adapting workflow or relaxing typical regulations, when possible</li> </ul>
12. The system's cultural capacity to sustain respectful and supportive working conditions for providers	If care is being conducted in the context of a system, evaluate the extent to which the provider's system prioritizes resilience, safety, and empowerment and recovery and promotes open communication among providers and leadership, including integrating providers' perspectives into leadership's decision-making	<ul style="list-style-type: none"> <li>• Create forums for open communication so staff feel heard, and modify the status quo when appropriate or indicated</li> <li>• Find ways for care teams and systems to offer one another support, and dedicate regular time for team discussions and "on-the-fly" check-ins</li> <li>• Ensure that a culture of emotional safety is fostered whereby providers feel they can speak openly about these factors</li> <li>• Encourage team members to offer to provide clinical back-up for one another</li> </ul>

*Note.* PTSD = posttraumatic stress disorder; PFA = psychological first aid; DSM-V = *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.); CBT = cognitive behavioral therapy; IPV = intimate partner violence; CPT = cognitive processing therapy; PE = prolonged exposure therapy.

**Figure 1**  
Patient-Level (A), Provider-Level (B), and System-Level Factors, Decision Points and Proposed Action Steps and Treatment Modifications



*Note.* Key factors are portrayed in blue squares divided across the three levels of analysis: patient- (Panel A), provider- (Panel B), and system-level factors (Panel C). Decision points are labeled as “yes” and “no,” although we emphasize that categorizing evaluations of these factors into “yes” and “no” may not be possible. Thus, the “yes” and “no” decision branches are shorthand for “mostly yes” and “mostly no” based on a holistic evaluation of the factor. Rectangles connected to the decision branches correspond to the following coding scheme: green = cognitive processing therapy (CPT)/prolonged exposure (PE) initiation likely indicated, proceed with evaluation based on other factors; orange = some caution noted with the initiation of CPT/PE, consider proposed action steps to strengthen indication for CPT/PE, consider modifications to CPT/PE; red = significant caution noted with the initiation of CPT/PE, consider alternative intervention approaches as appropriate or delay initiation of CPT/PE and reevaluate. PTSD = posttraumatic stress disorder; PFA = psychological first aid; IPV = intimate partner violence.

COVID-19 pandemic. These are (a) the consistency of the patient’s presentation with the diagnostic criteria for PTSD; (b) the extent of the immediate impact to the patient, by pandemic conditions; (c) the effectiveness of CPT and PE in reducing patients’ PTSD symptoms while they are experiencing an on-

going threat in their environment; (d) the likelihood of a given patient completing a full sequence of CPT or PE; (e) the ability of the patient to engage in meaningful exposure activities; and (f) the clinical risks and benefits associated with delaying versus initiating treatment, based on patient characteristics and case conceptualization. These patient-level considerations are summarized by Factors 1–6 in Table 1 and discussed in detail herein. These patient-level factors are also visually represented in Figure 1, Panel A.

**Factor 1: PTSD Diagnostic Status**

Given that CPT and PE are evidence-based interventions for the treatment of PTSD, Factor 1 in our proposed framework involves whether the patient meets the criteria for PTSD (see Factor 1 in Table 1 and Figure 1, Panel A). Following the criteria outlined in the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed., APA, 2013), the patient must have experienced a qualifying traumatic event (i.e., Criterion A). In the context of the pandemic, this traumatic event could fall into one of three categories: a distal, prepandemic event; an event that occurred or is occurring during but is not directly linked to the COVID-19 pandemic; or (c) an event that is directly related to the current pandemic. Whichever category the event falls into, the patient must report clinically significant disturbance lasting at least 1 month (i.e., Criterion F) across other key criteria domains (i.e., Criteria B, C, D, E) (APA, 2013). During a pandemic, careful consideration of a patient’s diagnostic status is especially relevant in that providers may need to differentiate between trauma-related disturbance and other ongoing sources of stress and mental health burdens. It is important to note that as long as sufficient time has passed since an individual experienced a Criterion A traumatic event (i.e., more than 1 month, per Criterion F), PTSD treatment can be indicated for any traumatic stressor regardless of whether the event is directly related to the pandemic.

