Current reference: Van Daele, T., Karekla, M., Kassianos, A. P., Compare, A., Haddouk, L., Salgado, J., Ebert, D. D., Trebbi, G. (on behalf of the EFPA Project Group on eHealth), Bernaerts, S., Van Assche, E., & De Witte, N. A. J. (in press). Recommendations for policy and practice of telepsychotherapy and e-mental health in Europe and beyond. *Journal of Psychotherapy integration.*

Recommendations for policy and practice of telepsychotherapy and e-mental health in Europe and beyond

Tom Van Daele[1], Maria Karekla[2], Angelos P. Kassianos[2,3], Angelo Compare[4], Lise Haddouk[5], João Salgado[6], David D. Ebert[7], Glauco Trebbi[8] (on behalf of the EFPA Project Group on eHealth), Sylvie Bernaerts[1], Eva Van Assche and Nele A. J. De Witte[1]

1. Expertise Unit Psychology, Technology & Society, Thomas More University of Applied Sciences, Antwerp, Belgium
2. Department of Psychology, University of Cyprus, Nicosia, Cyprus
3. Department of Applied Health Research, UCL, London, UK
4. Human and Social Science Department, University of Bergamo, Bergamo, Italy
5. Rouen University, Rouen, France
6. Department of Social and Behavioural Sciences, ISMAI - University Institute of Maia, & CPUP - Center of Psychology at University of Porto, Portugal<
7. Faculty of Behavioural and Movement Sciences, Clinical, Neuro- & Developmental Psychology, Vrije University Amsterdam, Amsterdam, The Netherlands
8. Trebbipsicologie, Luxembourg

Author note

Correspondence concerning this article should be addressed to Tom Van Daele, Thomas More University of Applied Sciences, Molenstraat 8, 2018 Antwerp, Belgium. Email: Tom.VanDaele@thomasmore.be

David Daniel Ebert reports to be a stakeholder of the Institute for health training online (GET.ON), which aims to implement scientific findings related to the present research into routine care. He also received consultancy fees from several companies, such as Minddistrict, Lantern, and German health insurance companies. All other authors do not report any conflict of interest.

Keywords

e-mental health; telepsychotherapy; guidelines; policy; clinical practice

Acknowledgments

This paper is a report of the Project Group on eHealth of the European Federation of Psychologists' Associations. Countries of member organizations represented are shown in brackets. Members of the project group include: Andreas Schwerdtfeger (Austria), Angélique Belmont (Belgium), Tom Van Daele (Belgium), Maria Karekla (Cyprus), Angelos P. Kassianos (Cyprus), Iben Sejerøe-Szatkowski (Denmark), Lise Haddouk (France), David Daniel Ebert (Germany), Christine Knaevelsrud (Germany), Angelo Compare (Italy), Glauco Trebbi (Luxembourg), Tine Nordgreen (Norway), Svein Øverland (Norway), João Salgado (Portugal), Jan Zaskalan (Slovakia), David Gosar (Slovenia), Per Carlbring (Sweden), Aslı Çarkoğlu (Turkey), Kotryna Danieleviciute (EFPSA).

Abstract

The COVID-19 pandemic has brought with it a great need for the use of telepsychotherapy and other interventions using psychological theories and techniques to support both mental and physical health. E-mental health presents a wide range of opportunities in mental healthcare to overcome barriers for receiving conventional psychological care, especially when psychotherapists and clients find themselves in (self)quarantine resulting from a pandemic. For many psychotherapists and clients, the current situation provides a first experience with e-mental health and reliance on telepsychotherapy or other means of technology to provide or receive care respectively. Psychotherapeutic circumstances may often be suboptimal, with psychotherapists and clients experiencing difficulties finding a private space or sufficient time for an undisturbed consultation. This paper aims to highlight recommendations on how to create the best possible context in which e-mental health supplements and enhances current services for clients. These recommendations are grouped according to three categories of key stakeholders: psychotherapists, health services and regulatory agencies, and developers. This paper focuses on: (1) how to make optimal use of technology in psychotherapeutic practice, (2) how to integrate e-mental health into the healthcare system to allow for a safe, transparent and effective environment for (self) care, and (3) how to develop e-mental health applications.

Recommendations for policy and practice of telepsychotherapy and e-mental health in Europe and beyond

In the midst of the COVID-19 outbreak, the Regional Director of the World Health Organization (WHO) Europe suggested that internet and mobile interventions could be used to deliver psychological first aid and mental health problem-management messages to those in need (Kluge, 2020). Digital means of delivering psychotherapy, often referred to as e-mental health, can be used to support clients by monitoring their health behaviors, offering stand-alone self-help interventions or in blended formats, where technology is used to supplement conventional psychotherapies (Ebert et al. 2018; Karekla et al., 2019). Aside from augmenting the broad spectrum of existing conventional psychotherapies, technology is sometimes used to simply overcome physical limitations. The most well-known example is the practice of online consultations using videoconferencing in telepsychotherapy (Joint Task Force for the Development of Telepsychology Guidelines for Psychologists, 2013; Ordre des Psychologues du Québec, 2013), in which the digital medium is mainly used to deal with the fact that clients and psychotherapists are unable to meet in person (Haddouk, 2015; Berryhil et al. 2019).

Despite an increasing evidence base for the efficacy of e-mental health (Carlbring et al., 2018), overall adoption in clinical practice has remained limited (Mohr et al., 2018; Gaebel et al., in press). Although the majority of psychotherapists are open to the idea of using technology, in particular telepsychotherapy, many are still apprehensive about actual utilization and appear as hesitant to integrate technology in their daily practice (Perle et al., 2012; Mendes-Santos et al., 2020). Reluctance may be related to uninformed attitudes or concerns and lack of training or experience, rather than fundamental issues with allowing

technology into psychotherapy. Even a ten-minute video highlighting the rationale and potential added value to utilize e-mental health, for example, increases the acceptance of e-mental health for potential clients (Ebert et al., 2015). Psychotherapists who have actual experience with technology themselves are more favorable towards its use (Stallard et al., 2010), supporting the view that it is indeed a lack of knowledge or experience that drives reluctance in technology use. Psychotherapists are rarely trained on providing telepsychotherapy, and especially on how to enhance acceptance of telepsychotherapy and to promote other important aspects such as presence, which refers to the extent to which clients experience being in the same - virtual - space as their psychotherapist (Haddouk et al., 2018). For a long time, the general public seemed unaware of the existence of online tools to safeguard their mental health or to rely on for support in case of mental health problems, and their overall attitude is ambivalent at best (Apolinário-Hagen et al., 2017; Musiat et al., 2014). Self-help applications, for example, show rapid declines in continued use, with only a small percentage of people relying on a smartphone application one month after installation (Baumel et al., 2019).

