

Why We Need Effective Deimplementation Strategies to Reduce the Costs by Ineffective and Potentially Harmful Therapies

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The provision of unsupported, proven ineffective, and potentially harmful therapies is a persistent problem in mental health care. Multiple reasons at the provider, system/policy, and public levels can help explain why practitioners are drawn to use poorly supported and pseudoscientific treatments. The example of posttraumatic stress disorder demonstrates how past attempts to implement evidence-based practice have failed, underlining the limits of an overly strong focus on traditional implementation strategies. This continuing science-practice gap comes at a cost not only for the individual but also for society, thereby wasting valuable resources and reducing their public health impact. Proceeding in parallel with implementation efforts to increase access to well-supported treatment, implementation science must also develop and deploy deimplementation strategies to tackle this challenge. Deimplementation science studies methods to systematically remove non-evidence-based practices from routine clinical care. The longitudinal prescription practice trend for posttraumatic stress disorder medication showed the benefits of targeted deimplementation efforts (e.g., reducing medication overprescription), but there is less evidence for successfully deimplementing psychological therapies. To fill this research gap, we propose a potential deimplementation framework targeting low-value and inappropriate care. Prioritizing deimplementation (e.g., removing ineffective and harmful treatments) may prevent wasting resources in research and health care, thereby exerting a public health impact equally large as the uptake of evidence-based innovations.

What is the public health significance of this article?

Many people with mental health problems still receive unsupported, proven ineffective, and sometimes even potentially harmful therapies in routine clinical care. The continued use of these treatments wastes limited resources, undermines patient outcomes, and limits the societal impact of mental health care. This article highlights that targeted *deimplementation*—the systematic removal of low-value and inappropriate treatments from mental health services—can be as crucial to public health as efforts to increase the uptake of well-supported psychological therapies.

Keywords: science-practice gap, deimplementation, ineffective and harmful therapies, low-value and inappropriate care

As illustrated by the science-practice gap, establishing the effectiveness of a treatment does not guarantee its uptake into routine care. Nor does the lack of evidence or the evidence of ineffectiveness (or, in the worst case, potential harm; Lilienfeld, 2007) of a therapy prevent its widespread usage in (mental) health

care systems. Studies estimate that it takes 17–20 years to transfer clinical innovations into practice, while fewer than 50% of them are ever implemented into general usage (Balas & Boren, 2000; Grant et al., 2003; Morris et al., 2011; Mosteller, 1981). While some interventions are rapidly adopted in routine care (e.g., due to the buzz surrounding certain psychotherapies; Meichenbaum & Lilienfeld, 2018), even in the absence of evidence, there are several reasons why it takes for some well-established therapies years to be applied by practitioners. In this article, we shed light on the reasons why practitioners are drawn to use poorly supported (and pseudoscientific) treatments and propose that shifting our attention toward deimplementation may help in tackling this challenge. Deimplementation refers to strategic processes for the deliberate removal, reduction, restriction, and replacement of established ineffective (or harmful) interventions, programs, and services (I. Williams & Mannion, 2022). In what follows, we first examine the barriers to evidence-based practice (EBP) adoption at the provider, system, and public levels. We then illustrate these challenges through the example of posttraumatic stress disorder (PTSD) treatment. Finally, we argue

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for a parallel emphasis on deimplementation by demonstrating how a potential framework may improve mental health care.

Barriers to EBP in Mental Health Care

A range of psychological, educational, and systemic barriers contribute to the persistence of unsupported therapies in practice. At a provider level, there are many reasons why clinical psychologists may be reticent to rely on scientific evidence to inform their clinical practice. Lilienfeld et al. (2013) outlined several such causes, including uncritical realism, statistical misunderstandings, erroneously placing the burden of proof on skeptics instead of on proponents of untested therapies, and widespread myths of what EBP entails (e.g., EBPs are inappropriate for complex cases, too rigid, and too difficult). Providers may also be drawn to pseudoscientific treatments marketed as faster or superior “cures” that are easier to complete than standard alternatives, despite limited empirical support. Appeals to tradition or countermainstream narratives (e.g., “alternative therapies overlooked by conventional practice”) and overreliance on anecdotal evidence are other typical trappings of pseudoscientific treatments. Provider trainings can also be expensive, which increases providers’ investment in using the therapy. Then, high expectancy for a good clinical outcome plus confirmation bias (e.g., therapists tend to overestimate their competence/therapeutic success and fail to detect deterioration; Kaiser et al., 2022; Walfish et al., 2012) promotes continued use of the therapy. Beyond cognitive and perceptual biases, structural and economic factors also play a role.

