

## PROTECTION OF PARTICULARLY VULNERABLE PATIENTS IN TELEMEDICINE

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**Abstract:** Providing health services is nowadays inextricably connected with the application of modern technologies, including also remote electronic communication. Telemedicine has been developing considerably, and it promises to enhance the efficiency and improve the accessibility of health care. It is welcome progress, especially given that contemporary society faces many economic, social, demographic, security and other challenges. Providing health care remotely allows to at least mitigate some of these problems. It is also associated with numerous risks. Obviously, the risks affect all patients, but some groups of patients, which can be described as the particularly vulnerable, are exposed to these dangers to a greater extent. The article focuses on their protection predominately from the viewpoint of international law and identifies several tools which can be utilised in this respect in order to protect the health services recipients and strengthen the resilience of the health care system as a whole.

**Resumé:** S poskytováním zdravotních služeb je dnes neoddělitelně spjata využívání moderních technologií včetně elektronické komunikace na dálku. Telemedicina se významně rozvíjí a slibuje větší efektivitu a zlepšení dostupnosti zdravotní péče. Jde o vítaný pokrok, zejména když současná společnost čelí mnoha ekonomickým, sociálním, demografickým, bezpečnostním a dalším výzvám. Poskytování péče na dálku umožňuje alespoň některé tyto potíže zmírnit. Zároveň je spojeno s řadou rizik. Ta se pochopitelně týkají všech pacientů, nicméně některé skupiny pacientů, které lze označit za zvláště zranitelné, jsou těmto nebezpečím vystaveny ve větší míře. Tento článek se zabývá jejich ochranou zejména z pohledu mezinárodního práva a identifikuje některé nástroje, které je v tomto směru možno využít k ochraně příjemců zdravotní péče a posílení odolnosti zdravotnictví jako celku.

**Key words:** telemedicine, remote health care, vulnerable patients, access to health care, international law

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### Introduction

Remote health services are on the rise. They include the providing of health care to patients through the use of information and communication technologies, remote patient monitoring, remote consultations between health professionals about a specific case, and many other applications of modern technologies in the field of health care. For the purposes of this article, we will use the notion of “telemedicine” to describe this category, forming an

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important but not all-encompassing part of eHealth (i.e. any systematic use of information and communication technologies in health care) in general.<sup>1</sup>

The attractiveness of telemedicine is due to more than one contributing factor. From the perspective of patients, it typically broadens and speeds up their access to care, especially when they live in areas with few health care providers, it lowers the risk of infection from contact with other patients and it saves time, expenses and discomfort associated with travelling to the provider. From the perspective of public policy it is clear that demographic changes and advances in modern medicine make it very hard to maintain sufficient personal and technical capacity.<sup>2</sup> Promoting public health and ensuring availability of health care to the population are quite important and desirable goals, and any reasonable means which help to achieve them are welcome.

Of course, this does not mean that the expansion of telemedicine comes without any problems. Greater efficiency of providing health care remotely, in comparison with the traditional model, may lead the providers to switch their preferred mode of operation to telemedicine. If this allows them to save costs (e.g. because they need less traditional wal-kin facilities, equipment etc.) and if the system of financing health care (e.g. through public health insurance) does not properly set up the respective levels of reimbursement,<sup>3</sup> it may drive (at least part of) the non-remote care out of the market.<sup>4</sup> This could seriously destabilise the organisation of health care system, as the patients who need non-remote care could then have a hard time obtaining it. In addition, not all patients are in the same situation. They differ vastly in terms of age, physical and mental condition, economic and social situation, mobility, digital competence etc. This means that utilising telemedicine can be more difficult for certain groups. Protection of these particularly vulnerable patients, with special consideration of the impact of international law, will be discussed below.

Any health service comes with the risk of legal liability of the provider. Telemedicine may involve additional risks beyond those inextricably connected with any health care.<sup>5</sup> Without

<sup>1</sup> Obviously, this classification is not the only possible one. We have utilised it as a practical tool e.g. in HOLČAPEK, Tomáš, ŠOLC, Martin, ŠUSTEK, Petr. Telemedicine and the standard of care: a call for a new approach? *Frontiers in Public Health*. (2023, Vol. 11, Article no. 1184971), available also at <<https://doi.org/10.3389/fpubh.2023.1184971>>.

<sup>2</sup> Cf. DE MEIJER, Claudine, WOUTERSE, Bram, POLDER, Johan, KOOPMANSCHAP, Marc. The effect of population aging on health expenditure growth: a critical review. *European Journal of Ageing*. (2013, Vol. 10, Issue 4), available also at <<https://pubmed.ncbi.nlm.nih.gov/28804308/>>; SCHMIDT, Simone, HENDRICKS, Verena, GRIEBENOW, Reinhard, RIEDEL, Rainer. Demographic change and its impact on the health-care budget for heart failure inpatients in Germany during 1995–2025. *Herz*. (2013, Vol. 38), pp. 862–867; or CINAROGLU, Songul, BASER, Onur. The relationship between medical innovation and health expenditure before and after health reform. *Health Policy and Technology*. (2018, Vol. 7, Issue 4), available also at <<https://doi.org/10.1016/j.hlpt.2018.10.001>>.