Providers could consider alternative intervention approaches to CPT or PE for patients who do not meet the diagnostic criteria for PTSD. For example, for patients who are in psychosocial distress, regardless of whether it is related to the pandemic, but do not meet the overall criteria for PTSD or for those who are experiencing a recent-onset disturbance or a disturbance related to a recent traumatic event (i.e., less than 1 month in the past), providers could consider interventions that target acute psychosocial concerns, such as psychological first aid (PFA) or brief cognitive-behavioral interventions. Clinicians should also consider that a large proportion of individuals with acute stress symptoms recover naturally from trauma exposure without the need for treatment protocols such as CPT or PE (Bonanno et al., 2004).

**Factor 2: Extent of the Impact to Patient, by Pandemic Conditions**

The second factor in our framework is the extent of disruption to personal security and psychosocial functioning individuals

may experience during a pandemic (see Table 1, Factor 2 and Figure 1, Panel A). For example, housing and food insecurity and physical injuries or illness are common problems during comparable humanitarian emergencies (Altare & Guha-Sapir, 2014; Rossi et al., 2006). In addition, humanitarian emergencies, including pandemics, can cause a variety of acute mental health challenges among some individuals, including those with a preexisting PTSD diagnosis (Hughes, 2015; Hugo et al., 2015; Paladino et al., 2017; Vetter et al., 2016). Emergency response models (Mollica et al., 2004) highlight the importance of using a hierarchical approach such that basic needs, such as food, housing, physical health, and physical security, and acute mental health concerns, including grief and mental health crises, are prioritized before resuming mental health interventions that target preexisting or chronic mental health concerns.

In line with this hierarchical response approach, intervention planning during the COVID-19 pandemic should consider whether a patient has unmet basic needs and acute mental health concerns before the initiation of CPT or PE (see Table 1, Factor 2). If indicated, multiple action steps can be considered to remove obstacles to initiating treatment, and alternative intervention approaches could be considered. For example, if a patient is quarantined with the perpetrator of ongoing intimate partner violence (IPV), providers can intervene by assisting the individual in obtaining safe housing, protection, and acute psychosocial support before engaging the patient in CPT or PE. Alternatively, if a given patient does not currently have the requisite cognitive, emotional, or physical resources to engage effectively in a course of CPT or PE, interventions to address acute needs can be considered, such as PFA or a referral for residential treatment.

If a patient is experiencing elevated distress related to the current pandemic situation but the distress is not so pronounced as to prevent effective engagement in therapy sessions, providers can proceed with CPT or PE. Several evidence-informed adaptations to CPT or PE can be considered in the context of the patient experiencing ongoing distress. First, providers can encourage patients to apply CPT skills to cope with their current circumstances, as encouraged by the CPT treatment model. In support of this adaptation, the effectiveness of CPT in reducing PTSD symptoms is not compromised when additional sessions are added to the protocol to address acute stressors using CPT skills (Galovski et al., 2012). This evidence also provides reassurance that CPT can be adapted to continue even if acute stressors occur after the protocol has begun as long as therapy engagement remains possible. Furthermore, it is consistent with the CPT model to provide psychoeducation and tailor the use of CPT skills to address cognitions that may be exacerbating distress or getting in the way of immediate problem solving throughout the course of treatment (Moring et al., 2020). Modifications can also be made to PE with regard to patients who are experiencing acute stressors (Sciarrino et al., 2020). While providing PE treatment, providers can address acute patient concerns by integrating psychoeducation and encouraging the patient to use breathing techniques built into the protocol to

help reduce immediate distress. Finally, if the patient has a time-limited capacity to engage in treatment due to pandemic-related factors, such as a short period of unemployment that affords excess time to dedicate to treatment, providers can consider intensive, or “massed,” treatment by reducing the time between sessions to condense treatment duration. The findings from a growing body of empirical work indicate that massed treatment delivery can be comparably effective to conventional pacing (Foa et al., 2018; Held et al., 2020; Hendriks et al., 2018; Wachen et al., 2019). For situations in which the patient is experiencing elevated stressors, we suggest that providers consider CPT over PE. Both PE and CPT offer modifications that can be leveraged to target acute concerns during treatment. However, CPT is distinctive in allowing for flexible integration of stressors into the modules, thus allowing patients to use CPT skills to confront their current life context.