Systemic issues within the mental health care infrastructure also hinder the adoption of evidence-based treatments. In addition to factors that facilitate implementation of non-EBPs at the individual provider level, mental health care systems and policy have had limited impact in supporting the use of EBPs. There is often a lack of incentive to use EBPs, particularly in mental health care systems where treatment selection is not monitored, creating an environment where the use of pseudoscientific treatment can flourish. At the public level, broader cultural dynamics further compound the problem. For example, distrust of science has also worsened, further undermining science-based arguments that favor EBPs (Lupia et al., 2024).

PTSD as a Case Example of Implementation Failure

The challenges described above are particularly evident in the treatment of PTSD, which offers a clear case study of both implementation and deimplementation dynamics in mental health care. The most well-supported EBPs for PTSD are trauma-focused treatments, particularly exposure therapy and cognitive processing therapy (Schnurr et al., 2022). There are also other therapies, including non-trauma-focused treatments such as interpersonal psychotherapy (Markowitz, 2024), that have some supporting evidence (Shea et al., 2020). Clinical practice guidelines suggest offering treatments with more robust evidence of their efficacy and safety first but acknowledge that through shared decision making, it may be appropriate to select a treatment with less robust supporting evidence (American Psychological Association, 2025; U.S. Department of Veterans Affairs & U.S. Department of Defense, 2023). Critically, however, there is also a large number of interventions that are used for PTSD that lack sufficient evidence to support any clinical practice recommendation for use. This category of unproven treatment is highly heterogeneous. Some of these therapies may,

pending further research, ultimately prove safe and beneficial (e.g., 3,4-methylenedioxymethamphetamine-assisted therapy). Others are likely unhelpful and problematic because they waste time and resources (e.g., energy therapies such as emotional freedom techniques [EFT]), while some therapies are even expressly harmful (e.g., critical incident stress debriefing). Ideally, the best supported treatments are used as a first-line approach, with second-line therapies selected as appropriate. The use of treatments that lack evidence for their safety and efficacy would be reserved for selected clinical circumstances (e.g., first- and second-line treatments have failed), and therapies that harm patients are never used. Unfortunately, as noted above, there are many factors that deter the use of EBPs and support the use of treatments that lack evidence, are proven ineffective or are even harmful. For example, there is disagreement about what kind of evidence (e.g., data from controlled trials vs. practice-based studies vs. anecdotal reports) is most relevant when evaluating and selecting a treatment. Consequently, studies of PTSD treatment implementation suggest widespread use of poorly supported treatments.

In Germany, only about 40% of PTSD patients receive any type of psychotherapy in an adequate dose according to national guidelines (Bachmann et al., 2021). Evaluations of health insurance claims data demonstrate that around half of those receiving outpatient care are likely to receive cognitive behavioral therapy (Epping et al., 2018), although analyses of case records show that most of these patients (53%) received non-trauma-focused cognitive behavioral therapy (Lindauer et al., 2022), which is less well-supported than trauma-focused cognitive behavioral therapy (McLean et al., 2022). Consistent with this finding, a survey by Pittig et al. (2019) showed that even among behavioral therapists, only slightly more than half felt competent in delivering exposure-based treatments. Thus, it seems that only a minority of PTSD patients in Germany receive a first-line psychotherapy, which is even more dramatic considering that the patients were specifically seeking a trauma-focused psychotherapy and had been waiting on average for $M = 13.47$ months ($SD = 33.88$) to receive care (Schwartzkopff et al., 2023). A potential explanation for this low proportion of trauma-focused treatment could be that myths (e.g., “Stabilization is always necessary before trauma-focused treatment”; Herzog, Kaiser, & de Jongh, 2023; Murray et al., 2022) and misconceptions (e.g., “Exposure therapy works poorly with complex cases”; Pittig et al., 2019) that actively circulate in clinical practice can delay or even prevent the application of trauma-focused psychotherapy. Instead, if at all a patient receives a treatment, weakly supported (or even potentially harmful) therapies are frequently provided.