<sup>3</sup> It is fairly questionable whether the level of reimbursement should be equal to that of in-person visits if the costs are not the same; this is something that should be thoroughly examined by the public health insurance system administrators, i.e. in the case of Czech Republic by the Ministry of Health and the health insurance companies. For an overview of the so-called parity laws in respect of telemedicine in the United States cf. *Private payer reimbursement for telemedicine*, available at <<https://chironhealth.com/telemedicine/reimbursement/private-payer/>>.

<sup>4</sup> HOLČAPEK, Tomáš, ŠOLC, Martin, ŠUSTEK, Petr. Telemedicine and the standard of care: a call for a new approach? *Frontiers in Public Health*. (2023, Vol. 11, Article no. 1184971), p. 3, available also at <<https://doi.org/10.3389/fpubh.2023.1184971>>.

<sup>5</sup> In this aspect, i.e. combination of a promise of additional benefits with additional dangers, it may be compared to implementation of innovative methods or introduction of new medicaments; cf. ŠOLC, Martin. *Stěžejní otázky*

a direct physical contact with patients, doctors are somewhat limited in their options, e.g. they cannot examine the patient by palpation or auscultation and fully perceive the patient's gait or movements. They may miss some details important for a correct diagnosis and thus not recognise a particular illness.<sup>6</sup> In a remote setting, it may be more difficult to verify the information given by the patient.<sup>7</sup> Patients should know about the added risks and understand them, if their consent with medical intervention is to be considered informed. And health professionals must exercise special care to avoid various pitfalls, e.g. overprescription of drugs (which a physician may resort to in order to err on the side of caution). Lack of perception of the patient's holistic needs due to the absence of physical contact can cause the health professional to focus solely on the particular health problem and forget to establish a rapport with the patient. That is another trap which health care providers should be aware of.

The aims of improving telemedicine's efficiency and mitigating its risks are reflected in various clinical guidelines and protocols,<sup>8</sup> some of which have already been adopted<sup>9</sup> and many more are to be expected in the future. These are usually tailored to a particular field of medical practice or even a specific clinical procedure. They will undoubtedly impact the formation or modification of the applicable standard of care and also help to integrate telemedicine into the pre-existing clinic workflow.

Telemedicine utilises systems of electronic communication and as such is especially susceptible to risks associated with transmission of sensitive information. It must deal with the interconnected problems of cybernetic security and protection of personal data.<sup>10</sup> In the

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ověřování nezavedených metod [Critical questions of evaluation of non-established methods]. In HOLČAPEK, Tomáš, ŠUSTEK, Petr, ŠOLC, Martin, ŠIROKÁ, Lucie. *Právní nástroje podpory inovací v medicíně* [Legal Tools in Support of Innovations in Medicine]. (Wolters Kluwer, Praha 2024), pp. 42–53.

<sup>6</sup> Cf. PANĂ, Maria, STĂNESCU, Ana M. A., ANDRONIC, Octavian, NĂSTASĂ, Iulian, PIȚURU, Silviu, JINGA, Viorel. Telemedicine, between medical benefit and malpractice: actual considerations. *Romanian Journal of Legal Medicine*. (2021, Vol. 29, No. 4), p. 409, available also at <<https://doi.org/10.4323/rjlm.2021.408>>.

<sup>7</sup> ŠUSTEK, Petr. Specifika klinické praxe moderní telemedicíny [Particularities of clinical practice of modern telemedicine]. In HOLČAPEK, Tomáš, ŠUSTEK, Petr, ŠOLC, Martin, ŠIROKÁ, Lucie. *Právní nástroje podpory inovací v medicíně* [Legal Tools in Support of Innovations in Medicine]. (Wolters Kluwer, Praha 2024), p. 21.

<sup>8</sup> Cf. BECKER, Christian D., DANDY, Katherine, GAUJEAN, Max, FUSARO, Mario, SCURLOCK, Corey. Legal Perspectives on Telemedicine Part 2: Telemedicine in the Intensive Care Unit and Medicolegal Risk. *Permanente Journal*. (2019, Vol. 23, No. 4), available also at <<https://www.thepermanentejournal.org/doi/full/10.7812/TPP/18.294>>.

<sup>9</sup> Cf. in the particular field of cardiology e.g. GRUSKA, Michael, AIGNER, Gerhard, ALTENBERGER, Johann et al. Recommendations on the utilization of telemedicine in cardiology. *Wiener klinische Wochenschrift*. (2020, Vol. 132), pp. 782–800, available also at <<https://doi.org/10.1007/s00508-020-01762-2>>; or British Heart Rhythm Society. *Clinical Standards and Guidelines for the Follow Up of Cardiac Implantable Electronic Devices (CIEDs) for Cardiac Rhythm Management* of June 2022, available also at <<https://bhrcs.com/wp-content/uploads/2022/06/BHRS-CIED-FU-Standards-June22.pdf>>. For a broader perspective, cf. American Telemedicine Association. *Practice Guidelines*, available at <[https://www.americantelemed.org/resource\\_categories/practice-guidelines/](https://www.americantelemed.org/resource_categories/practice-guidelines/)>.

