

Juridical Analysis of Telemedic Legality in Medical Services Using Technology

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Abstract: *The legal issues regarding telemedicine are ideally regulated in national law to provide legal certainty in responding to demands for medical technological developments and the use of telemedicine. With the existence of a legal system that regulates it, the development of this technology will be more directed in the corridors of applicable laws and values, provide legal certainty for providers and receivers, give attributive authority to law enforcement officials and institutions and ultimately will provide order, benefits and a sense of justice in society. Telemedicine can be said to be legal if in practice there are third parties who witness when we provide patient health services and all activities that are pursued such as nursing care between nurses and patients which are then stored in the medical record and carried out with informed consent. Utilization of telemedicine technology in medical practice can save the cost of treatment of regional patients referred to the hospital, simply by teleconsultation can submit complaints and illnesses to be treated without geographical barrier.*

Keywords: Telemedicine; Medical Services; Health workers

1. Introduction

The era of the industrial revolution 4.0 marked by the development of communication technology and globalization has opened up regional boundaries and even the world as if without geographical boundaries. Its influence in the health sector has provided space to facilitate patient access to online-based services. Health workers also benefit from being able to develop knowledge in the health field. This new era has led some countries to adopt methods to reduce disparities in health services known as telehealth or telemedicine.¹

WHO defines telemedicine as the delivery of health services involving health professionals, with the use of information and communication technology as a medium? Telemedicine services can include:²

- a) Exchange of diagnostic information,
- b) Disease management (curative, rehabilitative)
- c) Disease prevention (promotive, preventive)
- d) Research
- e) Continuing education and training.

Telemedicine practices can be in the form of consultations via video conferencing and e-mail, sending medical imaging results both radiological and pathological, or communication before the patient is referred to another health facility. The difference between the term telemedicine and telehealth is that limited telemedicine only involves medical personnel. Meanwhile, telehealth has a broader meaning, not only

limited to certain professional circles but even patients and parties outside the health professional.³

The rapid development of technology in the field of health services demands that both health workers and other personnel play a role in providing services that are fast, efficient and effective. Telemedicine is one of the breakthroughs that is expected to play an important role in improving the quality of health services. Utilization of technology by sharing health information and providing health services by overcoming geographical, distance and time constraints will provide great benefits for patients and health workers if their application has a direct or indirect impact on meeting the needs in health care. There are at least 4 main elements that are closely related to telemedicine namely:⁴

- a) Serves to support clinical activities
- b) Connecting between individuals without having to face to face physically so that it can help overcome geographical obstacles
- c) Using various information technology media and telecommunications
- d) Aims to improve the quality of health

The reality and implications of legal issues concerning telemedicine above are ideally regulated in national law, as has been done by India, Malaysia and other countries so as to provide legal certainty in responding to demands for technological developments in the medical field and the use of telemedicine. With the existence of a legal system that regulates it, the development of this technology will be more directed in the corridors of applicable laws and values, provide legal certainty for providers and receivers, give attributive authority to law enforcement officials and institutions and ultimately will provide order, benefits and a sense of justice in society. The problem raised in this paper is how is the legal regulation about the legality of

¹Irvan Tanpomias (2018 September 10) Revolusi Industri 4.0 dalam Dunia Kesehatan Koran Sindo Retrieved from <https://nasional.sindonews.com/read/1337174/18/revolusi-industri-40-dalam-dunia-kesehatan-1536571793>

²Organization, World Health. 2010. Telemedicine: Opportunities and Developments in Member States. Report on the Second Global Survey on eHealth 2009. Geneva: World Health Organization https://www.who.int/goe/publications/goe_telemedicine_2010.pdf. p 8.

³Ibid.

⁴Ibid. p. 9

telemedicine in medical services and the use of technology for the use of telemedicine in medical practice?

Telemedicine

The word tele in Greek means far, at a distance, so that telemedicine can be interpreted as a medical service, even though it is separated by distance.⁵ In general telemedicine is the use of information and communication technology combined with medical expertise to provide health services, ranging from consultation, diagnosis and medical treatment, without limited space or implemented remotely.