The COVID-19 Coronavirus pandemic, however, provides opportunities for e-mental health adoption, including telepsychotherapy. Worldwide quarantine and lockdown measures led to the need for psychotherapists to increasingly rely on technology to continue their work and support their clients. Interrupting ongoing psychotherapies or putting new intakes on hold is not a solution. In addition, isolation in the context of quarantine measures can lead to long-term negative psychological effects, as evidenced by research on the effects of the quarantine in response to the SARS pandemic between 2003 and 2005 (Brooks et al., 2020). Psychotherapists are well equipped to mitigate detrimental psychological effects, especially for vulnerable groups of individuals who (already) require support for mental

health issues (e.g., stress, sadness, irritability, sleep problems, substance use), and telepsychotherapy is a straightforward option for quality service delivery.

The particular context where the COVID-19 pandemic has put mental healthcare in, has been referred to as a 'black swan': a potential turning point for e-mental health, in which the majority of psychotherapists and their clients gain (first) experiences with technology in psychotherapy (Wind et al., 2020). Although circumstances are obviously far from ideal, this event may nevertheless prove to be the gateway towards continued use of e-mental health. Not only telepsychotherapy, but also other forms of e-mental health may prove to be of importance in the near future, as the pandemic obstructs or complicates access to mental healthcare or exacerbates symptoms for those already receiving formal care. Of course, telepsychotherapy may prove useful not only for those already in psychotherapy, but also for the broader population, in which a surge in mental health problems in the upcoming months following isolation and loss of significant reinforcers is expected (Gao et al., 2020). Other means of e-mental health include internet-based interventions (Anderson, 2018), smartphone apps (Linardon et al., 2019), wearables (De Witte et al., 2019; Konstantinou et al., 2020), or virtual reality (Freeman et al., 2016; Matsangidou et al., in press). Increasing the use of technology in psychotherapy might indeed help to expand and strengthen mental healthcare services. It nevertheless remains essential to consider several important aspects when adding any form of technology to psychotherapy, especially in the long term.

In this paper, the Project Group on eHealth of the European Federation of Psychologists' Associations (EFPA) highlights important points of attention for the adoption of technology in psychotherapy, grouped into three categories of key stakeholders: psychotherapists, health services and regulatory agencies, and developers.

Recommendations have been conceived with the aim of providing high-quality psychological care to clients. The current recommendations focus on design and delivery of e-mental health, to include telepsychotherapy, by professionals and organizations. Nevertheless, in line with the increasing focus on client participation and involvement in the decision-making processes of mental healthcare (Tambuyzer et al., 2011), it is important to acknowledge and involve the clients in the entire development and implementation process. A structured overview of all 25 recommendations can be found in Figure 1. Each recommendation is discussed in greater detail in separate paragraphs below.

--- Add Figure 1 about here (or elsewhere, depending on page lay-out ---

Psychotherapists

While there is a 'digital divide' with some individuals lacking the necessary information and communications technology facilities, training, or social context that allows for the use of digital health (e.g., depending on age or geographical location) (Fang et al., 2019), disinclination for the use of technological means may also relate to personal considerations. Initial reluctance should, however, not be a reason to dismiss e-mental health altogether (Ebert et al., 2015). Nevertheless, psychotherapists should acknowledge a **strong reluctance towards e-mental health** in clients, and accordingly explore non-technological alternatives. Certain client groups are known to be reluctant towards psychotherapy in general, or are vulnerable for dropout or disengagement from psychotherapy (e.g., males, chronically ill individuals). Tailoring and personalization is especially important for these groups (e.g., offering content that is appealing, such as relying on sports metaphors for male users; Karekla et al., 2019). Moreover, digital alternatives should not replace in-person

contact altogether, but serve as a complementary method to overcome problems when in-person contact is difficult.

When children or other vulnerable client groups like older adults or people with intellectual disabilities are making use of e-mental health, additional caution is required. Garrido et al. (2019) showed that, for youth, a high level of supervision or psychotherapist involvement is necessary for an e-mental health intervention to be effective (e.g., to assure adherence). In the context of telepsychotherapy, additional care should be given to establish a virtual psychotherapeutic space, incorporating toys or creative verbal and interactive techniques to sufficiently engage young clients over the course of a session (American Psychiatric Association, 2020). Additional guidance on best practices in telepsychotherapy with youth at clinical high-risk for psychosis is provided elsewhere in this special issue (Shiffman et al., 2020). Equally important is that approval of parents or guardians should be assured, according to the legal majority age, confidentiality parameters, and other criteria to access psychological services as per national legislation parameters.

Given that little is currently known as to what works for whom and under which conditions, be sure to monitor the progress of clients carefully and tailor treatment. Regularly monitoring progress, for example via use of ecological momentary assessment (EMA; Shiffman et al., 2008) or a single case design approach, may be useful for tracking progress, which can be valuable for both clients and psychotherapists. For example, health systems could collect patient-reported outcomes, such as depression and anxiety symptoms, in real-time using apps and help psychotherapists to use this information to tailor treatment or intervene rapidly. Furthermore, Rozenthal et al. (2015) concluded that monitoring negative trends on standard outcome and self-report measures probing for adverse events, might also

help to prevent and reverse deterioration and dropout among clients using e-mental health services. As a next step, ecological momentary intervention (EMI; Heron & Smyth, 2010) can expand this monitoring to an active intervention approach in real-time and in naturalistic settings. For example, specific relaxation techniques can be provided to clients who demonstrate elevated levels of anxiety at home. EMI combined with EMA data has the potential to optimize clients' experience and interventions' effectiveness and adoption, whilst also informing psychotherapists of the ongoing treatment.

Self-administered e-mental health interventions should include personal guidance (e.g., weekly contacts via forum, email, or phone calls; for review see Baumeister et al., 2014). The content of the guidance can take different forms (e.g., clarifying content and tasks, encouragement or feedback on specific assignments; Ebert et al., 2018) and the amount of time required may vary depending on the client's needs (Berger, 2017). Accumulating evidence indicates that e-mental health interventions that include guidance result in better outcomes than unguided treatments (Richards & Richardson, 2012; Spek et al., 2007; Palmqvist et al., 2007; Baumeister et al., 2014). For example, Baumeister et al. (2014) reported significantly greater reduction of symptoms, less dropout, and more implemented modules in guided compared to unguided interventions.

E-mental health sometimes requires an effort equivalent to conventional care, especially when guided, and thus sufficient time should be taken for client follow-up. In this respect, e-mental health should not overburden psychotherapists and their clients. As opposed to conventional psychotherapy, many digital interactions are asynchronous, which implies that exchanges do not necessarily take place in real-time but that communication is scattered over a longer period of time via email, internet, or automated messaging systems

(e.g., Yellowlees et al., 2018). In addition, psychotherapists need to consider boundary issues. For example, chat systems might alert a client each time the psychotherapist signs into the system, prompting the client to send messages during the therapist's own time (Childress, 2000). Therefore, boundaries in terms of availability for clients should be set by the psychotherapists and discussed with the clients.