<sup>10</sup> Cf. e.g. BASSAN, Sharon. Data privacy considerations for telehealth consumers amid COVID-19. *Journal of Law and the Biosciences*. (2020, Vol. 7, Issue 1), available also at <<https://academic.oup.com/jlb/article/7/1/ljaa075/5905251>>; or NITTARI, Giulio, KHUMAN, Ravjyot, BALDONI, Simone et al. Telemedicine Practice: Review of the Current Ethical and Legal Challenges. *Telemedicine and e-Health*. (2020, Vol. 26, No. 12), available also at <<https://www.liebertpub.com/doi/10.1089/tmj.2019.0158>>; or ŠUSTEK, Petr, ŠOLC, Martin. Principy GDPR a legální aspekty distanční medicíny [GDPR principles and legal aspects of distance medicine]. In TÁBORSKÝ, Miloš et al. *Digitální medicína 2022* [Digital medicine 2022]. (EEZY Publishing, Praha 2022), pp. 68–78.

European context, this includes, but is not limited to, compliance with the General Data Protection Regulation. Of course, these issues do not affect solely remote health care, as digitization permeates all aspects of medicine, including also keeping of medical records, sharing information among health care providers, reporting to regulatory authorities and health insurance companies etc.<sup>11</sup> But the context of telemedicine enhances the risk of unanticipated loss of privacy and potential physical and psychological safety concerns.<sup>12</sup> From a rather more technical perspective, construction of an efficient and comprehensive telemedicine system often requires connecting disparate health care providers with different equipment, software, operational procedures etc. Lack of interoperability between providers with respect to medical records is a significant obstacle for functional data sharing.

Telemedicine may also facilitate cross-border health care. With its greater development, issues of jurisdiction in case of disputes, applicable law and regime of legal liability may become much more frequent. Suppose a patient resides in country A, but decides to consult a physician who provides services out of country B, or suppose a health care provider from country C wants to utilise online tools supplied by a company seated in country D. Obviously, these scenarios are not completely new, as cross-border legal relationships have occurred for a long time, but they did not use to be so common in the field of medicine. In this respect, various international treaties and soft law created by public and private organisations may help to find appropriate and just solutions. Within the European Union, remote care falls under the scope of Directive 2011/24/EU on the application of patients' rights in cross-border healthcare. While the Directive does not even attempt to regulate telemedicine comprehensively, it sets out the rule that in this case care is considered to be provided in the EU member state where the provider is established.<sup>13</sup> This type of legal norm resolves at least some of the jurisdictional, regulatory and conflict of laws problems.

## 1. Legal Protection of Vulnerable Patients

In a sense, all patients are vulnerable. They seek specific services, which often interfere significantly with their physical or mental integrity and privacy, because they currently are in, or may foreseeably enter, a state of illness, injury or pregnancy, or are facing the approaching end of their life. Typically, they are not educated in medicine and seek care from those who are health professionals. It is only natural that the law may view patients as the weaker party vis-à-vis the health care providers. In many aspects, patient protection is a manifestation of consumer protection, with the added emphasis on informed decision-making with regard to interference with bodily integrity.

Nevertheless, even within the general category of patients as the more vulnerable party, there are many subcategories which may require particular attention. When we try to

<sup>11</sup> For an example of a detailed analysis on the level of national law cf. ŠIROKÁ, Lucie. Elektronizace zdravotnictví [Electronization of the health care system]. In HOLČAPEK, Tomáš, ŠUSTEK, Petr, ŠOLC, Martin, ŠIROKÁ, Lucie. *Právní nástroje podpory inovací v medicíně [Legal Tools in Support of Innovations in Medicine]*. (Wolters Kluwer, Praha 2024), pp. 55–82.

<sup>12</sup> Cf. MISHKIN, Adrienne D., ZABINSKI, Jeffrey S., HOLT, Grayson, APPELBAUM, Paul S. Ensuring privacy in telemedicine: Ethical and clinical challenges. *Journal of Telemedicine and Telecare*. (2023, Vol. 29, Issue 3), available also at <<https://doi.org/10.1177/1357633X221134952>>.

<sup>13</sup> Article 3(d) of the Directive. In addition, the Directive also mentions telemedicine in the context of reimbursement in Article 7 paragraph 7.

broadly outline the groups of patients that may have increased susceptibility to the risks and disadvantages of telemedicine, several examples come readily into mind, without ambition to create an exhaustive list. It should also be kept in mind that the presented categories are not mutually exclusive. On the contrary, many patients fall into more than one of them.

