

## Telemedicine and Its Legal Aspects

Davood Mohammad Amini

Department Of Computer Engineering & Information Technology (Ceit), Payame Noor University,  
Iran

*\*Corresponding Authors:* Davood Mohammad Amini, Department Of Computer Engineering & Information Technology (Ceit), Payame Noor University, Iran. [d.mamini@pnu.ac.ir](mailto:d.mamini@pnu.ac.ir)

### ABSTRACT

Telemedicine in the mean of distance medicine is one of the ways to provide health services that use new technology and modern computer medical equipment. Telemedicine offers advice extended services such as remote consulting or referral services to specialist (Tele consultation), Remote Radiology (Tele Radiology), Tele Cardiology, Tele pathology, And Robotic Surgery, using medical equipment such as Tele stethoscope (Stethoscope Remote ) and Remote ears exam, From Psychiatry internal Medicine, Rehabilitation, Children, Neurology And Women And childbirth, Tele dermatology, Genetic counseling and nutrition, Emergency And distance medical treatment, psychiatric treatment by Tele communications, Ongoing virtual education of Doctors, Medical and health information to individuals and remote surgery. The provision of telemedicine services to patients requires their informed consent about how services are provided, the treatment method and the potential risks of this method. Telemedicine providers sometimes are doctors and sometimes medical centers. When these services are provided by doctors, the patient's contracting party is a medical doctor who, for example, is advising or treating him or her online and, and the responsibility of the doctor is sometimes in the form of contractual liability due to breach of contractual obligations and sometimes in the form of no contractual liability if a fault comes from his error. In contrast, when services such as remote surgery are provided to patients at the treatment centers, the treatment center where the surgery is performed in is the patient's contract party. Even though the contractual relationship between the patient and the physician is not implied in this assumption, but the responsibility of the doctor's mistakes is based on grounds such as responsibility of the employer, responsibility for substitution and apparent representation with the health center.

**Keywords:** Telemedicine, Long distance medicine, Distance doctor, Hospital, Patient, Civil liability in Telemedicine.

### INTRODUCTION

The first type of telemedicine used was in the form of, companion of ill patient was hospitalized at home go to doctor and describe patient's condition and receiving Temporary treatment order Until the main visit by the physician, But remote medicine, in concept that is used today, may be thought of as starting up with the use of telephones and telegraphs. (Mohammad Amini, 2012). Today, electronic health is a new and growing field, indicating a crossroads of public health information exchange and trade exchanges. In e-health, health services are provided through the Internet and its related technologies.

The term "e-health" has been used since 2000 and its field of activity is very wide-ranging, including the creation of health information

electronic records for citizens via the Internet, telemedicine, and the insertion of specific devices in the human beings body for regulate the function of the body (Torabi; Safdari, 2008, p. 19). The transfer of medical information from one place to another by using electronic communication methods, which can be Different from a telephone call between two physicians to a robotic surgery by a surgeon residing in a remote location using satellite video technology. Among this, E-health or Tele health is referred to as telecommunications for clinical services, while Telemedicine also includes clinical, non-clinical, medical education, and research services (Mohammad Amini, 2012). But since the Internet market and such this services are so wide-ranging and Anonymous, Such activities and services require legal measures and the establishment of a regulatory and regulatory

## Telemedicine and Its Legal Aspects

boundary (Hamedan, 2007, p. 52). Because electronic health and the use of modern medical techniques bring new legal and moral challenges (Hamedan 2007, p. 55).

Of course, in foreign countries, laws and regulations as well as various legal texts can be found in this area, but because these activities are not solely for advanced and foreign countries, and within Iran, it also has extensive services such as telemedicine in the specialist Virtual clinic and in cooperation with medical universities is exploited. (Two weekly Newsletter, of new medicine 2012, p. 12).

In our legal system, there is a vacuum of laws and regulations, as well as an analysis and explanation of the legal issues of these affairs.

On the other hand, because of the wide field of electronic health, the legal study of all existing domains is not feasible and hence the present article deals with the legal clarification of one of these domains called Telemedicine. Therefore, since the provision of services through telemedicine leads to widespread and sometimes complex relationships between patients and service providers, questions and ambiguities are raised, such as how a patient's relationship with a remote doctor.

And According to this, how is the relationship between the patient and the providers of health services in the treatment center explained? Is patient's knowledge of telemedicine and telemedicine therapy essential? And finally, who is responsible for the patient's potential loss? Treatment center? Physician of treatment center or Physician who is providing treatment and counseling from long distance?

