

# The Right to Mental Health in the Digital Era

Fatemeh Kokabisaghi, Iris Bakx & Blerta Zenelaj\*

## Abstract

People with mental illness usually experience higher rates of disability and mortality. Often, health care systems do not adequately respond to the burden of mental disorders worldwide. The number of health care providers dealing with mental health care is insufficient in many countries. Equal access to necessary health services should be granted to mentally ill people without any discrimination. E-mental health is expected to enhance the quality of care as well as accessibility, availability and affordability of services. This paper examines under what conditions e-mental health can contribute to realising the right to health by using the availability, accessibility, acceptability and quality (AAAQ) framework that is developed by the Committee on Economic, Social and Cultural Rights. Research shows e-mental health facilitates dissemination of information, remote consultation and patient monitoring and might increase access to mental health care. Furthermore, patient participation might increase, and stigma and discrimination might be reduced by the use of e-mental health. However, e-mental health might not increase the access to health care for everyone, such as the digitally illiterate or those who do not have access to the Internet. The affordability of this service, when it is not covered by insurance, can be a barrier to access to this service. In addition, not all e-mental health services are acceptable and of good quality. Policy makers should adopt new legal policies to respond to the present and future developments of modern technologies in health, as well as e-Mental health. To analyse the impact of e-mental health on the right to health, additional research is necessary.

**Keywords:** E-health, e-mental health, right to health, right to mental health

## 1 Introduction

Mental illness, as a disease with high prevalence worldwide, has a very high impact on the experienced quality of life. Mental disorders are one of the main causes of disability, morbidity and premature mortality.<sup>1</sup> The rate of disability and mortality is disproportionately high among people with mental disorders in comparison with others. These diseases affect patients' physical health,

which in turn might affect patients' mental health. The economic consequences of mental health losses are considerable, especially because of the large number of mentally ill people. They are often excluded and marginalised from society and live in a disadvantaged situation. They may also be subjected to neglect, physical and sexual abuse, harmful and degrading treatment, and unhygienic and inhuman living conditions in health facilities.<sup>2</sup> Their fundamental rights and freedoms, such as the right to the highest attainable standard of health, are often violated.

The right to the highest attainable standard of health is a fundamental human right (hereinafter the right to health), recognised in various international human rights treaties.<sup>3</sup> States are required to use the maximum amount of their resources to adopt the necessary means to realise people's right to health. In order to promote, realise and improve the right to access to (mental) health services, countries should adopt progressive legislation<sup>4</sup> to respond to the new developments of science and technology without discrimination. In recent decades, the use of the information and communications technology (ICT) in health care has significantly increased. Various international bodies, such as the European Commission and the World Health Organization (WHO) expect this health-related use of ICT to improve health and health care.<sup>5</sup>

E-health applied in mental health care is referred to as e-mental health. This intervention has the potential to increase access to mental health care because it facilitates remote treatment at any place and any time. Furthermore, e-mental health services can be anonymous, which can take away initial restraints to contact a health care professional. E-mental health provides people with the possibility to manage their mental health care pro-

\* Fatemeh Kokabisaghi, Iris Bakx and Blerta Zenelaj are Ph.D. candidates at the Institute of Health Policy and Management, Erasmus University Rotterdam. All authors contributed equally.

1. World Health Organization (hereinafter WHO), *Mental Health Action Plan 2013-2020* (2013), at 7, available at: <www.who.int/mental\_health/publications/action\_plan/en/> (last visited 6 June 2016).

2. WHO (2013), above n. 1, at 4.

3. Art. 12 International Covenant on Economic, Social and Cultural Rights (hereinafter ICESCR), 16 December 1966, 6 ILM 1967, at 360; Art. 25 Universal Declaration of Human Rights (hereinafter UDHR), GA. Res 217A (III), 10 December 1948; Art. 11 European Social Charter (Revised) (hereinafter RESC), 3 May 1996, ETS 163.

4. WHO, *Resource Book on Mental Health, Human Rights and Legislation. Stop Exclusion Dare to Care* (2005), at 1, available at: <http://ec.europa.eu/health/mental\_health/docs/who\_resource\_book\_en.pdf> (last visited 2 September 2016).

5. European Commission, *eHealth Action Plan 2012-2020 – Innovative Healthcare for the 21st Century*, 6 December 2012, 736 final (2012), at 4-5, available at: <https://ec.europa.eu/digital-single-market/en/news/ehealth-action-plan-2012-2020-innovative-healthcare-21st-century> (last visited 6 June 2016); WHO, *eHealth*, 7 April 2005, A58/21, at 2 (para. 7).

cess and leads them to take control of their own health.<sup>6</sup> Therefore, e-mental health is expected to decrease the number of people suffering from mental disorders.<sup>7</sup> In spite of these promising expectations, questions related to e-mental health and the right to health can be raised. It is likely that not everyone can benefit from these developments. For instance it can be questioned whether e-mental health can be beneficial for the digitally illiterate. This paper will examine under what conditions e-mental health can contribute to realising the right to health by analysing its impact on the availability, accessibility, acceptability and quality of mental health services from a legal point of view by applying the AAAQ framework. This framework has been developed by the Committee on Economic, Social and Cultural Rights (CESCR).<sup>8</sup> To carry out this analysis, an auxiliary multidisciplinary approach will be applied. Studies from other disciplines will partially be included. Where legal practice standards are not present, guidelines on medical ethics will be used. After an explanation of the right to health and the problems that people with mental disorders usually face in their enjoyment of this right (Section 2), the concepts of e-health in general and e-mental health in particular, together with the probable barriers they aim to resolve will be clarified (Section 3). Subsequently, a further analysis of the effects of e-mental health on the availability, accessibility, acceptability and quality of mental health services will follow (Section 4). In the conclusion part, issues regarding AAAQ, which should be considered in current and future e-mental health systems, will be addressed (Section 6).

## 2 The Right to the Highest Attainable Standard of Health

The Universal Declaration of Human Rights (UDHR) states that everyone is born with inherent dignity and equal in rights and entitled to the protection of his fundamental rights without discrimination of any kind.<sup>9</sup> The right to health is one of those fundamental rights, recognised in several international treaties and regulations. The UDHR refers to this right as the right to a standard of living adequate to the health and well-being of individuals and their family. This encompasses food,

clothing, housing, medical care and necessary social services. Furthermore, it includes the right to social security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond the person's control.<sup>10</sup> In the European Social Charter (ESC)<sup>11</sup> and the Revised European Social Charter (RESC),<sup>12</sup> the right to health is formulated as the right to protection of health. The ESC and the RESC instruct State Parties to take away causes of ill health, to promote health education and individual responsibility for health, and to commit themselves for the control of diseases and accidents.<sup>13</sup>

The International Covenant on Economic, Social and Cultural Rights (ICESCR) encompasses the right to health as well. In this covenant, the right is formulated in Article 12 as the right to the enjoyment of the highest attainable standard of physical and mental health. This provision explicitly mentions that the right to health includes the right to mental health.<sup>14</sup> In order to be able to fully understand what the right to health entails, first, it is essential to know what is meant by 'health'. According to the WHO, 'Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity'.<sup>15</sup> Mental health, as an aspect of health, is 'a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community'.<sup>16</sup>

After clarifying the concept of health, the right to the highest attainable standard of health has to be interpreted. The Committee on Economic, Social and Cultural Rights (CESCR) provided an additional explanation on the right to health as laid down in Article 12 ICESCR in its General Comment No. 14. The right to health does not imply a right to be healthy.<sup>17</sup> Such a right cannot be realised by states because individual's biological and socio-economic preconditions also affect their health. Moreover, governments cannot protect people against all diseases. Rather, the right to health has to be interpreted as a 'right to the enjoyment of a variety of facilities, goods, services and conditions necessary for the realization of the highest attainable standard of health'.<sup>18</sup> Equal opportunity should be provided to everyone to enjoy this right without any discrimination.<sup>19</sup> According to the CESCR, a State party should provide available, accessible and acceptable health facilities,

6. Mental Health Network, NHS Confederation, 'e-Mental Health: What's all the Fuss About?' *Discussion Paper* 2013:12, at 1, available at: <[www.nhsconfed.org/~media/Confederation/Files/Publications/Documents/E-mental-health.pdf](http://www.nhsconfed.org/~media/Confederation/Files/Publications/Documents/E-mental-health.pdf)> (last visited 6 June 2016).  
7. Beyondblue, 'Improved Access – e-Mental Health Programs', *Information Paper* 2013, at 1, available at: <<https://www.beyondblue.org.au/docs/default-source/policy-submissions/bw0161.pdf?sfvrsn=2>> (last visited 6 Jun 2016).  
8. UN Committee on Economic, Social and Cultural Rights (CESCR), *General Comment No. 14: The Right to the Highest Attainable Standard of Health*, 11 August 2000, E/C.12/2000/4, para. 12.  
9. Arts. 1 and 2 UDHR.

10. Art. 25 (1) UDHR.

11. European Social Charter (hereinafter ESC), 18 October 1961, ETS 35.

12. European Social Charter (Revised) (hereinafter RESC), 3 May 1996, ETS 163.

13. Art. 11 ESC; Art. 11 RESC.

14. Art.12 (1) ICESCR.

15. Preamble to the Constitution of the WHO, adopted by the International Health Conference, from 19 June to 22 July 1946, signed on 22 July 1946 by the representatives of 61 States, *Off. Rec. Wld Hlt Org.*, 2, 100, entered into force on 7 April 1948.

