# What are the most used formats of digital MHPSS?

Digital MHPSS can differ according to the form of use, the extent of digital material and length of intervention, the degree and form of contact, the level of automation and the combination of face-to-face and digital content. There is no single definition of what is to be considered a digital intervention and the field is continuously evolving. In this factsheet, we describe some of the most used definitions and formats within digital mental health. For a further discussion regarding definitions, see the factsheet What is Digital MHPSS?

As you read this factsheet it is important to remember that digital MHPSS interventions should be considered a complement, addition or add-on to face-to-face interventions, which broadens the support for wellbeing, mental health problems and everyday functioning. They are not a direct replacement of staff or current MHPSS programming, although depending on the format, they can change the way human support is provided and the amount of human contact needed. A report based on input from RCRC Movement experts recommended a hybrid model, combining face-to-face contact with digital material, a format commonly preferred among healthcare workers[1,2].

Digital MHPSS solutions are suitable in many areas of application. The most frequent areas of use are listed below:

- **Screening** (e.g. finding a specific target group or diagnosis, triage for referral)
- **Assessment** (e.g. evaluating symptom levels or suicide risk)
- **Prevention** (e.g. health promotion and psychoeducation)
- **Crisis relief** (e.g. psychological first aid PFA)
- **Support** (e.g. counselling)
- **Treatment** (e.g. for sub-clinical, mild, moderate or severe distress/conditions)
- **Monitoring** (e.g. changes in wellbeing over time during an intervention)
- **Aftercare** (e.g. maintenance and relapse prevention)

# Commonly used digital formats

There is a variety of formats utilizing online and mobile technologies. We provide a brief description below of each of the most common delivery formats and their current evidence base. There is usually some form of contact between provider and user or between users (peer-to-peer support) in digital interventions. Using human support has been shown to increase compliance with the intervention and improve its effects, which is further expanded upon in the factsheet What is the role of human support in digital MHPSS? As the digital realm is continuously evolving and different modalities overlap, this list does not attempt to be exhaustive, but rather describes the most used formats and points out the differences between them. Currently, the most frequently used formats in research and real-world settings are guided Internet-based and video, telephone and hybrid interventions.

## Guided Internet-based interventions (human-supported)

Internet-based programs/material delivered by the use of e.g. text, audio, video, interactive elements, self-assessments, and free-form text input. Provided in a structured format with online support by a professional or a trained lay person through secure email, chat, video or phone, but with less contact compared to face-to-face services. Usually provided during a specified time-period of 6-12 weeks with the user accessing one digital treatment module per week with accompanying homework. Support can be scheduled or provided on demand. This format is the most studied digital treatment [3].

Research provides strong support for the use of guided Internet-based interventions in the treatment of mild, moderate and sometimes severe mental health conditions[4], with comparable results to face-to-face interventions[5]. The most studied format is Internet-based cognitive behavioural therapy (ICBT).

## Video- and telephone-delivered interventions

Video- or phone-delivered interventions from professionals or trained lay workers often mimicking face-to-face services in terms of length and content. Videoconferencing solutions have the advantage that provider and user see each other during the intervention (non-verbal cues available), while telephone interventions are easily disseminated even in hard-to-reach areas or in low-tech settings and are therefore more accessible. These modalities are also often used for counselling and short follow-up and maintenance sessions.

Research provides support for the use in the treatment of mild, moderate and sometimes severe mental health problems such as PTSD [6]. In direct comparisons, video and telephone interventions yield similar results [7]. As the pandemic made video a commonly used way of providing interventions, there is a need for even more studies to support its frequent use.

## Hybrid interventions (blended treatment)

Digital/online material in combination with face-to-face support from a professional or trained lay person. It can be provided in a sequential or mixed format, where the sequential format is commonly used for aftercare/maintenance (first face-to-face, then digital) and the mixed version for treatment and psychological support (mixing digital and face-to-face during the intervention).

