



Covid-19 health status certificates: Key considerations for data privacy and human rights

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Covid-19 health status certificates: Key considerations for data privacy and human rights

Ana Beduschi

Abstract

The technological solutions adopted during the current pandemic will have a lasting impact on our societies. A variety of initiatives to develop and deploy Covid-19 health status certificates are currently underway. However, it is not sufficient to develop technical solutions for the verification of Covid-19 health status. Because technologies do not evolve in a legal vacuum, the existing laws and regulations must be respected. The risks of implementing such technologies must be anticipated and mitigated as much as possible before any large-scale deployment. This article evaluates the implications of health status certificates for data privacy and human rights and offers an actionable framework for decision-making, informing policymakers in this area of vital national and international interest.

Keywords

Covid-19 certificates, data protection, digital green certificates, human rights, privacy, vaccine passports.

Introduction

The technological solutions adopted during the current pandemic will have a lasting impact on our societies. They will shape how we respond to the trade-offs between data privacy, human rights, and public health interests in the future. Among these technologies, those aiming to verify individuals' Covid-19 health status have attracted considerable attention in the past months.

A variety of terms have been used to describe them, notably in the media. These include 'immunity passports', 'Covid-19 health status certificates', 'vaccine passports', 'digital green certificates', or 'Covid-19 status certificates.' While these terms have been used interchangeably, it is essential to clarify that they do not refer to passports in the sense of official documents issued by governments as proof of nationality or citizenship.

Instead, they refer to the digital and paper-based certificates that, combined with identity verification, allow individuals to prove their health status via Covid-19 tests and vaccination records.

A variety of initiatives to develop technological solutions for these certificates are currently underway (CommonPass, 2021; IATA, 2021; IBM, 2021; Good Health Pass, 2021). Use cases range from international travel to domestic uses to access public and private spaces such as restaurants, gyms and cinemas.

Countries worldwide have considered or already started implementing Covid-19 health status certificates (Ada Lovelace Institute, 2021a). Israel and China launched vaccination certificates programme earlier this year (Gold, 2021; Reuters, 2021). The European Commission has proposed

a legal framework for 'digital green certificates' (2021). The UK government is conducting a review of Covid-19 certificates (2021). In England, since the 17th of May 2021, those individuals who have received a full course of the Covid-19 vaccine can use the NSH digital application to demonstrate their vaccination status when travelling abroad (Department of Health and Social Care, 2021).

The World Health Organisation (WHO) and the World Tourism Organisation (UNWTO) also undertook to review Covid-19 health certificates (WHO, 2021a; UNWTO, 2021). At this stage, the WHO maintains that vaccination passports should not become a requirement for travel, as there are still uncertainties about whether the vaccines prevent disease transmission (WHO, 2021b).

While these initiatives respond to the urgent need of easing lockdown measures and reopening economies, they also raise scientific, legal and ethical issues (Beduschi, 2020a; Kofler & Baylis, 2020; Phelan, 2020; Privacy International, 2020; Ada Lovelace Institute, 2021b, 2021d; Boyton & Altmann, 2021; Mills & Dye, 2021).

Concerning the protection of data privacy and human rights, these certificates pose essential questions given that (1) they use sensitive personal health information; (2) create a new distinction between individuals based on their health status and (3) can be used to determine the degree of freedoms and rights individuals may enjoy (Beduschi, 2020b).

The article builds on this tripartite structure to evaluate Covid-19 health status certificates' implications for data privacy and human rights. It places the analysis within international human rights law (IHRL) and the European Union's General Data Protection Regulation (GDPR). On that basis, the article proposes an actionable framework for decision-making, informing policymakers in this area of vital national and international interest.

Protection of health data

Covid-19 health status certificates draw on sensitive personal health information. Within the scope of the GDPR, 'data concerning health' means 'personal data related to the physical or mental health of a natural person, including the provision of health care services, which reveal information about his or her health status' (Article 4-15 GDPR). Covid-19 test results and vaccination records relate to a natural person's physical health and reveal information about their health status – thus, they are considered health data under the GDPR.

