

SLCMC 2021

International conference «State and law in the context of modern challenges»

**FINANCIAL SUPPORT PROBLEMS THAT TELEMEDICINE
FACES IN RUSSIA**

Margarita B. Razgildieva (a)*, Anastasia A. Malysheva (b)

*Corresponding author

(a) Saratov State Law Academy, 1, Volskaya Str., Saratov, 410056, Russia, Razgildieva@yandex.ru,

(b) Saratov State Law Academy, 1, Volskaya Str., Saratov, 410056, Russia, asyamalysheva@mail.ru

Abstract

The implementation of telemedicine technologies in medical practice is considered to be a necessary step in shaping the future of Russian medicine. The success and speed of its achievement are directly determined by the funding available for this purpose. This article characterizes the legal aspects of the financial support for the introduction and use of telemedicine technologies in Russia. Thus, the authors describe who is to bear expense for medical institutions to implement telemedicine technologies; whether the use of telemedicine technologies can be paid by the compulsory health insurance funds. Positive and negative experience of foreign countries in dealing with this issue is analyzed. Many countries have no proper telemedicine reimbursement laws; not all expenses are stipulated in the current health insurance systems. Proceeding from the legal regulations of the financial support for the implementation and use of telemedicine technologies in Russia, the analysis of their development possibilities leads to the conclusion that conditions for their active development have not yet been formed. The current Russian model of distribution of expenditure liabilities for financing the state (municipal) healthcare system presupposes the active participation of the RF subject authorities in state healthcare policy-making and its implementation. The interests of medical organizations in as much as it concerns funding for telemedicine introduction and application shall be validated and guaranteed by law. Digital healthcare modernization cannot be based on federal programs only. The constituent entities of the Russian Federation shall take a proactive position in this matter, shaping a modern regional healthcare policy.

2357-1330 © 2022 Published by European Publisher.

Keywords: Financing digital technologies, health care financing, telemedicine

1. Introduction

Digitalization processes are financed by a number of state programs and federal projects. For example, one of the targets of the national project "Health Care" is the creation of a centralized subsystem of the state healthcare information system "Telemedicine Consultation" in all federal entities by December 31, 2022. In addition, cash flows from other budget financing sources of the Russian Federation are being channeled to the digital modernization of Russian health care. It is important to shape a platform for understanding the system of resources that the state shall allocate in order to integrate and implement telemedical technologies and determining the procedures for medical organizations to get and use such technologies.

2. Problem Statement

Following global trends, telemedicine in Russia is considered to be an inevitable and imminent future medical care component and is legislated in many aspects. However, laws do not provide a clear answer to the question what funding sources are to be used while integrating and implementing telemedicine technologies in free medical care system. Accordingly, there arise a number of questions concerning the legal regulation of the tasks set forth in the policy documents and connected with the introduction of telemedicine technologies. Therefore, it is essential to analyze the financial aspect of the program and determine who shall undertake financial obligations to provide health care organizations with telemedicine technologies; and find out whether the use of telemedicine technologies can be paid by the compulsory health insurance funds.

3. Research Questions

1. Telemedicine trends in the world and in Russia.
2. Russian model of financing integration and application of telemedicine technologies.

4. Purpose of the Study

The purpose of this research is to analyze the development of telemedicine technologies within Russia, based on the legal regulation of the financial support of their integration and application.

5. Research Methods

The methods of induction, deduction, system analysis, hypothesis formation and hypothesis testing were used in the research. The authors also used the methods and principles of determinism. Using the methods of current, prospective and statistical analysis and synthesis, the authors summarized the practice of implementing digital technologies in the healthcare system in Russia. The comparative legal method was used to establish the specific features of some foreign medical care systems applying telemedicine technologies. Methods of institutional and functional classification were used to systematize the data

obtained. The application of these methods identified a number of issues that require detailed scientific analysis.

