Policy report

The Potential of **Evidence-Based** eHealth Resources towards Improving the Care for People with Depression and Preventing Suicidal Behaviour in Europe







Purpose

This policy report has been prepared under the remit of the European project 'Preventing Depression and Improving Awareness through Networking in the EU' (Predi-Nu). Predi-Nu aims to improve the care of depression and prevent suicidal behaviour through information and communication technologies. To this end, a multilingual information website about depression and suicidal behaviour (www.ifightdepression.com) and a multilingual, internet-based selfmanagement programme for patients with minor, mild and moderate forms of depression (the iFightDepression programme) have been developed and are available through administration by the European Alliance Against Depression (EAAD).

The purpose of this policy report is to:

- Tresent key insights about depression as a major public health concern in Europe;
- Address the need for the development of additional evidence-based resources to combat the gap in the provision and availability of effective treatments for depression;
- Summarise relevant policy insight from the international conference "iFightDepression: E-Self-Management of Depression in the Context of Current and Future Mental Health Programmes" held in April 2014;
- Present recommendations to policy makers from the mental health area regarding the integration of eHealth resources in current healthcare systems in Europe.



Key messages of this policy report

- Depression is associated with significant suffering, increased mortality and the risk of suicidal behaviour; this includes even minor or subclinical forms of depression.
- Improving the care of individuals experiencing depression, particularly during the earlier stages of depression, has proven to be an effective technique to prevent more severe forms of depression and suicidal behaviour.
- Evidence-based eHealth resources represent a promising means of overcoming the decreasing availability of treatments for depression by both complementing and adding to the range of existing resources in addition to reducing demands on healthcare systems.
- The iFightDepression programme, as an evidence-based online resource that is multilingual and implemented through general practitioners and healthcare professionals, has the potential to fit within a stepped care approach in healthcare systems throughout Europe towards targeting mild to moderate forms of depression.



1. Public health significance of depression

In the last two decades, awareness of the relevance of depression for overall health and well-being, healthcare systems and health economy has increased. The World Health Organisation estimates that by the year 2020, depression will reach second place of the ranking of Disability Adjusted Life Years (DALYs; the sum of years of potential life lost due to premature mortality and the years of productive life lost due to disability) calculated for all ages and both sexes (WHO, 2004; WHO, 2008). Additionally, unipolar depression is the leading chronic condition in Europe, ranking first when considering the index of 'Years Lived with Disability' (YLD; WHO 2004, update 2008).

Depressive disorders contribute to substantial impairments in quality of life and are associated with significant suffering, both in terms of the individuals affected and to issues of public health. Research has indicated that mental disorders, including depression, are significant contributors to early retirement, absenteeism and lost productivity at work (McDaid et al., 2008). Depression is associated with decreased life expectancy in addition to an increased risk of suicide. Approximately 90% of all suicides occur in the context of psychiatric disorders, of which the majority are depressive disorders (Mann et al., 2005; Yoshimasu et al, 2008). Furthermore, individuals suffering from major depression are also twenty times more likely to die by suicide (Lönnqvist, 2008).

It is noteworthy that such statistics are present despite the fact that a number of effective evidence-based treatments for depression are available. However, it is clear that several factors, including suboptimal provision and/or availability of such resources, may contribute to the continuing high prevalence of depressive disorder.

2. The bottleneck of available resources for depression

Firstly, the need for effective treatments for depression greatly outweighs the availability of such resources. Specifically, as the demand for resources increases, there is subsequently limited effective assistance available. Even in countries with a very high number of psychiatrists and psychotherapists, many individuals with depression are waiting several months before accessing psychotherapy or treatment by a psychiatrist. This is even more pronounced in rural areas.

Moreover, the recent economic recession has impacted on the provision and availability of services in a number of European countries impacted by governmental cost-saving initiatives, including the reduction of budgets for mental health services (Cooper, 2011). Finally, there are limited specialised evidence-based resources for milder forms of depression.