The answer to the above questions requires a comprehensive review of the telemedicine and the method of provision of health services to patients, the patient's relationship with the physician, the health center and the outside physician, and the responsibility for possible injuries to the patient, which will be explained in a separate section.

### PROVIDING HEALTH SERVICES THROUGH TELEMEDICINE

The provision of health services is often carried out in the categories under the contract of treaty; the contract is the result of oral or written

consent of the patient and the medical or therapeutic center for the provision of health services such as examination, treatment, surgery, or even counseling and prevention With patients against pay and reciprocity (Sharifi; Saghafi, 2012, p. 86). In the European legal system, the contract for treatment is in the area of service contracts (Barendrecht, 2002, P.781; Von Bar, 2009, p. 326) and in the legal system of Iran, including uncertain contracts is known (Katoozian, 2009, p. 98; Salehi, 2013, p. 151; Salehi, 2012).

This contract is permissible on the part of the patient and is required on the part of the doctor or the treatment center (Saghafi, 2012, pp. 6-10). The parties to the treatment contract are also providers of health services, including physicians and treatment centers and patients (Saghafi, 2012, p. 51). Now, with this introduction, we will review the provision of therapeutic services through Telemedicine. Tele means distance, and telemedicine means "remote medicine" (Karimi, Rahimipour, Hasani, 2010, p. 49).

Telemedicine connects the treatment centers and the treatment team or the transmission of diagnostic information and provides patients and providers of health services with the services and expertise of physicians in different areas (Altaq, Rezaei-rad, 2011, P. 24). It includes telemedicine services, counseling, surgery, radiology, palatalization, and home care remotely (Kazemi, 2012, pp. 5-4).

For example, a patient may be visited at his or her place of residence, via the Internet, and the visual-remote connection, and even control and examine his vital signs (see also: Rezaeirad, 2011, p. 27), or perform patient's surgery in the operating room with remote mechanical commands (Abbasi; Salahikia; Rezaei, 2013 p. 158).

Therefore, in our telemedicine, we do not face the simple relationships between the patient and the service provider, and there are complex relationships that sometimes lead to the relationship between the patient and the doctor outside the center of treatment.

Sometimes a physician outside the center of treatment and the patient's treatment site has no relationship with him, and these relationships

## Telemedicine and Its Legal Aspects

also affect the level of responsibility of service providers. Prior to entering these topics, the study of how to inform the patient and his satisfaction with the provision of health-care services through telemedicine is necessary.

### RESPONSIBILITY OF DAMAGES AND LOSSES TO THE PATIENT IN THE TELEMEDICINE

In the delivery of telemedicine services, the responsibility for damages and losses to patients can be imposed on health centers, doctors in health centers and physicians outside the centers or in the remote doctors.

### RESPONSIBILITY OF HEALTH CENTERS

As stated, in most cases patients refer to treatment centers, patients' relationship with the center is contracted, and consequently the responsibility of the health center is also contractual liability.

Therefore, if the telemedicine service is provided by the health center, the responsibility of the treatment center is based on the contract.

It should be noted, however, that the existence of contractual liability does not preclude litigation based on civil liability and surety, and hence the patient can benefit from both liability (Katowziyan, 2009, p. 316). The responsibility of health centers is sometimes directly attributable to their fault legal liability, and error, which, according to the principle of direct responsibility or <sup>1</sup>legal liability, should compensate for the harm done to the patient.

Because, as soon as a patient is contracted, there are obligations that failure to perform any of these obligations by the health center is considered a fault and responsible (khoshnoodi, 2013, p. 45).

In some cases, the responsibility of the health center is due to the fault and misconduct of doctors and their medical staff.

In the recent hypothesis, the responsibility of health centers is justified according to theories such as employer's responsibility<sup>2</sup>, succession responsibility, apparent representation theory, or organizational fault.

However, since often a remote doctor is not considered to be a staff member and a health center crew, it is not possible to take any ideas such as employer's responsibility or succession

responsibility. Therefore, the appearance representation theory seems to be more appropriate than other theories.

According to this theory, patients referring to a valid medical center think that the medical staff of the center has sufficient expertise and, accordingly, have been given a permit to enter the center and provide health services (Kavaler, Spiegel, 2003, p.255). Hence, if injuries are caused to the patients by remote and out-center physicians

According to the aforementioned theory, the patient can claim damages from the health center, because some of them known, the remote doctor as a health center representative (Carroll, 2001, p.397).