This type of personal data attracts a reinforced level of protection (Article 9 GDPR). For instance, even when pursuing public health interests, domestic laws must provide suitable and specific measures to safeguard individuals' rights and freedoms (Article 9-2(i) GDPR).

Consent is undoubtedly a legal basis that can be used for the processing of health data (Article 9-2(a) GDPR). However, that does not exempt data processors from abiding by the fundamental principles and obligations put forward by the GDPR. Significantly, Covid-19 health status certificates providers will still have to comply with the principles laid down in Article 5 of the GDPR, including data minimisation and purpose limitation.

Although individuals may consent to have their health data collected, stored and processed to use such a digital or paper-based certificate, providers would still need to build data protection into their design by default (Article 25-1 GDPR).

In this regard, maintaining the confidentiality of health data should be paramount. Health data must be processed in a manner that complies with the requirements of security and confidentiality, preventing any unauthorised access, accidental loss, damage or destruction of the data (Article 5-1 (f) GDPR).

Moreover, as Covid-19 health status certificates are likely to result in a high risk to natural persons' rights and freedoms, as discussed in the following sections, providers should carry out data protection impact assessments before any large-scale deployment of these certificates (Article 35-1 GDPR).

Equality and non-discrimination

All persons are equal in dignity and rights (Article 1 of the Universal Declaration on Human Rights (UDHR)) and are entitled without any discrimination to the equal protection of the law (Article 7 UDHR; Article 26 of the International Covenant on Civil and Political Rights (ICCPR); Article 14 of the European Convention on Human Rights (ECHR); Article 24 of the American Convention on Human Rights (ACHR); Article 3 of the African Charter on Human and Peoples' Rights (ACHPR)).

Yet, Covid-19 certificates create a distinction between individuals based on their health status. Depending on how they are implemented, they may also exclude minorities and vulnerable populations (Ada Lovelace Institute, 2021c). Two key issues can be identified in this regard.

First, vaccines should be accessible to all before any large-scale deployment of these certificates. Vaccine equity is of particular concern regarding populations not in priority groups, such as young people. Vaccination registrations and identity verification may also deter migrants in an irregular situation from being vaccinated, which may not only exclude them from access to Covid-19 certificates, but also jeopardise broader public health goals (UN Committee on Migrant Workers, 2021).

Second, Covid-19 tests, as alternatives to vaccines, should be free of charge or at least affordable to everyone to avoid unlawful discrimination. Unless policymakers tackle the affordability of Covid-19 tests, the deployment of Covid-19 health status certificates risks creating a system, in which only the wealthy have access to travel, culture and the enjoyment of life in society. Consider, for example, pregnant women who cannot be vaccinated as there is not enough evidence about vaccines' safety (Mills & Dye, 2021). If they cannot afford to pay for private Covid-19 tests repeatedly, they may be *de facto* excluded from exercising their basic rights.

No arbitrary interference with rights and freedoms

Covid-19 health status certificates can be used to determine the degree of freedoms and rights individuals may enjoy. As such, they interfere with the right to respect for one's private life (Article 12 UDHR; Article 17 ICCPR; Article 8 ECHR; Article 11 ACHR). In that regard, it is established in human rights case-law that the concept of private life includes the protection of personal information concerning one's health and attributes such as biometric data and DNA samples (S. and Marper v. UK, 2008; Gaughram v. UK, 2020).

If required to access public and private spaces, the certificates would in effect exclude the non-vaccinated and those without a negative Covid-19 test. They would thus interfere with one's right to freedom of assembly (Article 20 UDHR; Article 21 ICCPR; Article 11 ECHR; Article 15 ACHR; Article 11 ACHPR) and the right to manifest a religion or beliefs (Article 18 UDHR; Article 18 ICCPR; Article 9 ECHR; Article 12 ACHR; Article 8 ACHPR).

However, from a human rights law perspective, the fact that a measure interferes with the right to privacy, freedom of assembly, or to manifest a religion or belief does not mean that such measure is automatically unlawful. As the protection afforded by these rights is not absolute, they may be restricted, as long as such restriction is not arbitrary. Public authorities may, therefore, be able to justify an interference with these rights under specific conditions.