### **Factor 3: Known Effectiveness of CPT and PE During Ongoing Emergency or Threat**

Given that some patients are likely to be exposed to ongoing threat in the context of the pandemic, existing literature can provide empirical insights on a third patient-level factor: Whether patients are likely to benefit from initiating CPT or PE under conditions of continued threat (see Table 1 and Figure 1, Panel A). If a patient is experiencing extensive, ongoing threat during the pandemic, providers may consider prioritizing CPT over PE. In several studies, CPT delivered in the context of environments characterized by active conflicts, ongoing threats of violence, and uncertainty in the environment remained effective at reducing PTSD symptoms (Bass et al., 2013; Gillespie et al., 2002; Kaysen et al., 2020). In these investigations, participation in the CPT intervention as well as the ongoing threats took place simultaneously in the same environments in which the initial traumatic experiences occurred. Furthermore, the degree of ongoing threat in the environment did not affect the treatment response, and the level of environmental insecurity did not affect the trajectory of PTSD treatment response to CPT treatment such that higher levels of contextual insecurity did not result in a blunted treatment response (Kaysen et al., 2020). Insights from a study by Weiss and colleagues (2015) are also consistent with the two studies discussed. Therefore, if a patient is experiencing an ongoing threat in the context of the pandemic, providers could consider initiating CPT rather than PE due to the empirical support for the efficacy of CPT in these contexts. However, given the support for other exposure therapies, such as narrative exposure therapy, in conflict settings, providers should not rule out PE as a treatment option.

### **Factor 4: Likelihood the Patient Will Complete the CPT or PE Protocol**

Given the pandemic context, providers should pay increased attention to the likelihood of a patient complete a full course

of CPT or PE before choosing to initiate. Premature dropout from PTSD treatment is problematic. Veterans who discontinue PTSD treatment have demonstrated significantly fewer reductions in PTSD symptoms and subsequently utilize more VA resources (Tuerk et al., 2013). There are several reasons pandemic conditions might increase the likelihood that patients will drop out of treatment. “Some evidence suggests an association between treatment dropout and a patient being exposed to ongoing threats in their environment (Duffy et al., 2007). It is important to note that this perceived threat could be exacerbated in treatment settings where providers and patients are in physical contact with others (i.e., face-to-face treatment contexts). Alternately, for treatment conducted via telehealth, dropout could result from inconsistent or lost access to a working telehealth device or inadequate connectivity during the course of the protocol. In their study of environmental insecurity, Kaysen and colleagues (2020) did not find differences in patient dropout from CPT treatment between sites with higher versus lower levels of environmental insecurity, suggesting that the overall environmental insecurity that accompanies pandemic conditions may not alone increase the likelihood of drop-out; rather, the likelihood of patient drop-out during COVID-19 is expected to be moderated by individual patient circumstances. Thus, this factor should be considered on a case-by-case basis in collaboration with each patient. As outlined in Table 1 (Factor 4), if contextual factors indicate that a given patient is likely to drop out of treatment before completing the full course of CPT or PE, the initiation of CPT or PE is relatively contraindicated. Alternatively, providers can consider massed treatment (Foa et al., 2018; Held et al., 2020; Hendriks et al., 2018; Wachen et al., 2019) to condense CPT or PE into a shorter timeframe if these modifications would increase the likelihood of treatment completion.

### **Factor 5: Feasibility of Exposure Activities**

When evaluating whether to initiate PE specifically, providers should consider the availability and feasibility of exposure activities during the pandemic. The PE protocol relies on a combination of imaginal and in vivo exposure activities as key active components of the intervention, with the goal of disconfirming the erroneous beliefs that underlie PTSD (Foa, 2011). During a pandemic, exposure activities may be restricted for multiple reasons, including governmental and public health guidelines as well as individual patient safety and health considerations. Importantly, PTSD can be treated successfully even with reduced opportunities to engage in in vivo exposures. Adaptations to PE for use in residential treatment settings suggest that this is indeed possible and effective. For example, the findings from several studies suggest that patients can use auditory or visual stimuli to elicit trauma-related distress, using pictures or video clips as an alternative to traditional in vivo exposure activities (Berenz et al., 2012; Henslee & Coffey, 2010; Sciarrino et al., 2020).