### ***1.1 Typical Characteristics of Vulnerable Patients***

With respect to remote health care, one of the first characteristics which most people would think of is age. This can mean both elderly patients and children, but the issues associated with telemedicine are particularly concerning for the former. However, we should not succumb to ageism and automatically suppose that elderly patients are less capable to utilise remote health service just because of their age. It is not the age *per se* that is relevant here, but rather other aspects which often, but not always, come with it. Seniors may be more conservative, not willing to adapt to new methods of communication, but the same can be true for much younger people. Elderly patients are more likely to have troubles with eyesight, hearing, speech and fine motor skills. This leads to problems with communication, exacerbated when that communication is performed remotely and thus both limited in the scope in which the health professional can perceive the patient and more dependent on the dexterity with which the patient can handle the electronic device used for the connection. These troubles manifest whether it is in telephone calls, text messaging or online video meetings. But again, the cause is not the age on its own; utilising telemedicine is more difficult for any patient who suffers from such sensory or motor control problems, no matter the age. Persons with cognitive, sensory or physical disabilities are in this aspect comparable to the elderly. Difficulties with remote communication increase the vulnerability of the affected patients in several respects. They make them less likely to use remotely provided health care at all, as they may not be able to establish the connection or may prefer to avoid it due to the discomfort it causes them. But even if they manage to maintain the remote contact with a health professional, there is additional risk (on both sides) of not successfully passing correct and relevant information on, or not understanding it properly.

With respect to children, the problems of remote communication may be less severe, as what they may lack in the necessary skills, especially when considering very young children, can be supplemented by their parents or other persons caring for them. But let us think of patients with mental health conditions; while they also may have their legal guardians, their availability for participation in e.g. online meetings with a physician may be limited. Telemedicine involves other techniques than just remote communication between a patient and a physician; for an example remote monitoring of some body functions or parameters (e.g. heart rate or glucose level, transmitted continuously to a health care provider) requires that the patient accepts wearing a particular medical device and does not sabotage its functioning. This is not always easy to achieve in cases of serious mental disorders.

Issues with remote communication also affect patients who could utilise the technical means without barriers caused by health reasons but who are constricted in their use by limited digital literacy or simply lack access to them due to social and economic reasons. While the first type of problem is somewhat easier to address, as it is basically remediable by special education or training, the other is tied to the overall societal structure and its inherent inequalities. Efficient remote health care requires good quality of electronic communication systems including sufficient transmission capacity (often referred to as the bandwidth). For

a part of the population, it may be too costly. And even individuals who on their own would not be particularly disadvantaged from the economic point of view can have problems with access to telemedicine if they live in areas with insufficient internet coverage.

The need to communicate remotely intensifies any language problems. When we speak with someone present on the same spot, we do not just hear the words but can also observe the person, their gestures etc. There is also instantaneous feedback because when we do not understand what the other person is saying, we can often show it by mere facial expression. In a remote setting, not all these channels are always open (e.g. in a telephone call, we do not usually see the other person), or at least are somewhat restricted. During a video call, we see the other person, but arguably the amount of information we gather from observation is a bit smaller than what we could gain if we were in the same room. Millennia of evolution made humans very astute observers of other humans, as this is an invaluable life skill for any social creatures. Remote communication makes it harder to gain maximum utility from this ability.

A very important point worth repeating is that people can possess characteristics which put them into more than one category of vulnerable patients. In other words, there are significant overlaps. For an obvious example, people with a disability may have a low income (e.g. because they cannot get a good-paying job or are outright dependent on social security payments), and consequently may not be able to buy the necessary device and pay for an adequate internet connection. Such patients can have problems to gain access to a remote health care provider, and even if the connection is established, they can then have problems to utilise it effectively because of an impaired ability to communicate in this manner, which may be additionally combined e.g. with a lower level of education, thus magnifying the communication barriers and also negatively influencing trust in the telemedicine system. Populations with a set of these characteristics (lower income, disability, lower education etc.) may already have difficulties accessing care in the traditional setting (e.g. because it is more complicated and relatively expensive for them to travel to a physician), but a shift to the digital worlds can push them out from access to health care even more.

An illustrative case study showing the complexity of remote health care implementation for a particular vulnerable population was carried out with respect to persons with opioid use disorder, with the intention to improve the treatment of hepatitis C virus in this group.<sup>14</sup> In this setting, many of the problematic features were present simultaneously: poverty (negatively affecting the ability to obtain the technical means for a sufficient and secure connection), low literacy (impinging on the trust in the telemedicine system) and generally worsened state of health. For patients in this situation, participating in a remote health care arrangement can be a tall order. In addition, these patients are frequently stigmatized in a conventional health care setting, which can lead them to question the security and confidentiality of the telemedicine alternative.<sup>15</sup> This makes them even more vulnerable, even if the providing of care in home environment (via telemedicine) could help them to avoid such stigmatisation and, ultimately, gain more trust in the system.

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<sup>14</sup> Described in detail in TALAL, Andrew H., SOFIKITOU, Elisavet M., JAANIMÄGI, Urmo et al. A framework for patient-centered telemedicine: Application and lessons learned from vulnerable populations. *Journal of Biomedical Informatics*. (2020, Vol. 112), available also at <<https://www.sciencedirect.com/science/article/pii/S1532046420302501>>.

<sup>15</sup> Ibid.

## 1.2 *International and European Law*

We will now turn to an analysis of how the law might help the particularly vulnerable patients with respect to telemedicine. For several reasons we will approach the matter mainly from a perspective of international and European law. In this manner we can discuss a topic which is similarly relevant for most developed countries without constraints of an individual legal order. International and European law are also very important sources for modification of national laws, either as an inspiration or because of an obligation to implement some new rules. And given the increasing importance of cross-border health care, norms which transcend national law are more suitable for its regulation. Nevertheless, we must keep in mind that these documents do not cover the whole world; their territorial scope of application depends on which countries ratified the relevant treaties or are part of the European Union, respectively.