16. WHO (2013), above n. 1, at 6.

17. Para. 8 General Comment No. 14 (CESCR).

18. Para. 9 General Comment No. 14 (CESCR).

19. Para. 8 General Comment No. 14 (CESCR).

goods and services of good quality in order to realise the right to health. These elements are complementary and interdependent. Thus, an adequate number of health services should be available, and these health services should be physically as well as economically accessible to everyone without discrimination. Accessibility includes the accessibility of information as well. Furthermore, health services should be both culturally and ethically acceptable, and the patients' confidentiality should be respected. Acceptable health services should aim to improve the health status of the persons involved. These available, accessible and acceptable health services should be of good quality, in other words they should be scientifically as well as medically appropriate.<sup>20</sup> These requirements are referred to as the AAAQ framework. Although General Comment No. 14, which introduces the AAAQ framework, is a so-called soft law instrument, it is seen as authoritative.<sup>21</sup> Furthermore, the implementation of AAAQ will depend on the level of development of a particular State party.<sup>22</sup> In realising the right to health, states have three kinds of obligations: they have to respect, protect and fulfil the right.<sup>23</sup> Because of scarcity of available resources, states are usually not able to realise economic, social and cultural rights within a limited amount of time. Article 2 ICESCR urges State parties to progressively realise the rights established in the covenant. In other words, they have to realise the rights over time, using the maximum of their available resources, although they are expected to realise minimum core obligations immediately.<sup>24</sup> They can also ask the international community for technical and financial help.<sup>25</sup> In addition, retrogressive actions are not allowed. When a State party takes measures that retrogressively affect a social, economic or cultural right in the ICESCR, the State violates that right.<sup>26</sup> The latter shows that in spite of the right to health being a social right and being not or hardly justiciable, it is not an 'empty shell'. On the contrary, the right to health includes several elements, such as the principle of non-discrimination, that, in fact, are justiciable.<sup>27</sup> Even though it might remain disputable whether the right to health is justiciable, this right is a fundamental human right. The extent of the enjoyment of

this fundamental right affects the extent of enjoyment of other fundamental rights, such as the rights to food, work, housing and education.<sup>28</sup> Furthermore, the right to health is an inclusive right, which means that it not only includes the right to health care but the underlying determinants of health, such as access to clean drinking water, sufficient and safe food and shelter, healthy working conditions, a healthy environment and access to health-related information and education, as well.<sup>29</sup>

### 3 Mental Health Worldwide

According to the WHO, in 2001 about 450 million people worldwide suffered from a mental disorder. Nearly 10% of adults, females and males, rich and poor and in rural and urban settings have a mental disorder, and 25% will face a mental disorder in the future.<sup>30</sup> Furthermore, the WHO states that 'around 20% of the world's children and adolescents have mental disorders or problems'.<sup>31</sup> Despite the fact that the right to health explicitly includes mental health,<sup>32</sup> in many parts of the world, mental health services are not adequate and accessible. Between 76% - 85% of people with severe mental disorders in low- and middle-income countries and between 35% - 50% in high-income countries receive no mental health treatment.<sup>33</sup> National legislation frameworks, especially in developing countries, do not offer equality of access to health care services. Some countries lack legislation to safeguard and respect human rights of the mentally ill people. The fundamental aim of mental health legislation is to protect, promote and improve the life and mental well-being of citizens.<sup>34</sup> Often, people with mental disorders, who are categorised by the WHO as vulnerable,<sup>35</sup> face discrimination, stigma, social exclusion, isolation, economic and social burdens because of their disability or illness. Accessibility to mental health

20. Para. 12 General Comment No. 14 (CESCR).

21. See, for instance N.S. Rodley, 'The Role and Impact of Treaty Bodies', in D. Shelton (ed.), *The Oxford Handbook of International Human Rights Law* (2013) 621, at 639 as quoted by S. Michalowski and W. Martin, 'Research Note: The Legal Status of General Comments', MoJ/EAP UNCRPD Project (23 May 2014), available at: <<http://autonomy.essex.ac.uk/wp-content/uploads/2014/07/Legal-status-of-General-Comments-.pdf>> (last visited 6 June 2016).

22. Para. 12 General Comment No. 14 (CESCR).

23. Paras. 50-52 General Comment No. 14 (CESCR).

24. Art. 2 (1) ICESCR; UN Committee on Economic, Social and Cultural Rights (CESCR), *General Comment No. 3: The Nature of States Parties' Obligations*, 23 January 1991, E/C.12/1990/3, at paras. 1, 2, 9 and 10.

25. Art. 2 (1) ICESCR.

26. Para. 48 General Comment No. 14 (CESCR).

27. Para. 1 General Comment No. 14 (CESCR). For a further statement on the justiciability of the right to health, see M. San Giorgi, *The Human Right to Equal Access to Health Care* (2012). In this dissertation, San Giorgi concludes that the right to health and several of its elements are justiciable.

28. Office of the United Nations High Commissioner for Human Rights and WHO, *The Right to Health, Factsheet No. 31* (2008), at 6, available at: <[www.ohchr.org/Documents/Publications/Factsheet31.pdf](http://www.ohchr.org/Documents/Publications/Factsheet31.pdf)> (last visited 6 June 2016); para. 1 General Comment No. 14 (CESCR).

29. Para. 11 General Comment No. 14 (CESCR).

30. WHO, *The World Health Report 2001. Mental Health: New Understanding, New Hope* (2001), at 3 and 19 as cited in WHO, *Improving Health Systems and Services for Mental Health* (2009), at 2, available at: <[http://apps.who.int/iris/bitstream/10665/44219/1/9789241598774\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/44219/1/9789241598774_eng.pdf)> (last visited 31 August 2016).

31. WHO, *10 Facts on Mental Health*, Fact 1, available at: <[www.who.int/features/factfiles/mental\\_health/en/](http://www.who.int/features/factfiles/mental_health/en/)>, updated August 2014 (last visited 28 June 2016).

32. Art. 12 (1) ICESCR.

33. WHO, *Global Burden of Mental Disorders and the Need for a Comprehensive, Coordinated Response from Health and Social Sectors at the Country Level*, EB130.R8, 130th session, Agenda item 6.2, 20 January 2012, at 2, available at: <[http://apps.who.int/gb/ebwha/pdf\\_files/EB130/B130\\_R8-en.pdf](http://apps.who.int/gb/ebwha/pdf_files/EB130/B130_R8-en.pdf)> (last visited 6 June 2016).

34. WHO (2005), above n. 4, at 1.

35. According to the WHO (2013), above n. 1, at 6, the term 'vulnerable groups' refers to individuals or groups of individuals who become vulnerable by the situation and environment that they are exposed to, as opposed to any inherent weakness or lack of capacity. Whether a specific group is a vulnerable group, should be determined according to countries' national situation.

services in rural areas, particularly in developing countries, is poor because of the inappropriate infrastructure and financial burden.<sup>36</sup> Moreover, the geographic distribution of professionals such as psychiatrists, psychologists and general practitioners (GPs) is inequitable worldwide. Some of the mental health services are of poor quality, ineffective, unfunded or harmful. In other cases, mental health services are not or hardly covered by health insurance. Sometimes psychiatric hospitals detain people rather than helping them to recover and rehabilitate.<sup>37</sup> Human rights and freedoms of people with mental disorders are often violated, too.<sup>38</sup> The aforementioned factors make the access to mental health services a fragile issue.

According to the UN Convention on the Rights of Persons with Disabilities (UNCRPD), 'persons with disability include those who have long term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society in equal basis with others'.<sup>39</sup> Therefore, not everyone who has a mental disorder is disabled. In the UN Standard Rules on the Equalization of Opportunities for Persons with Disabilities, mental disease is mentioned as a cause for disability.<sup>40</sup> Mental illness might cause a disability (temporarily or permanent)<sup>41</sup> that inhibits the person to fully participate in society. According to the WHO, 'disability is an umbrella term for impairments, activity limitations and participation restrictions. It denotes the negative aspects of the interaction between an individual (with a health condition) and that individual's contextual factors (environmental and personal factors)'.<sup>42</sup>

To realise the right to mental health, people with mental disorders should have access to and benefit from necessary medical and social services that enable them to become independent, prevent further disabilities and support their social integration. Furthermore, to reach and maintain the optimum level of functioning and independence, they must be provided with rehabilitation services.<sup>43</sup> In addition to general health services, necessary health services for people with (mental) disabilities, such as early diagnosis and intervention, mini-

mising and preventing further disabilities, should be provided. Health services and goods should be provided free or at a reasonable price. Furthermore, provision of health insurance for these people in a fair and reasonable manner is important.<sup>44</sup>

Apart from the ICESCR, several international and regional treaties, such as the International Covenant on Civil and Political Rights (ICCPR),<sup>45</sup> the Convention on the Rights of the Child (CRC)<sup>46</sup> and the UNCRPD, have defined rights for people with mental disorders. Furthermore, the UN has developed principles for the protection of persons with mental illness.<sup>47</sup> These rights and principles mostly relate to the prohibition of discrimination based on disability and the right to health, equally for everyone.<sup>48</sup> The CESCR states that governments are required to take all the measures, with the maximum use of their resources to enable these people to enjoy their rights equal to others and to overcome the disadvantages caused by their disability.<sup>49</sup> On the other hand, states should provide health services and centres as close as possible to these patients' communities, including rural areas.<sup>50</sup> More specifically, states are required to undertake or promote the development of goods, services, equipment and facilities, which are used worldwide, to meet the needs of people with disabilities. In this respect, states should use high technology to improve the standard and effectiveness of health services<sup>51</sup> and to promote access of people with disabilities<sup>52</sup> at an affordable cost.<sup>53</sup> ICT is increasingly applied in health care: This health-related use of technology is called e-health and is subject to many expectations. E-health might be able to help governments in realising the right to health of the mentally ill people.

## 4 The Concept and the Potential of E-Health and E-Mental Health

E-health is the use of ICT in health care. E-health and other forms of the use of ICT in health care, such as tel-

36. UN Committee on Economic, Social and Cultural Rights (CESCR), *General Comment No. 5: Persons with disabilities*, 9 December 1994, E/1995/22, para. 8.

37. WHO, *Quality Rights Tool Kit. Assessing and Improving Quality and Human Rights in Mental Health and Social Care Facilities* (2012), at 4, available at: <[www.who.int/mental\\_health/publications/QualityRights\\_toolkit/en/](http://www.who.int/mental_health/publications/QualityRights_toolkit/en/)> (last visited 6 June 2016).

38. WHO (2005), above n. 4, at 1.

39. Art. 1(2) UN Convention on the Rights of Persons with Disabilities (hereinafter UNCRPD), GA. Res. 61/106, 13 December 2006.

40. UN Standard Rules on the Equalization of Opportunities for Persons with Disabilities, GA Res. 48/96, 20 December 1993.

41. Standard Rules on the Equalization of Opportunities for Persons with Disabilities, annexed to General Assembly resolution 48/96 of 20 December 1993 (Introduction, para. 17), as quoted in para. 3 General Comment No. 5 (CESCR).

42. WHO, *International Statistical Classification of Diseases and Related Health Problems, 10th Revision (ICD-10), Volume 2, Instruction Manual* (2011), at 10, available at: <[www.who.int/classifications/icd/en/](http://www.who.int/classifications/icd/en/)> (last visited 6 June 2016).

43. Para. 5 General Comment No. 5 (CESCR).

44. Art. 25 UNCRPD.

45. International Covenant on Civil and Political Rights (hereinafter ICCPR), 16 December 1966, 6 ILM 1967, at 368.

46. Convention on the Rights of the Child (hereinafter CRC), GA Res. 44/25, 20 November 1989.

47. UN Principles for the Protection of Persons with Mental Illness and the Improvement of Mental Health Care, GA Res. 46/119, 17 December 1991.

48. Such as Art. 26 ICCPR (non-discrimination); Art. 24 CRC (right to health for children); Art. 25 UNCRPD (right to health without any discrimination for persons with disabilities).