Depending on the focus of treatment, exposure activities that are incorporated into treatment could pertain either to a pandemic-related or a distal, non-pandemic-related traumatic event. In either case, decisions to engage in trauma-related exposure activity must be based on an ongoing assessment of the risks associated with the activity (Foa, 2011), which may vary depending on pandemic conditions; this is to both protect the patient’s health and safety and to avoid a justified fear response that would compromise the process of reducing conditioned trauma responses and undermine the effectiveness of treatment.

Although the COVID-19 pandemic represents an ongoing stressor that could exacerbate patients’ distress, exposure activities can be safely implemented among patients who are at risk of experiencing exacerbated distress (van Minnen et al., 2012). Thus, the ongoing pandemic does not serve as a general contraindication for engaging in exposure activities in the context of PE and CPT. As outlined in Factor 5 of Table 1, providers should identify and implement exposure activities that are most consistent with public health guidelines, governmental ordinances, and patient circumstances, and be prepared to generate alternative activities if needed based on risk considerations. Given that PE relies on exposure activities as a mechanism of therapeutic change, providers can consider CPT over PE in situations wherein few safe and suitable exposure activities can be identified.

### **Factor 6: Balance of Clinical Risks Associated with Initiating Versus Delaying Treatment**

Pandemic conditions may heighten the tradeoffs associated with initiating or delaying treatment due to clinical risks, including harming oneself or others, substance misuse, or other forms of destabilization. For patients with high-risk presentations, a common provider concern is that initiation of CPT or PE during COVID-19 may exacerbate these risks. Given that many CPT or PE sessions are likely to take place via telehealth during the pandemic, providers will have less immediate means to monitor and intervene and maybe be tasked with identifying and mitigating risk and managing problem behaviors from afar. For many providers, this may be a novel challenge. Concerns about managing destabilization during delivery of CPT or PE should be weighed carefully against the potential risks of delaying treatment and the benefits associated with treatment completion. Pandemic conditions expose patients to numerous changing and difficult-to-predict stressors and place demands on individual resilience. Evidence shows that untreated PTSD increases vulnerability to mental health concerns from new stressors, decreases resilience (North & Pfefferbaum, 2013; Doran et al., 2017), and, critically, is a risk factor for suicide (Jakupcak & Varra, 2011). The suicidality consideration should be given special attention given the expectation that the pandemic and the related mitigation techniques could increase the risks of psychological destabilization, including suicidality (Reger et al., 2020).

### Provider-Level Considerations

We suggest three provider-level factors to consider when deciding whether to initiate CPT or PE under pandemic conditions: (a) the provider's professional demands, including the likelihood of these demands changing in response to the dynamic COVID-19 situation; (b) the impact of the pandemic on the provider's personal capacity to provide effective trauma-focused care; and (c) the provider's access to necessary resources for delivering CPT or PE consistently with key moderators of treatment success, including fostering a strong therapeutic alliance and reducing the likelihood of patient dropout (Factors 7–9, summarized in Table 1, and Figure 1, Panel B).

#### Factor 7: The Provider's Professional Capacity to Deliver the Full CPT/PE Protocol

Providers should consider whether both current and anticipated professional demands are compatible with engaging in CPT or PE. It is important to note that guidelines for disaster mental health response suggest caution in proceeding with clinical practice as usual (North & Pfefferbaum, 2013; Watson et al., 2011). Complex emergency situations, such as a pandemic, can cause providers' professional responsibilities to shift dynamically as emergencies evolve. Consistent with Mollica and colleagues' (2004) "mental health action plan," mental health providers may at times be encouraged or required to suspend existing practices to focus on crisis mental health interventions or support other health care services, as determined by leadership within the health care system in which they are practicing or by community need. Anticipating whether and how professional demands could interfere with complete delivery of the CPT or PE protocol will thus be particularly important to prevent interruption of treatment.