Telemedicine is also a health practice using audiovisual communication and data including care, diagnosis, medication consultation and medical data exchange and long-distance scientific discussions. The scope of telemedicine is very broad, covering the provision of long-distance health services (including clinical, education and administrative services), information transfer (audio, video, graphics), using telecommunications devices (two-way interactive audio-video, computers, and telemetry)) by involving doctors, patients and other parties. Another understanding of telemedicine is the application of clinical medicine by making medical information transferred through interactive audiovisual media.⁶

Telemedicine is also a general concept that applies electronic communication technology or telecommunications technology that can send information about a list of all types of diseases including the education in the form of e-learning and information for a patient.⁷

The need for the application of a telemedicine system is the use of facsimiles, telephone sets to exchange information through transmission and evaluate images such as radiographs or images of injuries or illnesses in videoconferencing in an interactive, easy to use and recognizable manner to the public and the location of communication devices that are easily accessible.⁸

The application of telemedicine is also useful for: primary and advanced care arrangements in the public health system, electronic communication in making referrals for follow-up care, assisting in connecting patients and main hospitals with care clinics in remote areas and can enhance collaboration between specialist doctors and referral nurses.⁹

Medical services

⁵Anwar, Arman (2013) Aspek Hukum Penggunaan Telemedicine. FIKI 2013, 1 (1). Retrieved from <http://eprints.dinus.ac.id/2078/>

⁶Fabbrocini, G., De Vita, V., Pastore, F., D'Arco, V., Mazzella, C., Annunziata, M.C., Cacciapuoti, S.,Mauriello, M. C., Monfrecola, A., *Teledermatology: From Prevention to Diagnosis of Nonmelanoma and Melanoma Skin Cancer. International Journal of Teledik and Applications*. Vol. 2011, hlm.5

⁷A. Riza Supono, *Penerapan Teknomogi Informasi Pada Dunia Kedokteran, Peluang dan Hambatan Penerapan Pengobatan Jarak Jauh Berbasis Internet di Negara Berkembang*, Application of Information Technology in the World of Medicine, Opportunities and Obstacles to the Application of Internet-Based Remote Medicine in Developing Countries (Bandung: Informatika, 2006)

⁸*Ibid*,

⁹Patrick Davey, *At a Glance Medicine*, (Jakarta: ECG, 2005)

Hospital is a medical referral implementing unit that has the main function to carry out curative and rehabilitative health efforts. The development and construction of hospitals continue to develop physically but are often not matched by good management including management of medical services. Medical services are one type of hospital services that provide services directly to patients, together with nursing services and support services.

Medical services as a system consists of three main components. This component includes the input (input), process and output. The resources owned by the hospital consist of personnel, organization and management, policies and procedures, medical facilities and infrastructure, as well as patients served; second, the medical service process carried out in the management of patients, and third is the output in the form of the results of medical services at the hospital in the treatment business and provide satisfaction at the hospital service.

Medical service personnel are doctors and dentists who have the authority to examine and treat patients and can participate in the duties and functions of the hospital. This medical staff can be considered as the heart of the hospital, good and bad organization of medical staff will directly affect the quality of medical services. Forms of organization and medical service management in government hospitals refer to line and staff organizations based on Minister of Health Decree No. 134 of 1978. Medical staff in ministerial decrees, act as functional implementers who report to the director.

Organization in private hospitals varies, depending on the condition of the hospital. To improve the quality of hospital services, a medical committee was formed which functions to provide advice and has the responsibility of maintaining the discipline of medical staff members.

Medical service policies and procedures compiled and established in hospitals are one of the parameters that can be used to assess management performance in supporting good medical services. In an effort to improve the quality of this service, a medical audit is needed as a means of control for medical services, both for outpatient, inpatient and emergency units.

2. Research Methods

This type of research is normative legal research that examines law as norms, rules contained in the law, and various laws and regulations. The problem approach used in this study is the normative juridical approach. The data source used in the study was only one, namely secondary data sources. Secondary data is data that includes laws and regulations, official documents, books, research results in the form of reports, diaries and so on. The collected data is then analyzed qualitatively by conceptual examination of an opinion, so that a clear purpose can be obtained as contained in that opinion.