Psychotherapists should assure that they receive **sufficient continuous education** to keep up with this rapidly changing field. Only e-mental health applications which demonstrate the highest possible client safety, desired quality of care, and sufficient evidence-base should be adopted (Ebert et al., 2018). Keeping up to date does not only relate to technology, but also to theory, knowledge, and skills necessary for delivering adequate care that properly fits clients' needs. As such, psychotherapists adopting e-mental health should uphold a standard of care and good professional practices equivalent to conventional care.

The practices of **peer intervision and supervision** are important, in line with professional development in other psychological competencies (American Psychiatric Association, 2015). Within health systems, e-mental health fits well into the perspective of integrated care (Paradiso et al., 2005) that sees the psychologists as an integral part of the system, where they interact with other health professionals within a case management perspective.

It is important to ensure continuous assessment for active suicidal ideation, psychosis, manic episodes or at-risk behaviors (e.g., drug use) from the start of client enrolment and establish action plans on how to deal with these issues, should they arise. **Protocols for handling crises**, before during, and after treatment, should be pre-planned and readily

available. Although such protocols are especially relevant and can be effective for autonomous e-mental health interventions (Tielman et al., 2019), individual psychotherapists should also know how to refer to (or alert) relevant 'conventional' services, when for example providing telepsychotherapy with clients from afar.

E-mental health interventions can reach beyond physical borders. This opportunity allows psychotherapists to provide care to clients in countries different from the one in which they are licensed. Therefore, psychotherapists should not only be aware of, but also follow applicable regulations regarding digital practice across borders. Note, however, that legislation is often still lagging, especially in mental healthcare. Within Europe, (the lack of) legislation has already been identified for several years as an important factor hampering large scale implementation and availability of telemedicine (Saliba et al., 2012).

Health services and regulatory agencies

One of the main challenges of e-mental health is lack of evaluation. The implementation of e-mental health calls for investigating reach and adoption of the intervention, the development of causal models of how the intervention will work to achieve its benefits, outlining key components, and providing a multitude of evidence on efficacy, effectiveness, cost-effectiveness, clinical meaningfulness and potential harm (Kassianos, et al., 2017; Murray et al. 2016; Ollf, 2015). In this respect, Carlbring et al. (2018) recently reported that internet-delivered and conventional cognitive behavior therapy are equally effective in treating social anxiety disorder, panic disorder, depressive symptoms, body dissatisfaction, insomnia, tinnitus, male sexual dysfunction, spider phobia, snake phobia, and fibromyalgia, when evaluated using Randomized Controlled Trials (RCTs). Increasingly, this

evidence is also found in routine-care conditions (Titov et al., 2017). For health services to further adopt e-mental health within routine mental healthcare, both the efficacy and the effectiveness under routine care conditions needs to be evaluated.

Despite efforts to assess the effectiveness and efficacy of e-mental health interventions, mandatory regulations for quality-assurance at a European level are currently lacking. Regulatory bodies, such as the US FDA and the UK National Health Service (NHS) are still exploring best-practice methods for evaluating e-mental health interventions and providing this information to users (Rodriguez-Villa & Torous, 2019). The App Evaluation Framework (Henson et al., 2019) is a useful tool to evaluate applications in many relevant areas using five levels of examination: background info, privacy and security, evidence-base, ease of use, and data integration. However, a lack of transparent reporting can impede individuals from accurately assessing these five levels. Therefore, Rodriguez-Villa and Torous (2019) propose the use of a self-certification program, supported by policy makers, clinicians, and clients, for developers, in addition to approaches such as the App Evaluation Framework. E-mental health interventions should at least be able to provide evidence of peer-reviewed research. For example, interventions applying content in written formats can provide citations and empirical references, whereas those applying audio-visual dynamic formats can provide clients with links or (preferably) nonintrusive pop-ups with such information (Karekla et al., 2019). Creating (inter)national guidelines and reporting standards for e-mental health, is overall strongly recommended. Characteristics of interventions to be reported could encompass: (1) background and credibility of the content creators, (2) detailed overview of specific intervention features, (3) adherence to data protection and privacy regulation (i.e., GDPR), (4) current evidence-base for both efficacy and effectiveness, (5) cost, and (6) specific conditions for adequate and efficient usage (e.g., level of support required).

In all forms of e-mental health (e.g., self-guided interventions, apps), clients should know **which psychotherapist and/or organization can be held responsible** for conducting the treatment. This responsible actor must convey a sense of system credibility to the clients, according to persuasive technology theory (Fogg, 2002), through the following principles: (1) trustworthiness (i.e., system providing truthful, fair, and unbiased information); (2) expertise (i.e., system providing information demonstrating knowledge, experience, and competence); (3) surface credibility (i.e., similar to face validity, a system should provide a sense of credibility to the client upon first inspection); (4) real-world feel (i.e., system providing information or means to communicate with the people behind its content); (5) authority (i.e., system quoting that the material originates or has been evaluated by an acknowledged authority); (6) third-party endorsements (i.e., system providing endorsements from respected and renowned sources, such as a university); and (7) verifiability (i.e., system providing means to verify the accuracy of the site content via outside sources such as peer-reviewed research articles). A system that uses content from theory-driven, evidence-based, psychotherapeutic approaches and abides by these seven principles will provide a sense of trustworthiness, expertise, and credibility to the client (Karekla et al., 2019). In all cases, it is important that the client knows who the psychotherapist is behind the intervention or screen, and what their credentials, licensure, theoretical and therapeutic approach and experiences are.

When one approach proves to be ineffective or harmful (e.g., negative side effects), **switching to another intervention should be made easy for the client**. For example, if a specific low-intensity, unguided intervention is not having the desired effects, other options, such as a more intensive therapist-guided program, should be explored. Clients should ideally be able to transfer their data (e.g., self-reported mood scores) from one service to another,

thus interoperability is an important aspect to consider when selecting e-mental health applications and interventions (Henson et al., 2019; mHealthBelgium, 2020). This is however rare, partially due to lacking data standards (Torous et al., 2019).

Reimbursement (e.g., of an app or a telepsychotherapy session) by healthcare systems is a prerequisite for sustainability of e-mental health. Reimbursement of apps can occur in many ways, but a study from the United States indicates that apps for self-directed use without involvement of clinicians are unlikely to be reimbursed (Powell et al., 2019). Careful consideration should indeed be given to reimbursement of (un)guided internet-delivered interventions. Given the current evidence base, reimbursement for telepsychotherapy or guided e-mental health interventions primarily seems to be preferred.

Only healthcare professionals with adequate background and sufficient continuous education should deploy e-mental health interventions. However, public health education programs in Europe insufficiently include digital health in their curriculum (Odone et al., 2019). Policy makers should encourage training programs on digital literacy for professionals and certification of quality should be established. Given that specific standard trainings are often lacking, quality criteria for professionals should ideally be determined. For telepsychiatry, for example, competencies related to patient care, system- and practice-based learning, professionalism, communication, knowledge and technology have already been defined, allowing for a subsequent distinction between novice, advanced beginner, competent, proficient or expert in telepsychiatry (Hilty et al., 2015). Such standards and competencies should be developed for psychotherapists as well.