#### Factor 8: Impact of Pandemic Conditions on The Provider's Personal Capacity

During a pandemic, providers might personally be impacted in ways that inhibit their ability to provide effective, consistent CPT or PE. For example, the literature suggests that disaster response workers are at increased risk for mental health symptoms and may require support and intervention themselves (e.g., Kleim & Westphal, 2011). Other challenges may arise from pandemic-related health risks and disruptions. Both providers and patients are susceptible to COVID-19 and pandemic-related personal stressors. Moreover, many providers work in health care settings where the risk of exposure is elevated. Of note, health care workers returning from environments characterized by crisis have been shown to be more likely to develop PTSD themselves if they perceive their personal safety to have been compromised (Kolkow et al., 2007). Providers should continually assess the extent to which pandemic-related stress may affect their ability to fully and effectively deliver the CPT or PE protocols, particularly before

treatment initiation of each case they are considering taking on (see Table 1 and Figure 1, Panel B, for suggested alternatives and proposed action steps).

#### Factor 9: Provider's Technological Capacity and Resources for Delivering CPT/PE Protocol Effectively

Pandemic conditions may create obstacles to effectively delivering CPT or PE, especially given the widespread need for telehealth treatment. In particular, the dropout rate and the quality of the therapeutic alliance have emerged as key moderators of treatment success, particularly when trauma-related therapy is delivered via telehealth (Knaevelsrud & Maercker, 2007). The capacity to address any such obstacles should be considered in the decision to initiate CPT or PE. Providers can leverage various forms of technology to support patient engagement and enhance patients' perceived connection to the provider. For example, smartphone-based technologies can reinforce telehealth interventions through their flexibility, accessibility, ease of delivery, and potential to support providers, peer support, and recovery organizations (Ruzek et al., 2016). Mobile applications have been developed specifically to support intensive trauma-focused therapies, including CPT and PE (Erbes et al., 2014; Kuhn et al., 2014, 2017; Miner et al., 2016).

### System-Level Considerations

Because provider–patient dyads often engage in CPT or PE in the context of a broader health care or treatment system, the question of whether treatment initiation is indicated might depend on system-level factors. By "system," we mean any context in which the care is being delivered where the provider is working alongside other providers and/or leadership structures, such as a clinic, private practice with a consultation team, treatment program within a hospital, or network of clinics or hospitals. It is important to note that COVID-19 is a stressor on systems as much as it is a stressor on individuals. We identify three key system-level factors (Factors 10–12; see Table 1 and Figure 1, Panel C), which should be continually assessed throughout the pandemic: (a) the system's capacity to support coordinated, flexible, and evidence-informed responses and decision-making under evolving pandemic conditions; (b) the system's logistical and technological capacity to support consistent, effective service delivery; and (c) the extent to which the system promotes a culture of support and respect. By highlighting system-related factors, we do not mean to imply that only providers who practice within large or highly resourced systems can consider providing CPT or PE during the pandemic. Rather, we aim to identify the most relevant factors to consider when the care is delivered within health care systems. With that said, providers who practice outside of a system may encounter distinct barriers to engaging in CPT or PE during the pandemic. For example, the burden of procuring and accessing



technology would fall entirely on the individual provider and patient in these cases.

**Factor 10: The System’s Capacity for Coordinated, Flexible, and Evidence-Informed Responses to Evolving Pandemic Conditions**

Literature at the intersection of disaster response and systems management suggests that the effectiveness of disaster response efforts is dependent upon how well the system functions, including how well the system supports its own component parts (Simpson & Hancock, 2009). Disaster responses are more effective when system components work in coordination rather than in isolation, including collaboration across levels of a given system’s hierarchical structure (Comfort & Haase, 2006; Kapucu, 2009). One particular challenge that systems face during disaster response efforts is the effective coordination of decision-making. This challenge is heightened during an extended public health emergency as conditions continuously evolve and vary across place and time. Crucially, systematic and evidence-informed decision-making procedures can still be created and implemented in rapidly evolving, complex situations that demand decision-making on a case-by-case basis (Graber & VanScoy, 2003). The use of frameworks such as the one presented herein is an example of how a system could promote evidence-informed coordination and decision-making. Following such procedures supports the predictability, stability, and cooperation needed to initiate and effectively complete structured therapy protocols, including the ability to address the patient and provider factors detailed earlier. Thus, as outlined in Factor 10 of Table 1, the indication for initiating CPT or PE may be stronger within a given system to the extent it can demonstrate the capacity to apply consistent, coordinated evidence-informed, and appropriately flexible responses to the pandemic.