The gap between what PTSD practice guidelines recommend and what providers implement comes at a cost for the society and the individual, as valuable resources in research and health care are not being allocated efficiently: An estimated 80% of medical research dollars do not exert a public health impact (Chalmers & Glasziou, 2009). The provision of ineffective or harmful therapies is not only at the expense of the individual (i.e., prolonged or exacerbated suffering) but also related to societal costs of illness (i.e., direct health care costs, direct nonmedical costs, and indirect costs; Gustavsson et al., 2011). The public health consequences include the cost of continued PTSD for individuals, families, and communities and, relatedly, the potentially discouraging effect of an unhelpful therapy experience on future treatment (Taber et al., 2015). The higher the treatment expectations (fueled by providers conveying overly optimistic expectations of

treatment outcomes; Herzog, Kaiser, Rief, et al., 2023), the more likely someone may internalize a treatment failure.

Successes and Limits of Implementation Strategies

Consequently, implementation science emerged as a distinct field that is defined as “the scientific study of methods to promote the systematic uptake of research findings and other evidence-based practice into routine practice and, hence, to improve the quality and effectiveness of health services” (Eccles & Mittman, 2006). The most frequently studied implementation strategies are distributing educational materials, conducting educational meetings, auditing and providing feedback, external facilitation, and a combination thereof (Ashcraft et al., 2024). Research has long debated about the most effective implementation strategies to facilitate uptake of EBP. Multicomponent interventions targeting overuse and involving patients and providers were most effective in reducing low-value medical health care services (Colla et al., 2017), with clinical decision support and performance feedback tools being promising strategies with solid empirical support. To make such tools work, however, treatment providers need to use the information provided by routine outcome monitoring and feedback systems—a challenge identified in the literature (Herzog, Kube, & Rubel, 2023). A recent metareview of 86 systematic reviews showed that implementation strategies demonstrated small impacts on the processes of care but found less evidence that these strategies shifted patient outcomes in practice meaningfully (Boaz et al., 2024). As a reduced uptake of effective clinical innovations versus overly fast uptake of new unproven therapies (e.g., in the case of PTSD: prolonged exposure vs. energy therapies such as EFT) is also a long-standing and persistent phenomenon in clinical psychology, dissemination and implementation efforts (e.g., identifying uptake barriers and facilitators across multiple levels of context) have received increasing attention over the last decades. As illustrated for the case of PTSD above, however, we are struggling with the implementation of well-supported PTSD treatments at a large scale, while pseudoscientific, empirically unsupported treatments like EFT are provided in routine care.

Recently, the importance of avoiding low-value health care has received increasing attention in many countries, where initiatives have been established across various medical disciplines to abandon care that wastes resources or delivers no benefit to patients. For example, in 2012, the American Board of Internal Medicine Foundation’s Choosing Wisely campaign aimed to promote discussion between clinicians and patients about the treatments that were commonly (over)used in their fields but lacked strong supporting evidence according to national specialty societies (Cassel & Guest, 2012). However, while deimplementation is necessary for evidence-based health care, it is also more likely to experience resistance than implementation efforts (I. Williams & Mannion, 2022). Addressing this resistance therefore requires a targeted and systematic approach.

Deimplementation as an Important Subfield of Implementation Science

Equally problematic as the nonuptake of effective therapies, but less studied, is the uptake of poorly supported (or even harmful) interventions that may counteract implementation efforts and whose successful deimplementation presents a significant challenge. While one might assume that deimplementation may simply be the reverse

process of implementation (i.e., knowledge gained through implementation science can be applied “in reverse”), deimplementation has several unique features (I. Williams & Mannion, 2022) that must be considered separately from implementation (McKay et al., 2018). For instance, Hahn et al. (2016) found that common strategies for implementation success, such as improving awareness and knowledge, were unlikely to be effective for deimplementation. Consistent with this notion, a study with Dutch surgeons found that motivational factors (e.g., department priorities) and economic and political factors (e.g., cost–benefit considerations in care delivery) were only linked with deimplementation challenges, whereas challenges with implementation were associated with organizational factors (van Bodegom-Vos et al., 2017). The only barrier or facilitator common to both implementation and deimplementation was outcome expectancy (i.e., the perceived net benefit to patients) in this study. Deimplementation and implementation should be considered as unique entities on a continuum of knowledge-informed change (Burton et al., 2021).

