# Issue Paper: Challenges and Proposed Solutions for People with Mental Health Conditions

## Introduction

Mental health conditions are one of the main causes of disability[[1]](#endnote-1) and may include schizophrenia, bipolar disorder, depression and anxiety with 1 in 4 individuals experiencing these types of disabilities during their lifetime[[2]](#endnote-2). In 2017, WHO stated that depression affects more than 300 million people and over 260 million have anxiety disorders costing the global economy an annual one trillion US dollars in lost productivity[[3]](#endnote-3) and half of all mental disorders ‘begins by the age of 14’[[4]](#endnote-4). Web applications and services must be designed to take account this diverse group that faces many challenges when using the Web.

## Challenges for people with mental health conditions using the Web.

The range of challenges that face those with mental health conditions when using the Web are often similar to those experienced by individuals with other or co-occurring cognitive and learning disabilities. These barriers may be part of the overall design such as page layout and navigational complexities or individual components such as scrolling banners or multimedia elements that distract. However, people with mental health conditions also appear to experience unique challenges when using the Web as well. These unique barriers include being exposed to inappropriate and sensitive content and having a lack of safety, privacy and security controls. There is a need to consider:

### Memory difficulties

Too much unstructured information, poorly defined important elements and cluttered or indistinguishable navigational components will make it harder for individuals to remember where they are on a Web page and how to operate interactive features.

### Fatigue and Poor Concentration / Attention / Distraction

Fatigue can affect concentration levels and there may be difficulties with distracting elements such as scrolling banners, flashing and blinking elements appearing on pages. Tiredness also affects the reading of text, coping with small fonts, poor contrast levels and a lack of orderly design.

### Reasoning and executive function

Individuals with mental health conditions may find their information processing and decision-making skills are affected by the complexity of some expected online interactions. Poor cognitive flexibility can make it harder to jump between a series of different actions when a Web application has several dynamic pages. Negative self-concept and low self-esteem can make individuals anxious when faced with abstract choices and the need to make decisions. Time outs and complex requests with multiple pages to navigate will intensify concerns and may cause a failure to complete activities.

### Language, Visual and Auditory Perceptual difficulties

Complex text based content with excessive support from multimedia audio and visual elements may prove to be distracting and/or confusing rather than helpful unless they can be personalised or controlled.

### Low motivation and mood

Due to a lack of motivation or low mood, it may be hard to hold the attention of an individual. Boring designs and dense use of text may be off putting and a lack of personalisation (that would enable the change of the look and feel of a Web application or service) can mean that no purchases or interactions are made and the user leaves the site. This can be a problem where important forms and actions are needed to gain support from organisations.

### Sense of safety

Ensuring privacy and avoiding abuse is paramount for people with mental health conditions and is crucial to their sense of feeling safe when using the Web. Feelings of worry, vulnerability and low self-confidence are exacerbated when those in this group feel unsafe. They often respond by strictly limiting their Web usage in fear of receiving abuse, unsolicited contact and falling victim to crime.

### Dexterity and fine motor movements

There are links between mental health and manual coordination difficulties such as dyspraxia and psychomotor skills.[[5]](#endnote-5) , which can affect the use of touch screens, mouse input and the ability to operate small target components such small buttons or icons.

## Proposed solutions

### Page layout

Make navigational components and menu items recognisable, responsive to mobile technologies with labels and buttons in obvious places and highly visible.

Touch screen access as well as poor mouse use may require larger than usual buttons – personalisation.

Ensure designs are engaging with a good mix of imagery and well-structured easy to understand text with clear headings.

Hyperlinks must make sense to the reader and have good colour contrast levels.

Avoid clutter, small fonts and insufficient line spacing. Use white space, noticeable boundaries between concepts and understandable icons to highlight important elements.

Dynamic Web applications must have clarity of use with obvious interactions and well-recognised failure notices. This must also apply to forms and edit boxes.

Timeouts must be avoided where possible or have regular warnings.

### Content

Offer summaries of important information with clearly organised lists and highlighted key points to aid attention.

Avoid complex language, distracting moving elements that cannot be controlled by the user.

Make sure imagery is relevant and colour is used sparingly to avoid distractions.

Offer relevant user controlled video and audio options that are in addition to text summaries.

Provide transcripts and captioning that offer alternatives when visual and audio output may be uncomfortable.

Explain acronyms and any specialist language.

Keep blocks of text relating to one subject to a single page with clear instructions as to what follows or has to be on other pages.

Allow for simpler layouts with options to change content presentation – avoid deep layers of information.

Provide ways to correct form entries, but allow for automated text entries and saving of data with clear information messages.

Avoid publishing unexpected, irrelevant and inappropriate content, especially emotionally charged and potentially sensitive content.

Provide multiple media format options when presenting emotionally-charged content with the least “information rich” option (e.g., text) set as default.

Avoid unbalanced content that is overly positive or negative.

Provide ample system status and feedback information.

### Personalisation[[6]](#endnote-6)

Ability to change the look and feel of pages so that colours, fonts, styles etc can be adapted to suit user needs.

Offer additional instructions about various page views and any changes that can be made with several options to assist users with navigation such as arrows and highlighted features.

Provide information filters and easy to use search functions.

Allow users to progress through a site at their own pace.

Provide adequate controls for users to regulate their access to features and frequency of usage.

### Safety

Outline inherent safety threats and offer guidance on how to remain safe.

Provide prominent trust signals.

Provide less mandatory and more granular privacy options.

1. Vos, T., et al. (2013) Global, regional, and national incidence, prevalence, and years lived with disability for 301 acute and chronic diseases and injuries in 188 countries, 1990–2013: a systematic analysis for the Global Burden of Disease Study. The Lancet. 386 (9995). pp. 743-800. [↑](#endnote-ref-1)
2. WHO (2001) Mental disorders affect one in four people <http://www.who.int/whr/2001/media_centre/press_release/en/> (Accessed 27th Oct, 2018) [↑](#endnote-ref-2)
3. WHO (2017) World Mental Health Day 2017 http://www.who.int/mental\_health/world-mental-health-day/2017/en/ (Accessed 27th Oct, 2018) [↑](#endnote-ref-3)
4. WHO (2018) World Mental Health Day 2018 http://www.who.int/mental\_health/world-mental-health-day/2018/en/ (Accessed 27th Oct, 2018) [↑](#endnote-ref-4)
5. https://www.healthyplace.com/depression/symptoms/how-depression-affects-psychomotor-skills [↑](#endnote-ref-5)
6. Bernard, R., Sabariego, C. and Cieza, A., 2016. Barriers and facilitation measures related to people with mental disorders when using the Web: a systematic review. Journal of medical Internet research, 18(6). [↑](#endnote-ref-6)