49. Para. 5 General Comment No. 5 (CESCR).

50. Office of the United Nations High Commissioner for Human Rights and WHO (2008), above n. 28, at 18; Art. 25 UNCRPD.

51. Rule 4 UN Standard Rules on the Equalization of Opportunities for Persons with Disabilities, GA Res. 48/96, 4 March 1994.

52. Art. 9 UNCRPD.

53. Art. 4 UNCRPD.

medicine, have existed for a longer period.<sup>54</sup> The emergence of the Internet in the 1990s accelerated the development and popularity of e-health.<sup>55</sup> The European Commission provided the following definition of e-health:

eHealth is the use of ICT in health products, services and processes combined with organisational change in healthcare systems and new skills, in order to improve health of citizens, efficiency and productivity in healthcare delivery, and the economic and social value of health. E-health covers the interaction between patients and health-service providers, institution-to-institution transmission of data, or peer-to-peer communication between patients and/or health professionals.<sup>56</sup>

In this study, we adopt this definition of e-health because it not only provides an explanation of the concept of e-Health but also provides information on the purpose and goal of digital health care. One of the main purposes of e-health is to improve health care and to make delivery of health care services more efficient. An additional objective of e-health is to enhance the access to health care.<sup>57</sup> By using e-health, patients can have access to health care at any place, anytime and anywhere, even across borders and in remote areas. Real-time contact with a physician is possible as long as an ICT infrastructure is available. Communication between the patient and the physician can be synchronous as well as asynchronous. Furthermore, patients can employ the intervention on their own, without interference of medical professionals.<sup>58</sup> At the European level, the emerging use of e-health is highly supported in developing the European Union (EU)'s single (health) market through the freedom of movement<sup>59</sup> and the freedom to offer services.<sup>60</sup> Through different ICT

technologies, users will be able to maintain the desired treatment and care throughout the EU.<sup>61</sup>

E-mental health is a subcategory of e-health related to the use of ICT in mental health care. A literature review conducted by Lal and Adair in 2014 shows that no consensus exists on the definitions or on the applications of e-mental health.<sup>62</sup> According to Riper *et al.*, e-mental health refers to:

the use of information and communication technology (ICT) – in particular the many technologies related to the Internet – when these technologies are used to support and improve mental health conditions and mental health care, including care for people with substance use and comorbid disorders. E-mental health encompasses the use of digital technologies and new media for the delivery of screening, health promotion, prevention, early intervention, treatment, or relapse prevention as well as for improvement of health care delivery (such as electronic patient files), professional education (e-learning), and online research in the field of mental health.<sup>63</sup>

E-mental health can be offered through different services, using different devices. Examples include telemedicine and telerehabilitation, remote data-collection, telemonitoring, remote assessments, training and support of health personnel, and to share professional expertise.<sup>64</sup> E-mental health applications can differ from the provision of information to peer support services, online apps and games, or real-time communication between patients and health care professionals.<sup>65</sup> E-mental health, as a part of e-health, is changing and complementing the traditional and predominant model of face-to-face interaction between mental health professionals and service users.

E-mental health includes ICT applications, which facilitate treatment. Such applications offer patients the possibility to contact a health professional from a distance, or enable health professionals to discuss the situation of a patient over distance. Furthermore, ICT applications used by a patient without the interference of a health professional are a part of e-mental health. E-mental health in the broadest sense also includes online prevention and online public health information. As indicated earlier, the European Commission's definition of e-health distinguishes between different kinds of e-health applications. First, e-health applications that are used between patients and health professionals; secondly, e-health applications that are used to disseminate informa-

54. For an overview of early e-health utilisation, see C.A. Meier, M.C. Fitzgerald & J.M. Smith, 'eHealth: Extending, Enhancing, and Evolving Health Care', 15 *Annual Review of Biomedical Engineering* 359, at 369-74 (2013).

55. Meier *et al.*, above n. 54, at 369; H. Oh, C. Rizo, M. Enkin & A. Jadad, 'What is eHealth? A Systematic Review of Published Definitions', 7 *Journal of Medical Internet Research*, at 374 (2005), available at: <[www.ncbi.nlm.nih.gov/pmc/articles/PMC1550636/](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1550636/)> (last visited 6 June 2016).

56. European Commission (2012), above n. 5, at 3.

57. Saliba, Legido-Quigley, Hallik, Aaviksoo, Car & McKee mention this in the case of telemedicine, a field under the umbrella term e-health: V. Saliba, H. Legido-Quigley, R. Hallik, A. Aaviksoo, J. Car & M. McKee, 'Telemedicine Across Borders: A Systematic Review of Factors that Hinder or Support Implementation', 81 *International Journal of Medical Informatics*, 793, at 795 (2012). Piette *et al.* also mention that e-health can solve access-related problems in J.D. Piette, K.C. Lun, L.A. Moura Jr, H.S.F. Fraser, P.N. Nechael, J. Powell & S.R. Khoja, 'Impacts of e-Health on the Outcomes of Care in Low- and Middle-Income Countries: Where Do We Go from Here?', 90 *Bulletin of the World Health Organization* 365, at 368 (2012).

58. For a list of examples, see S. Timmer, *eHealth in de praktijk. Handreiking voor iedereen die wil kennismaken of starten met eHealth* (2011), at 27-66.

59. Title IV, Chapter 1 Treaty on the Functioning of the European Union (hereinafter TFEU), OJ C 326/47.

60. Title IV, Chapter 3 TFEU.

61. P. Quinn, A.K. Habbig, E. Mantovani & P. De Hert, 'The Data Protection and Medical Device Frameworks – Obstacles to the Deployment of mHealth Across Europe?', 20 *European Journal of Health Law* 185, at 188 (2013).

62. S. Lal and C.E. Adair, 'e-Mental Health: A Rapid Review of the Literature', 65 *Psychiatric Services* 24 (2014).

63. H. Riper, G. Anderson, H. Christensen, P. Cuijpers, A. Lange & G. Eysenbach, 'Theme Issue on e-Mental Health: A Growing Field in Internet Research', 12 *Journal of Medical Internet Research* (2010).

64. WHO and World Bank, *World Report on Disability* (2011), at 118.

65. Beyondblue, above n. 7, at 1-2.

tion between health institutions; thirdly, e-health applications that enable patients to communicate with each other and, finally, e-health applications that facilitate communication between health professionals.<sup>66</sup> The same categorisation is reflected in the definition of e-mental health formulated by Riper et al.

Throughout this paper, two types of e-mental health and their relation with the right to health will be discussed. The first type concerns e-mental health used within the mental health care process. This type of e-mental health includes contact between a patient and a health care professional in the form of an online consultation and contact between two health professionals consulting each other about a patient's condition. Such consultations can be synchronous or asynchronous. The second type that will be considered in this paper is e-mental health with the aim of prevention, such as online mental health information. Other types of e-(mental) health, such as electronic patient records or mobile health applications, which are used without the involvement of a mental health professional (m-mental health), fall outside the scope of this paper. E-mental health is often provided as a supplement to the existing mental health services, through universal design<sup>67</sup> of services. The use of e-mental health services in combination with regular mental health services is referred to as blended care.<sup>68</sup> In this way, e-mental health can be used to ensure the full participation and integration of people with mental health problems. In summary, e-mental health does not aim to replace the regular mental health services; in underserved areas with a shortage of mental health professionals, it can be the only opportunity to access mental health service. This difference will be taken into account throughout the paper.

E-mental health has the potential to increase the access to mental health care because it facilitates remote treatment at any place and any time. Furthermore, e-mental health services can be anonymous, which can take away the initial restraints to contact a health care professional. GPs and health workers can use e-mental health in offering and improving (mental) health services in the community. E-mental health provides people with the possibility to manage their mental health care process and leads them to take the control of their own health.<sup>69</sup> Preventing a mental illness (relapse) through e-mental health is cost-effective compared with the total costs of treatment in a psychiatric hospital, community-based treatment or a rehabilitation centre. However, empirical

studies are needed to show whether e-mental health services are cost-effective and how their efficiency in practice should be improved. E-mental health aims to improve access of certain disadvantaged groups such as the homeless, adolescents, elderly people, people with disabilities, ethnic minorities, indigenous groups, drug abusers, prisoners and women, especially housewives and violated women to mental health services. Moreover, different services offered by e-mental health contribute to reduce both public and self-stigma and to build self-confidence in people with mental disorders.

Nevertheless, not everyone has equal opportunities to use e-mental health services worldwide. The economic development of a country plays a crucial role in the implementation of these services. Not all countries can afford the same level of implementation of ICT. However, they are obliged to remove the barriers and obstacles for implementing ICT and to include ICT in their domestic legislative framework for people with (mental) disabilities.<sup>70</sup> In this regard, normative frameworks, such as e-mental health policies, strategies, ethical codes and guidelines, are needed. These normative frameworks should include issues related to privacy, e-consent, liability, data protection and confidentiality. Even within countries, some e-mental health services are more developed than others, because of priorities of the government. Other barriers in access to e-mental health might be language, low education, low income, physical impairments, poor health, literacy, cultural intolerance, public stigma and self-stigma, and poor training of health professional in e-mental health issues. These all might cause a digital divide and create a treatment gap in the accessibility of e-mental health services.

In summary, e-mental has the potential to make a positive contribution to realising the right to health. In the following part of this study, the impact of e-mental health on the availability, accessibility, acceptability and quality mental health services will be analysed from a legal point view.

## 5 Effects of E-Mental Health on the Right to Health

### 5.1 Availability

Availability of health facilities, goods and services in sufficient quantity within a country's jurisdiction is an essential part of the realisation of right to health.<sup>71</sup> One of the steps that countries should take in order to realise the right to health is to assure that medical services are provided when they are necessary.<sup>72</sup> The distribution of skilled human resources for mental health is highly inequitable worldwide. Especially low- and middle-income countries suffer from shortages of psychologists, psychiatrists, psychiatric nurses and social workers.

66. European Commission (2012), above n. 5, at 3.

67. Art. 2, Definitions (UNCRPD) 'Universal design means the design of products, environments, programmes and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. Universal design should include assistive devices and technologies for people with mental disabilities without discrimination'.

68. R.M.F. Kenter, P.M. van de Ven, P. Cuijpers, G. Koole, S. Niamat, R.S. Gerrits, M. Willems & A. van Straten, 'Costs and Effects of Internet Cognitive Behavioral Treatment Blended with Face-to-Face Treatment: Results from a Naturalistic Study', 2 *Internet Interventions* 77, at 78 (2015).

