utility.

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1. Cuijpers P. World Psychiatry 2019;18:276-85.
2. Laird KT, Lavretsky H, Paholpak P et al. Int Psychogeriatr 2019;31:193-202.
3. Van Zoonen K, Buntrock C, Ebert DD et al. Int J Epidemiol 2014;43:318-29.
4. Dias A, Azariah F, Anderson SJ et al. JAMA Psychiatry 2019;76:13-20.
5. Valliant GE. Aging well: surprising guideposts to a happier life from the landmark Harvard Study of Adult Development. Boston: Little, Brown and Co., 2003.
6. Jeste DV, Savia GN, Thompson WK et al. Am J Psychiatry 2013;170:188-96.
7. Shear MK, Reynolds CF, Simon N et al. JAMA Psychiatry 2016;73:685-94.
8. Alexopoulos GS, Arean P. Mol Psychiatry 2014; 19:14-19
9. Diniz BS, Reynolds CF, Sibille E et al. Am J Geriatr Psychiatry 2017;25:64-72.

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Toward a personalized approach to psychotherapy outcome and the study of therapeutic change

Cuijpers[1] highlights that, in spite of major progress in mental health research, there are still many important unanswered questions regarding psychotherapies. He emphasizes the significance of looking beyond symptomatic reduction and studying a range of treatment outcomes. He suggests (and we agree) that symptom reduction does not necessarily reflect many crucial and sustainable aspects of therapeutic change.

One of the reasons why change in symptoms is the most widely studied outcome is that researchers conducting randomized controlled trials (RCTs) are required to define their primary outcome *a priori*. Defining multiple primary outcomes results in an increase of the number of individuals to be included in a study to satisfy statistical power requirements. Thus, selecting a broader more representative range of outcomes becomes expensive, impractical and strategically problematic within the current major funding mechanisms. Additionally, reports of conflicting findings when similar research questions are examined using different measures make it difficult to determine which measures are to be prioritized conceptually and psychometrically.

It is indeed crucial to conceptualize and measure outcomes from the patient's perspective. Even patients who experience reductions in symptoms and meet remission criteria may still struggle in major domains such as navigating relationships, regulating emotions, maintaining consistent employment, and coping with stress. Other aspects of outcome, such as patients' capacity to cope with stressors and to use strategies learned in therapy in the face of adversity, should also be evaluated. Another understudied outcome is patients' gained subjective sense of freedom – one's ability to confront and resolve conflicting demands that arise from perceptions of the outer and inner worlds and make "choices" that are not determined by unconscious forces[2]. A patient-centered approach suggests that the treatment course should be guided by patients' specific needs, preferences, and perspectives on their own therapeutic change[3].

Many medical specialties are now shifting towards a "precision medicine" model – tailoring treatment to the individual patient. In psychotherapy, this model requires a comprehensive assessment of the individual patient's functioning across multiple domains in order to develop a personalized treatment plan[4]. Some progress has been made in the development of computerized algorithms, with preliminary evidence for efficacy of matching patients with the optimal treatment package[5]. However, implementing these algorithms requires the availability of skilled therapists who can deliver the selected "optimal" complex treatment modality. Treatment packages involve extensive clinical training and supervision, which limits their feasibility and applicability, especially for large populations of patients who reside in areas with limited access to experienced mental health professionals.

Thus, in addition to focusing on matching patients with treatment packages, researchers could focus on matching specific treatment components with specific patients' needs. One of the big unanswered questions is whether therapy should focus on the patients' strengths or remedy their deficits. For example, do patients who struggle with interpersonal relationships benefit more from treatments focusing on social and interpersonal skills? Similarly, will patients who struggle with avoidance or apathy benefit more from exposure to rewarding and meaningful activities? Alternatively, a personalized approach may focus on reinforcing existing strengths and resources[6]. For example, patients who are naturally aware of their thought processes may benefit from focusing on distorted cognitions (even if they do not receive a full manualized protocol of cognitive behavioural therapy). On the other hand, patients who have a strong social support system and connections with helpful significant others may benefit from behavioral activation focusing on social and interpersonal engagement. These are important research issues that have rarely been addressed.

One of the challenges in studying the benefits of particular treatment components (or mechanisms of change) is that researchers rarely include in their studies components that are not part of their declared treatment approach (although there are some exceptions[7]). This creates a gap between the relatively clean studies on treatment components associated with change and a clinical practice where most therapists flexibly integrate techniques from various approaches. Studies reflecting clinical practice could facilitate our understanding of which particular components of treatment are beneficial to patients with specific clinical presentations.