Treatment of mild forms of depression is crucial, given that even mild or minor forms of depression negatively impact upon quality of life (Nierenberg et al., 2010), are associated with functional impairments (Rapaporte t al., 1998), increased mortality and risk of transition to severe depression and subsequent suicidal behaviour if untreated (Cuijpers & Smit, 2002). Considering the above, it is clear that improving the availability of evidence-based resources for the management of mild depression should be a key priority for research, care provision and policy makers.

3. Self-management and the potential of eHealth resources

For milder forms of depression, treatment via low intensity psychosocial interventions is recommended within a stepped care approach (NICE, 2009). Given that only a relatively small number of patients can be treated by one psychotherapist, strengthening self-management capacity of patients with minor or mild to moderate depression via such low intensity approaches is a promising strategy to overcome the gap in the provision and availability of resources. Self-management refers to 'interventions, trainings and skills by which patients with a chronic condition, disability or disease can effectively learn how to take care of themselves and effectively deal with difficult situations' (Sterling et al, 2010, p. 133). Whilst originally applied to chronic physical illnesses with success, including the management of diabetes (Norris et al, 2001), asthma (Gibson et al, 2001) and arthritis (Warsi et al, 2003), it is increasingly being applied to mental health (Davidson, 2005).

The internet affords additional avenues for the provision of self-management to a large number of people and enables cost-effective access to self-management resources at the patient's own convenience. This is important in light of research demonstrating that the majority of individuals in Europe use the internet at least once a week (72%) or daily/nearly every day (62%; Seybert & Reinecke, 2013).



Computerised Cognitive Behavioural Therapy (cCBT) is one type of a lower intensity intervention recommended for the treatment of mild to moderate depression in several clinical guidelines (references), which incorporates the principles of self-management.

Predi-Nu aimed to capitalise on the potential of the internet regarding the provision of eHealth/cCBT and self-management resources, by improving the care of individuals with depression through the development and use of innovative information and communication technologies.

4. The increasing potential of eHealth – policy and recent initiatives

From the perspective of European policy and practice, the potential use of eHealth generally within healthcare systems in Europe is gaining increased awareness. This development is also reflected in recent EU policy activities and initiatives, a number of which are referred to below:

- In December 2012, the "eHealth Action Plan 2012-2020 - Innovative healthcare for the 21st century" was published by the European Commission, noting the necessity for structural reforms aiming at the sustainability of the current system. It concluded that information communication technologies (ICT) should form a substantial part of such reforms, given that '...information and communications technologies applied to health and healthcare systems can increase their efficiency and improve quality of life' (p.3). As a result, the action plan aims to address and remove barriers related to the implementation of eHealth interventions and systems on a broader level in Europe and presents a 'vision' to guide the utilisation and development of eHealth in addressing a number of health challenges. number of points raised within the action plan's vision are met by the Predi-Nu project aim and outcomes:
- 1. Improve chronic disease and multimorbidity management and strengthens effective prevention and health promotion practices;
- 2. Increase sustainability and efficiency of health systems by unlocking innovation, enhancing patient/citizencentric care and citizen empowerment and encouraging organisational changes;

- 3. Foster cross-border healthcare, health security, solidarity, universality and equity.
- An eHealth network was established in 2011, comprising a voluntary network of representatives from all national authorities in the EU. The network aims to enhance the complementarity and interoperability between electronic health systems and continuity of care, in addition to access to safe and quality healthcare, and assists in the development of related guidelines. Additionally, the European Commission supports the eHealth Governance Initiative (eHGI), which aims to enhance cooperation between Member States and to develop a joint vision for eHealth.
- The Global Observatory for eHealth, an initiative dedicated to the study of eHealth and the monitoring of its global progress, including its evolution and impact on health in countries, was launched in 2005 by the World Health Organisation. The Observatory's mission is to improve health by providing Member States with strategic information and guidance on effective practices and standards in eHealth. The Observatory developed an online Directory of eHealth policies, a comprehensive source of national eHealth strategies and policies from Member States.
- A recent conference 'Mental health: Challenges and Possibilities' was held in October 2013 in Vilnius, Lithuania. A document outlining the conclusions from the event identified a number of key priorities, one of which referred specifically to eHealth: 'To provide mental health services that are accessible and affordable.... and make use of the potential of eHealth'. Additional priorities that were identified are also applicable to the potential of eHealth, including that of empowering people with mental health problems and improving the understanding of mental health and illness.
- The European Commission has provided funding opportunities regarding research and innovation in eHealth including a specific focus on mental health; most recently, the Third Health Programme (Horizon 2020) includes ICT innovations relating to 'health, demographic change and mental wellbeing' within the list of topics pertaining to potential ICT projects.