6. Findings

The importance of technological solutions for remote medical care has grown immensely in the conditions of the coronavirus pandemic (Loeb et al., 2020; Tavakoli et al., 2020). But the use of telemedicine could potentially improve the diagnosis and treatment of other diseases as well. There is research on its use in pediatrics (Andres et al., 2018), in the treatment of chronic heart failure (Waisman, 2016), neurology (Hatcher-Martin et al., 2020), oncology (Sirintrapun & Lopez, 2018) and other areas. The legal aspects of the financial support mechanism for telemedicine implementation are also relevant, as it is necessary to fix the procedure for its financing.

Telemedicine knowledge is becoming deeper, which results in a larger number of studies on the subject in various scientific fields and, consequently, in the findings obtained. For example, a study of the application of IoT-based telemedicine technologies found that between 2014 and 2020, 2,121 articles were published on the subject (Albahri et al., 2021). Russian science is no exception as well, with a rapidly growing number of scientific studies devoted to various aspects of the implementation of digital technologies in Russian healthcare, including those related to the direct medical care. The volume and number of scientific developments form an obvious need to compile and summarize their results on an ongoing basis, making it possible to track the directions of scientific developments, their effectiveness, and the dynamics of practical changes. This area can be developed both in initiative research projects led by independent universities, or within relevant grants.

Following global trends, telemedicine in Russia seems to become an integral part of medical care within the foreseeable future. However, law currently limits its application to consulting, dynamic monitoring and correction of previously prescribed treatment. On the governmental level, Russian telemedicine is considered from the perspective of its participation in the global market of medical services (Strategy for Development of Service Export until 2025).

How much successful the solution of this task may be is largely determined by the sufficiency of funding, as well as the effectiveness of the organizational and legal mechanism for the use of these resources to implement telemedicine technologies, as it was planned. Thus, the Government of the Russian Federation provides for subsidies to leading companies that develop and implement Russian digital transformation technologies, as well as projects aimed at introducing domestic platform solutions. However, these subsidies are allocated on a competitive basis and cannot lay the foundation for telemedicine technologies to be implemented on a national scale.

Many states have insufficient legal and regulatory framework regarding telemedicine reimbursement, not everywhere it is included in the current health insurance systems, but all are interested in integrating it as quickly as possible into national health systems (Nittari et al., 2020; Ohannessian et al., 2020), as it can significantly optimize health care costs (Hong et al. 2020).

It is also necessary to consider the negative experiences of those countries that are unable to implement such technologies effectively, not only due to the failure to include them in the national health insurance system, but also due to such factors as having no unified information system. This is aimed to

exchange medical documents, no confidentiality regulations, or using as telemedical some technological techniques that clinical acceptability and cost-effectiveness have not been pre-assessed (Omboni, 2020).

Telemedicine technology is seen as a technological element in medical work and services, which can only be carried out in compliance with medical care procedures. There is an increasing number of health care procedures that could use telemedicine technologies. The healthcare organizations holding telemedicine consultations are to provide the premises, communication facilities and equipment necessary for such consultations, which makes the issue of funding sources to cover these costs vital.

The legal regulation of telemedicine in Russia is conventionally divided into two streams: health care legislation and legislation on personal data protection (Varyushin, 2018). It is possible to distinguish also the third stream that includes regulations on financial support to integrate and implement telemedicine technologies, which are an integral part of Russian legislation on the financial healthcare support in general. However, the above-mentioned legal regulation does not determine clearly the funding sources used to integrate telemedicine technologies and provide their use in free medical care system.

Russian public healthcare system is financed from three sources: compulsory medical insurance funds (hereinafter referred to as CMI), federal and regional budgets (in the form of transfers to territorial CMI funds and/or subsidies directly to the medical organization belonging to the public healthcare system), as well as revenues from providing paid medical services.

It is worth noting that private medical organizations can also get funding from CMI funds, federal and regional budgets, to reimburse the costs, including expenditure on telemedicine implementation. However, legal regulation of these relations is different from the one discussed in this article.