The European Convention on Human Rights<sup>16</sup> does not set out any particular right to access to health care, even in the traditional non-remote setting. Its Article 14 prohibits discrimination on any ground, which could potentially relate to quality of care provided to disadvantaged patients in comparison with the “ordinary” ones, but the provision protects only against discrimination in connection with rights and freedoms set out in the Convention. Therefore, without the relevant substantive right enshrined in the Convention, any considerations of unequal enjoyment of such right are irrelevant. This feature of the Convention, by some perceived to be a flaw, was meant to be altered by its Protocol No. 12, which intended to broaden the discrimination prohibition to “*the enjoyment of any right set forth by law*”.<sup>17</sup> It could then apply to any right to health care (or access to health care) stipulated by national law. However, the Protocol has only been ratified by 20 countries.<sup>18</sup> In any event, prohibition of discrimination, particularly by public authorities, is an important rule but in itself does not remedy the underlying individual or societal factors. It is usually difficult to ascertain which positive obligations to take any specific steps should be derived from it.

The European Social Charter<sup>19</sup> supplements the Convention by a scope of social and economic rights, further enlarged by its Additional Protocol.<sup>20</sup> According to Article 13 of the Charter, national governments should ensure social and medical assistance to persons without adequate resources. Pursuant to Article 4 of the Additional Protocol, the effective exercise of the right of elderly persons to social protection should be ensured by appropriate measures, including health care, designed to enable them to remain full members of society and lead independent lives for as long as possible. In the revised version of the Charter,<sup>21</sup> Article 4 of the Additional Protocol was incorporated in the Charter as Article 23.<sup>22</sup> The

<sup>16</sup> The Convention for the Protection of Human Rights and Fundamental Freedoms, adopted on 4 November 1950. The Czech Republic is a legal successor to the Czech and Slovak Federative Republic, which ratified the Convention in 1992; it was published in the Collection of Laws under no. 209/1992 Coll.

<sup>17</sup> Article 1 of the Protocol.

<sup>18</sup> The Czech Republic has signed the Protocol, but never ratified it.

<sup>19</sup> Adopted on 18 December 1961. The Czech Republic ratified it in 1999; it was published in the Collection of International Treaties under no. 14/2000 Coll. Int. Tr.

<sup>20</sup> Adopted on 5 May 1988. The Czech Republic ratified it in 1999; it was published in the Collection of International Treaties under no. 15/2000 Coll. Int. Tr.

<sup>21</sup> Adopted on 3 May 1996. The Czech Republic has not ratified the revised version.

<sup>22</sup> The revised version also contains, beside other provisions, a principle of non-discrimination embodied in Part V Article E.

provisions are clearly rather vague, addressed to the individual states with the purpose to influence their policies. They are not self-executing and their direct application to telemedicine is problematic.

The two-piece set of International Covenant on Civil and Political Rights and International Covenant on Economic, Social and Cultural Rights<sup>23</sup> addresses health care in the latter of the two Covenants. Its Article 12 recognises the universal right to the highest attainable standard of health; obviously, it is an ideal towards which the individual states' efforts are aimed rather than a directly applicable legal rule. Nevertheless, for the purposes of protection of vulnerable patients with respect to telemedicine the provision of Article 12(2)(d) could be relevant. It stipulates that the state parties shall take steps necessary for "*the creation of conditions which would assure to all medical service and medical attention in the event of sickness*". Governments should make sure that everyone is either able to utilise the benefits stemming from remote health care or has reasonable access to care in the traditional setting.<sup>24</sup> The precise measures to achieve the stated goal are left to their discretion and the Covenant has no ambition regarding how the health care system should be structured, operated or financed.

Protection of health and promotion of health services is one of the many objectives supported by the main treaties of the European Union, together with e.g. fight against all sorts of discrimination.<sup>25</sup> The Charter of Fundamental Rights of the European Union<sup>26</sup> is more focused on the perspective of an individual human being. It mentions several characteristics which have, in the context of medicine, impact on vulnerability of the concerned persons as patients. In Article 25, the Charter acknowledges the "*rights of the elderly to lead a life of dignity and independence and to participate in social and cultural life*". In Article 26, it does the same for the "*right of persons with disabilities to benefit from measures designed to ensure their independence, social and occupational integration and participation in the life of the community*". While both provisions are of course rather general, at least they express the will to make extra effort in order to accommodate the special needs of the mentioned categories of people. In Article 35, the Charter stipulates the right of everyone to "*access to preventive health care and the right to benefit from medical treatment under the conditions established by national laws and practices*". These provisions are accompanied by a general rule on non-discrimination contained in Article 21. However, it should be noted that the Charter is not legally relevant in all circumstances, but basically only within the scope of application of other EU law.<sup>27</sup>

As the groups of vulnerable patients include children, we can mention especially the rights enshrined in Articles 23 and 24 of the Convention on the Rights of the Child.<sup>28</sup>

<sup>23</sup> Adopted on 16 December 1966. The Czech Republic is a legal successor to the Czechoslovak Socialist Republic, which ratified both Covenants in 1975; they were published in the Collection of Laws under no. 120/1976 Coll.