The Unified Theory of Acceptance and Use of Technology (UTAUT) states that the degree to which an individual believes technological and organizational facilities are available

has a direct impact on the use of technology (Venkatesh et al., 2003). Health services should **assure adequate conditions for optimal use** of e-mental health, both for psychotherapists and clients. Psychotherapists require a suitable location, appropriate equipment, and sufficient time for (online) follow-up with clients using e-mental health interventions. Consequently, adequate public funding should underlie the implementation of digital health strategies (Odone et al., 2019). Interventions should in turn be provided to clients with similar sufficient facilities, knowledge, and skills for proper use.

Relevant clinical information can get lost as a client moves through the healthcare system. Having high-quality, interoperable platforms and records to provide psychotherapists and clients easy access to up-to-date clinical information, can lead to improved care, client empowerment, and decreased documentation burden (Lehne et al., 2019). To achieve this, **continuity of IT systems for healthcare** is important. All necessary precautions should for example be taken to avoid clients and service providers suddenly losing data (e.g. by frequent, secure back-ups). Continuous updating of these systems to current standards is also necessary to safeguard data on software platforms from cybersecurity threats. Observations to date, suggest that healthcare systems have difficulties keeping up with new technologies and security protocols (Kruse et al., 2017).

Developers

E-mental health interventions should be developed based on sound psychological theory and evidence and should make full use of technological theory and design principles (Karekla et al., 2019). It is important that the development of e-mental health interventions conforms with clients' needs using a simple and interactive design. A simple, intuitive, and

attractive interface and a goal-oriented approach, including elements of gamification, narratives, and avatars, are key elements of e-mental health that can contribute to motivation, self-efficacy, and even effectiveness (Bakker et al., 2016). Therefore, development of e-mental health should always be a theory- and best-practices-driven, multidisciplinary endeavor in which the efforts and expertise of both psychologists and professionals with a background in information and communications technology and design are combined. In order to achieve effective interventions, developers require input concerning theory of psychological processes and behavior change methodologies. Psychologists require input on technological theory about how to develop engaging interventions (e.g., gamification theory) for the target groups.

E-mental health needs to be adapted to the proposed target population and its context. Developers should design e-mental health interventions with the target population in mind, and consider cultural factors, comorbidities and the severity of different mental disorders. For example, clients who suffer from severe depressive symptoms and suicidal thoughts can have difficulties with simple daily tasks and might, consequently, find it very challenging to take part in (new) online interventions (Krog et al., 2018). Many e-mental health applications have currently been developed for a specific (diagnosed) clinical disorder (e.g., social anxiety), which implies that they do not make full use of the large accessibility of smartphones in the general population, nor do they acknowledge the continuum of mental health (Bakker et al., 2016). Tailoring interventions to the needs of clients based on multiple constructs (which can be theoretical, behavioral, or demographic) could lead to greater effectiveness of e-health interventions (Morrison et al., 2012). E-mental health interventions can offer individualized content based on specific needs or preferences. A module on behavioral activation can, for example, be recommended for individuals with depressive

symptoms, while other modules might be preferred when anxiety symptoms are the main treatment target (Weisel et al., 2019). However, research on the efficacy of tailored e-mental health intervention is still scarce. When conditions for proper use of e-mental health are not met (e.g., limited access to digital means and digital literacy), alternatives should be available (e.g., consultations over the telephone, or conventional psychotherapy consultations).

E-mental health needs to comply with **legal regulations** and assure a safe service. Regulatory frameworks that are in place for traditional mental health interventions, are often not suitable for and tailored to e-mental health (yet). Armontrout et al. (2018) note that many applications are not properly regulated by the US Food and Drug Administration (FDA), either because they solely claim to target symptoms (but to not diagnose or to treat disorders) or that they are estimated to have low potential for harm. Ethical issues and especially ones of privacy, confidentiality, and emergency should be considered in e-mental health development (Karekla & Savvides, 2019). Developers should establish operating procedures of how to deal with ethical issues that may arise, in order to ensure privacy in data collected and ensuring users' safety (Arora et al., 2014).

Developers would benefit from following recommendations by the International Society for Mental Health Online (ISMHO, 2000) and the European Group of Ethics (2012). They should particularly pay attention to: (1) process, (2) contact details of psychotherapists, (3) any risks that may arise from the use of e-mental health (e.g., likelihood of technical difficulties) and (4) safeguards taken to ensure confidentiality and privacy (e.g., use of encrypted platform of communication). **Maintaining ethical standards** should be an overarching goal across the e-mental health development and application process. Developers should also be transparent about the content of an e-mental health application

and the procedures relating to data handling and privacy, as this allows users to make informed decisions.

Involving end users, both clients and psychotherapists, early in the design process is important. Although there is a fairly good understanding of the design requirements of e-mental health and the processes leading up to a high-quality e-mental health intervention or service, there still seem to be few examples of implementation of these principles in clinical practice (Aryana et al., 2019). Relying on an iterative approach for the design process, entailing consecutive rounds of end-user input in which co-creation is stimulated, still seems essential to maximize the odds of successful adoption and continued use. Such involvement includes surveys, focus groups, interviews or hands-on experience with wireframes and prototypes. Even when targeted users are facing serious mental health problems, this approach is strongly encouraged and has demonstrated to be feasible (Biagianti et al., 2017).

Despite the increasing evidence-base for e-mental health, commercially available applications often lack scientific background and are hardly ever validated in research (Anthes, 2016; Larsen et al., 2019). Therefore, developers should consider an evidence-based approach. The 'person-based approach' of digital intervention development details two central processes in application evaluation: (1) the use of methods to collect qualitative data and (2) identifying the intervention's guiding principles (Yardley et al., 2015). E-mental health is currently predominantly grounded in cognitive-behavioral therapy, but other psychotherapeutic frameworks can also be applied. For example, Acceptance and Commitment Therapy, Psychodynamic psychotherapy, and Interpersonal psychotherapy are also on the rise (Moshe et al., 2020). Moreover, technological theories should be taken into

consideration as well, for example on how to make e-mental health convey trust and how to optimize its ease of use (e.g., persuasive technology theory).

Developers need to **work with researchers to provide robust evaluation evidence** for their specific e-mental health application. RCTs are considered the gold standard to demonstrate efficacy and effectiveness when evaluating e-mental health interventions but might not be able keep pace with the rapidly changing landscape e-mental health. Novel evaluation designs have emerged with a more explicit focus on user engagement or implementation outcomes, such as the Continuous Evaluation of Evolving Behavioral Intervention Technologies (CEEBIT; Mohr et al., 2013). Different e-mental health applications entail varying levels of risks and warrant different evaluation approaches. The UK National Institute for Health and Care Excellence (NICE, 2019) has devised an evidence-standards framework, which classifies e-mental health depending on its content (e.g., providing information, allowing two-way communication, self-management, providing diagnosis or treatment), and accordingly attributes a level of evidence-base needed for each. Alternative approaches may not (and should not) replace conventional RCTs, but could be of added value by providing rapid, preliminary evidence for the iterative development of e-mental health that goes beyond mere effectiveness.