The main source of financing the current work of public medical organizations is the CMI funds that are strictly earmarked. Funding can be allocated only for those expenses that constitute the tariff basis to pay for the medical care rendered. The structure of this tariff does not include the expenditures for fixed assets which cost exceeds 100,000 rbl per unit. This means that it is impossible to allocate the CMI resources for the purchase of expensive equipment used to implement telemedicine technologies.

The fundamental federal health care laws legitimizing the use of telemedicine technologies are Federal Law 242-FZ dated July 29, 2017 "On Amending Some Legislative Acts of the Russian Federation in as much as it Concerns Application of Information Technologies in Health Care" (hereinafter referred to as Federal Law 242-FZ), and Federal Law 323-FZ dated November 21, 2011 "On Basics of Health Protection of the Citizens in the Russian Federation" (hereinafter referred to as Federal Law 323-FZ) that do not specify any rules regarding financial support to implement and use such technologies. Federal Law 326-FZ dated November 29, 2010 "On Compulsory Medical Insurance in the Russian Federation" has no any clauses regarding the use of CMI funds for these purposes either.

In accordance with Federal Law 242-FZ, the procedure used to organize and provide medical care using telemedicine technologies is established by an authorized federal executive body. This procedure was approved by Order 965n of the Russian Ministry of Health dated November 30, 2017 "On Approval of the Procedure for the Organization and Rendering Medical Care with the Use of Telemedicine Technologies" (hereinafter referred to as Order 965n). This order stipulates that medical care with the use of digital technologies can be paid or free for the patient. However, Order 965n does not explain what resources will be used to pay for such care, if it is provided free of charge.

The analysis of the legislation suggests that there are no special federal regulations on funding integration and implementation of telemedicine technologies. On the regional level, most constituent entities of the Russian Federation have either formal, fragmented or no regulations in the free medical care system. This means that financing is carried out according to general rules, i.e. it can be provided by the CMI funds or financed by other state budget system resources (federal and/or regional).

CMI funds may be allocated for these purposes if this is provided for in the basic CMI program, approved annually by the Russian government as part of the program of state guarantees of free medical care for citizens. The program of state guarantees for the current year and the planning period up to 2023 stipulates that the costs of medical care with the use of telemedicine technologies should be taken into account in the per capita financing norm within the framework of the basic CMI program. The costs of medical organizations for purchasing equipment to provide medical care with the help of telemedicine technologies must be financed from federal and regional budgets. This document also establishes that territorial programs as part of differentiated medical care standards may also stipulate the use of telemedicine technologies.

In accordance with par. 12 of Order 965n, these technologies can be used when rendering primary health care; specialized health care, including high-tech medical care; emergency care, including specialized emergency care; and palliative care. Under Federal Law 323-FZ, funding to render these types of care is guaranteed from the CMI funds. It is necessary to supplement this law with the clause that basic medical care and corresponding telemedicine technologies shall be funded from the same sources if rendering such medical care is stipulated by law.

The basic CMI program can be expanded by territorial state programs guaranteeing free medical care to citizens, which programs shall be formed in each region. This part of the territorial program must be financed by transfers from the budget of the specific RF constituent entity to the territorial CMI fund of the same region. The territorial programs of some Russian regions could provide consultations with the use of telemedicine technologies at the expense of CMI funds. Sometimes a territorial program of state guarantees includes a reference to telemedicine, but a local CMI program does not ensure counselling (or any other types of medical care) with telemedicine technologies applied.

Thus, consultations with the use of telemedicine technologies at the expense of CMI funds are financed only when they cover the types of medical care under the basic CMI program. The costs of purchasing the respective equipment should be financed from other budgets, which is in line with the model of distributing the financial healthcare burden between different budget types within the budget system of the Russian Federation. However, still not sufficiently clear is the approach whereby the financial aspects of healthcare digitalization are not fixed at federal level but are determined by annually adopted by-laws. This may create a sense of transience and probable revision on behalf of the Russian Government.