Deimplementation science is the study of methods to systematically remove non-EBP from routine clinical care and improve the quality and effectiveness of health services. As such, it is a subfield of implementation science that involves a complex, multilevel process that takes into account intrapersonal, interpersonal, organizational, and system dynamics (Walsh-Bailey et al., 2021). Deimplementation targets of inappropriate interventions comprise their reduction (i.e., decreasing the frequency/intensity of an inappropriate intervention), replacement (i.e., eliminating an inappropriate intervention and putting a new evidence-based treatment targeting the same or similar outcomes in its place), restriction (i.e., narrowing by whom, where, and/or for whom an inappropriate intervention is used), and removal (i.e., eliminating an inappropriate intervention from practice or terminating a health care policy without replacement). For example, in a national cohort of U.S. veterans, a longitudinal prescription practice trend for PTSD was observed indicating a successful deimplementation: While the percentage of PTSD patients who received at least one of the examined recommended or second-line/adjunctive medications for PTSD in a calendar year declined by 9.0% from 2009 to 2018, the largest absolute change in rates of prescribing for medication classes was found among benzodiazepines (–15.8%), both in any prescription and in new prescriptions (Holder et al., 2021). This result extends the trend of decreasing benzodiazepine prescriptions for PTSD patients in the U.S. Department of Veterans Affairs from 1999 to 2009 (Bernardy et al., 2012). While this finding likely reflects concerns regarding the effectiveness and adverse side effects of benzodiazepines (Guina et al., 2015), it is unclear whether this indicates actual increases in access to EBPs for PTSD. Indeed, access to EBPs for PTSD only modestly increased for PTSD patients in a national health care system from 2001 to 2014 (Maguen et al., 2020), although people prefer to receive psychotherapy over medication and to talk about their trauma (Simiola et al., 2015). Moreover, there was a notable difference in absolute change in rates of prescribing for medication classes between selective serotonin reuptake inhibitors (–12.3%) and serotonin–norepinephrine reuptake inhibitors (+6.4%). The reduction in selective serotonin reuptake inhibitor use was largely driven by a decreased citalopram prescription starting in 2011, which coincides with U.S. Food and Drug Administration warnings of QT prolongation (U.S. Food and Drug Administration, 2019). Along with implementation efforts to increase access to well-supported treatment, deimplementation of low-value and inappropriate

(mental) health care (e.g., reducing medication overprescription) may thus help to make the leap in the “valley of death”—a chasm between evidence-based scientific discoveries and the patients who need them (Butler, 2008).

However, to date, there is less evidence for deimplementing psychological therapies: Therapies that can cause harm and are proven ineffective should be prioritized for deimplementation over therapies that lack evidence and may or may not be helpful. While harmful therapies are more commonly viewed as unethical, therapies that lack evidentiary support and/or theoretical plausibility should also not be offered before well-supported treatments. In his seminal article, Lilienfeld (2007) provided a provisional list of potentially harmful therapies (PHTs), such as the potential harm of critical incident stress debriefing to increase the risk for posttraumatic stress symptoms and that of recovered-memory techniques to produce false memories of trauma. Unfortunately, in a recent study on psychotherapists in Germany, most reported cases of memory recovery, and more than a third used therapeutic techniques at least once to recover presumed trauma memories, while a fifth believed memory recovery is a task of psychotherapy (Schemmel et al., 2024). Thus, the last decade has seemed to reinforce rather than alleviate Lilienfeld’s concerns, while his early warnings have been insufficiently heeded. The persistence of PHTs may be attributable to two factors: First, deimplementation attempts may have failed because of cultural and professional resistance, insufficient dissemination of evidence regarding harm, structural and systemic issues, patient expectations, and/or competing incentives. Second, and more likely, is the lack of targeted deimplementation efforts of ineffective and harmful (mental) health care practices. Indeed, the development and evaluation of effective deimplementation have not gained the same interest as implementation in the public and professional debate. This is supported by the strong focus among funding agencies and researchers on implementation (exclusively), lack of infrastructure for deimplementation, and limited and inconsistent reporting of harms and negative effects in clinical research and practice (Herzog et al., 2019). Therefore, a framework specifically designed for deimplementation challenges is needed.