<sup>24</sup> Article 2(2) of the Covenant stipulates that the rights enunciated in the Covenant must be exercised without discrimination of any kind, which reinforces the principle that health care should indeed be effectively available to everyone.

<sup>25</sup> With respect to public health in its many aspects the most prominent provision is that of Article 168 of the Treaty on the Functioning of the European Union, which nevertheless recognises that organisation of the health care system is primarily in the purview of member states.

<sup>26</sup> Adopted on 7 December 2000, and pursuant to Article 6(1) of the Treaty on the European Union recognised as having the same legal value as the Treaties.

<sup>27</sup> Cf. Article 51(1) of the Charter.

<sup>28</sup> The United Nations Convention on the Rights of the Child, adopted on 20 November 1989. The Czech and

Article 23 focuses on children with disabilities, which for our purposes constitute another characteristic feature increasing vulnerability with respect to telemedicine. Special needs of a disabled child are recognised and effective access to, *inter alia*, health care services should be ensured. Article 24 of the Convention sets out the right of any children to enjoy the highest attainable standard of health and to facilities for the treatment of illness and rehabilitation of health. Specific measures for the actual implementation of these rights are left mostly to the discretion of the national governments, but they should be appropriate and aim at the objectives stated in Article 24(2) of the Convention.

There is no similar international treaty with respect to the elderly yet,<sup>29</sup> but there is one regarding persons with disabilities: the Convention on the Rights of Persons with Disabilities.<sup>30</sup> It strives to promote the rights and dignity of persons with disabilities, particularly by allowing them to effectively enjoy the possibilities which are normally available to everyone else. For these purposes, the notion of persons with disabilities is defined broadly to 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 on an equal basis with others*”. This definition is quite fitting with respect to the challenges these persons face as patients, particularly in the remote health care setting. Two provisions of the Convention should be expressly mentioned in this context. Article 9 obligates the states that are parties to the Convention to take appropriate measures to ensure equal access of persons with disabilities to facilities and services provided to the public, both in urban and in rural areas. This includes medical facilities and services and is directly relevant for telemedicine, as the Convention expressly mentions access to new information and communications technologies and systems, including the Internet. Article 25 of the Convention acknowledges the right to the highest attainable standard of health without discrimination on the basis of disability. Among other principles, it requires that persons with disabilities be provided with the same range, quality and standard of free or affordable health care and programmes as are provided to other persons. These health services should be provided as close as possible to their own communities, including in rural areas.

Turning now to the Convention on Biomedicine,<sup>31</sup> which is for obvious reasons markedly relevant for health services,<sup>32</sup> we may notice that neither the Convention, nor its Additional

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Slovak Federative Republic, to which the Czech Republic is a legal successor, ratified the Convention; it was published in the Collection of Laws under no. 104/1991 Coll.

<sup>29</sup> But discussions about a new treaty dealing specifically with the rights of older people have already started; cf. *UN: Treaty on Older People's Rights Moves Ahead*, available at <<https://www.hrw.org/news/2025/04/03/un-treaty-older-peoples-rights-moves-ahead>>.

<sup>30</sup> The United Nations Convention on the Rights of Persons with Disabilities, adopted on 13 December 2006. The Czech Republic ratified the Convention in 2009; it was published in the Collection of International Treaties under no. 10/2010 Coll. Int. Tr.

<sup>31</sup> The Convention for the Protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine, adopted on 4 April 1997. The Czech Republic ratified the Convention in 2001; it was published in the Collection of International Treaties under no. 96/2001 Coll. Int. Tr.

<sup>32</sup> Not just because of its subject-matter, but in the Czech legal order also because of direct applicability of at least some of the provisions. For a more detailed discussion cf. HOLČAPEK, Tomáš. Convention on Biomedicine and Liability Resulting from Deficiency in Informed Consent. In ŠTURMA, Pavel et al. *Czech Yearbook of International Public & Private Law*. Vol. 9. Praha: Česká společnost pro mezinárodní právo / Czech Society of International Law, 2018, pp. 270–279.

Protocols go into much detail with respect to protection of particularly vulnerable patients. Apart from the general provisions, such as Article 3 on equitable access to health care or Article 4 on professional standards, the Convention deals with special categories of patients in connection with informed consent (Articles 6 and 7), research on persons (Article 17) and removal of organs and tissues from living donors (Article 20). The principles expressed therein are expanded on in the Additional Protocols, but there are no specific rules on how effective access to health care should be ensured to persons who are disadvantaged in comparison with others due to their health condition, social and economic circumstances etc.

### ***1.3 Impact of International and European Law in Domestic Law***

Even a passing review of international and European (primary) law shows that there are several general principles which should be reflected in domestic law with respect to protection of vulnerable groups of patients in telemedicine. Two main points come into prominence. One is the rule of non-discrimination, i.e. vulnerable patients should not be discriminated against, whether in access to health care or in its actual providing. The other is that even disadvantaged populations should be able to effectively enjoy the rights whose protection is afforded to everyone.

