

Regulation of Personal Information Protection in Public Health Emergencies from the Perspective of Digital Rule of Law

-- Taking Health Code as an Example

Yutong Wang¹, Jie Zhou², Chunyu Ren¹, Ying Zhang³

¹School of law, Anhui University of Finance and Economics, Anhui 233030, China

²School of Statistics and Applied Mathematics, Anhui University of Finance and Economics, Anhui 233030, China

³School of Marxism, Huaibei Normal University, Anhui 235000, China

Abstract

With the dual background of digital rule of law and COVID-19 epidemic, the digital rights based on human rights level show cross-border and integration attributes, breaking through the limitations of various theories on data protection. With the e-government entering a new stage of digital government, the generation and operation of health codes profoundly reflect the interactive relationship between right restriction and power restraint. This paper analyzes the protection of personal information in the use of health codes, and at the same time, the risk of personal information security is brewing, and the principles of personal information protection are analyzed from the perspective of health code security management. At the same time, according to China's national conditions, this paper explores a new legal enforcement mechanism for personal information protection to meet the needs of the digital age, and puts forward suggestions for improving personal information protection under the epidemic situation in China from the perspective of the use of data technology.

Keywords

Digital Rule of Law; Health Code; Protection of Personal Information; Public Power; Private Right.

1. Introduction

Health code has been continuously improved since it was put into use in early 2020. With the continuous improvement of epidemic prevention and control situation in China and the comprehensive economic recovery, the use of health code has been widely popularized, and it has become an important data technical means for the country to successfully fight against the epidemic. The birth of health code promotes the construction of national certification infrastructure under public health emergencies, and is accompanied by the establishment of new digital identity and joint tracking of health information. Admittedly, health codes not only indicate human health, but also contact the most sensitive personal information. On February 9, 2020, the Central Network Information Office publicly issued the Notice on Protecting Personal Information and Supporting Joint Prevention and Control with Big Data, which made relevant regulations on personal information collection during the epidemic. However, the existing system of personal information protection in major public health incidents is not detailed, and in the process of implementation, there are some problems, such as personal information being leaked, illegally collected and used, and irregular public disclosure. In the digital age, how to standardize the personal information processing behavior in the operation of health code generation has become an important issue, which not only effectively guarantees

the security of personal information, but also effectively promotes the rational use of personal information. Under the normal situation of epidemic prevention and control, we should calmly examine the legitimacy of health codes and pay attention to personal information security in the use of health codes.[1]

2. Research Background and Practical Significance

2.1. Research Background

We are in and will be in an era of data remixing for a long time. The occurrence of COVID-19 epidemic has catalyzed the change of grassroots legal environment, and the extensive application of artificial intelligence has innovated the social development pattern. With the development and popularization of new generation information technologies such as Internet, cloud computing, artificial intelligence, blockchain and quantum communication, human society has entered the era of big data with data as the key element. With a series of ethical and legal issues, it is reshaping the legal system, changing the rights relations among citizens, and creating many social control methods without resorting to laws. Under the digital ecology, whoever realizes the effective governance of grass-roots data first has mastered the initiative and discourse power of information globalization. Based on the development strategy of "Digital China" and the development concept of digital rule of law, and based on the critical period when digital rule of law promotes grassroots rule of law and the transformation of public services, the application of health codes in the public domain improves the efficiency of social problem governance, and brings about the consideration of personal privacy information protection.

2.2. Research Status

China is represented by Professor Wang Xiuzhe's difficulty in dealing with the challenge brought by big data to personal information protection by analyzing the current legislation. Professor Wang Liming mentioned in "Data Sharing and Personal Information Protection": In practice, personal information is misused due to data sharing, even causing information leakage and causing damage to information rights holders, which puts forward requirements for personal information protection in data sharing. In foreign countries, Omer Tene and Jules Polonetsky summarized that technology drives people's change of the concept of a private society.

2.3. Research Significance

The Personal Information Protection Law of the People's Republic of China voted at the 30th meeting of the Standing Committee of the 13th National People's Congress covers the standardization of the whole processing process of personal information from collection to utilization, and promotes the protection level of personal information to a new height. From the theoretical point of view, since entering the information society, information resources, as an important part of production factors, are different from traditional production factors, and no longer have the characteristics of exclusiveness and exclusiveness, which makes the rules of information generation, collection and use become the core of the new system. How to establish a scientific and reasonable grassroots digital service system to ensure the full circulation and use of information and promote economic growth and social progress without damaging personal data security is one of the important issues we are facing. Deep analysis with health code as the cut-in has the effect from point to surface.

