

Turning the Unified COVID-19 Vaccine Passport into a Powerful Tool for Global Recovery

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Abstract: In the post epidemic era, the promotion of the COVID-19 “vaccine passport” should become a matter of common concern in the field of public governance of the international community, which is of great significance to promote the global economy and society into the normal track of sustainable development. The essence of the “vaccine passport” is a unified digital passport with technology neutrality. To solve the problem of the promotion and application of the COVID-19 “vaccine passport”, it is necessary to build a composite domestic normative system and reach an agreement on mutual trust and recognition among countries or regions through the bilateral or multilateral negotiations. The sustainable development solution is recognized as the directive specification for the recognition and application of the “vaccine passport” launched by the international organizations.

1. Introduction

The whole world has been afflicted with the COVID-19 over the past two years. The economy was thrown out of order thus, reboot it has become a matter of emergency. In order to achieve safe cross-border movement of personnel, “vaccine passport” has become a key consideration. As of 13 January 2022, a total of 9,283,076,642 vaccine doses have been administered.[1] The competition of developing the COVID-19 “vaccine passport” is ongoing. As for the problems of where, who and how to apply the “Vaccine Passport”, many countries and regions have taken their exploration and preparation. At present, the application of COVID-19 “vaccine passport” encounters many problems, in which the fundamental one is lacking consensus norms.

2. A Brief Overview: Attitudes, Models and Norms of Major Countries and Regions Towards the COVID-19 “Vaccine Passport”

“Vaccine passport” is not a new thing whose significance must be judged. Although there are different opinions on details, its concept and normative model have been gradually recognized all over the world. The vaccination record, for a longtime, has been the necessary material for overseas tourists, students and medical workers. Before COVID-19, the “vaccine passport” for yellow fever and epidemic encephalitis have already existed.

At present, many countries and regions (such as the United States, the European Union, the United Kingdom, etc.) have made advanced plans and participated in the research of relevant applications together with airlines, industry organizations, software enterprises and other subjects.

Based on the urgency of economic recovery and high expectations for vaccines, some countries and regions begin to consider how to recognize the fact that their people have been vaccinated with the COVID-19 vaccine and make preparations for the implementation of the COVID-19 “vaccine passport”. The current COVID-19 “vaccine passport” of various countries are all based on digital technology. So, the additional considerations such as information security must be taken into account.

3. The Institutional Weaknesses of Vaccine Passport

3.1 The COVID-19 “Vaccine Passport” Lacks Sufficient and Reliable Scientific Basis

Whether the COVID-19 “vaccine passport” is feasible relies on its safety and effectiveness. At present, more than a dozen COVID-19 vaccines are being vaccinated all over the world. These vaccines are developed and produced by pharmaceutical enterprises in different countries. Although they have passed phase III clinical trials and the approval of inspection departments, not all vaccines have passed the certification of the World Health Organization so far. In addition, according to the published data we collected, the effectiveness of vaccines produced by different manufacturers is different. For example, the Moderna vaccine was 94.1% effective at preventing laboratory-confirmed COVID-19 illness in people who received two doses and who had no evidence of being previously infected.[2] Based on evidence from clinical trials, the Pfizer-BioNTech vaccine was 95% effective at preventing laboratory-confirmed COVID-19 illness in people without evidence of previous infection.[3] The J&J/Janssen vaccine was 66.3% effective in clinical trials (efficacy) at preventing laboratory-confirmed COVID-19 illness in people who had no evidence of prior infection 2 weeks after receiving the vaccine.[4]

3.2 The COVID-19 “Vaccine Passport” Lacking Unified Standards and Specifications May Have a Negative Impact on Information Security

In the process of discussing how to promote the use of the COVID-19 “vaccine passport” all over the world, there are some problems related to social management, such as anti-counterfeiting of scientific and technological means, information accuracy, personal information protection and so on have occurred. When the technology of big data is applied in epidemic prevention, problems related to information security should be highlighted. In terms of personal freedom of choice, the promotion of “vaccine passport” is tantamount to exerting invisible pressure on individuals to be vaccinated because the negative choice of vaccination will lead to discrimination and affect the work and life of people who are unwilling or have not been vaccinated. Health status, personal data and location must be anonymized. Apps that empower individuals to make safe choices about their own movements should be prioritized.[5]

3.3 Too Many External Factors Interfere with the Normal Function of “Vaccine Passport”

The COVID-19 vaccine should be a global public good, but too many political factors have been involved in the distribution, use and approval of the vaccine, which has hindered the global adoption of the “vaccine passport” for COVID-19. Political considerations are less efficient than market games, which is probably why the “vaccine passport” has not been unified at the government level so far, but the private sector (such as the development and application of the immunization certification information system for airlines mentioned above) is moving faster.[6] Objectively speaking, groups vaccinated with any kind of vaccine should enjoy the same treatment as groups vaccinated with other vaccines as long as they can prove that they have produced antibodies. If a country chooses a vaccine and its nationals are not recognized by other countries because they have been vaccinated, it will in fact deprive the relevant countries and nationals of their right of free choice.