69. Mental Health Network, NHS Confederation, above n. 6, at 1.

70. Paras. 27-28 General Comment No. 2 (CRPD).

71. Para. 12(a) General comment No. 14 (CESCR).

72. Art. 12(2) ESCR.

This is one of the main reasons for the limited availability of mental health care in those countries.<sup>73</sup>

The primary aim of establishment of mental health services from a distance has been to increase the availability in areas with a limited number of mental health professionals.<sup>74</sup> Because of the possibility to rapidly deliver health information, e-mental health can assist to and provide a variety of different treatments and services.<sup>75</sup> E-mental health makes mental health care available at any place and any time. For example a person with mental health disorder can contact his or her psychiatrist through online consultation while he or she is in another country for holidays. It is even stated that e-mental health services can find its users without the users having to search for them. A study gives an example where googling about suicide will lead you to the contact information of a mental health charity.<sup>76</sup> Furthermore, e-mental health has the potential to increase the availability of trained medical personnel, it might contribute to a more efficient delivery of care. For instance, medical professionals from Germany can assist health professionals in Romania, over distance through the Internet. In addition, e-mental health supports cross-border health care,<sup>77</sup> which might resolve the shortage of health care professionals, as patients are not dependent on the availability of mental health services in their region anymore.<sup>78</sup> By using e-mental health, patients can easily contact a health professional in another region. Mental health rules and programmes suggested that community workers in primary care should receive training in detecting mental health problems at an early stage and refer patients to the right specialist.<sup>79</sup> E-mental health can facilitate the community workers' network for communication between patients and specialists.

In summary, e-mental health seems to be able to make a positive contribution to the availability of mental health services. However, e-mental health cannot always lead to the availability of health services in the case of emergencies. This might be difficult when health care is pro-

vided over distance. The International Society for Mental Health Online (ISMHO) and the Psychiatric Society for Informatics (PSI) considered this in their suggested Principles of Professional Ethics for the Online Provision of Mental Health Services.<sup>80</sup> In these principles, it is stated that the patient has to be informed of a way to reach the professional in an emergency. In the case of e-mental health care over a large geographical distance, a local professional should be available when an emergency occurs. The mental health care professional should try to find the local professional's contact information. This local professional should be a professional who already knows the patient's medical history, such as the patient's GP.<sup>81</sup> Furthermore, the interoperability of e-health systems is a complicating factor for the availability of health care across borders.<sup>82</sup> Interoperability between various e-health systems should be realised to increase the availability of care.<sup>83</sup> In cross-border e-mental health care, language can be a barrier as well.

Another issue related to the availability of mental health care is the availability of the ICT itself. Not all countries in the world have the same level of ICT infrastructure. This is called the digital divide. A digital divide can exist both between and within countries. It is imaginable that, for some countries, it is hard or even impossible to provide an ICT infrastructure to carry out e-mental health, whereas others already have a functioning ICT infrastructure. The number of people who have access to the Internet also differs per country. For example poor countries, such as Eritrea and Ethiopia, cannot have the same level of e-mental health, as the Netherlands. Poor countries might have other emergent issues than e-mental health, but under international obligations, they are also required to take measures gradually in realising the right to health.<sup>84</sup> These poor countries have the possibility to seek technical and financial support from the international community.<sup>85</sup>

Similarly, a digital divide within countries can exist between certain groups in society, such as the elderly and the young or between people in different areas of the country.<sup>86</sup> A digital divide can also be induced by economic or knowledge barriers within a country.<sup>87</sup> It would be more cost-effective to consider the availability and accessibility of ICT from the early stages of universal design of mental health services.<sup>88</sup> Finally, because of

73. WHO, *10 Facts on Mental Health*, Fact 8, available at: <[www.who.int/features/factfiles/mental\\_health/en/](http://www.who.int/features/factfiles/mental_health/en/)>, updated August 2014 (last visited 29 June 2016).

74. D. Lambert, J. Gale, A.Y. Hansen, Z. Croll & D. Hartley, 'Telemental Health in Today's Rural Health System', *Research & Policy Brief* (2013), at 4.

75. H. Christensen, K.M. Griffiths & K. Evans, 'e-Mental health in Australia: Implications of the Internet and Related Technologies for Policy', *Centre for Mental Health Research, The Australian National University, Information Strategy Committee Discussion Paper* 2002:3, at 4-5.

76. P. Wicks, 'E-mental health: A medium reaches maturity', *4 Journal of Mental Health* 323, at 333 (2012).

77. Directive 2011/24/EU of the European Parliament and of the Council of 9 March 2011 on the application of patients' rights in cross-border healthcare, OJ 2011 L 88/45.

78. European Commission, *Green Paper on Mobile Health ('mHealth')*, COM (2014) 219 final, 10 April 2014, at 13.

79. Rule 2(2) UN Standard Rules on the Equalization of Opportunities for Persons with Disabilities, GA Res. 48/96, 4 March 1994; WHO, *Integrating Mental Health Services into Primary Health Care*, information sheet, at 1 and 2, available at: <[www.who.int/mental\\_health/policy/services/3\\_MHintoPHC\\_Infosheet.pdf?ua=1](http://www.who.int/mental_health/policy/services/3_MHintoPHC_Infosheet.pdf?ua=1)> (last visited 21 October 2015).

80. ISMHO/PSI Suggested Principles of Professional Ethics for the Online Provision of Mental Health Services, version 3.15.psi, 9/13/00.

81. *Ibid.*, section C.

82. A.V. Gaddi and F. Capello, 'The Debate Over eHealth', in A.V. Gaddi, F. Capello & M. Manca (eds.), *eHealth, Care and Quality of Life* (2014) 1, at 6.

83. European Commission (2012), above n. 5, at 6.

84. Art. 2(1) ICESCR and UNCRPD.

85. Art. 2(1) ICESCR.

86. International Telecommunication Union, *What is the Digital Divide?* Available at: <[https://www.itu.int/net/wsis/basic/faqs\\_answer.asp?lang=en&faq\\_id=43](https://www.itu.int/net/wsis/basic/faqs_answer.asp?lang=en&faq_id=43)> (last visited 21 October 2015); International Telecommunication Union, *Measuring the Information Society Report 2014* (2014), at 55; International Telecommunication Union, *World Information Society Report 2007* (2007), at 21.

87. *Ibid.*

88. Paras. 15 and 35 General Comment No. 2 (CRPD).

the digital divide, implementing e-mental health might be too costly or at least financially unattractive for less developed countries. If ICT is not included in the health care system from the beginning, additional costs to adopt the existing services and to access e-mental health are necessary.<sup>89</sup>

## 5.2 Accessibility

To realise the right to (mental) health, equal and timely access to preventive, curative, and rehabilitative health services, education and essential drugs should be provided.<sup>90</sup> This is preferably provided at the community level, as the process of treatment of people with mental problems, which includes recovery, rehabilitation and integration, is long. Providing rehabilitation services in local communities offers the opportunity for family to participate in the process of integrating the patient in the society.<sup>91</sup>

At first sight, e-mental health interventions seem to be able to break down barriers in the access to health care. Accessible health services include four preconditions: non-discrimination, physical accessibility, economic accessibility (often referred to as affordability) and information accessibility. E-mental health affects all these dimensions.

### 5.2.1 Non-Discrimination

First, in order to be accessible, health services should be free of discrimination. Nevertheless, misunderstanding, stigma and discrimination towards mental illness are widespread and remain important barriers to access mental health services. To prevent facing discrimination and misunderstanding, people with mental disorders might be unwilling to seek health services.<sup>92</sup> Through e-mental health, people who were excluded from treatment previously can gain access to mental health care. A study has shown that a web-based cognitive behavioural intervention for bulimia nervosa was perceived as accessible by its participants. The anonymity, the ease and the non-judgemental character of these services were perceived as an advantage.<sup>93</sup> E-mental health might thus be beneficial for the more sensitive subjects or for those that evoke a feeling of fear or shame and discrimination. Furthermore, e-mental health aims to meet the needs of people who have restricted access or no access to mental health services at all, such as the homeless, adolescents, elderly people, people with disabilities, ethnic minorities, indigenous groups, drug abusers, prisoners and women, especially stay-at-home mothers, violated women and unemployed women. Cultural differences, the stigma and the shame of having a mental problem or disability may hinder them from seeking treatment and

having access to health care. Furthermore, medical professionals do not always treat people with mental diseases with respect, and sometimes they neglect the rights of these people as patients.<sup>94</sup>

Through e-mental health, public stigma and self-stigma will be reduced. Both public and self-stigma are characterised by the same elements, such as stereotypes, attitudes or prejudice, and avoidant behaviour or discrimination. All these elements have an impact on seeking and receiving the formal and informal mental health services. People with mental health disorders will be less afraid of stereotypes, prejudice and discrimination while using e-mental health services. For example online consultation is offered to everyone; mental health professionals cannot see what nationality, age, sex or which minority group a person who is asking for help belongs to. On the other hand, online consultations will also contribute to reduced self-stigma. Therefore, people with mental disorders who belong to one of the aforementioned groups will not be afraid and ashamed of asking the appropriate help in the right time and they can do so at any place. However, this will depend on different e-mental health services chosen by a person with a mental disorder. For example a Roma mentally ill person will not feel discriminated if he or she is chatting with a health professional online. Because he or she does not feel discriminated, he or she is more likely to ask for help in the right time.

Consequently, e-mental health has the potential to decrease patients' unpleasant feeling about the services and the behaviour of professionals, although such feelings might not be eliminated altogether. Continuous education of professionals about the rights of these patients and the way to treat them online with respect must be added to the system.

Analysing the effects of e-mental health on accessibility, it seems that e-mental health is able to increase the access to mental health care for everyone without discrimination. However, this service can lead to new discrimination issues itself. Generally, e-health applications have to be accessible to all, and therefore, e-health applications and websites should be developed to be understandable for everyone, taking into account the users' physical, sensory, intellectual and communicational capabilities.<sup>95</sup> Possible challenges for the digitally illiterate have to be considered as well. This group does not know how to use technology or is not capable to do so. A study showed that this can be solved by adjusting the technology to these users. The capabilities of these patients have to be taken into account when e-health applications are developed. In the aforementioned study, patients started to use the technology when it was

89. Para. 15 General Comment No. 2 (CRPD).

90. Para. 17 General Comment No. 14 (CESCR).

91. Rule 2(3) UN Standard Rules on the Equalization of Opportunities for Persons with Disabilities, GA Res. 48/96, 4 March 1994.

92. WHO, *Mental Health and Human Rights: Fact Sheet* (2006), at 6.

93. N. Pretorius, L. Rowlands, S. Ringwood & U. Schmidt, 'Young People's Perceptions of and Reasons for Accessing a Web-based Cognitive Behavioral Intervention for Bulimia Nervosa', 18 *European Eating Disorders Review*, at 205 (2010).