**Factor 11: The System’s Logistical and Technological Capacity to Support Consistent, Effective Service Delivery**

Trauma-focused therapy initiated during pandemic conditions is likely to rely heavily on telehealth platforms, which may at times be required for public health reasons. It is important to note that the literature suggests that it is broadly feasible and effective to deliver PTSD interventions in a telehealth format (Turgoose et al., 2018). However, in deciding whether to initiate CPT or PE, providers need to consider a system’s logistical and technological capacity to support consistent, effective telehealth services. Does the system allow the use of effective telehealth technologies and provide adequate technical support? Can the system infrastructure provide reliable access and adequate bandwidth for services, including when usage surges? Is the system addressing any administrative issues and policy restrictions to ensure that telehealth can be practiced without undue complexity and burden on providers?

**Factor 12: The System’s Cultural Capacity to Sustain Respectful and Supportive Working Conditions for Providers**

When planning to initiate care, providers should consider the extent to which the system context is currently fostering a culture of safety and respect for providers and patients. Effective delivery of patient care at all times benefits from health care systems taking deliberate actions to build a culture of support and respect within the system, especially under disaster or emergency conditions (Kalkman & de Waard, 2017; Rietjens & Bollen, 2008). Because a pandemic is likely to impose distress and psychological trauma among patients and providers, the importance of systems fostering a culture of support and respect is particularly salient. Systems could help support providers by adopting trauma-informed management approaches that encourage providers to prioritize resilience, safety, and empowerment and recovery when necessary as they fulfill their patient-care responsibilities. Empirical evidence suggests that adopting this type of systems management approach benefits patient care by reducing provider burnout. The strongest predictors of burnout and reduced professional effectiveness among providers working in VA PTSD treatment programs have been shown to be workplace characteristics, including organizational politics or bureaucracy, increased clinical workload, and control over how work is done (Garcia et al., 2014). With these considerations in mind, the indication for initiating CPT or PE can be strengthened when care is being initiated in the context of a supportive, respectful, and flexible culture at the system-level.

**Evaluating Whether and How to Engage in CPT/PE During the COVID-19 Pandemic: A Proposed Framework**

As shown in Table 1, the proposed framework is composed of three main components, which correspond to the three columns shown in Table 1. First, key factors are specified for consideration. These factors, shown in the “Key factors” column, are separated into “Patient-level factors,” “Provider-level factors,” and “System-level factors,” which are demarcated by table section subheadings. Second, the “Comments” column aims to provide additional context on each key factor. Additionally, this column provides guidance on how to evaluate each factor. Third, the “Possible action steps and modifications” column outlines some concrete action steps that providers, treatment team members, and health care systems could consider implementing to strengthen the rating for the factor in question, if applicable. Although we provide recommendations with regard to initiating CPT or PE and proposed action steps based on each factor in Table 1 for the sake of organizational clarity, we acknowledge that the determinations about whether to initiate CPT or PE and whether or how to adapt these interventions should ultimately be made based on consideration of all factors together in context.

The framework is intended as a tool to guide critical thinking and clinical discussion by individual providers, treatment teams, and system staff as they evaluate the indications for a given patient–provider pair within a system regarding CPT or PE initiation in the context of the COVID-19 pandemic. As an accompaniment to Table 1, we have included a three-panel flowchart (Figure 1), which offers a visual representation of the key factors, decision points, treatment alternatives, and evidence-informed treatment modifications. We hope this framework will guide providers in systematically and efficiently considering each factor presented in service of reaching a holistic decision. Pandemic conditions pose enormous challenges for providers, patients, and systems in delivering trauma-related treatment protocols, such as CPT and PE, appropriately and effectively. Ultimately, by making integrative determinations about whether and how to initiate CPT or PE with a given patient by taking key evidence-informed factors into account, providers can offer the best care possible under these conditions.

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## CPT AND PE DURING THE COVID-19 PANDEMIC

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