Developers should, furthermore, **account for factors that contribute to adoption** . E-mental health interventions require tailoring to the literacy of the intended clients, including digital literacy. Language needs to be simple, inclusive (in relation to gender, age, lifestyle, mental health), and presented in an interactive format (Bakker et al., 2016; Levin-Zamir & Bertschi, 2018). Developers should (1) aim to include an initial assessment of user's digital literacy, (2) aim for simplicity, (3) aim for use in various operating systems and platforms

(smartphones, tablets, computers), (4) while at the same time plan for technical assistance availability and easy video tutorials (Karekla et al., 2019).

Conclusion

Overall, the COVID-19 pandemic poses enormous challenges for healthcare. It does seem that for e-mental health, this crisis also holds opportunities, primarily to increase the dissemination, adoption, and potentially even the development of digital tools and services. Nevertheless, it remains important to consider all relevant stakeholders and perspectives involved in order to create added value for psychotherapy and healthcare in general. The current paper aims to support the provision of high-quality e-mental health, including telepsychotherapy, to clients by reporting recommendations to psychotherapists, health services and regulatory agencies, and developers. Currently, the use of technology may find its way to psychotherapists and healthcare professionals solely out of the urgent need, but if the proposed recommendations are taken into consideration, e-mental health may demonstrate its added value for clinical practice and healthcare systems in general.

References

American Psychiatric Association (2020). *Child & Adolescent Telepsychiatry.*

https://www.psychiatry.org/psychiatrists/practice/telepsychiatry/toolkit/child-adolescent

American Psychological Association. (2015). Guidelines for clinical supervision in health service psychology. *American Psychologist, 70*(1), 33–46. https://doi.org/10.1037/a0038112

Anderson, G. (2018). Internet interventions: Past, present and future. *Internet Interventions, 12,* 181-188. https://doi.org/10.1016/j.invent.2018.03.008

Anthes, E. (2016). Mental health: There's an app for that. *Nature, 532*(7597), 20-23. https://doi.org/10.1038/532020a

Apolinário-Hagen, J., Vehreschild, V., & Alkoudmani, R. M. (2017). Current views and perspectives on e-mental health: an exploratory survey study for understanding public attitudes toward internet-based psychotherapy in Germany. *JMIR mental health, 4*(1), e8. https://doi.org/10.2196/mental.6375

Armontrout, J. A., Torous, J., Cohen, M., McNiel, D. E., & Binder, R. (2018). Current regulation of mobile mental health applications. *Journal of the American Academy of Psychiatry and the Law, 46,* 204-211. https://doi.org/10.29158/JAAPL.003748-18

Arora, S., Yttri, J., & Nilsen, W. (2014). Privacy and security in mobile health (mHealth) Research. *Alcohol Research: Current Reviews, 36,* 143–151.

Aryana, B., Brewster, L., & Nocera, J. A. (2018). Design for mobile mental health: an exploratory review. *Health and Technology, 9,* 401–424. https://doi.org/10.1007/s12553-018-0271-1

Bakker, D., Kazantzis, N., Rickwood, D., & Rickard, N. (2016). Mental Health Smartphone Apps: Review and Evidence-Based Recommendations for Future Developments. *JMIR Mental Health, 3*(1), e7. https://doi:10.2196/mental.4984

Baumeister, H., Reichler, L., Munzinger, L., & Lin, J. (2014). The impact of guidance on Internet-based mental health interventions - A systematic review. *Internet Interventions, 1*(4), 205-215. https://doi.org/10.1016/j.invent.2014.08.003

Baumel, A., Muench, F., Edan, S., & Kane, J. M. (2019). Objective user engagement with mental health apps: systematic search and panel-based usage analysis. *Journal of Medical Internet Research, 21*(9), e14567. https://doi.org/10.2196/14567

Berger, T. (2017). The therapeutic alliance in internet interventions: A narrative review and suggestions for future research. *Psychotherapy Research, 27*(5), 511-524. https://doi.org/10.1080/10503307.2015.1119908

Berryhill, M.B., Culmer, N., Williams, N., Halli-Tierney, A., Betancourt, A., Roberts, H. & King, M. (2019). Videoconferencing psychotherapy and depression: A systematic review. *Telemedicine and e-Health, 25,* 435-446. https://doi.org/10.1089/tmj.2018.0058

Biagianti, B., Hidalgo-Mazzei, D., & Meyer, N. (2017). Developing digital interventions for people living with serious mental illness: perspectives from three mHealth studies. *Evidence-based mental health, 20*(4), 98-101. https://doi.org/10.1136/eb-2017-102765

Brooks, S. K., Webster, R. K., Smith, L.S., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: rapid review of the evidence, *The Lancet, 395,* 912-920. https://doi.org/10.1016/S0140-6736(20)30460-8

Carlbring, P., Andersson, G., Cuijpers, P., Riper, H., Hedman-Lagerlöf, E. (2018). Internet-based vs. face-to-face cognitive behavior therapy for psychiatric and somatic

disorders: an updated systematic review and meta-analysis. *Cognitive Behaviour Therapy, 47*, 1-18. https://doi.org/10.1080/16506073.2017.1401115

Childress, C. A. (2000). Ethical Issues in Providing Online Psychotherapeutic Interventions. *J Med Internet Res 2000, 2*(1), e5. https://doi.org/10.2196/jmir.2.1.e5

De Witte, N. A. J., Buyck, I., & Van Daele, T. (2019). Combining biofeedback with stress management interventions: a systematic review of physiological and psychological effects. *Applied Psychophysiology and Biofeedback, 44,* 71-82. https://doi.org.10.1007/s10484-018-09427-7

Ebert, D.D., Van Daele, T., Nordgreen, T., Karekla, M., Compare, A., Zarbo, C., …., & Baumeister, H. (2018). Internet- and mobile-based psychological interventions: Applications, efficacy, and potential for improving mental health. A report of the EFPA E-Health Taskforce. *European Psychologist, 23*(2), 167-187. https://doi.org/10.1027/1016-9040/a000318

Ebert, D. D., Zarski, A. C., Christensen, H., Stikkelbroek, Y., Cuijpers, P., Berking, M., & Riper, H. (2015). Internet and computer-based cognitive behavioral therapy for anxiety and depression in youth: a meta-analysis of randomized controlled outcome trials. *PloS one, 10*(3). https://doi.org/10.1371/journal.pone.0119895

European Group on Ethics in Science and New Technologies to the European Commission, & European Commission. (2012). *Ethics of information and communication technologies.* Publications Office of the European Union.