There is increasing research support for the use of blended or hybrid interventions in the treatment of mild and moderate mental health conditions [8], and it is an often-preferred format for providers and users[1]. Hybrid interventions were recommended by RCRC experts as a viable provision option for MHPSS in the Movement [2].

## Information and psychoeducation (one-way)

Websites, apps or other digital modalities (e.g. podcasts or videos) that provide information about mental health problems and available resources, which can increase awareness and reduce stigma, and thereby lead to increased wellbeing and better uptake.

Research is somewhat limited and the results mixed when it comes to the effects of broad scale psychoeducation and mental health information for the general population, or for targeted settings such as schools or community centres. The same goes for using digital means to provide this form of information across age groups and settings in low-resource areas, although there are preliminary positive outcomes[9].

## Peer-to-peer digital support

Digital solutions that facilitate peer-to-peer support with regards to mental health conditions and wellbeing in one-to-one or group formats.

Research on peer-to-peer supported interventions shows small but significant effects for clinical and personal recovery[10]. Using online peer-to-peer support holds promise and can lead to a significant positive outcome, even for more severe mental health conditions[11], but there is still a lack of research confirming its effects for young people[12].

## Self-guided Internet-based interventions

Digital/online and mobile self-help programs/material provided without support from a healthcare professional, lay worker or peer. Can be used for self-care, distributed widely and include self-screening.

Research supports the use of self-guided (unguided) interventions for sub-clinical and mild distress/conditions[13] and the treatment of certain mild to moderate mental health conditions[14]. The effects of self-guided (unguided) interventions are smaller than those of guided interventions. The preventive effects of unguided online interventions are still inconclusive and more research is needed[15].

## Chat, email or SMS interventions

Text-based delivered interventions from professionals or trained lay workers. Can be used as a stand-alone intervention but are mainly used as an add-on and communication channel in other interventions.

Even though the effects of stand-alone chat and email interventions have been proven effective in specific studies[16,17], research and practice currently provide low support for the use of stand-alone text-messaging interventions for the prevention or treatment of mental health conditions, but support the use of these modalities as communication channels for human support in conjunction with digital material as is normally the case in Internet-based treatment.

## Virtual reality (VR) and augmented reality (AR)

Treatment and training in a virtual reality setting using a VR-headset or a digitally augmented reality using a mobile phone.

Research provides support for VR in the treatment of specific problems such as PTSD, specific phobias and fear of public speaking[18], and it can be an alternative when other options are resource-demanding or effective interventions impossible (exposure for war-related environments). Research on augmented reality is still scarce and often targets the same populations as VR-research.

## Chatbots (and conversational AI)

Text-based delivered interventions provided by AI-chatbots and/or conversational agents.

Since this is a new area of research with few studies, there is currently no evidence to support the use of chatbots targeting mental health conditions[19], but there are many interesting projects such as a digital psychological first aid kit chatbot used in Ukraine[20], disseminated in the "golden hours" following trauma exposure to prevent the development of posttraumatic stress.

## App-based interventions

The provision of interventions through a mobile application, often labelled mHealth interventions. Mainly provided without support and distributed via Apple App Store or Google Play Store download, but there is a variety of distribution channels including physician referral in those countries that have regulations and reimbursements for mental health apps in place (e.g. USA and Germany) within the system of digital therapeutics (DTx).

Although many mental health and wellbeing apps exist, there is currently very limited research supporting the use of mHealth interventions provided as stand-alone smartphone apps[21].

## Digital groups

The use of digital technology to provide group interventions, mainly using video. It can be combined with digital material between sessions, be conducted in a peer-to-peer fashion or in a more traditional therapist-client interaction mimicking traditional group sessions. It can also be the combination of face-to-face-sessions in a group format with digital material between meetings.

Video and phone can be used to deliver interventions in a group in both high- and low-income settings [22,23] but research is lacking when it comes to this format.

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