3. Results and Discussion

Telemedicine can be said to be legal if in practice there are third parties who witness when we provide patient health services and all activities that are pursued such as nursing care between nurses and patients which are then stored in the health data record (medical record) and carried out with informed consent. This type of telemedicine service generally has no ethical issues as long as the roles and responsibilities of each party are clearly regulated, tariff / remuneration arrangements, and clarity of information provided to patients. In general, the face-to-face doctor remains responsible for the service being performed and is the patient's physician in charge at least at that time. Telemedicine is considered legal if it meets the following requirements:

a) Legal aspects

The legal aspect states that, citizens must be protected from the practice of ill health workers, therefore every health worker who practices telemedicine must have a practice license from the government.

b) Safety standard

Attention in the application of technology in health care is the safety / patient safety. The telemedicine service system must be able to guarantee safety for patients so that even in telemedicine treatment, there must still be doctors and nurses who carry out and are responsible for the actions of patient care.

c) Data Security

Recording telemedicine services that are part of telehealth requires electronic records (electronic health records) that are prone to loss of privacy, confidentiality and data security.

d) Health workers

Every health worker who conducts telemedicine is subject to regulations regarding general health practice. Health workers who provide online services must have a Medical Practice License (MPL) issued by the government and must be in accordance with their competence and clinical authority.

The development of the sophistication of information technology tools is very rapid. Nowadays we can easily access the Internet, telephone lines and also GPRS already available in almost all regions of Indonesia. This should make us more able to develop techniques and ways to provide services to the community, especially people in remote areas. Communities in remote areas will be very happy if they are introduced to sophisticated technology.

Regarding the procedure of implementing online-based medical service practices according to Agung Dirgantara explained that if you want to join as a member, the first thing a doctor must have is a Bachelor of Medicine education certificate, has a registration certificate issued by the Medical Council and has attended the Registrar's Office clinic for 2 (two) years, then follow the selection by written examination conducted by the company. After passing the selection, the doctor will be given learning about the use of the application and how to operate the application in serving patients in accordance with the conditions set by the company.

Regarding the work time used in telemedicine medical services. Further explained that the working time used uses a time sharing system that can be chosen by the doctor. The division of time provided is flexible so that doctors can adjust to the time of practice in other places (conventional practice).

It was further explained that the procedures for the services provided were;

- a) The doctor can choose consultation questions according to his area of expertise. Then the consultation questions that appear at the top of the application system must be taken and answered first, may not take questions that are not the top. Given the questions that can be read can be read by other doctors, the selection system and taking consultation questions are carried out on a scramble.
- b) In terms of identifying and determining the disease, the first thing the doctor does is conduct a health interview process (online) of patient complaints. After the doctor knows the patient's illness, the doctor will notify the patient of 3 (three) or more types of illness that are approaching as a comparison of the symptoms experienced by the patient. In health science the determination of such diseases is called differential diagnosis.
- c) If the consultation process, the patient wants a drug, the doctor will recommend the drug, but with the condition, the recommended drug is a drug that is labeled green or commonly referred to as over-the-counter drugs.

The arrangement of the information system in the health sector by the Ministry of Health has been started since 1982 by the Data Collection and Processing Division in the Planning Bureau until 1985 the Health Data Center (Pusdakes) was formed which was finally established in 2010 as the Data and Information Center (Pusdatin) as the executor of the task Ministry of Health in the field of health data and information. The Center for Data and Information has taken the initiative to compile:

- a) Health Information System (SIK) regulations and standards outlined in the form of activities, indicators, targets, as outlined in the Action Plan.
- b) Minimum data set based on the needs of the main units in the Ministry of Health of the Republic of Indonesia.
- c) Making a health data dictionary (Health Data Dictionary or HDD), as a requirement needed to create integrated data communication.
- d) Integrating SIK through Exchange Data Architecture (web services) development.
- e) Revise SP2TP (Community Health Centers Level Recording and Reporting System) or SP3 (Recording and Reporting System) and SIMPUS (Community Health Centers Management Information System) with a new name, namely Community Health Centers Information System.