Fang, M. L., Canham, S.L., Battersby, L., Sixsmith, J., Wada, M., & Sixsmith, A. (2019). Exploring Privilege in the Digital Divide: Implications for Theory, Policy, and Practice. *The Gerontologist, 59*(1), e1-e15. https://doi.org/10.1093/geront/gny037

Fogg, B. J. (2002). Persuasive technology: Using computers to change what we think and do. *Ubiquity, 2002,* 5. https://doi.org/10.1145/764008.763957

Freeman, D., Reeve, S., Robinson, A., Ehlers, A., Clark, D., Spanlang, B., & Slater, M. (2017). Virtual reality in the assessment, understanding, and treatment of mental health disorders. *Psychological medicine, 47*(14), 2393-2400. https://doi.org/10.1017/S003329171700040X

Gaebel, W., Lukies, R., Kerst, A., Stricker, J., Zielasek, J., Diekmann, S., Trost, N., Gouzoulis, E., Bonroy, B., Cullen, K., Desie, K., Mulliez, A. E., Gerlinger, G. Günther, K., Hiemstra, H. J., McDaid, S., Murphy, C., Sander, J., Sebbane, D., … Vlijter, O. (in press). Upscaling e-Mental Health in Europe: A Six-Country Analysis and Policy Recommendations from the eMEN Project. *European Archives of Psychiatry and Clinical Neuroscience.*

Gao, J., Zheng, P., Jia, Y., Chen, H., Mao, Y., Chen, S., Wang, Y., Fu, H., & Dai, J. (2020). Mental Health Problems and Social Media Exposure During COVID-19 Outbreak. *SSRN*, 3541120. https://doi.org/10.2139/ssrn.3541120

Garrido, S., Millington, C., Cheers, D., Boydell, K., Schubert, E., Meade, T., & Nguyen, Q. V. (2019). What works and what doesn't? A systematic review of digital mental health interventions for depression and anxiety in young people. *Frontiers in Psychiatry, 10,* 759. https://doi.org/10.3389/fpsyt.2019.00759

Haddouk, L. (2015). Presence in Telepsychotherapy. Towards a Video-Interview Framework.

International Journal of Emergency Mental Health and Human Resilience, 17(4), 712-713. https://doi.org/10.4172/1522-4821.100029

Haddouk, L., Bouchard, S., Brivio, E., Galimberti, C., & Trognon, A. (2018). Assessing presence in videoconference telepsychotherapies: A complementary qualitative study on breaks in telepresence and intersubjectivity co-construction processes. *Annual Review of CyberTherapy and Telemedecine, 16,* 118-123. https://doi.org/10.1037/1528-3542.6.3.383

Henson, P., David, G., Albright, K., & Torous, J. (2019). Deriving a practical framework for the evaluation of health apps. *The Lancet Digital Health, 1*(2). https://doi.org/10.1016/S2589-7500(19)30013-5

Heron, K. E., & Smyth, J. M. (2010). Ecological momentary interventions: incorporating mobile technology into psychosocial and health behaviour treatments. *British journal of health psychology, 15*(1), 1-39. https://doi.org/10.1348/135910709X466063

Hilty, D. M., Crawford, A., Teshima, J., Chan, S., Sunderji, N., Yellowlees, P. M., Kramer, G., O'neill, P., Force, C., Luo, J., & Li, S. T. (2015). A framework for telepsychiatric training and e-health: competency-based education, evaluation and implications. *International Review of Psychiatry, 27*(6), 569-592. https://doi.org/10.3109/09540261.2015.1091292

International Society for Mental Health Online. (2000). *ISMHO/PSI suggested principles for the online provision of mental health services.* https://ismho.org/resources/archive/suggested-principles-for-the-online-provision-of-mental-health-services/

Joint Task Force for the Development of Telepsychology Guidelines for Psychologists. (2013). Guidelines for the practice of telepsychology. *American Psychologist, 68*(9), 791–800. https://doi.org/10.1037/a0035001

Karekla, M., Kasinopoulos, O., Neto, D. D., Ebert, D. D., Van Daele, T., Nordgreen, T., Höfer, S., Oeverland, S., & Jensen, K. L. (2019). Best practices and recommendations for digital interventions to improve engagement and adherence in chronic illness sufferers. *European Psychologist, 24*(1), 49-67. https://doi.org/10.1027/1016-9040/a000349

Karekla, M., & Savvides, S. N. (2019). Smoking cessation avatar-led Acceptance and Commitment Therapy digital intervention: feasibility and acceptability in young adults. *Translational Behavioral Medicine,* ibz128. https://doi.org/10.1093/tbm/ibz128

Kassianos, A. P., Georgiou, G., Papaconstantinou, E. P., Detzortzi, A., & Horne, R. (2017). Smartphone applications for educating and helping non-motivating clients adhere to medication that treats mental health conditions: aims and functioning. *Frontiers in Psychology, 8*, 1769. https://doi.org/10.3389/fpsyg.2017.01769

Kluge (2020, March 26). *Statement – Physical and mental health key to resilience during COVID-19 pandemic.* World Health Organization Regional Office for Europe. http://www.euro.who.int/en/media-centre/sections/statements/2020/statement-physical-and-mental-health-key-to-resilience-during-covid-19-pandemic

Konstantinou, P., Trigeorgi, A., Georgiou, C., Gloster, A. T., Panayiotou, G., & Karekla, M. (2020). Comparing apples and oranges or different types of citrus fruits? Using wearable versus stationary devices to analyze psychophysiological data. *Psychophysiology, 57*, e13551. https://doi.org/10.1111/psyp.13551

Krog, M. D., Nielsen, M. G., Le, J.V., Bro, F., Christensen, K. S., & Mygind, A. (2018). Barriers and facilitators to using a web-based tool for diagnosis and monitoring of patients with depression: a qualitative study among Danish general practitioners. *BMC Health Services Research, 18,* 503. https://doi.org/10.1186/s12913-018-3309-1

Kruse, C. S., Frederick, B., Jacobson, T., & Monticone, D. K. (2017). Cybersecurity in healthcare: A systematic review of modern threats and trends. *Technology and Health Care, 25*(1), 1-10. https://doi.org/10.3233/THC-161263

Larsen, M. E., Huckvale, K., Nicholas, J., Torous, J., Birrell, L., Li, E., & Reda, B. (2019). Using science to sell apps: evaluation of mental health app store quality claims. *NPJ digital medicine, 2*(1), 1-6. https://doi.org/10.1038/s41746-019-0093-1

Lehne, M., Sass, J., Essenwanger, A., Schepers, J., Thun, S. (2019). Why digital medicine depends on interoperability. *NPJ Digital Medicine, 2,* 79. https://doi.org/10.1038/s41746-019-0158-1

Levin-Zamir, D. & Bertschi, I. (2018). Media Health Literacy, eHealth Literacy, and the Role of the Social Environment in Context. *International Journal of Environmental Research and Public Health, 15,* 1643. https://doi.org/10.3390/ijerph15081643

Linardon, J., Cuijpers, P., Carlbring, P., Messer, M., & Fuller-Tyszkiewicz, M. (2019). The efficacy of app-supported smartphone interventions for mental health problems: a meta-analysis of randomized controlled trials. *World Psychiatry, 18*(3), 325-336. https://doi.org/10.1002/wps.20673

Matsangidou, M., Otkhmezuri, B., Ang, J., Avraamides, M., & Karekla, M. (in press). *Designing a Multi-User Virtual Reality Remote Psychotherapy for Eating Disorders.*

Mendes-Santos, C., Weiderpass, E., Santana, R., & Andersson, G. (2020). Portuguese Psychologists' attitudes towards internet interventions: an exploratory cross-sectional study. *JMIR Mental Health, 7*(4), e16817. https://doi.org/10.2196/16817

mHealthBelgium (2020). *Validation pyramid.* mHealthBelgium. https://mhealthbelgium.be/validation-pyramid

Mohr, D. C., Cheung, K., Schueller, S. M., Brown, C. H., & Duan, N. (2013). Continuous evaluation of evolving behavioral intervention technologies. *American journal of preventive medicine, 45*(4), 517-523.