3. Personal Information Protection in the Use of Health Codes

Health code not only plays an effective role in epidemic prevention and control, but also hides the risk of personal information leakage. As a digital tool which is widely used and constantly permeates the society, it plays an important role today. However, personal information safety accidents frequently caused by the information associated with health code gradually cause public panic after the epidemic is normalized, and a large amount of sensitive personal information is concentrated under the control of public power. It is very important to re-examine the legality of the use of health code. Specific personal information protection issues are as follows.

3.1. Improper Personal Information Collection

Taking the subject of personal information and the subject of personal information collection as the research object, in the data age, the subject of personal information as an individual is always in a weak position dominated by data power. In the epidemic prevention and control, for the sake of social and public interests, the collector can collect and use personal information without the consent or disapproval of the subject of information, which shows that the application of the principle of informed consent is limited.[2] Moreover, although the health code has undergone corresponding coding encryption, it seems to reduce the risk of personal information disclosure. In fact, if the information of the subject of personal information has been collected by others during the running process, the phenomenon of infringement of corresponding personality and property rights will only continue to increase. As a strong party in information collection, the subject of personal information collection needs to mobilize personnel at all levels to cooperate with relevant work in order to realize joint prevention and control of the National People's Congress data. The scope of the subject is expanding continuously, as is the irregular behavior in the process of collecting information.

3.2. Improper Storage and Utilization of Personal Information

Although China has issued a systematic Personal Information Protection Law, which has formed decentralized legislation such as the Decision on Strengthening Network Information Protection, the Criminal Law Amendment (IX) of the People's Republic of China, the Civil Code of the People's Republic of China and the Network Security Law of the People's Republic of China, the provisions concerning public services and personal information protection lack specific operable provisions. On the one hand, with the expanding trend of the main body of epidemic information collection, no matter in the personal information safe keeping technology, such as database encryption, firewall and other encryption technologies; In terms of protection system, such as authority setting management and backup mechanism of data system, grass-roots prevention and control are relatively backward, and there is no specific custody standard for this situation in the current law. On the other hand, it is the leakage problem in the process of personal information utilization that has been briefly discussed above. If it has gone through the information collection procedure, it is difficult to determine the specific subject of leaked information according to the current law, and accordingly it is difficult to determine the tort subject and tort liability, which results in improper storage and utilization of personal information.

4. Analysis of Personal Information Protection Principles from Health Code Safety Management

Personal information is useful, but it should be taken properly and used properly. The priority of public health safety embodied by health code is obviously just and rational. Admittedly, the safety management of health code is the proportional problem of public right expansion,

private right restriction and risk release. Due to the frequent problems of improper collection and improper storage and utilization of personal information in the actual use of health codes, strengthening the protection of personal information has become the key for health codes to return to a legal and reasonable track. From a normative point of view, it is necessary to recognize the positive value of the principle of legitimacy and necessity for personal information protection, and at the same time make good use of the principle of proportionality, integrate legitimacy and necessity, control the governance boundary and insist on the realization of the consent rule.

4.1. Justifiable Principles of Personal Information Processing

The right of personal information and data involved in the use of health codes emphasizes the individual's independent personality and freedom of behavior, which is in line with the basic value orientation of private rights, personal interests and the freedom they enjoy and realize. At present, the legal principles of personal information processing are relatively broad. For the administrative subject, the main purpose of dealing with personal information related to health codes is to protect public interests and reduce the risk of epidemic prevention. However, excessive demands for specific and clear purposes of personal information processing may limit the full circulation of personal information, and appropriate purpose changes should be allowed.[3] Consolidate the system foundation of the whole due principle, fully guarantee the privacy of personal data and information, and maximize the social value of personal information.

4.2. Necessary Principles of Personal Information Protection

Article 6 of the Personal Information Protection Law embodies the "necessary principle", which requires that personal information should be handled in a way that has the least impact on personal rights and interests, and that "personal information should not be collected excessively." The principle of necessity is mainly the specification of personal information processing means, which requires that personal information be processed and protected within necessary limits. The use of health code involves the confrontation between public power and private rights, and public rights are strong in nature. China has always lacked centralized and systematic legislative provisions on private rights or rights with private rights attributes, and [4] adopted a decentralized legislative approach that does not require private rights types to be stipulated in different legal norms. Therefore, while the personal information processing of health code does not exceed the legitimate purpose, it is necessary to protect the security of personal information, and prohibit excessive damage and insufficient protection.