94. Office of the United Nations High Commissioner for Human Rights and WHO (2008), above n. 28, at 16.

95. S.G. Cunningham, D.J. Wake, A. Waller & A.D. Morris, 'Definitions of eHealth', in A.V. Gaddi, F. Capello & M. Manca (eds.), *eHealth, Care and Quality of Life* (2014) 15, at 20-21.



designed to meet their specific needs.<sup>96</sup> Another group that risks to be discriminated is the group of people who are self-excluded from technology. The digitally self-excluded are not interested in using modern technologies and thus exclude themselves from the use of digital health services. Health care, however, is increasingly digitalised. When no measures are taken to involve this group, they will eventually be digitally as well as socially excluded.<sup>97</sup>

### 5.2.2 Physical Accessibility

To solve the problem of shortage of mental health professionals, mental health programmes suggested that mental health services can be introduced into primary health care centres within communities.<sup>98</sup> In this system, e-mental health provides the network for communication between community workers, specialists and patients.

E-mental health increases the accessibility of mental health services because it provides the opportunity to contact a health care professional at any time and anywhere. Patients can contact a mental health professional from their house, on request, which is designed to meet their specific needs.<sup>99</sup> E-mental health can increase access to health care for certain groups who experience difficulties to travel to a mental health care facility, such as adults with serious mental illnesses, children and the elderly.<sup>100</sup> It will probably lead to shorter waiting lists<sup>101</sup> and a decreased travel time for visiting a specialist. Furthermore, e-mental health decreases the geographic limitations of the workforce, especially in rural or remote areas. A general access-related advantage of e-mental health is that it makes geographical borders non-existent. At the EU level, e-health can facilitate the free movement of people to receive health care. However, the access to health care cannot increase if health professionals and patients do not understand each other. Cross-border e-mental health can also lead to new issues, such as a language barrier. On the other hand, e-health applications provided in only one language can be

a problem within a (multilingual) country too<sup>102</sup> but it is thinkable that a language barrier will mostly be a hurdle to access to cross-border care. Through online consultations, health professionals residing overseas might contribute to improve access to mental health for patients of their country of origin and thus help resolving the shortage of mental health professionals in that particular country. By e-mental health, consultations over distance can take place between both patients and health professionals and among health professionals. According to the UNCRPD, Member States are obligated to support each other in realisation and implementation of the Conventions' provisions by 'facilitating access to and sharing of accessible and assistive technologies, and through transfer of technologies' through international cooperation.<sup>103</sup>

Physical accessibility of mental health services has shown to be better in urban rather than in remote areas, but this is not always true. Difficulties in accessing mental health services in urban areas are related to complex urbanisation, overcrowded areas, and more sophisticated and expensive ICTs. For this reason, e-mental health tends to reduce the inequalities and to ensure the accessibility of mental health services, no matter where the person lives. It is the duty of State parties to elaborate comprehensive and individualised supportive assistance, taking into account the age difference and diversity of people with mental disorders.<sup>104</sup> Therefore, for people with severe mental illness living in remote areas, e-mental health would help remove the above-mentioned barriers and improve access to mental health care. This should contribute to improving the universal design of mental health care, providing appropriate support services and reasonable accommodation according to the needs of people with mental disorders. For example, e-mental health enables an adult with schizophrenia, who lives in a remote area and cannot go to the city hospital because of his or her severe conditions, to consult his or her psychiatrist online. It is the psychiatrists' duty to call the GP of that remote area in order to offer the appropriate mental health care together.

### 5.2.3 Affordability

Little is known about the cost-effectiveness of e-mental health. This should be measured according to different interventions and diseases. Furthermore, it depends on the severity of mental illness, whether a person has more than one illness and the type of intervention that is required. A study in Sweden, Australia and the UK showed e-mental health is cost-effective.<sup>105</sup> A study conducted in the Netherlands showed that e-mental health has been cost-effective for the treatment of dif-

96. L. Lind and D. Karlsson, 'Telehealth for "the Digital Illiterate" – Elderly Heart Failure Patient's Experiences', in C. Lovis, B. Séroussi, A. Hasman, L. Pape-Haugaard, O. Saka & S.K. Andersen (eds.), *e-Health – For Continuity of Care: Proceedings of MIE2014* (2014), at 353.

97. M. Zajicek, 'Web 2.0: Hype or Happiness?', *W4A '07 Proceedings of the 2007 International Cross-Disciplinary Conference on Web Accessibility (W4A)* (2007), 35; G.W. Coleman, L. Gibson, V.L. Hanson, A. Bobrowicz & A. McKay, 'Engaging the Disengaged: How Do We Design Technology for Digitally Excluded Older Adults?', *Proceedings of the 8th ACM Conference on Designing Interactive Systems* (2010) 175, at 176.

98. Rule 2, UN Standard Rules on the Equalization of Opportunities for Persons with Disabilities, GA Res. 48/96, 4 March 1994.

99. K.M. Myers and D. Lieberman, 'Telemental Health: Responding to Mandates for Reform in Primary Healthcare', 19 *Telemedicine and e-Health* 438, at 440 (2013).

100. A. H. Smith, and A. R. Allison, *Telemental Health: Delivering Mental Health Care at a Distance: A Summary Report*, (Unpublished Summary Report) U.S. Department of Health and Human Services, Office for the Advancement of Telehealth (1998), at 21.

101. K. Cavanagh and D. Shapiro, 'Computer Treatment for Common Mental Health Problems', 60 *Journal of Clinical Psychology* 239, at 247 (2004).

102. Cunningham *et al.*, above n. 95, at 26.

103. Art. 32 (1) UNCRPD.

104. See e.g. UNCRPD, *General Comment no. 2: Article 9: Accessibility*, 22 May 2014, paras. 13-26.

105. H. Riper and J.H. Smit, *eMental-Health in Europe, Accelerating Implementation of Evidence Based Treatments for Mental Disorders*, available at: <[www.triple-ehealth.nl/wp-content/uploads/2014/10/2014\\_09\\_23-ggz-e-compered.pdf](http://www.triple-ehealth.nl/wp-content/uploads/2014/10/2014_09_23-ggz-e-compered.pdf)> (last visited 6 June 2016).

ferent mental diseases such as depression and anxiety.<sup>106</sup> Another study indicates that even when the costs of implementing ICT are taken into account, the costs of this service are lower than the costs of usual mental health services.<sup>107</sup> Furthermore, by utilising e-mental health, the costs of health care become lower, which in turn enhances the financial viability of the community hospital or clinic. Furthermore, early prevention and treatment can prevent the costs of treatment of a disease in an advanced stage.

Although different countries worldwide have embraced the use of e-mental health into mental health services, in a broader perspective, not all countries can afford to apply e-mental health strategies, because of the high costs of deployment and maintenance. Some countries are still in the first steps of embracing these interventions into their health care services, or cannot afford its implementation yet because of their financial situation. Inadequate financial reimbursement of these services can be a barrier to access to mental health services as well. When states do not provide reimbursement, people who cannot afford e-mental health care will be excluded.<sup>108</sup> Provision of health insurance in a fair and reasonable manner for disabled people including the mentally ill<sup>109</sup> can be regarded as a precondition for increasing the access to mental health services. Within the EU regulations for reimbursement of cross-border health care exist. Based on Article 7 of the Directive on the application of patients' rights in cross-border health-care (EU Patient Mobility Directive) which is applicable to telemedicine, the costs of health care across borders have to be reimbursed when it is covered by the Member State where the health service user resides.<sup>110</sup> Whenever an e-mental health treatment is covered within a certain Member State, e-mental health received in another Member State through cross-border care can be reimbursed as well. However, not all countries offer their citizens the possibility of reimbursement of digital health care. In the United States, for example, difference in the reimbursement of telemedicine services exists between the states.<sup>111</sup> In the Netherlands, it is considered to reimburse anonymous e-mental health services too.<sup>112</sup> This service will be paid from public funds.<sup>113</sup>

#### 5.2.4 Information Accessibility

According to the WHO, every mental health system should have a mental health information system (MHIS). The MHIS is 'a system for collecting, process-

ing, analyzing, disseminating, and using information about a mental health service and the mental health needs of the population it serves'.<sup>114</sup> E-mental health can assist in the process of gathering information in the MHIS.

E-mental health facilitates dissemination of information at any time and can be used for health promotion, prevention of mental illness and to increase the awareness regarding mental health through online campaigns on mental health issues. Furthermore, this system can be used for education of both the population<sup>115</sup> and professionals about mental illness.<sup>116</sup> A better understanding of mental illness helps in better integration of patients and decreases the stigma towards people with mental disorders.<sup>117</sup> Easy and early access to information can help patients address their problems in an early stage of disease. In addition, information about mental health professionals can be accessed online, which can help the patient in choosing his or her health care provider.<sup>118</sup>

On the other hand, increased access to information might lead to increased access to misinformation as well.<sup>119</sup> Furthermore, it might lead to unrealistic expectations or be potentially harmful when the patient, based on incorrect information, does not seek appropriate assistance for his or her health problems. Other concerns are health information that leads to commercial surveys, as well as information that disturbs the relationship of trust between patients and health care providers.<sup>120</sup> Therefore, mental health professionals and patients together should interpret the online information obtained by patients.<sup>121</sup>

Another potential challenge of online mental health information is posed by websites 'pro' certain illness, such as pro-anorexia and pro self-harm websites. These websites can contribute to deteriorating the patient's condition and may lead to (additional) damage.<sup>122</sup> Partly, this can be prevented by providing quality marks to certain websites that can inform the patient whether the website is supported or approved by health professionals. In the Netherlands, for example, <www.thuisarts.nl> is a website initiated by the *Nederlands Huisartsen Genootschap* [Dutch College of General Practitioners] (NHG) that contains health information and links to additional information.<sup>123</sup> In the UK, health information is already subject to the Information Standard, a certification programme of the National Health Services (NHS) that provides certificates to organisations producing evidence-based health care information for the

106. GGZ Nederland, *e-Mental Health in the Netherlands, Factsheet e-Mental Health*, available at: <www.ggznederland.nl/uploads/assets/Factsheet%20e-mental%20health%20in%20the%20Netherlands%20def.pdf> (last visited 6 June 2016).

107. Cavanagh and Shapiro, above n. 101, at 243-45.

108. Christensen *et al.*, above n. 75 at 4-7.

109. Art. 25, UNCRPD.

110. Art. 3 (d) Directive 2011/24/EU.

111. L. Thomas and G. Capistrant, *50 State Telemedicine Gaps Analysis. Coverage & Reimbursement*, American Telemedicine Association (2015).

112. *Kamerstukken II* 2012/13, 33675, n. 3 at 1.

113. *Ibid.*, at 7.