3.4 The International Technology and Management Rules for “Vaccine Passport” Are Not Mature

The foundation of “vaccine passport” lies in unity which requires countries around the world to achieve large-scale international cooperation and form a unified identification standard and information and data sharing system. Although it is not difficult for countries to issue COVID-19 “vaccine passport” by will, the real challenge is to form a unified identification and information sharing system. Several experts interviewed said that the COVID-19 “vaccine passport” lacks international standards and technical specifications and it is difficult to prevent counterfeiting. There is no international consensus on the safety and effectiveness of marketed vaccines. Each country would recognize the vaccines approved by their drug regulatory departments, which is

bound to lead to the coexistence of standards and specifications. Each country has its own standards, and adopting its own rules of approval, which is not only inefficient to communicate, but also can restrict people's action because they are not accepted in some regions.

4. Suggestions on the Standardized Path of Promoting Vaccine Passports

4.1 A Basic Information System is Necessary for the COVID-19 “Vaccine Passport”

The direction of the “international travel health certificate” in the COVID-19 prevention and control stage may be consistent with the existing “vaccine passport” for such as yellow fever and epidemic cerebrospinal meningitis. “Vaccine passport” used to be an entity book, but now it can be digitized by the technology of big data. The relevant personnel can query vaccine vaccination, nucleic acid detection, nucleic acid antibody and other information online through the Internet. The digital technology raises the concept of “vaccine passport” to a new level. “Vaccine passport” is closely related to the innovation and progress of medical technology, however, its essence, content and potential law risks are all related to the ICT. To some extent, the application of digital resources such as large-scale population health data and electronic medical records in the field of public health begins to play a more and more important role, even not inferior to the innovative progress in the field of traditional medicine (such as pharmacy and clinical medicine). People are increasingly aware that cutting-edge digital technology products, together with advanced drugs and therapies, can become a sharp weapon fighting against diseases and ensuring public health and safety.

4.2 The de Facto Standard of “Vaccine Passport” Should Be Formed through Bilateral or Multilateral Negotiations

The long-term way to break epidemic barriers is to promote the mutual recognition and trust of the COVID-19 “vaccine passport” among countries and regions and form an open multilateral treaty. The deep-seated problem involved in the COVID-19 “vaccine passport” is to integrate the network information architecture and effectively manage, share and verify the data matched with entry-exit personnel to meet the requirements of entry-exit management. In the foreseeable future, the global promotion and application of the COVID-19 “vaccine passport” will work in a way that closely related countries or regions reach an agreement on mutual recognition of each other's vaccination and health certificate. We should grasp the strategic initiative, adopt an open attitude and approach, take countries and regions with close economic and trade relations as a breakthrough, carry out bilateral or multilateral special consultations and negotiations, recognize the effectiveness of vaccination and reach a “vaccine passport” mutual recognition and mutual trust agreement on the premise of clear technical norms. The agreement should highlight the technical indicators with relatively strong neutrality, less subjective value consideration and relatively weak political color.

4.3 The Necessity of Building an International “Technology + Management” COVID-19 Vaccine Specification System

Governance is a series of activities that an organization manages according to established rules. In the governance theory, the state or government is no longer the only dominant subject of power and resources.[7] The purpose of social governance is to achieve “consensus”, that is, to form a consistent goal among all governing bodies and make cooperation possible through institutional transformation. In terms of social governance, standards exist as the role of soft law.[8] Since the 21st century, international standardization activities have been committed to promoting social stability and fulfilling social responsibilities. For example, ISO/PAS22399 (Societal Security - Guideline for Incident Preparedness and Operational Continuity Management) and ISO26000 (Guidance on Social Responsibility) are issued successively. In the area of social governance, standards tend to be operated in the micro, technical and operational levels, while laws, regulations and policies in the macro and guiding ones. Standards can support laws, regulations and policies at the technical and operational dimension, making the implementation of laws, regulations and policies more operable. Laws and regulations are formulated and issued through strict procedures,

with the widest scope of application and the most effective implementation guarantee. The scope of application of the standard is limited, but its object is clear and operable. Except for mandatory standards, they are adopted voluntarily with good flexibility.

5. Conclusion

The promotion and application of the COVID-19 “vaccine passport” is a systematic engineering. Before a way to wipe out COVID-19 thoroughly is found, the “vaccine passport” and its mutual recognition and interoperability is the only feasible way to reopen the world. The implementation of the “vaccine passport” requires the international community to establish a matching institutional framework and vaccine to be a reliable public goods. When there are differences in political systems, cultural traditions and values in different countries and regions, mutual distrust will amplify these differences and damage the basis for exploring and practicing the “vaccine passport”. The application of COVID-19 “vaccine passport” requires mankind to consciously identify with common interests, and solidarity and cooperation are the most powerful means for the international community to defeat the epidemic.

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