Mohr, D. C., Riper, H., & Schueller, S. M. (2018). A solution-focused research approach to achieve an implementable revolution in digital mental health. *JAMA psychiatry, 75*(2), 113-114. https://doi.org/10.1001/jamapsychiatry.2017.3838

Morrison, L.G., Yardley, L., Powell, J.,& Michie, S. (2012). What Design Features Are Used in Effective e-Health Interventions? A Review Using Techniques from Critical Interpretive Synthesis. *Telemedicine and e-Health, 18*(2). 137-144. https://doi.org/10.1089/tmj.2011.0062

Moshe, I., Terhorst, Y., Cuijpers, P., Cristea, I., Pulkki-Råback, L., & Sander, L. (2020). Three Decades of Internet-and Computer-Based Interventions for the Treatment of Depression: Protocol for a Systematic Review and Meta-Analysis. *JMIR Research Protocols, 9*(3), e14860. https://doi.org/10.2196/14860

Murray, E., Hekler, E. B., Andersson, G., Collins, L. M., Doherty, A., Hollis, C., Rivera, D. E., Wst, R., & Wyatt, J. C. (2016). Evaluating Digital Health Interventions. *American Journal of Preventive Medicine, 5*(51), 843-851. https://doi.org/10.1016/j.amepre.2016.06.008

Musiat, P., Goldstone, P., & Tarrier, N. (2014). Understanding the acceptability of e-mental health-attitudes and expectations towards computerised self-help treatments for mental health problems. *BMC psychiatry, 14*(1), 109. https://doi.org/10.1186/1471-244X-14-109

National Institute for Health and Care Excellence (2019). *Evidence standards framework for digital health technologies.* https://www.nice.org.uk/Media/Default/About/what-we-do/our-programmes/evidence-standards-framework/digital-evidence-standards-framework.pdf

Odone, A., Buttigieg, S., Ricciardi, w., Azzopardi-Muscat, N., & Staines, A. (2019). Public health digitalization in Europe: EUPHA vision, action and role in digital public health. *European Journal of Public Health, 29,* 28–35. https://doi.org/10.1093/eurpub/ckz161

Olff, M. (2015). Mobile mental health: a challenging research agenda. *European journal of psychotraumatology, 6*(1), 27882. https://doi.org/10.3402/ejpt.v6.27882

Ordre des Psychologues du Québec (2013). *Guide de pratique concernant l'exercice de la télépsychologie.* [PDF file] Québec, Canada: Ordre des Psychologues du Québec https://www.ordrepsy.qc.ca/documents/26707/63191/Guide+de+pratique+concernant+l%E2%80%99exercice+de+la+t%C3%A9l%C3%A9psychologie/5175fd35-d45b-4cbe-99e3-e46ff5079552

Palmqvist, B., Carlbring, P., & Andersson, G. (2007). Internet-delivered treatments with or without therapist input: does the therapist factor have implications for efficacy and

cost? *Expert Review of Pharmacoeconomics & Outcomes Research, 7*(3), 291-297, https://doi.org/10.1586/14737167.7.3.291.

Paradiso, R., Loriga, G., & Taccini, N. (2005). A wearable health care system based on knitted integrated sensors. *IEEE Transactions on Information Technology in Biomedicine, 9*(3), 337-344. https://doi.org/10.1109/TITB.2005.854512

Perle, J. G., Langsam, L. C., Randel, A., Lutchman, S., Levine, A. B., Odland, A. P., Nierenberg, B., & Marker, C. D. (2013). Attitudes toward psychological telehealth: Current and future clinical psychologists' opinions of Internet-based interventions. *Journal of Clinical Psychology, 69*(1), 100-113. https://doi.org/10.1002/jclp.21912

Powell, A. C., Bowman, M. B., & Harbin, H. T. (2019). Reimbursement of Apps for Mental Health: Findings From Interviews. *JMIR mental health, 6*(8), e14724. https://doi.org/10.2196/14724

Richards, D., & Richardson, T. (2012). Computer-based psychological treatments for depression: A systematic review and meta-analysis. *Clinical Psychology Review, 32*(4), 329-342. https://doi.org/10.1016/j.cpr.2012.02.004.

Rodriguez-Villa, E., & Torous, J. (2019). Regulating digital health technologies with transparency: the case for dynamic and multi-stakeholder evaluation. *BMC Medicine, 17*(225). https://doi.org/10.1186/s12916-019-1447-x

Rozental, A., Boettcher, J., Andersson, G., Schmidt, B., & Carlbring, P. (2015) Negative Effects of Internet Interventions: A Qualitative Content Analysis of clients' Experiences with Treatments Delivered Online. *Cognitive Behaviour Therapy, 44*(3), 223-236. https://doi.org/10.1080/16506073.2015.1008033

Saliba, V., Legido-Quigley, H., Hallik, R., Aaviksoo, A., Car, J., & McKee, M. (2012). Telemedicine across borders: a systematic review of factors that hinder or support implementation. *International journal of medical informatics, 81*(12), 793-809. https://doi.org/10.1016/j.ijmedinf.2012.08.003

Shiffman, S., Stone, A. A., & Hufford, M. R. (2008). Ecological momentary assessment. *Annual review of clinical psychology, 4,* 1-32. https://doi.org/10.1146/annurev.clinpsy.3.022806.091415

Spek, V., Cuijpers, P., Nyklíček, I., Riper, H., Keyzer, J., & Pop, V. (2007). Internet-based cognitive behaviour therapy for symptoms of depression and anxiety: A meta-analysis. *Psychological Medicine, 37*(3), 319-328. doi:10.1017/S0033291706008944.