4.3. Integration of Legitimacy and Necessity: Principle of Proportionality

The legitimacy and necessity of personal information processing and protection involved in the use of health codes are reasonably related. The principle of "legitimacy and necessity" is the core substantive principle of personal information processing, which respectively regulates the purpose and means of personal information processing and protection. The integration of the two is also the embodiment of the principle of proportionality. Cameron said that the number right is the basic right of every citizen in the information age. In reality, as the representative of public power, he is actually the biggest data controller. Under the background of public health emergencies, the lack of specific systems and the natural expansion of public power led to the abuse of data public rights, which makes the space of private rights of personal information continuously compressed. The principle of proportionality should play its guiding value in it, and promote the mutual game and checks and balances between data public rights and information private rights. Only by standardizing the data collection, storage and utilization during the use of health codes can personal information be truly protected.

5. Suggestions on Perfecting Personal Information Protection in China from the Perspective of Digital Rule of Law

5.1. Construct the Concept of Number Rights and Strengthen the Awareness of the Rule of Law

Joseph Kohler, the founder of New Hegelianism Law, once said: "In the past, law was a product of civilization; At present, law is a tool to maintain civilization. For the future, law is a means to promote civilization." From the farming age to the industrial age and now to the digital age, the law will realize a leap from "human law" to "material law" and then to "number law". The dual background of digital rule of law and COVID-19 epidemic makes the number right of personal information based on human rights show cross-border and fusion attributes, breaking through the limitations of various theories on data protection. On this basis, it is necessary to establish a correct ideological position, improve digital awareness, build the concept of number right, attach importance to the role of data, whether it is public or private right of data, tap the value of data, and transform the thinking mode based on experience into the thinking mode based on data. Only by continuously enhancing the awareness of digital rule of law can we actively learn more technologies and innovate a more perfect management model, thus improving the scientific nature of decision-making, the legitimacy of regulation and the legitimacy of utilization, realizing the digital transformation from the mode of thinking and coordination, and empowering the construction of personal information protection infrastructure with digital technology.[5]

5.2. Adhere to the Unity of Legitimacy and Necessity, Limited by the Principle of Proportionality

As mentioned above, the expansion of public power and the limitation of private power in the use of health codes, we must adhere to the unity of the legitimacy and necessity of relevant behaviors in the process of personal information collection, storage and utilization. In case of public health emergencies, we must limit ourselves to the legal implementers, and the public power cannot be expanded indefinitely, and should have legitimate behavior implementation purposes. Under the condition that the principle of informed consent of the subject of personal information is limited in the epidemic situation, it is difficult for the administrative subject to play the role of legal cause when collecting and using citizens' personal information in health code. Therefore, the principle of proportionality should be used to re-examine whether the collection, storage and utilization of health code personal information based on the public interest in the epidemic is beyond the necessary limits. It requires that the measures adopted by the administrative organs must have a causal relationship with the realization of the administrative purpose. The administrative subject should choose the way that can achieve the purpose with the least damage to civil rights, and should confirm that the degree of contribution to the public interest is indeed greater than the degree of damage to the private right of personal information.

5.3. Improve the Legal System Related to Personal Information Protection

Under the background of public health emergencies, it is inevitable that there will be conflicts between personal interests and social public interests. When conflicts occur, the former should give way to the latter. The core of personal information protection lies in how to regulate the behavior of controllers and processors of personal data in collecting, using, processing and transmitting citizens' personal data. "Reconstructing an open and flexible private rights system" has become a new requirement in the era of big data. With the strategic advancement of "digital government", as President Xi Jinping emphasized: "Public. The author thinks that it is necessary to improve the relevant legal system of personal information protection, such as

the imperfect patient compulsory information disclosure system in China, and the standard of desensitization of sensitive personal information to be further regulated, etc., so as to balance the relationship between public power and private rights with the law as the criterion, realize the protection of private rights in a weak position, strengthen the digital rule of law, and do a good job of personal information protection in the COVID-19 epidemic.

Acknowledgments

This work was financially supported by the undergraduate scientific research and innovation fund of Anhui University of Finance and Economics (ProjectNo: XSKY2132ZD), Regulation of Personal Information protection in public health emergencies from the perspective of digital rule of law: Taking Health Code as an Example.

References

- [1] Ning Yuan. Regulation of Personal Information Protection in Health Code Operation. *Law review*. Vol. 41 (2020) No. 6, p. 111-121.
- [2] Hetian Yang. Protection of citizens' personal information in the context of COVID-19 epidemic. *Legal System and Society* . Vol. 16 (2021) No. 8, p. 12-13.
- [3] Quan Liu. On the Legitimacy, Justification and Necessity of Personal Information Processing. *The Jurist*. Vol. 36 (2020) No. 5, p. 1-15.
- [4] Rui Ma, Jianhua Li. Private law logic of the concept of private right. *Henan Social Sciences*. Vol. 22 (2014) No. 9, p. 29-36.
- [5] Ling Hu. Health Code, Digital Identity and the Rise of Authentication Infrastructure. *China Law Review Volume*. Vol. 8 (2021) No. 2, p. 102-110.