However, it should be noted, that the theory of apparent representation cannot be the basis for the responsibility of medical centers due to the lack of recognition and acceptance in our legal system. But the important thing is that in telemedicine the doctors and personnel are not a major risk, but a major risk for such services is by advanced equipment such as robotic arms in remote surgery or the Internet and communication devices.

Because disconnecting the Internet and the relationship with a remote doctor or disrupting the work of other equipment has irreparable risks and damages. Hence, some believe that providing telemedicine services has the greatest responsibility for health centers, because any disruption to the equipment causes the patient to suffer and the responsibility for the equipment disruption is related to the relevant health center (Hoffman, Podgurski, 2009, p. 1536).

### RESPONSIBILITY OF THE DOCTOR AT THE HEALTH CENTER

In some legal systems, such as the American legal system, the relationship between the treatment doctor and the remote doctor is explained in accordance with the rules and laws of the lawyer (Challacombe, Kavoussi, Patriciu, 2006, P.615).

According to this view, a remote doctor who advises or treats the patient is On behalf of treatment`s doctor, as a result his actions is for the treatment`s physician, and the responsibility is also addressed to the treatment`s doctor. However, with the assumption of this view, the

## Telemedicine and Its Legal Aspects

responsibility of the client does not prevent the represented from being responsible for his mistake and fault<sup>3</sup>. In another view has come that, In the telemedicine services Responsibility for injuries to the patient is addressed to both doctors, and both the doctor and the remote doctor are responsible for recovering the damage (Angood, 2001, p. 1449). It should be noted that in cases where the role of the doctor has been very faint in such a way that it is only in the specific case of interpreting the patient's tests that the doctor is consulted, the main responsibility for the patient's damage is to the Doctor who treat the patient. That may be this contractual liability (when the doctor works independently and in his own office to treat a patient and is a contracting patient) or coercive.

### THE RESPONSIBILITY OF THE DOCTOR OUTSIDE THE HEALTH CENTER (REMOTE DOCTOR)

The patient must prove the following for claiming damages from a remote doctor:

- The patient's relationship with a remote doctor who, in accordance with this relationship, has a doctor's duty of care<sup>4</sup> of the patient and has violated this duty.
- Violation of the duty of doctor's care has caused the patient to be harmed;
- Losses directly caused by a doctor's violation of duties (Carroll, 2001, P.392).

According to a traditional theory, when there is an implicit relationship between a doctor and a patient that in most cases this relationship appears in the form of a contract;

The doctor has a responsibility to take care of the patient and, in case of a violation, is responsible (Kumar, 2008, p. 173).

As stated in the last section, in most telemedicine services, the idea of a relationship between a patient and a remote doctor is possible, but nevertheless, some of the responsibilities of a remote doctor are more limited and less than doctors inside the health center knows about that (Kumar, 2008, p.174). In contrast to this point, it should be said that when a remote doctor, such as a general practitioner attending a clinic and a health center, treats the patient, such as telephone and internet services to the patient, the responsibility of the physician is as ordinary

doctors. Therefore, they are responsible for making mistakes and blaming them.

Examples of such services' mistakes include the lack of follow-up and Internet or telephone counseling or negligence in inviting the patient to the health facility if the patient is urgently and immediately needed. This case was also ruled by the court, and in a case<sup>5</sup>, the judge recognized the remote doctor because he could save his life as a child with meningitis by telephoning follow-up of his patient's condition (Hoffman, Podgurski, 2009, p.1550). Also, when the remote doctor as a guide manages the surgical team (Kazemi, 2012, p. 6),

In the event of failure and error, his liability is assumed. Of course, in this hypothesis, with the ideas such as the concept of the ship's captain<sup>6</sup>, the remote doctor could not only be responsible for his mistake and fault, but also responsible for the other members of the surgical team's mistake. Of course, this view is not accepted in the legal system of Iran, and no members of the surgical team are responsible for any other acts, and everyone is responsible for their fault<sup>7</sup> and mistake. But beyond the discussion in the Iranian legal system, the responsibility of the remote doctor can always be proved by proving his mistake and fault in accordance with Article 1 of the Civil Liability Act<sup>8</sup>.