114. WHO (2001), above n. 30, at 42.

115. Cavanagh and Shapiro, above n. 101, at 247.

116. Myers and Lieberman, above n. 99, at 439.

117. Smith and Allison, above n. 100, at 8 and 10-12.

118. Mental Health Network, NHS Confederation, above n. 6, at 2.

119. Myers and Lieberman, above n. 99, at 442 and Gaddi and Capello, above n. 82, at 8.

120. Gaddi and Capello, above n. 82, at 8.

121. Myers and Lieberman, above n. 99, at 442.

122. Mental Health Network, NHS Confederation, above n. 6, at 3.

123. See <https://www.thuisarts.nl/> (in Dutch) (last visited 22 October 2015).

public.<sup>124</sup> Its website encompasses a list of certified organisations.<sup>125</sup> The Royal College of Psychiatrists is such an organisation; it provides evidence-based information on mental health on its website.<sup>126</sup>

In summary, E-mental health can increase the information accessibility with the condition that people know where to find appropriate and reliable information.<sup>127</sup> People who do not have adequate information about the e-mental health system will not have access to this type of mental health care.<sup>128</sup>

### 5.3 Acceptability

The third element necessary to realise the right to health is acceptability. According to General Comment No. 14, acceptability implies that health services should respect medical ethics, be culturally appropriate and should improve the health status of those concerned.<sup>129</sup>

#### 5.3.1 Ethical Issues

First, in order to be acceptable, e-mental health services should respect medical ethics. According to the UNCRPD, and the UN Principles for the Protection of Persons with Mental Illness and the Improvement of Mental Health Care (MI Principles), people with mental disorders should be treated with humanity and respect to their dignity.<sup>130</sup>

Several codes can be helpful in assessing how e-mental health can respect medical ethics, such as the International Code of Medical Ethics by the World Medical Association (WMA). This international code imposes several duties on physicians.<sup>131</sup> Examples are the duty to maintain the highest standards of professional conduct, to accept the patient's right to give consent to treatment or to decline it, the duty to respect human dignity, the prohibition to refer patients or to prescribe certain products merely for financial gain, and the duty to act in the patient's best interests when providing health care.<sup>132</sup> When a patient does not accept the use of e-mental health, face-to-face care should be provided

instead. If, however, a patient does give his or her consent, the e-mental health care provider should respect the patient's dignity. The prohibition to refer patients or to prescribe certain products solely for financial gain entails that health professionals cannot prescribe or advise the use of medical apps or other e-mental health applications because they have a financial interest in these applications. Decisions to utilise such interventions should rely on the question of whether the use of such applications is the best treatment for a particular patient. Whether the use of e-mental health is in the patient's best interest has to be judged by the physician on a case-by-case basis, depending on the patient's health situation.

On the other hand, it is imaginable that a need for personal contact and long conversations is inherent to the nature of some illness. For those patients, regular, face-to-face care might be more beneficial. However, e-mental health might still function as a supplement to the care for these patients. E-mental health will help the mental health care services being more inclusive and comprehensive. It will also help in promoting participation and integration of people with mental illness into the society. In this way, e-mental health should be considered as an addition to existing mental health services (blended care). This additional service intends to improve mental health care and public health. Therefore, blended care will be an appropriate method to offer the necessary care in time, in place and with the right health care professionals. Moreover, an emergency can be easily managed if it is identified on time. Through blended care, a person with a mental disorder can obtain a tailored treatment plan according to his or her needs.

The number of people who need face-to-face contact differs per country, community and group. Probably patients with severe mental diseases need face-to-face contact with the professional. It is estimated that about 5% of the working-age workers have severe mental illness.<sup>133</sup>

In addition, in order to ensure all these ethical implications of e-mental health, the ISMHO, in collaboration with the PSI, suggested principles of professional ethics, especially for online mental care.<sup>134</sup> These principles include informed consent, procedural standards and emergencies. Informed consent is a human right of significance for people with mental health problems in receiving health care including e-mental health care. According to the principle of informed consent, a medical treatment can be started only after the patient's explicit consent. Consent can be given only after receiving adequate information. The right to informed con-

124. See <[www.england.nhs.uk/tis/about/the-info-standard/](http://www.england.nhs.uk/tis/about/the-info-standard/)> (last visited 22 October 2015).

125. See <[www.england.nhs.uk/tis/our-members/certified-organisations/](http://www.england.nhs.uk/tis/our-members/certified-organisations/)> (last visited 22 October 2015).

126. See <[www.rcpsych.ac.uk/](http://www.rcpsych.ac.uk/)> (last visited 22 October 2015).

127. Cunningham *et al.*, above n. 95, at 21.

128. Christensen *et al.*, above n. 75, at 4-7.

129. Para. 12(c) General Comment No. 14 (CESCR).

130. Art. 3 (a) UNCRPD and Principle 1, UN Principles for the Protection of Persons with Mental Illness and the Improvement of Mental Health Care, GA RES. 46/119, 17 December 1991.

131. International Code of Medical Ethics, Adopted by the 3rd General Assembly of the World Medical Association, London, England, October 1949 and amended by the 22nd World Medical Assembly Sydney, Australia, August 1968 and the 35th World Medical Assembly Venice, Italy, October 1983 and the WMA General Assembly, Pilanesberg, South Africa, October 2006.

132. In this place we provide a few examples of what this code implies for e-mental health. This is not an exhaustive or complete enumeration of the duties imposed by this code. International Code of Medical Ethics, Adopted by the 3rd General Assembly of the World Medical Association, London, England, October 1949 and amended by the 22nd World Medical Assembly Sydney, Australia, August 1968 and the 35th World Medical Assembly Venice, Italy, October 1983 and the WMA General Assembly, Pilanesberg, South Africa, October 2006.

133. OECD, *Focus on Health, Making Mental Health Count*, July 2014, available at: <<https://www.oecd.org/els/health-systems/Focus-on-Health-Making-Mental-Health-Count.pdf>>, at, 1. (last visited 6 June 2016).

134. ISMHO/PSI Suggested Principles of Professional Ethics for the Online Provision of Mental Health Services, version 3.15.psi, 9/13/00.

sent also includes the right to refuse treatment.<sup>135</sup> In the digital era, the ‘electronic consent’ or ‘e-consent’ deals with managing and administering integrated health care information by different stakeholders in the health care decision-making process.<sup>136</sup> Through the e-consent system, service users determine and agree with whom they will share their personal health information. It is essential that e-mental health services provide enough information and enable the patient to give consent. The methods of providing information and giving consent should be as user-friendly as possible.<sup>137</sup>

The Recommendation on the Protection of Medical Data indicates that e-consent concerning medical data should be free, express and informed.<sup>138</sup> The person with a mental disorder should give his or her consent written or orally, or by recording his or her consent after a clear and informed explanation. This information should be understandable for the person concerned.<sup>139</sup> People with mental disorders are free to refuse, to withdraw or to modify their e-consent, as long as they understand the information and the consequences. During emergencies, medical data might be processed or collected without the consent of mentally ill people only for treatment purposes. Other situations where medical data might be collected or processed without e-consent is in the case of public health interest, the prevention of a real danger or the suppression of a specific criminal offence, or other public interest.<sup>140</sup> Furthermore, medical data can be collected and processed for preventive, diagnostic or therapeutic purposes in order to protect the interest of a person with a mental disorder or to protect the fundamental rights of others.

In order to be able to give consent to be treated, legal capacity is required. If a person with mental disorder lacks legal capacity, his or her legal representative or an authoritative body established by a domestic court might also give e-consent.<sup>141</sup> Based on Article 12 of UNCRPD, everyone in principle has legal capacity on equal basis.<sup>142</sup> According to the WHO, mental illness does not necessarily entail incapacity. In principle, everyone possesses capacity, until evidence to the contrary is found. Whenever an individual’s legal capacity

is subject to doubt, the physician is responsible for determining whether this individual has the capacity to give his or her informed consent. Capacity should be determined again in every new situation.<sup>143</sup> For a health professional, assessing someone’s capacity to make decisions about his or her health care process is difficult, especially online and over distance. The use of online follow-up questions to help assessing someone’s capacity to make decisions might assist in this matter. However, it will remain difficult to determine the legal capacity over distance.

The principles by ISMHO and PSI also suggest that additional measures should be taken to protect the patients who are not able to give consent themselves.<sup>144</sup> The suggested principles state that, besides the usual components of informed consent, such as information about the proposed treatment, the alternatives and risks, e-mental health treatment requires additional information. This additional information entails the explicit mention that misunderstandings are more probable to occur in e-mental health than in regular face-to-face mental health care because the patient and the physician possess less information about each other and cannot take advantage of non-verbal communication in an online environment. Both the health professional and the patient should be aware of the risk of misunderstandings before they start an online therapy session. These suggestions by the ISMHO serve as precautions that health professionals should take and do not necessarily entail that e-mental health always leads to misunderstandings and should not be used at all. Whether online treatment is suitable for a particular patient will depend on the mental health specialists’ professional judgement. Mental health professionals must consider the mental capabilities of patients before starting the treatment. Because of the risk of misunderstanding, severe mental illness might be better treated face-to-face. Online therapy is best provided as a supplement to face-to-face therapy. For example, a patient can visit a mental health professional once a month and have weekly online consultations. Therefore, the patient does not have to travel to the health care facility every week.

Furthermore, information should be provided to the patient about the way of communication, which can be synchronous as well as asynchronous, and about the time within which he or she can expect the physician’s reaction. The health professional has to provide his or her personal information to the patient, and the patient should be offered information about security measures he or she can undertake, especially when he or she uses a shared computer.<sup>145</sup> Especially using a shared computer can cause conflicts with the patient’s informational

135. UN Principles for the Protection of Persons with Mental Illness and the Improvement of Mental Health Care, GA Res. 46/119, 17 December 1991, principle 11, para. 4.

136. P.A.B. Galpottage and A.C. Norris, ‘Patient Consent Principles and Guidelines for e-Consent: A New Zealand Perspective’, 11 *Health Informatics Journal* 5, at 7 (2005).

137. SI 336 of 2011-European Communities (Electronic Communications Networks and Services) (Privacy and Electronic Communication) Regulation 2011, at 11.

138. Principle 6 (1) Recommendation No. R (97) 5 on the Protection of Medical Data (1997).

139. UN Principles for the Protection of Persons with Mental Illness and the Improvement of Mental Health Care, GA Res. 46/119, 17 December 1991, principle 11, paras. 1 and 2.

140. Art. 4 (3) (a) Recommendation No. R (97) 5 on the Protection of Medical Data (1997).

141. See also UN Principles for the Protection of Persons with Mental Illness and the Improvement of Mental Health Care, GA Res. 46/119, 17 December 1991, principle 11, para. 6, under b and Art. 4 (3) (a) Recommendation No. R (97) 5 on the Protection of Medical Data (1997).