iFightDepression: an innovative EU-level initiative to target depression

The aforementioned initiatives demonstrate an increasing awareness and interest in the potential of eHealth as a priority within European healthcare systems over the past number of years. As such, the implementation of the PREDI-NU project was timely and innovative, particularly given that the project represented an internationally standardised approach to improving the care of depression via two eHealth resources – the iFightDepression tool and website.

The iFightDepression Tool

The *iFightDepression self-management tool* is a multilingual internet-based guided self-management programme for adults and adolescents with minor, mild or moderate depression that is currently available in eight languages (English, German, Spanish, Catalan, Hungarian, Estonian, Bulgarian and Dutch). It is cost-free to use and was developed according to scientific standards, following a systematic review and expert consensus process.

The iFightDepression tool was optimised following evaluation in five European countries to assess the acceptability of the tool and feasibility of its use with both healthcare professionals and patients. This is noteworthy, given that whilst existing online interventions based on CBT have been demonstrated to effectively improve the diagnostic status of individuals with depression, there is limited evidence as to the acceptability and feasibility of use of such interventions, which may contribute to the limited uptake and adoption of previous interventions.

Specifically, approximately 200 patients and 160 healthcare professional from 5 European regions were involved in evaluating the acceptability of the iFightDepression tool and the feasibility of its use, demonstrating the multifaceted value of the tool as an additional resource.

The iFightDepression tool (Figure 1) is based on the principles of cognitive behavioural therapy (CBT) and comprises several online modules that patients can work through at their own pace, with associated exercises to allow users to consolidate the skills they are learning and to encourage self-management of depressive symptoms. For young people, an adapted version of the programme is available, containing additional age-appropriate modules on social anxiety and social relationships. A central element of the tool is that of 'guidance' by a trained general practitioner (GP) or mental health professional, as existing evidence demonstrates that guided programmes are more effective than those without supervision (McNaughton, 2009; Morgan & Jorm, 2008; NICE, 2009).



Further advantages of the iFightDepression tool include the following:

- The iFightDepression tool is a resource that specifically targets milder forms of depression to prevent progression to more severe forms of depression and subsequent suicidal behaviour;
- It represents a promising resource to target the "bottleneck" of existing resources for depression;
- It is based on existing evidence and recommendations from international experts in mental health and representatives from patient organisations, to ensure that it meets the needs of service-users in addition to principles of best-practice;
- It is a low-threshold additional resource to complement treatment-as-usual; it allows professionals to offer immediate and concrete assistance to their patients until other forms of treatment can be commenced;
- It promotes an active and empowering role of patients, to strengthen their capacity in dealing with their own mental health;
- It is multilingual and therefore ensures the provision of an evidence-based online intervention for depression in the native language of a number of European countries, which is innovative for some countries;
- It is implemented through healthcare professionals, thereby ensuring that patients are appropriately assessed and referred to the tool before they use it;
- It is offered alongside a short training workshop for healthcare professionals interested in using the tool within clinical practice. The training workshop was also developed by the PREDI-NU consortium, providing standardised guidelines regarding procedures of implementation and guidance of the tool, and aiming to reduce existing therapeutic deficits in the detection and diagnosis of depression. This is important, given that research indicates that depression is under-detected and inadequately screened within primary care (Maxwell et al., 2013).



The iFightDepression Website

The *iFightDepression information and awareness website* (www.ifightdepression.com) aims to increase knowledge and awareness of depression and suicidal behaviour, to improve attitudes regarding depression and suicidal behaviour and to promote help-seeking and positive mental health (Figure 1). It contains information on local and regional helplines and support services, in addition to information on helpful strategies for depression, including self-management resources. It is multifaceted, with specific tailored information and recommendations regarding depression and suicidal behaviour for the broad public, adults and young people, family and friends of depressed patients, community professionals and health care professionals. The website is currently available in 10 versions (English, German (German and Austrian version), Spanish, Catalan, Hungarian, Estonian, Portuguese, Bulgarian, Dutch and French) and was developed with input from international experts to ensure the inclusion of accurate information.