### RESULTS AND SUGGESTIONS (CONCLUSION)

Telemedicine legal dimensions as a new tool for providing health care services to patients are in a midst of ambiguity. Therefore, this article has been formulated to clarify the legal issues of this service in Iranian law. How to obtain informed consent from patients, explaining patient relationships, treatment centers and physicians, including internal physicians at the health center and long-distance physicians, and finally, the civil liability assessment of service providers is one of the issues discussed in this article.

As stated, patients need to be aware of how these services are provided, its benefits and risks, and in general, with a clear and informed perspective, to welcome these services. The informed consent of patients due to the emergence of these services and their unpredictable risks are felt more than other health care services. Telemedicine providers are sometimes doctors and medical centers. When a patient is treated

## Telemedicine and Its Legal Aspects

directly by a doctor directly and without the intervention of a health center and remotely, the contracting parties are a patient and a remote doctor and the distance away and lack of direct access to the patient does not prevent does not prevent the contract's Coagulation. Providing counseling to a patient online by a doctor is an example of such contracts. In this hypothesis, if a patient is Hurt, harmed or injured as a result of a doctor's consultation, the damaged person may file a claim based on the contract Coagulated, and the physician's contractual responsibility or liability, based on his fault and error.

On the other hand, when a telemedicine service is provided through a health facility, the patient's contract is with the health center; even if, the patient is being treated by a remote doctor.

An example of such a contract is the patient's surgery at a health center by video conferencing and under the supervision of an external surgeon outside the treatment center, led by a team of surgeon. In the recent assumption, the responsibility of the health center is directly and indirectly implied. Direct responsibility of the center is due to equipment defects or disconnection with the surgeon during surgery and so on. But the indirect responsibility of the center is due to the errors of the medical staff or even to the remote doctors, which is justified by considerations such as employer responsibility, responsibility for substitution or apparent presentation.

Finally, the advancement of technology and the use of telemedicine services is an effective step in the medical sciences, including the benefits of access of patients in deprived areas to the professionals of this science through the Internet and its related technologies, without the need to travel long distances. But the potential risks of this new technology require clarification of relevant laws, regulations, and interpretations in order to protect the rights of patients better and more effectively.

### PERSIAN REFERENCES

- [1] Mohammad Amini, D, (2012) Telemedicine article, presented at 2nd Computer, Electronic and IT engineering Conference in Azad University. Khomain, Iran
- [2] Torabi, Mashallah; Safdari, Reza. (2008). Electronic Health, First Edition, Secretariat of the Supreme Council for Information.

- [3] Sakhafi, Maryam (2012). Comparative Study of Treatment Contracts in the Legal Systems of Iran and England, Thesis of MA in Private Law, Qazvin, Imam Khomeini International University.
- [4] Sechati, Maryam. (2014). Telemedicine (telemedicine) study from a legal point of view, Medical Journal Quarterly, Vol. 8 No. 28 pp. 143-167
- [5] Hamedan, Mahnaz. (2007). Ethical and Legal Challenges for Electronic Health, Journal of Medical Education, No. 1, 59-49.
- [6] khoshnoodi, Reza. (2013). Evolution of the concept of medical fault and its implications in the French legal system, Journal of Medical Law, seventh year, No. 26, 64-41.
- [7] Two weeks new medicine letter. (2012). Number 65, taken from the site :[www.novindaroo.com/65magazin.pdf](http://www.novindaroo.com/65magazin.pdf).
- [8] Sharifi, Sayyid al-Hamaddin; Sahafi, Maryam. (2012). The treatment's Contract Fee, Journal of Legal Thoughts, Volume 1, No. 2, 107-84.
- [9] Salehi, Hamid Reza. (2013). Legal nature of treaty contracts, Medical Journal Quarterly, seventh year, No. 27, 160-127.
- [10] Abbasi, Mahmoud (2006). Responsibility of the medical team in surgical operations, Journal of Legal Justice, No. 54, 78-59.
- [11] Abbasi, Mahmoud, Salehikia, Nasrin, Rezaei, Raheleh. (2013). Electronic Health; From Preventing Fences to Legislative Process; Medical Journal Quarterly, Seventh Year, No. 25, 188-158.
- [12] Katouzian, Nasser (2009). Public Contracts Rules, Vol. 1, 8th Printing, Tehran, Public Joint Stock Company.
- [13] Kazemi, Fariba. (2012). Telemedicine, taken from the site: [http://darman.Umsha.ac.ir/uploads/15363\\_telemedisiyan.doc](http://darman.Umsha.ac.ir/uploads/15363_telemedisiyan.doc)
- [14] Karimi, Abbas; Rahimipour, Faith; Hosni, Mehdi. (1389). Medical Remote Crime Caused by Electronic Health, Medical Journal Quarterly, Fourth Edition, No. 14, 69-47.
- [15] Nataq, Farzaneh; Raziyahad, Majid. (2011). The role of electronic health in the provision of health services, Journal of Educational Sciences, School of Health, Year 11, No. 42, 33-23.