What specific measures should be taken in order to reach these goals is mostly left to the discretion of national governments. After all, they are tied to which public policies each individual country wants to pursue and what the economic situation allows. Therefore, we can say that there is hardly any specific rule which must be implemented into domestic law. National legal orders of democratic countries often contain their own provisions on non-discrimination and effective enjoyment of recognised rights, so even in this respect the implementation is usually not exactly revolutionary.

Nevertheless, national governments should take steps which are at least appropriate and meaningful. Total inactivity or adoption of only entirely fruitless measures can in some cases give rise to individual claims, such as in the mechanism utilised by the European Convention on Human Rights (via the European Court of Human Rights). Otherwise, pressure by intergovernmental bodies, non-governmental entities and other relevant actors may influence the internal processes of a country.

It follows from what was said above that there are certain obligations which many states (including the Czech Republic) took upon themselves and they need to seek legal or non-legal solutions to fulfil them. Of course, in many cases doing something to fulfil such obligations coincides with doing what is morally and ethically right. We will discuss some of the ways in which a state can help vulnerable patients in the context of remote health care in the following section.

## **2. Specific Measures, Education and Guidelines**

Two general remarks should be made beforehand. Any debate on how to make the online world, in which much of telemedicine takes place, more accessible, more comfortable and safer should not lead to a complete suppression of the non-digital alternative. Full

substitution of the traditional health care setting by telemedicine is probably impossible, but definitely not desirable. After all, the same point is valid for other fields of human activity, unless we want to live in a sci-fi dystopia. The other remark is that the principal goal of all measures directed at vulnerable patients with respect to telemedicine is to help them derive maximum benefits from it and this also includes reduction of their dependence on others when they want to utilise it. In other words, it is not enough to e.g. ensure that remote health care is available for the elderly patients, but they should also, to the maximum possible extent, be able to use it on their own, without relying on the assistance of other people.

A primary, and often discussed, tool is education of both patients and health care providers. Education directed at the patients should be broadly available and tailored to the learning patterns and pace of the target population. In case of many vulnerable patients, whether due to their age or disabilities, it could be incorrectly supposed that they are unable to adapt to new technologies. However, they might be actually very interested in it, but the initial barrier may be too high – they might simply not know where and how to start. Patient education is quite important in order to increase the likelihood that they will feel comfortable using telemedicine. For these purposes, both on-site and video demonstrations of telemedicine in action can be very helpful; testimonials from other patients from the same target population, who have already had a successful encounter with telemedicine, encourage others to try it and increase their trust in it.<sup>33</sup> This is tied to the concept of community support in general. While it is not always the case, vulnerable patients may live close to other people in similar circumstances (imagine a small village, a retirement home or an assisted living facility) and will often act on the basis of their experience, whether positive or negative. Information about health care which was effectively provided in a remote setting will spread out and may do more for the promotion of telemedicine than a one-time organised campaign. In order to make the encounters with telemedicine as positive as possible, a system of permanent field support should be established. Public authorities, health insurance companies and non-governmental organisations have all their role to play in it, especially if it is to be offered not just in big cities but also in less populated areas, or places perceived to be outright problematic in terms of access to care, e.g. due to concentration of persons living in poverty, ethnical minorities etc.

Education of health care providers and their employees is just as important. They need to know more than just how to provide health care remotely from the purely technical perspective. They should also be trained to recognise and report signs of abuse, neglect or coercion of the patients, which may be more difficult to detect in the online environment.<sup>34</sup> We have already mentioned that various clinical guidelines and protocols have been, and will be, adopted in order to standardise and facilitate the individual procedures, thus adapting the already established ways of providing health care to the digital environment. These guidelines also need to set out the basic rules of referral to non-remote care. Not all patients and situations are suitable for telemedicine in the first place, but even those that are sometimes need to be moved to the traditional setting. After all, telemedicine is not a world

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<sup>33</sup> Cf. TALAL, Andrew H., SOFIKITOU, Elisavet M., JAANIMÄGI, Urmo et al. A framework for patient-centered telemedicine: Application and lessons learned from vulnerable populations. *Journal of Biomedical Informatics*. (2020, Vol. 112), available also at <<https://www.sciencedirect.com/science/article/pii/S1532046420302501>>.

<sup>34</sup> Ibid.

on its own, and the possibility of moving flexibly from non-remote to remote setting and back, as the particular patient's needs require, is highly useful.

For remote communication in telemedicine, video calls are usually preferable to purely audio ones, as doctors cannot read visual cues or establish comparable rapport with patients when merely talking on the telephone without seeing the patient.<sup>35</sup> In a call with a video component the health professional can more easily realise that the patient is not following the conversation. To help the patients, including but not limited to those with impaired hearing, any available automatic captioning technology should be utilised and turned on as the default.<sup>36</sup> But completely eliminating the option to do just an audio call is not desirable as it could deprive some patients – those who do not have access to the necessary technology for video calls or feel uncomfortable using it – of the opportunity to utilise remote care.