One of the health sectors which is currently developing in various countries in adopting information and communication technology (ICT) is e-health (e-health). According to WHO, e-health is briefly the use of ICTs for health. In a broad sense, e-health is related to efforts to increase the flow of information, through electronic means,

to support health services and management of the health system.

Consultation and patient care data obtained from Hospital Information Systems and Telemedicine at Health Care Facilities (Fasyankes) are known as Electronic Medical Records (RME). With the effort to integrate health data from all health facilities into national health data, one of the benefits is that each individual's health data can be collected into an Electronic Health Record (RKE).

The RKE therefore covers a variety of functions and information including patient demographics, progress notes, problems, medications, vital signs, medical history, immunization status, laboratory data, radiology reports, scheduling, transcription, erection, evaluation and coding management, conditions specifically care, major complaints, evidence-based decision support, and health care.

Progress in the field of ICT that is used to improve the quality of medical practice and health services is merely as a support to improve the effectiveness and efficiency of administration and facilitate communication.

In an effort to make new regulations or improve existing regulations, the following signs need to be considered:

- a) Health Information System is a core component of e-health because this system manages health data and information at all levels of government in a systematic and integrated way to support the management of health services to the community.
- b) Medical practice according to the mandate of the Medical Practice Law (UUPK) aims to: provide protection to patients; maintain and improve the quality of medical services provided by doctors and dentists; and provide legal certainty to the public, doctors and dentists.

In Indonesia, regarding regulations related to telemedicine, namely Decree of the Minister of Health of the Republic of Indonesia Number Hk.02.02 / Menkes / 409/2016 Regarding Trial Hospitals for Video Conference and Teleradiology-Based Telemedicine Service Programs. In considering the Minister of Health Decree, it was explained that health information technology in the form of telemedicine services based on videoconferencing and teleradiology provides benefits in increasing the accuracy and speed of medical diagnosis and medical consultation in hospitals that do not yet have certain specialist doctors;

Telemedicine services based on videoconferencing and teleradiology are forms of health services with certain methods that require trials in their operation; Based on the considerations as stated in the Ministerial Decree above, the tasks of hospitals which are capable of testing telemedicine service programs based on videoconferencing and teleradiology are:

- a) Provide medical information (medical records) of patients to supporting hospitals for the benefit of the consultation, education and research processes;
- b) Obtain informed consent from the patient and / or family of the patient before carrying out telemedicine

- referencing based on videoconferencing and teleradiology to the health care facilities of the provider;
- c) Providing infrastructure in the form of an adequate internet network, electricity, work space and others needed to support the smooth operation of telemedicine based on videoconferencing and / or teleradiology; and
- d) Making standard operational procedures for telemedicine services based on videoconferencing and teleradiology. Hospital health workers who are capable of piloting videoconferencing-based telemedicine service programs must ensure the competence of hospital health workers who are able to carry out the consecrated health services.

Conducting trials of telemedicine service programs based on videoconferencing and teleradiology set forth in a cooperation agreement between the head or director of the supporting hospital with the head or director of the hospital being managed, and known by the Head of the local District / City Health Service.

Technology Utilization of the Use of Telemedicine in Medical Practices

Telemedicine has previously been developed in Indonesia as a pilot project since 2012 with only teleradiology services. In 2016, telemedicine was developed into three types of telemedicine services, including teleradiology, teleelectrocardiology and teleultrasonography. Teleconsultation is also currently being developed, which until now this service is in the stage of further development and testing.

The legal principle of the use of telemedicine in medical practice that is medical data is something that is confidential (privacy) which is only entrusted by the patient to the doctor who handles and still must maintain the confidentiality of patient data.

Regarding the telemedicine program, hospitals in the face of a strategic plan (Renstra) in the future must think about this because the demands of society have reached the digital era through the development of systems and good human resources.