### ENGLISH REFERENCES

- [16] Angood, Peter B. (2001). Telemedicine, The Internet, and World Wide Web, Overview, Current Status, and Relevance to Surgeon, World Journal Surgery, Vol.25
- [17] Barendrecht, Jansen. (2002). Principles of European Law, Service Contracts. London, European Law Publishers.
- [18] Challacombe, Ben; Kavoussi, Louis; Patriciu, Alexandru. (2006). Technology Insight, Tele

## Telemedicine and Its Legal Aspects

- mentoring and Tele surgery in Urology, Natu Publishing Group, Vol.3, 611-617.
- [19] Carroll, Roberta. (2001). Management Handbook for Health Care Organizations, 3rd ed, Joosey-Bass.
- [20] Hoffman, Sharona; Podgurski, Andy. (2009). E-Health Hazards, Provider Liability and Electronic Health Record Systems, Berkeley Technology Journal, and Vol.24:4.
- [21] Kavalier, Florence; Spiegel, Allen D. (2003). Risk Management in Health Care Institutions, London: Jones and Bartlett Publishers.
- [22] Koch, Bernhard A. (2011). Medical Liability in Europe, A Comparison of Selected Jurisdictions, Walter de Gruyter.
- [23] Kumar, Sajeesh; Marescaux, Jacques. (2008). Telesurgery, New York: Springer.
- [24] Showalter, J Stuart. (2008). the Law of Healthcare Administration. Chicago, Health administration Press.
- [25] Salehi, Hamid Reza. (2011). Civil liability of treatment procedure, Tehran: Legal publication.

## Endnotes

<sup>1</sup>. Direct or Legal Liability: According to the theory of direct or legal liability of any person, it is directly responsible for legal liability, and on that basis, all group therapy staff have a primary level of responsibility for their actions. Look at: Sechati, Mary (2012). Same, pp. 147-146.

<sup>2</sup>. Respondent Superior, Vicarious Liability, Apparent Agency, Corporate Negligence.

<sup>3</sup>. Article 666 of Iranian Civil Code - If the principal suffers loss owing to the fault of the agent, and if the agent is by common custom considered to be the cause of the loss, he will be responsible.

<sup>4</sup>. Duty of Care: Care responsibilities include routine care and skill utilization during examination, counseling and treatment. It is also a time when the patient's position, records, physical and physical symptoms are carefully examined. When necessary, enough tests are performed and efforts are needed to reduce the pain and suffering of the patient, whether the patient is treated or unwell. Look at: Koch Bernhard A. (2011). Medical Liability in Europe: A Comparison of Selected Jurisdictions. Walter de Gruyter. PP.171-172.

<sup>5</sup>. Hand v. Tavera. 864 s.w.2d 678 (cr.APP.Tex.1993). 20-Fletcher v. Ford 377 S.E.2d 206,207,209 (Ga.Ct, App.1988).

<sup>6</sup>. Captain the Ship: According to this theory, the surgeon is the captain of the ship and is responsible for all the events that occur during surgery. Also, the head of a place like the operating room, in addition to his personal and direct responsibility, is also responsible for his subordinate function. See Abbasi, Mahmud (2006). Responsibility of the Medical Team in Surgery, Journal of Justice, p. 54, p. 65. And Showalter. J Stuart (2008). The Law of Healthcare'

<sup>7</sup>. Circulars of Department of Health and Medical Education, 383798 / P / G, dated 27/2/1382.

<sup>8</sup>. Article 1 of the Civil Liability Act of Iran: "Anyone who has deliberately or, as a result of accident, intentionally or inadvertently suffered from loss of life or health or property or liberty or dignity or commercial reputation or to any other right created by law to the detriment of the material harmful Or another spiritual person is responsible for the damage caused by his actions."

**Citation:** Davood Mohammad Amini. "Telemedicine and Its Legal Aspects." *Research Journal of Library and Information Science*, 3(1), pp.15-20

**Copyright:** © 2019 Davood Mohammad Amini. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.