A Potential Deimplementation Framework

A review identified 10 studies describing theories, models, and frameworks developed specifically for deimplementation of low-value care; most suggest a multilevel understanding with the role of the patient being inconsistent (Nilsen et al., 2020). Particularly relevant for the context of clinical psychology and psychotherapy is the “synthesis model for the process of de-adoption” (Niven et al., 2015) that consists of seven activities:

1. Identify and prioritize low-value practices
2. Assess current use of low-value practice
3. Adapt knowledge to local context
4. Assess barriers and facilitators to de-adoption
5. Select, tailor, and implement de-adoption intervention
6. Evaluate de-adoption process and outcomes
7. Sustain de-adoption

Following a multiprofessional whole-system approach (Burton et al., 2021), we adapt the process model by Niven et al. (2015) to propose a potential deimplementation framework of low-value mental health care. As a prerequisite, we recommend forming a consortium consisting of clinical psychologists from multiple universities and institutions (researchers and practitioners), health economists, (de)implementation scientists, patient advocacy groups, funders (e.g., health insurance), and policymakers that will collaborate closely across all phases.

Identify Candidates

In the identification phase, this consortium should aim to identify interventions or practices that are candidates for deimplementation. Particularly, they can conduct systematic literature reviews and/or meta-analyses across multiple iterative steps to identify (a) ineffective interventions (e.g., those with negligible, null, or negative effect sizes), (b) harmful practices (e.g., high dropout rates, symptom worsening), and (c) outdated approaches (superseded by newer, more effective ones). In an expert consensus approach, they can also use Delphi panels or focus groups of clinical researchers and practitioners to identify low-value practices. Further, they can analyze clinical guidelines to compare current practices with updated guidelines (e.g., American Psychological Association, National Institute for Health and Care Excellence, World Health Organization, Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften e. V.). In a practice audit, they can survey current practices in clinical settings to detect persistent use of those methods. In clinical psychology, for example, contraindicated interventions for suicide prevention (e.g., contracting for safety, no-harm contracts, and no-suicide contracts) are being used at high rates in community settings, highlighting that suicide prevention trainings for evidence-based interventions should include a focus on deimplementation of such contraindicated interventions (Rozek et al., 2023). Finally, routine social listening (monitoring search trends, social media mentions, and training advertisements) can help to identify emerging low-value practices early for prioritization.

Prioritize Practices

The goal of the prioritization phase is then to decide which interventions to deimplement first based on impact and feasibility. Criteria may include risk to patients (e.g., high harm potential), prevalence of use, strength of evidence for ineffectiveness, cost-ineffectiveness, and feasibility of change (logistical, ethical, and political). At this point, considerations may also involve preconditions and resources of the health care system (Harris et al., 2017). For this purpose, they can use a scoring matrix or a multicriteria decision analysis approach to rank candidates (Gongora-Salazar et al., 2023; Marsh et al., 2016; Thokala et al., 2016). Multicriteria decision analysis describes techniques for systematically evaluating and prioritizing options that balance competing considerations (Marsh et al., 2017).

Engage Stakeholders

Convincing patients and other affected parties of the necessity and benefits of the proposed change can be challenging, given that

the evidence to support removal of an established practice is often limited (I. Williams & Mannion, 2022). Considering the whole-system context of deimplementation, a range of different strategies will be required to engage with different stakeholders, in different ways, to change practice and policy in a timely manner (Burton et al., 2021). In the stakeholder engagement phase, the goal is therefore to involve relevant parties to ensure buy-in and successful execution (Niven et al., 2015). In other words, the degree of alignment between policy, public, professional, and patient perspectives around deimplementation is important to determining deimplementation success (Burton et al., 2021). Stakeholders may include first-level leaders/middle managers in the health care system, practicing therapists, patient groups, institutional review boards, and academic journal editors. Grouping all together, they can conduct codesign workshops that create forums for discussion and feedback. In previous research on a framework for deimplementing overuse, a multistakeholder advisory committee that included patients, providers, and health care leaders offered feedback and interpretation of findings to optimize decision making (Parchman et al., 2017). Targets in this framework included the prioritization of the need to reduce low-value care, building a culture of trust, innovation and improvement, the establishment of a shared purpose and language about low-value care (e.g., conversations about potential for harm), and the commitment for resources to measurement on the use of low-value care.

Unlike prescribing, psychotherapy nearly always requires replacing an ineffective practice with a different intervention. Engagement activities should therefore anticipate simultaneous loss and gain: Clinicians asked to stop familiar (but low-value) methods need accessible training, supervision, and protected time to adopt the replacement. Leadership messaging should couple the ethical rationale for stopping low-value practices with a positive vision and practical supports for delivering the higher value alternative. Peer champions who already use the target EBP can model the change, normalize early difficulties, and provide just-in-time problem solving.