For instance, within the ECHR framework, public authorities' measures must safeguard one of the legitimate aims enumerated in the second paragraph of Articles 8, 9 and 11 of the Convention. These include, for example, 'the protection of health' and 'the economic well-being of the country', both of which could be relied on in the management of the current health crisis. In addition, any interference with these rights must satisfy the cumulative tests of legality, necessity, and proportionality.

The legality test requires that measures interfering with these rights must have a basis in domestic law, be compatible with the rule of law and protect against arbitrary interferences by public authorities (S. and Marper v. UK, 2008, para. 95; Eweida and others v. UK, 2013, para. 80; Navalny v. Russia, 2018, para. 115; Malone v. UK, 1984, para. 67; Moscow Branch of the Salvation Army v. Russia, 2006, para. 58). Therefore, domestic laws providing the legal basis for the deployment of Covid-19 health status certificates must be adequately accessible and foreseeable and afford adequate legal protection against arbitrariness.

The necessity test demands that the measures adopted address a pressing social need (S. and Marper v. UK, 2008, para. 101; Eweida and others v. UK, 2013, para. 84; Navalny v. Russia, 2018, para. 128). Arguably, in the context of Covid-19 health status certificates, the need to tackle the social and economic impact of the pandemic and lift the current draconian restrictions on freedom of movement may satisfy the necessity test. Still, public authorities will need to clear the proportionality hurdle.

The proportionality test requires that the measures taken by public authorities are proportionate to the legitimate aims pursued and entail the least restrictive viable solution (Kennedy v. UK, 2010, para. 155; Roman Zakharov v. Russia, 2015, para. 260; Eweida and others v. UK, 2013, paras. 83-84; Navalny v. Russia, 2018, para. 120). In striking a fair balance between the interests of the community as a whole and private individuals' rights, States often have a certain margin of appreciation (Greer, 2000; Shany, 2005; Letsas, 2006; McGoldrick, 2016; Follesdal, 2017).

In this regard, it is possible to argue that, in the context of Covid-19 health status certificates, this hurdle could be cleared if a fair balance is struck between the competing interests at stake. The following section proposes a framework to inform decision-making in this area.

A framework for decision-making

Deciding on whether to deploy Covid-19 health status certificates is not a simple task and will have to be done on a case-by-case basis. Building on the analysis developed so far, the following framework can guide policymakers in determining whether to implement Covid-19 health status certificates and if so, how this should be done. The framework considers three essential elements: (1) the context of deployment of these certificates; (2) the impact on rights and freedoms; and (3) the necessary safeguards in place.

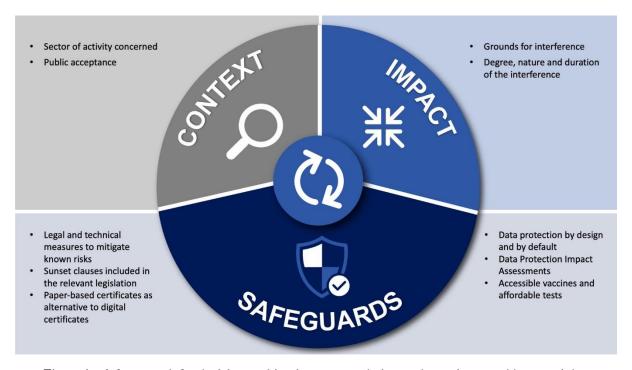


Figure 1 - A framework for decision-making in matters relating to data privacy and human rights

Policymakers should consider the *context* of the deployment of these certificates. There is no 'one size fits all' solution for Covid-19 certificates that would be equally appropriate in all countries or even in all sectors of the economy. A tailored approach for the implementation of these certificates may thus present advantages.

For instance, a consensus is being formed about requiring Covid-19 health status certificates for international travel. The existing international certificate of vaccination or prophylaxis (Article 31 and Annex 6, International Health Regulations) sets a precedent that could be latter used in the context of Covid-19. Yet, concerns over the different types of vaccine to be used, their efficacy, and equitable access by populations worldwide should considered.