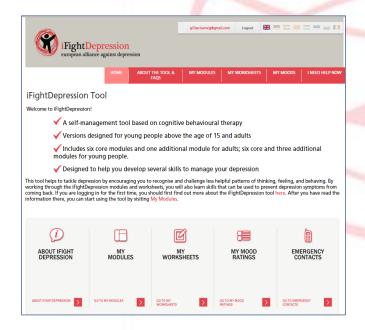




Figure 1: Homepages of the iFightDepression tool (left) and iFightDepression website (right)



"iFightDepression: E-self-management of depression in the context of current and future mental health programmes"

The PREDI-NU consortium organised an international Symposium on the 1st of April 2014 in Brussels. During this Symposium, a forum of key political stakeholders and international experts in mental health was present to discuss mental health policy and the future of e-self-management within the EU. This included Mr. Jürgen Scheftlein and Dr. Terje Peetso (DG Health and Consumers), Professor Lars Mehlum (University of Oslo), Professor Ad Kerkhof (VU University, Amsterdam), Dr. Richard Seeber and Mr. Brian Crowley (Members of European Parliament). Additionally, a valuable personal perspective on the potential benefits of internet-based interventions and recommendations for their use was provided by Mr. Thomas Müller-Rörich of Deutsche DepressionsLiga, a patient organisation.

In an encouraging atmosphere of researchers and professionals committed to working collaboratively towards improving the care of depression and promoting mental health, several key topics and recommendations were discussed. These included:

- The importance of **investing in mental health**, because "where there is health, there is also wealth". It was recommended that there should be a stronger **focus** on the concept of **positive mental health**, which should be seen as a 'resource in its own right' and in changing our perspectives of mental health costs as investments rather than actual 'costs'. Specifically, Mr. Scheftlein referred to the 'Investing in Health' document of the Social Investment Package (2013), an integrated policy framework which takes account of the social, economic and budgetary divergences between Member States. This document emphasises four main aims:
 - 1. Investment in sustainable health systems/health solutions
 - 2. Investment in people's health as human capital not in terms of 'life lost
 - 3. Investment in reducing health inequalities
 - 4. Investing in health through adequate support from EU funds

- The importance of **sustainability**, by ensuring the transition of mental health-related research projects into 'reality' and continuation of their implementation after project running time;
- Interaction and co-operation between legislators, researchers and mental health professionals is crucial to ensure sustainability of research and implementation, the transition of research into policy and practice, and the sharing of knowledge and experience;
- Complementarity between digital healthcare and traditional healthcare is of utmost importance (whereby digital healthcare should not replace current forms of treatment, but may be useful as an additional resource);
- The importance of **involving service users** in discussions of mental health issues and the development of mental health interventions;
- Evaluating the acceptability and feasibility of use of eHealth interventions is crucial, given the importance of developing technology that both service users and healthcare professionals actively want to use;
- Assuring equal access to healthcare systems by accounting for the **digital health literacy** of the target group specifically, eHealth should not increase inequalities.

In addition to the above Symposium, Predi-Nu and iFightDepression were presented in many local, national and international events, including scientific conferences and workshops and public events In total, approximately 50 presentations were made, reaching multiple target audiences of stakeholders, academics, general practitioners, mental health professionals and the broad public. Three yearly News Bulletins were distributed to a mailing list containing more than 350 recipients of stakeholders and researchers and a wide range of press releases, factsheets and leaflets have been circulated. Symposia, seminars and workshops were organised by project partners in the Predi-Nu intervention regions and were well-received; these have led to more than 50 media reports published online and in printed newspapers and magazines, and broadcast on the radio and TV.