7. Conclusion

Widely recognized and typical for the current situation is the fact that there are some rapid changes connected with integration of new technologies. We should probably admit inappropriate the idea of expecting longstanding draft legislation based on the analysis of all possible consequences. However,

what is essential to provide nowadays is adequate rapidity of legal changes aimed at eliminating negative outcomes identified in practice, including gaps, inconsistencies or other shortcomings. This observation is also essential when it comes to financing the implementation of telemedicine technologies. Digital healthcare modernization cannot be based on federal programs only. The constituent entities of the Russian Federation are obliged to be actively involved, shaping a modern regional healthcare policy. The interests of medical organizations in as much as it concerns funding for telemedicine introduction, and application shall be validated and guaranteed by law.

The use of telemedicine technologies even for consultations is possible only if the appropriate equipment and communication means are available. Solving the task of providing the healthcare system with such equipment should be carried out by a single organizational centre coordinating the policy of the constituent entities of the Russian Federation in this area and giving them recommendations.

Acknowledgments

M.B. Razgildieva prepared this paper within the framework of the Russian Foundation for Basic Research Grant No. 18-29-16102 "Transformation of legal personality of participants in tax, budget and public banking relations in the context of digital economy development".

References

- Albahri, A. S., Alwan, J. K., Taha, Z. K., Ismail, S. F., Hamid, R. A., Zaidan, A. A., & Alsalem, M. A. (2021). IoT-based telemedicine for disease prevention and health promotion: State-of-the-Art. *Journal of Network and Computer Applications*, 173, 102873.
- Andres, E., Talha, S., Hajjam, M., & Hajjam, A. (2018). State of Art of the French Telemedicine Projects in the Field of Chronic Heart Failure. *J. Clin. Med. Ther.*, 3, 8.
- Hatcher-Martin, J. M., Adams, J. L., Anderson, E. R., Bove, R., Burrus, T. M., Chehrena, M., & Govindarajan, R. (2020). Telemedicine in neurology: telemedicine work group of the American Academy of Neurology update. *Neurology*, 94(1), 30-38.
- Hong, Z., Li, N., Li, D., Li, J., Li, B., Xiong, W., & Zhou, D. (2020). Telemedicine during the COVID-19 pandemic: experiences from Western China. *Journal of medical Internet research*, 22(5), e19577.
- Loeb, A. E., Rao, S. S., Ficke, J. R., Morris, C. D., Riley, L. H., & Levin, A. S. (2020). Departmental Experience and Lessons Learned With Accelerated Introduction of Telemedicine During the COVID-19 Crisis. *The Journal of the American Academy of Orthopaedic Surgeons*, 28(11), e469–e476.
- Nittari, G., Khuman, R., Baldoni, S., Pallotta, G., Battineni, G., Sirignano, A., Amenta, F., & Ricci, G. (2020). *Telemedicine and e-Health*, 26(12), 1427–1437.
- Ohannessian, R., Duong, T. A., & Odone, A. (2020). Global Telemedicine Implementation and Integration Within Health Systems to Fight the COVID-19 Pandemic. A Call to Action. *JMIR Public Health Surveill*, 6(2), e18810.
- Omboni, S. (2020). Telemedicine During the COVID-19 in Italy: A Missed Opportunity? *Telemedicine and e-Health*, 26(8), 973–975.
- Sirintrapun, S. J., & Lopez, A. M. (2018). Telemedicine in Cancer Care. *American Society of Clinical Oncology Educational, Book 38*, 540–545.
- Tavakoli, M., Carriere, J., & Torabi, A. (2020). Robotics, Smart Wearable Technologies, and Autonomous Intelligent Systems for Healthcare During the COVID-19 Pandemic: An Analysis of the State of the Art and Future Vision. *Advanced Intelligent Systems*, 2(7), 1.
- Varyushin, M. S. (2018). Legal regulation of telemedicine in Russia and the EU: two steps forward and one step back. *Law*, 1, 165–166.
- Waisman, Y. (2016). Telemedicine in Pediatric Emergency Care: An Overview and Description of a Novel Service in Israel. *J. Intensive & Crit. Care*, 2, 2.