Develop Strategies

The goal of the strategy development phase is to select and design deimplementation interventions tailored to the context (e.g., particularities of the respective health care system) by considering barriers and facilitators. For implementation, context-focused strategies had positive effects on EBP implementation outcomes (N. J. Williams & Glisson, 2020). A recent study showed that interventions targeting organizational leadership and implementation climate led to improved measurement-based care fidelity and clinical outcomes for youth in outpatient mental health clinics (N. J. Williams et al., 2024). However, empirical evidence on deimplementation interventions is limited and often focuses on specific clinical issues such as prescribing. For deimplementation, a research synthesis identified six context-mechanism-outcome configurations (e.g., nudging clinical practice, designing deimplementation through technology, enhancing capability, and supporting staff to deimplement) that focused on issues ranging from individual behaviors to organizational procedures (Burton et al., 2021). Aiming to make clinical decision making more accountable, the consortium should choose strategies based on the type of practice, setting (academic, clinical, private), and resistance levels. Considerations in this phase may relate to the nature of decision making around low-value practice, including how it is supported by

systems, processes, and tools, and the nature of interventions (e.g., face-to-face vs. written approaches, individual responsibilities vs. treatment standards; Burton et al., 2021).

Examples of deimplementation interventions include educational outreach (e.g., training programs to update knowledge and raise awareness of low-value practice), audits and feedback (e.g., quality management strategies such as sharing practice data with providers and using routine outcome monitoring systems to benchmark clinical practice), policy and guideline changes (e.g., updating standards to discourage outdated practices), incentive alignment (e.g., fund or reward evidence-based alternatives), “de-prescription” analogs (e.g., structured withdrawal plans in long-term hospitalized chronically mentally ill patients to reduce overuse), and priority setting (e.g., decommissioning services providing low-value care; Burton et al., 2021).

On a system level, a specific deimplementation strategy may be the removal of low-value treatment options from decision-making processes in mental health care delivery systems (e.g., psychological debriefing for trauma-exposed people; McNally et al., 2003). The removal or restriction (policy plus audit/feedback) should be paired with brief, competence-focused training and supervision hours for the replacement EBP. Further, redesigning clinical decision-support systems can make it harder to sustain low-value practice (Burton et al., 2021). When full fidelity monitoring is infeasible, brief checklists for key components, patient-rated session goals, and occasional audio spot-checks with supervisor review could be used as scalable fidelity-light support tools.

Particularly, the design of clinical support tools can be adapted to actively promote evidence-based treatments and remove low-value interventions from recommended choice options (de Jong et al., 2021; Herzog, Kube, & Rubel, 2023; Lutz et al., 2022). Here, using a nudge may help practitioners be aware of their decision-making strategies through increasing their attention to low-value practices and likewise slow down clinical decision making (Burton et al., 2021). Nudges may include prompts for clinical support tools in psychological therapies (e.g., brief reminders or alerts when a clinician deviates from recommendations), but also default settings in electronic health records (e.g., evidence-based medication referrals as the default option), feedback with behavioral framing (e.g., peer comparison by presenting performance data such as “You prescribed antipsychotics off-guideline more than 80% of your peers”), and an active choice architecture (e.g., opting out of evidence-based treatments with justification to increase the psychological cost of nonadherence). Where comprehensive measurement-based care and clinical support tool infrastructure are absent, the treatment facility should select one or two validated patient-reported outcome measures aligned with the target condition to collect minimal data at intake and at regular intervals (e.g., every four to six sessions). The results can be fed back to clinicians by simple run charts and peer-comparison summaries. This strategy could be paired with brief checklists for key EBP components and periodic sample audits of notes or deidentified audio clips. Even minimal data—when fed back promptly and framed around patient benefit—can shift behavior and create demand for more robust tools. As capacity grows, clinics can layer in automated decision support and richer feedback systems. Relatedly, emerging ethically sensitive AI-assisted review of medical records (i.e., deidentified clinical notes) or secure session recordings could make it more feasible to review session content and

thus support scalable detection of low-value practice and recommendation of EBPs. Any such approach requires strong governance: explicit consent, privacy-preserving processing, clinician oversight, and safeguards against bias or overreach. In early stages, AI outputs should be advisory only and integrated into supervision, not used punitively. As accuracy, transparency, and acceptability improve, AI may enable more precise feedback and targeted deimplementation.