Choosing suitable platforms for telemedicine is not a simple task either. On the one hand, it is important that secured, encrypted communication is used in order to protect patient data and ensure confidentiality.<sup>37</sup> This also needs to encompass the possibility of identity verification on the part of both the patient and the health care provider, so that the potential for fraud or impersonation is limited. On the other hand, the selected platforms should be easy to operate, with a clear and accessible interface, and ideally not require to download too much data. We should keep in mind that the user experience can be quite different even with the same platform when it is operated on a telephone in comparison with a computer. Suitable platforms should include a chat function and it should be possible to send the link for the telemedicine connection via a text message or an e-mail.<sup>38</sup>

Given that telemedicine presupposes that a significant amount of sensitive personal information is transmitted out of direct control of the patient, privacy features of any utilised platform should also include the option to easily regulate consent (and revoke of consent) to store and use such data. Maintaining at least this type of control over personal information can improve an individual's sense of security in the system.<sup>39</sup>

From the point of view of “technical feedback”, the utilised platforms should allow the provider to keep track of waiting times, total encounter time, interruptions and audio and video quality; in addition, a system for “human feedback” by the patient (e.g. in a form of a simple questionnaire about satisfaction with and preference for telemedicine) should be

<sup>35</sup> Cf. PAPOUTSI, Chrysanthi, REED, Julie E., MARSTON, Cicely et al. Patient and public views about the security and privacy of Electronic Health Records (EHRs) in the UK: results from a mixed methods study. *BMC Medical Informatics and Decision Making*. (2015), available at <<https://link.springer.com/content/pdf/10.1186/s12911-015-0202-2.pdf>>.

<sup>36</sup> Ibid.

<sup>37</sup> In real world, a risk of data loss or leak cannot be completely avoided, but it should at least not be significantly greater than in a non-remote care setting.

<sup>38</sup> Cf. TALAL, Andrew H., SOFIKITOU, Elisavet M., JAANIMÄGI, Urmo et al. A framework for patient-centered telemedicine: Application and lessons learned from vulnerable populations. *Journal of Biomedical Informatics*. (2020, Vol. 112), available also at <<https://www.sciencedirect.com/science/article/pii/S1532046420302501>>.

<sup>39</sup> PAPOUTSI, Chrysanthi, REED, Julie E., MARSTON, Cicely et al. Patient and public views about the security and privacy of Electronic Health Records (EHRs) in the UK: results from a mixed methods study. *BMC Medical Informatics and Decision Making*. (2015), available at <<https://link.springer.com/content/pdf/10.1186/s12911-015-0202-2.pdf>>.

also readily available and promoted. In case of a technical malfunction, the provider should have an alternative prepared in advance.<sup>40</sup>

Last but not least, the health care providers need to properly consider how telemedicine encounters will be documented and implement the appropriate protocols and technical rules. This is very important to fulfil their legal obligation of keeping adequate medical records, to allow efficient combination of remote and non-remote care and to have a solid basis for reimbursement from the health insurance system.

## Conclusion

Modern information and communication technologies will undoubtedly continue to influence all fields of human activity, and their further development will only increase their impact. In medicine, technological advances manifest not only during on-site care in health care facilities but also in the remote setting. Telemedicine has both advantages and disadvantages and in the preceding text we have pointed out some of them. The demand for health services is not about to diminish; the population grows older and will likely require more of them. To ensure sufficient access and quality of such services, all available tools including telemedicine will have to be utilised. Certain population groups may have greater problems utilising remote care than others, and both the public authorities and non-governmental actors can do a lot to make that burden lighter.

Legal protection of patients, and especially those in a particularly vulnerable position due to physical or mental decline or disability, difficult social and economic circumstances or other similar factors, remains primarily in the domain of discretion of national lawmakers, executives and courts. But in order to review the topic from a broader perspective we have shown that international law, above all several important international treaties on human rights, provides certain legal basis for protection of vulnerable patients which the various contracting parties are obliged to, or at least should, observe and implement. The specific measures by means of which they do so are mostly left for them to decide. This does not mean that states cannot be criticised or pressured for lack of effective fulfilment of such obligations, but the mechanisms allowing direct enforcement of individual rights vis-à-vis the state are rare. In addition, right to health care is a complicated social right, which is unavoidably difficult to precisely define and use as a basis for a legal claim given that it depends to a large extent on various public policies, available public and private financing etc.

Nevertheless, there are meaningful steps which can be adopted by public bodies, health insurance companies and private entities and individuals in order to facilitate access to health care via telemedicine and its effective utilisation for the maximum welfare of the patients. We have presented some of the ideas, but more are to be expected to appear in the foreseeable future. Hopefully, the social impact of telemedicine's development will be predominately positive, and its benefits will outweigh any issues which it will bring about. Lawyers, health care providers and all other relevant professional should continue to work hard to achieve that goal.

<sup>40</sup> TALAL, Andrew H., SOFIKITOU, Elisavet M., JAANIMÄGI, Urmo et al. A framework for patient-centered telemedicine: Application and lessons learned from vulnerable populations. *Journal of Biomedical Informatics*. (2020, Vol. 112), available also at <<https://www.sciencedirect.com/science/article/pii/S1532046420302501>>.