Recommendations to policy makers

Based on our experience and results from the Predi-Nu project and previous initiatives targeting depression and suicidal behaviour, discussions during the iFightDepression Symposium, and existing policy and literature, the EAAD Board of Directors and Predi-Nu consortium recommend policy makers and stakeholders responsible for health to:

- 1. Increase awareness of the public health significance of depression in Europe in policy discussions and initiatives, including its impact on well-being and productivity and related issues of therapeutic and treatment deficits;
- 2. Increase awareness of the fact that 'mild depression is not a mild disorder' within the broad public and community of healthcare professionals, and that effective treatment of mild depression may prevent progression to more severe forms of depression and suicidal behaviour;
- 3. Collaborate with the WHO in the development of a framework and mental health action plan to enable the integration of evidence-based e-mental-health resources (such as the iFightDepression tool) within routine care, particularly in primary care services. This will increase the range of available resources for the management of depression to ensure treatment complementarity for both primary care providers and patients;
- 4. Additionally, raise awareness of the potential for such evidence-based emental-health resources to be used in additional settings, including University and special education healthcare services;
- 5. Work collaboratively to establish a legal framework for the integration of eHealth resources in healthcare provision, to accommodate secure transfer of information between health facilities and patients and to establish clear guidelines regarding data collection and use.



- 6. Promote the use of the iFightDepression tool and training within European healthcare systems in Member States as an evidence-based package to: 1) increase awareness, recognition and appropriate diagnosis of depression in the community of healthcare professionals and 2) provide an evidencebased, cost-free additional resource for the management of minor, mild or moderate forms of depression. Given that the tool is available in a wide variety of languages, this is particularly crucial for countries where a high number of patients have no access to psychotherapy at all due to a lack of psychotherapists and/or a lack of health insurance to cover the costs of psychotherapy. Indeed, for many European countries, the iFightDepression tool represents the first online intervention for depression in their native language.
- 7. Raise awareness and educate healthcare professionals and the general public regarding the potential of eHealth resources in healthcare systems specifically, the following two activities should be undertaken:
 - Ensure the provision of clear information regarding the effectiveness and/or acceptability and feasibility of eHealth resources from previous studies;
 - Provide clear information to demonstrate the effectiveness of 'guided' interventions over non-guided interventions, to inform healthcare professionals and patients that the use of guided eHealth interventions will ensure the involvement of a supportive, trained healthcare professional.

It is likely that educating the general public and healthcare professionals on the evidence base and potential value of eHealth resources may increase uptake of their use.



Conclusions

Depression is a major and prevalent public health concern in Europe, impacting on the wellbeing and quality of life of individuals in addition to incurring greater societal costs, such as loss of productivity in the workplace. Whilst a number of evidence-based resources for the management and treatment of depression exist, there is clearly an urgent need to increase both the range and availability of treatments and resources for depression. eHealth resources represent a cost-effective and promising solution to contributing towards both filling the gap of available resources for depression and complementing existing treatments, particularly if the resources are 'guided' (supported by a healthcare professional) and implemented within a stepped-care approach. Within this report, we have outlined specific recommendations regarding the implementation and integration of eHealth resources within healthcare systems in Europe; simultaneously, we have demonstrated the need to increase awareness of minor depression as a serious disease and awareness of the need to treat minor depression appropriately, to lessen the risk of progression to more severe forms of depression.

Additionally, we have presented the iFightDepression tool and website as two examples of evidence-based international eHealth resources to both increase awareness and knowledge of depression and promote the self-management of depression. The tool is being implemented in 7 European regions thus far (Ireland, Germany, Belgium, Spain, Estonia, Hungary and Bulgaria). The iFightDepression tool will be implemented in Italy and Estonia as part of the European project MasterMind ('MAnagement of mental health diSorders Through advancEd technology and seRvices – telehealth for the MIND') and activities have been undertaken to support future implementation of the tool in Portugal.

Both the iFightDepression tool and website will be sustainably administered through the European Alliance Against Depression (EAAD), a non-profit organisation that has been operating on a sustainable basis since 2008 and comprises an international network of experienced researchers dedicated to improving the care for individuals with depression and preventing suicidal behaviour. If you are interested in iFightDepression or would like further information please contact us at contact@eaad.net.



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