On the provider side, assessing practitioner beliefs (e.g., beliefs about expected outcomes for patients, for the self, and for the organization; Powell et al., 2013) and validating their concerns about deimplementation may be helpful strategies to increase acceptance for deimplementation (Burton et al., 2021). In fact, a well-documented, common major driver of the provision of non-effective or even harmful treatments is the so-called therapist drift—the tendency for psychologists to move away from the delivery of the EBPs in which they are trained, even when resourced to implement them (Waller, 2009; Waller & Turner, 2016), leading to nonadherence to empirically supported treatments. Therapists' characteristics influencing drift include therapist knowledge of and attitudes toward evidence in relation to cognitive biases that may lead therapists to rely on clinical experience, not evidence (Speers et al., 2022).

On a public level, understanding the culture of mental health care consumption as well as patient factors and experiences may facilitate acceptance on the patient's side (Morgan et al., 2017). Social media platforms (e.g., TikTok) now strongly shape treatment beliefs among the public, patients, and therapists (Munoz et al., 2024). To counter promotion of unproven, ineffective, or harmful therapies and increase attention to and public demand for EBPs, deimplementation efforts should include public-facing communication: searchable myth-debunking pages optimized for common queries; short, engaging, and shareable videos that independently promote EBPs while also explaining why certain practices are low-value; collaborations with credible and reputable creators; and partnerships with platforms to flag misleading treatment claims, thereby reducing amplification. As a targeted public campaign, a patient-facing "Choosing Wisely for Psychotherapy" list can equip patients to ask for EBPs and to recognize red flags.

On a policy level, a recognized priority for health care financing is deimplementation under the guise of disinvestment (Elshaug et al., 2008) that includes the shifting of resources to other health services that have greater clinical effectiveness or cost-effectiveness (Polisena et al., 2013; Rooshenas et al., 2015).

Implement Changes

In the implementation phase of the deimplementation model, the goal is to execute the plan to abandon existing low-value practices and monitor changes in the process (Voorn et al., 2017). Actions may include pilot programs in selected clinics, using Plan-Do-Study-Act cycles to refine strategies (Taylor et al., 2014), providing deimplementation support teams including "knowledge brokers," and monitoring fidelity and resistance. Implementation theory and prior research on EBP implementation in children's mental health clinics (N. J. Williams et al., 2020) suggest that first-level leaders/middle managers can increase clinicians' EBP use in health care settings by enacting specific leadership behaviors, such as being proactive, knowledgeable, supportive, and perseverant with regard

to implementation that is related to an improved implementation climate. Conceivably, leadership behavior may also facilitate deimplementation, for example, by building trust in the deimplementation process.

Evaluate Outcomes

In the evaluation and feedback phase, the goal is to assess the effectiveness of the deimplementation process and outcomes. Metrics may comprise the reduction in target practice usage, increase in adoption of evidence-based alternatives, organizational deimplementation climate, patient outcomes (symptom improvement, satisfaction), cost savings, and practitioner attitudes and compliance. For this purpose, the consortium can use mixed methods evaluations and comparisons across settings or regions.

Sustain and Disseminate Changes

In the sustainability and knowledge translation phase, the goal is to ensure long-term change and translate findings to broader settings. Actions may include embedding changes into training curriculums; implementing structured workforce development approaches in mental health care services (Burton et al., 2021); revising licensing/continuing education standards; disseminating results through open-access research articles, conferences, and clinical guidelines; and creating a living repository of deimplemented practices.

Challenges of Deimplementation in Routine Psychotherapy

Serving as ideal candidates for deimplementation, a metascientific review of Lilienfeld's (2007) PHTs found evidence of harm for some PHTs, most importantly Critical Incident Stress Debriefing and Scared Straight Interventions (A. J. Williams et al., 2021). Other treatments accepted as harmful involve "therapies" that aim to change sexual orientation or gender identity/expression (American Psychological Association, 2009), which are associated with a range of iatrogenic effects and serious harms (see United Nations Independent Expert on Protection Against Violence and Discrimination Based on Sexual Orientation and Gender Identity, 2020), and the "therapeutic community" program for psychopathic prisoners at the Social Therapy Unit at Oak Ridge (Rice et al., 1992), in which prisoners spent periods of up to 2 weeks in small groups in a windowless room, in a state of nudity that was referred to as a "Total Encounter Capsule" (Weisman, 1995).