142. Art. 12 (2) (UNCRPD).

143. WHO (2005), above n. 4, at 40 and 41.

144. ISMHO/PSI Suggested Principles of Professional Ethics for the Online Provision of Mental Health Services, version 3.15.psi, 9/13/00, section A.

145. ISMHO/PSI Suggested Principles of Professional Ethics for the Online Provision of Mental Health Services, version 3.15.psi, 9/13/00 section A.

privacy as well as with his or her spatial privacy.<sup>146</sup> A study showed that the acceptance of e-health systems is lower when patients are concerned about invasion of their privacy.<sup>147</sup> Additional attention should be paid to confidentiality of the patient's data. Protection of personal data and privacy are fundamental rights set out in several human rights treaties.<sup>148</sup> The UNCRPD explicitly mentions the right to privacy of persons with disabilities.<sup>149</sup>

The Data Protection Directive<sup>150</sup> prohibits processing of data concerning health issues,<sup>151</sup> although there are some exceptions such as when the data subject is physically or legally incapable of giving consent.<sup>152</sup> Preventive medicine, medical diagnosis, provision of care or treatment, or management of health care services are exceptions as well. The data should always be processed by a health professional.<sup>153</sup> Another often heard fear is that the health data could be accidentally disclosed to unauthorised parties.<sup>154</sup>

The ISMHO and PSI principles include principles on to the procedure of online mental health care, too. First, the health care provider should act according to his or her competence, and he or she should be allowed to provide health care at his or her location. For cross-border care, additional problems rise because he or she might need the qualifications to provide health care at the place where the patient resides.<sup>155</sup> As e-mental health facilitates cross-border health care, this is a substantial issue. Furthermore, the patient and the professional should agree on the prevalence and the way the online communication takes place. This includes appointments with regard to fees and payment of services. Health care provider should assess the patient's health condition as good as he possibly can in an online environment, while respecting the patient's confidentiality and keeping a medical record of the treatment.<sup>156</sup>

In 2009, the WMA developed ethical guidelines for the use of telehealth.<sup>157</sup> These guidelines also elaborate on

the duty of care, communication with patients, standards of practice and quality of care, patient confidentiality and informed consent. Notable is the provision that the professional who offers telehealth services should be familiar with the technology and even has to educate himself or herself in 'telehealth communication skills' before he or she can offer such services.<sup>158</sup> Apart from these international principles for online (mental) health care, numerous national guidelines<sup>159</sup> about the application of e-mental health as well as e-health and online behaviour of health professionals, in general,<sup>160</sup> exist.

### 5.3.2 Cultural Acceptance

In providing mental health services from distance, special attention should be paid to differences in race, ethnicity, region, religion, socioeconomic status and sexual orientation of patients. The cultural background of patients, such as their psychosocial environment, and cultural explanations for the problem should be considered by mental health providers.<sup>161</sup> These elements might affect the acceptability of the service by patients. E-mental health has the potential to enhance coordination and participation in care between psychiatrists and GPs and between family members and patients. Furthermore, e-mental health can be a mean to take cultural and linguistic barriers away. Evidence that e-mental health can contribute to the cultural acceptability can be found in several studies such as the pilot study among Korean immigrants in Georgia. This group received telepsychiatric care from a health care professional who was 'culturally competent' and spoke their native language. In general, this type of care was seen as accepta-

146. A study conducted in the UK showed that the black, minority and ethnic respondents use computers outside their own homes more frequently than white respondents, which leads to questions related to their right to privacy. See L. Ennis, D. Rose, M. Denis, N. Pandit & T. Wykes, 'Can't Surf, Won't Surf: The Digital Divide in Mental Health', 21 *Journal of Mental Health* 395, at 400 (2012).

147. R. Gajanayake, R. Iannella & T. Sahama, 'Consumer Acceptance of Accountable-eHealth Systems', in C. Lovis, B. Séroussi, A. Hasman, L. Pape-Haugaard, O. Saka & S.K. Andersen, *e-Health – For Continuity of Care* (2014) 980.

148. Such as Arts. 7 and 8 CFR, Art. 17 ICCPR and Art. 12 UDHR.

149. Art. 22 UNCRPD.

150. Directive 95/46/EC of the European Parliament and of the Council of 24 October 1994 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, OJ 1995 L281, at 31-50.

151. Art. 8 (1) Directive 95/46/EG.

152. Art. 8 (2) (c) Directive 95/46/EG.

153. Art. 8 (3) Directive 95/49/EG.

154. European Commission (2014), above n. 78, at 8.

155. ISMHO/PSI Suggested Principles of Professional Ethics for the Online Provision of Mental Health Services, version 3.15.psi, 9/13/00, section B.

156. *Ibid.*

157. Telehealth includes telemental health, which is comparable, albeit a bit narrower, with e-mental health.

158. WMA Statement on Guiding Principles for the Use of Telehealth for the Provision of Health Care, Adopted by the 60th WMA General Assembly, New Delhi, India, October 2009, at 2 and 3.

159. For instance: National Board for Certified Counselors, *Policy Regarding the Provision of Distance Professional Services* (2012), available at: <[www.nbcc.org/Assets/Ethics/NBCCPolicyRegardingPracticeofDistanceCounselingBoard.pdf](http://www.nbcc.org/Assets/Ethics/NBCCPolicyRegardingPracticeofDistanceCounselingBoard.pdf)> (last visited 29 June 2016); American Telemedicine Association, *Practice Guidelines for Videoconferencing-Based Telemental Health* (2009), available at: <[www.americantelemed.org/docs/default-source/standards/practice-guidelines-for-videoconferencing-based-telemental-health.pdf](http://www.americantelemed.org/docs/default-source/standards/practice-guidelines-for-videoconferencing-based-telemental-health.pdf)> (last visited 29 June 2016), American Telemedicine Association, *Practice Guidelines for Video-Based Online Mental Health Services* (2013), available at: <[www.americantelemed.org/docs/default-source/standards/practice-guidelines-for-video-based-online-mental-health-services.pdf?sfvrsn=6](http://www.americantelemed.org/docs/default-source/standards/practice-guidelines-for-video-based-online-mental-health-services.pdf?sfvrsn=6)> (last visited 29 June 2016).

160. For instance: American Telemedicine Association, *Core Operational Guidelines for Telehealth Services Involving Provider-Patient Interactions* (2014), available at: <[www.americantelemed.org/docs/default-source/standards/core-operational-guidelines-for-telehealth-services.pdf?sfvrsn=6](http://www.americantelemed.org/docs/default-source/standards/core-operational-guidelines-for-telehealth-services.pdf?sfvrsn=6)> (last visited 29 June 2016), KNMG, *Richtlijn Online Arts-Patient Contact* (2007), available at: <<http://knmg.artsennet.nl/Publicaties/KNMGpublicatie/62422/Richtlijn-online-artspatient-contact-2007-met-aanvulling-Handreiking-Arten-en-Social-Media-2011.htm>> (last visited 29 June 2016); NHG, *NHG-Checklist e-Consult* (2014), available at: <[https://www.nhg.org/sites/default/files/content/nhg\\_org/uploads/nhg-checklist\\_e-consult\\_1.3\\_-\\_februari\\_2014.pdf](https://www.nhg.org/sites/default/files/content/nhg_org/uploads/nhg-checklist_e-consult_1.3_-_februari_2014.pdf)> (last visited 29 June 2016).

161. M.A. Jones, M.K. Shealy, K. Reid-Quiñones, D.A. Moreland, M.T. Davidson, M.C. López, C.S. Barr & A.M. de Arellano, 'Guidelines for Establishing a Telemental Health Program to Provide Evidence-Based Therapy for Trauma-Exposed Children and Families', 11 *Psychological Services* 398, at 404 (2014).

ble for the studied patients.<sup>162</sup> Another study among aboriginal people in Australia shows that e-mental health tools offer a possibility for accessible, effective and acceptable treatment.<sup>163</sup> However, the acceptance of e-mental health among different groups is not the same. Elderly patients, for example, are less likely to rely on and to accept health services from a distance.<sup>164</sup> In addition, in some countries, women tend to be more conservative and therefore less likely to accept this service.<sup>165</sup> While e-mental health applications might seem helpful in delivering culturally appropriate care, this section explained that they are not acceptable to everyone. Acceptance of e-mental health among health care professionals is another issue related to the acceptability of these services. E-health services will only contribute to the accessibility of mental health services when not only patients but also health care professionals accept them. Evidence exists that e-health is sometimes underutilised because health professionals are at times reluctant to use them.<sup>166</sup> They have to be convinced of the tremendous possibilities of e-health in order to realise the potential for e-(mental) health to increase the accessibility of mental health care.

#### 5.4 Quality

Finally, in order to contribute to realising the right to health, health services should be scientifically and medically appropriate and of good quality. This implies, among other things, skilled medical personnel and scientifically approved drugs.<sup>167</sup> As mentioned in the introduction, e-mental health is expected to improve the quality of mental health services.<sup>168</sup>

According to Jefe-Bahloul,<sup>169</sup> different studies have found that telemedicine as a type of health services is clinically effective.<sup>170</sup> As patients gain easier access to

mental health care in an early phase of their illness, deterioration might be prevented. E-mental health also enhances involvement in care and continuity of care for patients in rural areas. A better connection between hospital and community providers increases the quality of service in local areas by increasing the diagnosis and treatment rate at early time and by improving the referral process. Growing participation of patients and reduction of no-show rates as a result, improves mental health outcomes. Empowerment of the e-mental health service user leads to a faster recovery process and better integration into the community. E-mental health applications, such as online self-tests, for instance might help patients to recognise and assess their problems in an early stage. When desired, the results of such a test can be discussed with a physician and the treatment can be started rapidly.<sup>171</sup> Moreover, e-mental health gives mentally ill people the opportunity to stay as much as possible with their families and community. The latter reduces the lengths of stay and readmission rates to psychiatric facilities. A report by the American Telemedicine Association showed that the number of inpatient psychiatric admissions and hospital stays significantly decreased by providing health services via new communication technologies.<sup>172</sup> To summarise, e-mental health has the potential to improve the quality of community mental health services.

E-mental health treatments can also lead to several quality-related implications. For instance, in order to be able to provide care of good quality, additional measures should be taken. With regard to the criterion of skilled medical personnel, licensing of mental health professionals to use e-mental health might be a solution. In the Draft International Convention on Telemedicine and Telehealth, licensing for health professionals who intend to use telehealth is recommended.<sup>173</sup> Furthermore, this draft convention states that online health care should be dealt with in the same way as regular, face-to-face care.<sup>174</sup> However, this draft convention was never ratified.