Stallard, P., Richardson, T., & Velleman, S. (2010). Clinicians' attitudes towards the use of computerized cognitive behaviour therapy (cCBT) with children and adolescents. *Behavioural and cognitive psychotherapy, 38*(5), 545-560. https://doi.org/10.1017/S1352465810000421

Tambuyzer, E., Pieters, G., & Van Audenhove, C. (2014). Patient involvement in mental health care: one size does not fit all. *Health Expectations, 17*(1), 138-150. https://doi.org/10.1111/j.1369-7625.2011.00743.x

Tielman, M. L., Neerincx, M. A., Pagliari, C., Rizzo, A., & Brinkman, W. P. (2019). Considering patient safety in autonomous e-mental health systems–detecting risk situations and referring patients back to human care. *BMC medical informatics and decision making, 19*(1), 47. https://doi.org/10.1186/s12911-019-0796-x

Titov, N., Dear, B. F., Staples, L. G., Bennett-Levy, J., Klein, B., Rapee, R. M., Andersson, G., Purtell, C., Bezuidenhout, G., & Nielssen, O. B. (2017). The first 30 months of the MindSpot Clinic: evaluation of a national e-mental health service against project objectives. *Australian & New Zealand Journal of Psychiatry, 51*(12), 1227-1239. https://doi.org/10.1177/0004867416671598

Torous, J., Andersson, G., Bertagnoli, A., Christensen, H., Cuijpers, P., Firth, J., Haim, A., Hsin, H., Hollis, C., Lewis, S., Mohr, D. C., Pratap, A., Roux, S., Sherrill, J., & Arean, P. A. (2019). Towards a consensus around standards for smartphone apps and digital mental health. *World Psychiatry, 18*(1), 97. https://doi.org/10.1002%2Fwps.20592

Venkatesh, V., Morris, M., Davis, G., & Davis, F. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly, 27*(3), 425-478. https://doi.org/10.2307/30036540

Weisel, K. K., Zarski, A. C., Berger, T., Krieger, T., Schaub, M. P., Moser, C. T., Berking, M., Dey, M., Botella, C., Baños, R., Herrero, R., Etchemendy, E., Riper, H., Cuijpers, P., Bolinski, F., Kleiboer, A., Görlich, D., Beecham, J., Jacobi, C., & Ebert, D. D. (2019). Efficacy and cost-effectiveness of guided and unguided internet- and mobile-based indicated transdiagnostic prevention of depression and anxiety (ICare Prevent): A three-armed randomized controlled trial in four European countries. *Internet Interventions, 16,* 52-64. https://doi.org/10.1016/j.invent.2018.04.002

Wind, T. R., Rijkeboer, M., Andersson, G., & Riper, H. (2020). The COVID-19 pandemic: The 'black swan' for mental health care and a turning point for e-health. *Internet Interventions.* https://doi.org/10.1016/j.invent.2020.100317

Yardley, L., Morrison, L., Bradbury, K., & Muller, I. (2015). The person-based approach to intervention development: application to digital health-related behavior change interventions. *Journal of Medical Internet Research, 17*(1), e30. https://doi.org/10.2196/jmir.4055

Yellowlees, P., Burke Parish, M., González, Á., Chan, S., Hilty, D., Iosif, A. M., McCarron, R., Odor, A., Scher, L., Sciolla, A., Shore, J., & Xiong, G. (2018). Asynchronous Telepsychiatry: A Component of Stepped Integrated Care. *Telemedicine journal and e-health, 24*(5), 375–378. https://doi.org/10.1089/tmj.2017.0103

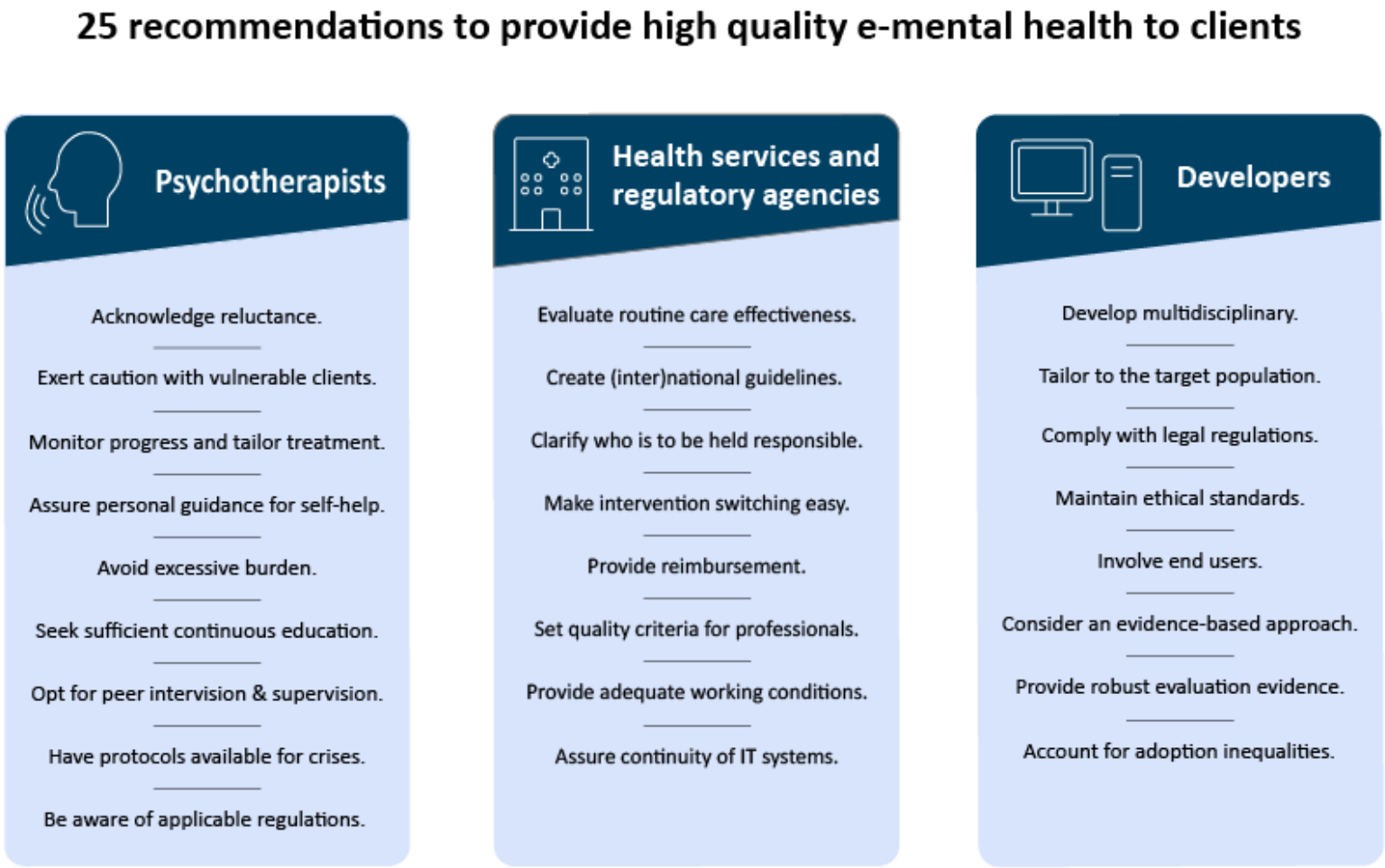

Figure 1. Structured overview of 25 recommendations to provide high quality e-mental health, in particular telepsychotherapy, to clients.