However, deimplementation in psychotherapy is in rare cases as straightforward as it is in these cases of harmful psychological therapies (i.e., removal of a treatment protocol) and in medicine (e.g., deprescription of psychotropic drugs or substitution of medical procedures such as testing): In routine clinical care, most practitioners often deliver psychotherapy in an eclectic (or integrative) way, drawing techniques from multiple traditions rather than adhering strictly to a single "branded" treatment protocol. For example, even when providers are excited about a new EBP that they learned, they may end up integrating or blending it with the low-value treatment they are comfortable with and drift into some ineffective hybrid approach (Waller, 2009; Waller & Turner, 2016). As a result, deimplementation rarely involves simply "stopping" one therapy; instead, specific low-value methods must be reduced or removed while higher

value, evidence-based methods are introduced, supported, and sustained. Therefore, there is a need for simultaneous implementation and deimplementation efforts for ineffective therapies.

This paired change of ending an ineffective practice and introducing and supporting fidelity to a new one has implications for leadership, incentives, and training. For example, no-suicide contracts should be replaced with safety planning interventions (Stanley et al., 2018) or crisis response planning (Bryan et al., 2017), including routine follow-up (Rudd et al., 2006); this requires (a) clear organizational policy discouraging the former, (b) brief training and supervision to increase fidelity for the latter, and (c) auditing and feedback on adherence that focus on both cessation and uptake. This becomes more complicated when lengthier and more complex protocols are involved: When practices such as EFT for PTSD are used, deimplementation should be closely coupled with structured support for trauma-focused psychotherapy (e.g., prolonged exposure, cognitive processing therapy), including supervised practice and fidelity checks that fit busy mental health care services. Here, new tools for training therapists to use evidence-based treatments could be used, for example, the AI-based TherapyTrainer for written exposure therapy (Stade et al., 2025). Otherwise, efforts to implement evidence-based therapies should include attention to deimplementation.

Therefore, the proposed deimplementation framework needs to operationalize paired action at each step: Prioritization explicitly weighs both harm/ineffectiveness and the feasibility of substituting a higher value alternative; stakeholder engagement addresses anticipated losses (identity, sunk cost) while providing concrete implementation supports; strategy development balances restriction/removal with replacement, selecting low-burden tools (brief checklists, peer comparison) where comprehensive clinical decision-support systems or measurement-based care is not yet in place; implementation leverages first-line leadership to model and reinforce the change; and evaluation tracks both reduction in low-value methods and increased delivery of evidence-based methods, alongside patient outcomes and cost. This dual-track “add this” and “stop that” approach likely better recognizes how psychotherapy is actually delivered and increases the likelihood of durable change.

Toward a Balanced Implementation Agenda

Sustained prioritization of deimplementation may be challenging for the field of mental health. Often resources are channeled to potentially promising treatment innovations that capture public and academic attention. These new treatments (e.g., 3,4-methylenedioxymethamphetamine-assisted therapy for PTSD; Mitchell et al., 2021; van Elk & Fried, 2023) may also be adopted into practice in advance of sufficient evidence for safety and efficacy. Although new treatment advances should be researched, reserving implementation resources for well-supported treatments may limit the need to deimplement the treatment downstream if sufficient evidentiary support does not materialize. To optimize the public health impact of mental health treatment, implementation science must also develop and deploy deimplementation strategies to (a) remove harmful and ineffective treatments and (b) reduce untested (and time/resource-wasting) treatments. To do so will require a public and professional critical dialogue about harms and negative effects caused by treatments and provide the necessary infrastructure for identifying (e.g., quality control authorities) and discontinuing (e.g., incentives) such treatments. Likewise, efforts to implement evidence-based

psychotherapies should routinely embed paired deimplementation strategies that retire low-value interventions and support uptake with scalable fidelity support, leadership behaviors, and incentives aligned to patient outcomes. As illustrated in our proposed framework, a possible leverage is to limit demand for those therapies among patients (e.g., removing such treatments from health insurance coverage), update provider training to omit those therapies (relatedly, work with continuing education granting organizations to not offer training in PHTs), and have organizations develop policy that bans such therapies. Focusing on effective deimplementation, along with implementation efforts that center around contextual factors (e.g., increasing access to evidence-based psychotherapy), may prevent wasting health care resources and have a public health impact equally as large as the uptake of evidence-based innovations.

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