There are several benefits of telemedicine, which are first expected to save the cost of treatment of regional patients referred to the hospital, simply by teleconsultation, they can submit complaints and illnesses to be treated without having to be referred far. The second advantage is that it can share knowledge between doctors, so doctors in the area can get better knowledge related to patient illnesses. Third, the patient's case can be resolved faster.

Telemedicine will find adequate health facilities to be able to interact with the webcam with doctors between health facilities. Telemedicine involves patients, doctors who handle patients, and medical equipment that is in the vicinity of patients, including staff that support patients, as well as long distance doctors at designated health facilities with equipment that also supports for these activities.

Telemedicine services should not be developed to destroy, but rather strengthen the noble values of medical ethics

based on KODEKI and doctor oaths. Thus, IDI and MKEK need to pay close attention to the development of this telemedicine service because in this practice medical consultation is given like a normal doctor's practice, and until now there has not been any regulation controlled; telemedicine doctors don't need SIP, and their services don't need permission.

Based on the Decree of the Director General of Health Efforts for the Ministry of Health of the Republic of Indonesia Number: HK.02.03 / V / 0209/2013 dated January 31, 2013 concerning the Implementation of Telemedicine Pilot Project and Designation of Telemedicine Health Service Facilities in Teleradiology and Telecardiology. then stipulated 2 (two) supporting health service facilities namely for telemedicine, health service facilities (fasyankes), the envoy is RSUPN dr. Cipto Mangunkusumo Jakarta and for the field of telecardiology is the Harapan Kita Heart and Blood Vessels Hospital in Jakarta. While the health facilities are managed to consist of 18 (eighteen) health facilities in the form of field hospitals, the main clinics of the Ministry of Health, ambulances, and Community Health Centers, and hospitals that are scattered in several underdeveloped areas, borders and islands (DTPK).

This decree is only an appointment letter from the Ministry of Health of the Republic of Indonesia to hospitals and health service facilities that are considered to have telemedicine technology systems and devices and the availability of a good internet network. The cooperation regulated in this decree only covers the provision of expert services and consultations in the field of radiovascular and cardiovascular emergencies (especially acute coronary syndromes). For this reason, the mechanism and technique for sending electronic transmissions of radiographic images and all radiological modalities and ECG records are called teleradiology and telecardiology. For diagnostic services, conventional plain photo medical consultations, CTScan and MRI and ECG, the amount of service is determined in the decree.

Considering that this decree is only an appointment to a health service facility, of course, more emphasis is placed on regulating the technical aspects of the service rather than regulating the legal relationship aspects. Therefore, in accordance with the dictum of the seventh decree stating that the legal relations arrangements of the parties in the implementation of the technology pilot project will be further outlined in a separate cooperation agreement between the supporting health facilities and be able to be known by the Director General of Health Services Ministry of Health of the Republic of Indonesia .

4. Conclusion

Telemedicine can be said to be legal if in practice there are third parties who witness when we provide patient health services and all activities that are pursued such as nursing care between nurses and patients which are then stored in the health data record (medical record) and carried out with informed consent. In providing medical care remotely it requires a general health policy (integrated) that regulates practice, standard operating procedures, ethics and

professionalism, safety, patient confidentiality and information assurance provided. All activities must be integrated with strategies and policies for the development of medical practices, the provision of nursing care services, and education and training systems that use the health / internet-based information model. Regulations related to telemedicine, namely Decree of the Minister of Health of the Republic of Indonesia Number Hk.02.02 / Menkes / 409/2016 Regarding the Trial Hospital for Video Conference and Tele radiology Based Telemedicine Services Program.

Utilization of telemedicine technology in medical practice: the first is expected to be able to save the cost of treatment of regional patients referred to hospitals, simply by teleconsultation can submit complaints and illnesses to be treated without having to be referred far. The second advantage is that it can share knowledge between doctors, so that doctors in the area can get better knowledge related to patient illnesses. Third, the patient's case can be resolved faster.

The government needs to be serious in implementing telemedicine in Indonesia both operationally and financially. Regarding the context of practice policy, standard operating procedures, ethics and professionalism, security, confidentiality and guarantee of information to patients need to be made comprehensive regulations.

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