However, the domestic uses of these certificates are not straightforward. On a spectrum, some situations may justify an obligation to display Covid-19 health status – for instance, to visit relatives in care homes and hospitals, where doing so may well be necessary to protect the health of vulnerable individuals. By contrast, there are increasing concerns about the equity of requiring Covid-19 health status certificates for access to restaurants, shops and other private venues, as discussed in section 3 above.

In this regard, the degree, nature, and duration of the interference are essential elements when examining the *impact* of public authorities' measures on a given right or freedom. These are analysed in detail in the previous sections. For example, even if adopted on the grounds of public health interests, the mere storage of personal information constitutes an interference with privacy rights (S. and Marper v. UK, 2008). Accordingly, before implementing Covid-19 certificates, policymakers must comply with legality, necessity, and proportionality conditions.

Accordingly, *safeguards* should be in place to guarantee against the risks posed by Covid-19 health status certificates. Policymakers should consider legal and technical measures to mitigate known risks. For instance, they should include sunset clauses in the relevant legislation, making clear that these certificates are to be used only during the pandemic.

Similarly, the provision of affordable or free of charge Covid-19 tests would be necessary to avoid unlawful discrimination vis-à-vis those who cannot be vaccinated, such as pregnant women, or will likely not be vaccinated soon, such as young people. Likewise, providing paper-based certificates, with technologies such as QR codes embedded for security and fighting fraud, would be necessary to ensure equality of treatment regarding those who do not have smartphones.

Finally, policymakers should guarantee that digital or paper-based certificates will not be repurposed for other uses during the pandemic, safeguarding against surveillance risks (Ada Lovelace Institute, 2021b; Pietropaoli, 2021). Requiring providers to undertake data protection impact assessments and integrate data privacy into the design of these certificates by default would also offer reassurances that risks would be proactively mitigated.

Conclusion

As vaccination campaigns progress in developed countries, so does the idea of implementing swift technology-powered solutions to ease our way out of lockdowns and manage the negative effects of the pandemic. However, as argued in this article, technical solutions for the verification of Covid-19 health status do not suffice on their own. Because technologies do not evolve in a legal vacuum, the existing laws and regulations must be respected. The risks of implementing such technologies must be anticipated and mitigated as much as possible before any large-scale deployment. This article has thus offered a framework concerning data privacy and human rights to guide policymakers in this difficult task.

References

Ada Lovelace Institute. (2021a). *International monitor: vaccine passports and COVID status apps.*Retrieved from Ada Lovelace Institute:

https://www.adalovelaceinstitute.org/project/international-monitor-vaccine-passports-covid-status-apps/

Ada Lovelace Institute. (2021b). What place should COVID-19 vaccine passports have in society? Findings from a rapid expert deliberation chaired by Professor Sir Jonathan Montgomery. London: Ada Lovelace Institute.

- Ada Lovelace Institute. (2021c). The data divide. Public attitudes to tackling social and health inequalities in the COVID-19 pandemic and beyond. London: Ada Lovelace Institute.
- Ada Lovelace Institute. (2021d). Checkpoints for vaccine passports. London: Ada Lovelace Institute.
- Beduschi, A. (2020a). Immunity Passports: A Risky Solution. *Directions Cyber Digital Europe*. Retrieved from https://directionsblog.eu/immunity-passports-a-risky-solution/
- Beduschi, A. (2020b). Digital Health Passports for COVID-19: Data Privacy and Human Rights Law. Exeter: University of Exeter.
- Boyton, R. J., & Altmann, D. M. (2021). Risk of SARS-CoV-2 reinfection after natural infection. The Lancet
- CommonPass. (2021). CommonPass. Retrieved from The Commons Project Foundation: https://commonpass.org/
- Department of Health and Social Care. (2021, May 18). Retrieved from Demonstrating your COVID-19 vaccination status when travelling abroad:

 https://www.gov.uk/guidance/demonstrating-your-covid-19-vaccination-status-when-travelling-abroad
- European Commission. (2021). Proposal for a Regulation on a framework for the issuance, verification and acceptance of interoperable certificates on vaccination, testing and recovery to facilitate free movement during the COVID-19 pandemic (Digital Green Certificate). COM/2021/130 final.
- Eweida and others v. UK, 48420/10, 59842/10, 51671/10 and 36516/10 (European Court of Human Rights January 15, 2013).
- Follesdal, A. (2017). Exporting the Margin of Appreciation: Lessons for the Inter-American Court of Human Rights. *International Journal of Constitutional Law*, 359–371.
- Gaughram v. UK, 45245/15 (European Court of Human Rights February 13, 2020).
- Gold, H. (2021). Israel vaccination 'green pass' may offer a glimpse of a post-Covid future. *CNN*.
- Good Health Pass. (2021). *Good Health Pass Collaborative*. Retrieved from Good Health Pass: https://www.goodhealthpass.org/
- Greer, S. (2000). The Margin of Appreciation: Interpretation and Discretion under the European Convention on Human Rights. Strasbourg: Council of Europe Publishing.
- HM Government. (2021). Roadmap Reviews: Update. London: HM Government.
- IATA. (2021). *IATA Travel Pass Initative*. Retrieved from International Air Transport Association: https://www.iata.org/en/programs/passenger/travel-pass/
- IBM. (2021). *IBM Digital Health Pass*. Retrieved from IBM: https://www.ibm.com/products/digital-health-pass
- Kennedy v. UK, 26839/05 (European Court of Human Rights May 18, 2010).
- Kofler, N., & Baylis, F. (2020). Ten reasons why immunity passports are a bad idea. *Nature*, 581, 379–381.

- Letsas, G. (2006). Two Concepts of the Margin of Appreciation. Oxford Journal of Legal Studies, 705–732.
- Malone v. UK, 8691/79 (European Court of Human Rights August 2, 1984).
- McGoldrick, D. (2016). A Defence of the Margin of Appreciation and an Argument for Its Application by the Human Rights Committee. *International & Comparative Law Quarterly*, 21-60.
- Mills, M., & Dye, C. (2021). Twelve criteria for the development and use of COVID-19 vaccine passports. London: The Royal Society.
- Moscow Branch of the Salvation Army v. Russia, 72881/01 (European Court of Human Rights October 5, 2006).
- Navalny v. Russia, 29580/12 (European Court of Human Rights November 15, 2018).
- Phelan, A. L. (2020). COVID-19 immunity passports and vaccination certificates: scientific, equitable, and legal challenges. *The Lancet*, 1595-1597.
- Pietropaoli, I. (2021). Part 2: Getting Digital Health Passports Right? Legal, Ethical and Equality Considerations. London: BIICL Blog.
- Privacy International. (2020). The looming disaster of immunity passports and digital identity. London: Privacy International.
- Reuters. (2021, March 9). China launches COVID-19 vaccination certificates for cross-border travel.

 Retrieved from Reuters: https://www.reuters.com/article/us-health-coronavirus-chinacertificates-idUSKBN2B10LO
- Roman Zakharov v. Russia, 47143/06 (European Court of Human Rights December 4, 2015).
- S. and Marper v. UK, 30562/04 and 30566/04 (European Court of Human Rights December 4, 2008).
- Shany, Y. (2005). Toward a General Margin of Appreciation Doctrine in International Law? European Journal of International Law, 907-940.
- UN Committee on Migrant Workers (2021). Joint Guidance Note on Equitable Access to COVID-19 Vaccines for All Migrants. Geneva: United Nations.
- UNWTO (2021). Global Tourism Crisis Committee Meets Again to. Madrid: World Tourism Organization.
- WHO (2021a). Smart Vaccination Certificate Working Group. Retrieved from World Health Organization: https://www.who.int/groups/smart-vaccination-certificate-working-group
- WHO (2021b). Clarity still needed on effectiveness of COVID-19 vaccine passports, says UN health agency. Retrieved from UN News: https://news.un.org/en/story/2021/04/1089082