Another crucial challenge raised by Cuijpers is the high rates of non-response to treatment. Whereas meta-analyses provide valuable information regarding the

group-level rates of non-response, it is difficult to translate this information into meaningful clinical recommendations for individual patients. An important developing area of research is early detection of risk for non-response. Conventionally, non-response studies are conducted after the trial has closed and patients are no longer receiving treatment; i.e. treatment failure is studied retrospectively. We propose that efforts should be focused on detecting non-response or deterioration early on, after the first several sessions. Then, a stepwise treatment approach could be used in order to intervene (e.g., augment specific treatment components or shifting towards a different treatment focus)[4].

Data from RCTs are valuable as they provide opportunities to test various treatment components and outcomes over time within distinct controlled treatments. However, as funding for psychotherapy research rapidly declines in the US and around the world, researchers are faced with a significant crisis[8]. Some are shifting towards naturalistic studies through the development of practice research networks. Such networks are based on the premise that research thrives on true continuous communication between stakeholders and collaboration between clinicians in the community and researchers in academia. Studies developed are informed and guided by clinicians' observations and input, and findings are integrated in clinical settings[9]. These studies also promote greater diversity and representation of individuals from minority groups, who often do not have access to academic medical centers where RCTs are conducted. We anticipate that, in the future, more of our data will emerge from such studies.

Overall, future research should include combinations of rigorous methodologies and personalized approaches to psychotherapy. Studies should identify non-responders early on and develop protocols to address risk of non-response or deterioration before the trial ends. These studies should be done in collaboration between clinicians, researchers, policy makers and patients. Outcomes should include not only symptomatic changes but also a range of intermediate outcomes/mechanisms that may go beyond the researcher's theoretical orientation. Such collaboration can expand our understanding of the complex and nuanced aspects of "therapeutic change" and move us closer towards answering the question: "what makes psychotherapy work?".

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1. Cuijpers P. World Psychiatry 2019;18:276-85.
2. Williams DR, Barber JP. In: Ciprut JV (ed). Freedom: reassessments and rephrasings. Cambridge: MIT Press, 2008:75-98.
3. Flückiger C, Hilpert P, Goldberg SB et al. J Couns Psychol (in press).
4. Solomonov N, Barber JP. Epidemiol Psychiatr Sci 2016;25:301-8.
5. DeRubeis RJ, Cohen ZD, Forand NR et al. PLoS One 2014;9:e83875.
6. Flückiger C, Wüsten G, Zinbarg R et al. Resource activation: using clients' own strengths in psychotherapy and counseling. Boston: Hogrefe, 2010.
7. Barber JP, Milrod B, Gallop R et al. Submitted for publication.
8. Barber JP, Sharpless BA. Psychother Res 2015; 25:309-20.
9. Castonguay LG, Youn SJ, Xiao H et al. Psychother Res 2015;25:166-84.

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Putting the psychotherapy spotlight back on the self-reflecting actors who make it work

After decades of research, there is no general consensus on what the targets and outcomes of psychotherapy should be[1]. While this may seem a rather disappointing aftermath of much hard work, we should not despair. Psychotherapy research has come a long way and many effective therapies have been developed. The challenge now is to employ these therapies in such a way that the individual patients benefit from them optimally.

During the initial psychotherapy session, patient and therapist usually discuss the targets and outcomes of therapy and how they will go about achieving them. Subsequently, the patient is treated in accordance with the "treatment plan". For instance, in the case of depression, loss of interest and low mood are often formulated as the targets of therapy. This is not surprising, given the enormous success of academic psychology and psychiatry in presenting mental suffering and its treatment within the "specialist" diagnosis/evidence-based practice/symptom reduction/outcome monitoring model of mental health care[2]. As a result, treatments such as cognitive behaviour therapy are mostly oriented towards the specific target of symptom reduction.

Implicit in this approach is the assumption that the psychotherapeutic setting is a static environment, in which the problems present themselves as symptoms, and that a specific solution exists to remediate these: the theoretical protocol. The elephant in the psychotherapy room, however, is that the psychotherapeutic environment is infinitely more dynamic. Patient perspectives are likely to evolve over the course of therapy, along with the impact, burden, meaning and acceptance of symptoms, and the theoretical protocol almost by definition cannot accommodate all this. It cannot be predicted how the patient perspectives and wishes will dynamically and non-linearly evolve over time, but it seems unavoidable that they will. While the process of non-linear change is inherent to the practice of real-life psychotherapy, the theoretical framework underlying modern "evidence-based" psychotherapeutic approaches does not explicitly address this.

Routine process monitoring (RPM) may be required in psychotherapy to oversee the patient's satisfaction and desired direction, on a session by session basis[3], ideally combined with monitoring of contextual mental states in real life[4]. RPM