The national and international practice guidelines as discussed in Section 5.3.1 give an indication of what e-(mental) health care of good quality should entail. The ISMHO and PSI principles, for example, indicate that misunderstandings can be expected when the professional and the patient do not have all the information about each other. These principles also indicate that it might be difficult to fully assess the patients' health condition because the advantages of non-verbal communication

162. J. Ye *et al.*, 'Telepsychiatry Services for Korean Immigrants', 18 *Telemedicine and e-Health* 797 (2012).
163. J. Povey, P.P.J.R. Mills, K.M. Dingwall, A. Lowell, J. Singer, D. Rotumah, J.B. Levy & T. Nagel, 'Acceptability of Mental Health Apps for Aboriginal and Torres Strait Islander Australians: A Qualitative Study', 18 (3) *Journal of Medical Internet Research* (2016), available at: <[www.ncbi.nlm.nih.gov/pmc/articles/PMC4825593/](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4825593/)> (last visited 6 June 2016).
164. Lind and Karlsson, above n. 96, conducted a study among elderly who were uninterested in modern technology.
165. A. Bener and S. Ghuloum, 'Gender Difference on Patients' Satisfaction and Expectation Towards Mental Health Care', 16 *Nigerian Journal of Clinical Practice* 285, at 290 (2013) in H. Jefe-Bahloul, 'Telemental Health in the Middle East: Overcoming the Barriers', 2 *Frontiers in Public Health* 1 (2014).
166. See e.g. A. Burghouts, N. Beekers, J. Krijgsman, S. Ottenheim, K. Oost, F. Beenkens & J. Jacobs, *Spelen met de zorg van morgen. Trendboek eHealth in de eerste lijn. Trendition* (2014), at 18-21.
167. Para. 12 (d) General Comment no. 14, (CESCR).
168. European Commission (2012), above n. 5, at 4-5; WHO (2005), above n. 5, at 2, para. 7.
169. Jefe-Bahloul, above n. 165.
170. D.M. Hilty, D.C. Ferrer, M.B. Parish, B. Johnston, E.J. Callahan & P.M. Yellowlees, 'The Effectiveness of Telemental Health: A 2013 Review'. 19 *Telemedicine and e-Health* at 444 (2013); F. Garcia-Lizana and I. Munoz-Mayorga, 'What About Telepsychiatry? A Systematic Review'. 12 *Primary Care Companion to the Journal of Clinical Psychiatry* (2010), available at: <[www.psychiatrist.com/\\_layouts/PPP.Psych.Controls/ArticleViewer.aspx?ArticleURL=/pcc/article/Pages/2010/v12n02/09m00831whi.aspx](http://www.psychiatrist.com/_layouts/PPP.Psych.Controls/ArticleViewer.aspx?ArticleURL=/pcc/article/Pages/2010/v12n02/09m00831whi.aspx)> (last visited 6 June 2016), as cited by Jefe-Bahloul, above n. 165, at 1.

171. Timmer, above n. 58, at 27-66.
172. American Telemedicine Association, *State Medicaid Best Practice, Telemental and Behavioural Health* (August 2013), at 1-7, available at: <[www.americantelemed.org/docs/default-source/policy/state-medicaid-best-practices-telemental-and-behavioral-health.pdf?sfvrsn=4](http://www.americantelemed.org/docs/default-source/policy/state-medicaid-best-practices-telemental-and-behavioral-health.pdf?sfvrsn=4)> (last visited 6 July 2016).
173. Art. 3 Draft international convention on telemedicine and telehealth of the International Bar Association Section on Legal Practice, Committee 2 (Medicine and Law) 22 July 1999.
174. Art. 2 (2) Draft international convention on telemedicine and telehealth.

are lacking in an online environment.<sup>175</sup> Other examples include distance as a complicating factor for the professional to give his or her diagnosis. A physician might experience difficulties in diagnosing the patient because of the distance. Additional problems occur when the communication is asynchronous and the time between the patient's question and the physicians' reaction is considerable.<sup>176</sup>

Furthermore, for an e-mental health system to work properly, a fruitful clinical supervision should be provided.<sup>177</sup> Another important issue of using ICTs is the liability of Internet web-based mental health care services. Liability concerns are linked with the numerous stakeholders involved,<sup>178</sup> poor quality information of websites, inappropriate use of information or the use of websites created by non-professional mental health specialists.<sup>179</sup> Clear liability rules for e-mental health in case of damage are needed.

## 6 Conclusion

This study aimed to answer the question under what conditions e-mental health can contribute to realising the right to the highest attainable standard of mental health. This was done by analysing the impact of e-mental health on mental health care regarding the AAAQ framework.

E-mental health can make health care more available as long as an ICT infrastructure is present. To make optimal cross-border e-mental health care available for everyone, interoperability between the various e-mental health systems should be realised.<sup>180</sup> This should be taken into account in the development process of e-mental health applications. Furthermore, the ICT has to be available itself around the country. The digital divide still exists and can cause inequalities in the availability of e-mental health care worldwide.<sup>181</sup>

E-mental health has the potential to increase the accessibility of e-mental health care. However, measures have to be taken in order to prevent exclusion of the digitally illiterate or those who are otherwise digitally excluded.<sup>182</sup> The first step in preventing this problem could be to design e-mental health applications with the

needs of these people in mind;<sup>183</sup> E-health should be need-driven instead of technology-driven.<sup>184</sup> Proper reimbursement of e-mental health services is another requirement for e-mental health to increase the access to mental health care.<sup>185</sup>

The third condition to realise the right to health is the acceptability of the services. This entails that services respect medical ethics and are culturally appropriate. Several national and international guidelines on medical ethics and e-health exist.<sup>186</sup> When these guidelines are followed, e-mental health can be acceptable. E-mental health should be culturally acceptable as well;<sup>187</sup> however, further research on this matter is needed to determine whether a particular e-mental health intervention is culturally acceptable. Finally, e-mental health has the potential to contribute to mental health care of good quality,<sup>188</sup> but only when quality standards are followed and clear liability rules are established. E-mental health can enhance the realisation of the right to the highest attainable standard of mental health for everyone in case the aforementioned conditions are met. Because of the large expansion and impact of e-mental health, there are still efforts to be made in order to overcome the aforementioned barriers.

175. ISMHO/PSI Suggested Principles of Professional Ethics for the Online Provision of Mental Health Services, version 3.15.psi, 9/13/00, section A, Art. 1 (a).

176. KNMG, *Richtlijn online arts-patient contact* (2007), at 15, available at: <<http://knmg.artsennet.nl/Publicaties/KNMGpublicatie/62422/Richtlijn-online-artspatient-contact-2007-met-aanvulling-Handreiking-Artsen-en-Social-Media-2011.htm>> (last visited 29 June 2016).

177. Jefee-Bahloul, above n 165.

178. European Commission (2014), above n. 78, at 16

179. Christensen *et al.*, above n. 75, at 5.

180. Gaddi and Capello, above n. 82, at 6.

181. International Telecommunication Union, *What is the Digital Divide?*, available at: <[https://www.itu.int/net/wsis/basic/faqs\\_answer.asp?lang=en&faq\\_id=43](https://www.itu.int/net/wsis/basic/faqs_answer.asp?lang=en&faq_id=43)> (last visited 21 October 2015); International Telecommunication Union, *Measuring the Information Society Report 2014*, at 55 (2014); International Telecommunication Union, *World Information Society Report 2007*, at 21 (2007).

182. Coleman *et al.*, above n. 97, at 176.

183. Lind and Karlsson, above n. 96, at 353-57.

184. Cunningham *et al.*, above n. 95, at 26-27.

185. Jefee-Bahloul, above n. 165 and Christensen *et al.*, above n. 75, at 4-7.

186. Such as the International Code of Medical Ethics, Adopted by the 3rd General Assembly of the World Medical Association, London, England, October 1949 and amended by the 22nd World Medical Assembly Sydney, Australia, August 1968 and the 35th World Medical Assembly Venice, Italy, October 1983 and the WMA General Assembly, Pilanesberg, South Africa, October 2006; ISMHO/PSI Suggested Principles of Professional Ethics for the Online Provision of Mental Health Services, version 3.15.psi, 9/13/00, WMA Statement on Guiding Principles for the Use of Telehealth for the Provision of Health Care, Adopted by the 60th WMA General Assembly, New Delhi, India, October 2009, National Board for Certified Counselors, *Policy Regarding the Provision of Distance Professional Services* (2012), available at: <[www.nbcc.org/Assets/Ethics/NBCCPolicyRegardingPracticeofDistanceCounselingBoard.pdf](http://www.nbcc.org/Assets/Ethics/NBCCPolicyRegardingPracticeofDistanceCounselingBoard.pdf)> (last visited 29 June 2016); American Telemedicine Association, *Practice Guidelines for Videoconferencing-Based Telemental Health* (2009), available at: <[www.americantelemed.org/docs/default-source/standards/practice-guidelines-for-videoconferencing-based-telemental-health.pdf](http://www.americantelemed.org/docs/default-source/standards/practice-guidelines-for-videoconferencing-based-telemental-health.pdf)> (last visited 29 June 2016); American Telemedicine Association, *Practice Guidelines for Video-Based Online Mental Health Services* (2013), available at: <[www.americantelemed.org/docs/default-source/standards/practice-guidelines-for-video-based-online-mental-health-services.pdf?sfvrsn=6](http://www.americantelemed.org/docs/default-source/standards/practice-guidelines-for-video-based-online-mental-health-services.pdf?sfvrsn=6)> (last visited 29 June 2016); American Telemedicine Association, *Core Operational Guidelines for Telehealth Services Involving Provider-Patient Interactions* (2014), available at: <[www.americantelemed.org/docs/default-source/standards/core-operational-guidelines-for-telehealth-services.pdf?sfvrsn=6](http://www.americantelemed.org/docs/default-source/standards/core-operational-guidelines-for-telehealth-services.pdf?sfvrsn=6)> (last visited 29 June 2016); KNMG, *Richtlijn Online Arts-Patient Contact* (2007), available at: <<http://knmg.artsennet.nl/Publicaties/KNMGpublicatie/62422/Richtlijn-online-artspatient-contact-2007-met-aanvulling-Handreiking-Artsen-en-Social-Media-2011.htm>> (last visited 29 June 2016); NHG, *NHG-Checklist e-Consult* (2014), available at: <[https://www.nhg.org/sites/default/files/content/nhg\\_org/uploads/nhg-checklist\\_e-consult\\_1.3\\_-\\_februari\\_2014.pdf](https://www.nhg.org/sites/default/files/content/nhg_org/uploads/nhg-checklist_e-consult_1.3_-_februari_2014.pdf)> (last visited 29 June 2016).

187. Ye *et al.*, above n. 162.

188. Jefee-Bahloul, above n. 165.

