National COVID-19 Science Task Force (NCS-TF)



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Requiring proof of Covid-19 vaccination (Vaccine "Passports" / "Certificates"): Key ethical, legal, and social issues

Executive summary:

(for German and French see below)

Health measures to limit the transmission of SARS-CoV2 aim to protect people against the risk of becoming ill. As soon as a vaccine is available, the question arises of lifting certain restrictions, such as the wearing of masks, for those who have been vaccinated or reserving access to certain activities for them.

Countries could require incoming travellers to carry proof of vaccination (such requirements already exist for yellow fever) in a manner consistent with the requirements of the International Health Regulations (IHR). This means that obtaining a travel visa can be made conditional on vaccination status by any country, including Switzerland.

Any difference in treatment of the vaccinated and the unvaccinated, however, presumes the reduction of transmission through vaccination. Sufficient proof that vaccination does indeed prevent transmission is a necessary condition for the justified use of vaccine certification requirements. This is currently unknown. The degree of effectiveness in the prevention of disease and transmission that would be required to make it safe to exempt vaccinated individuals from some or all of the social distancing rules would have to be modelled once the data comes in.

Arguments in favour of differentiated treatment for vaccinated and unvaccinated individuals include that -if it was shown that vaccination significantly limits transmission- maintaining restrictions on vaccinated individuals would no longer be justified, that requiring vaccine certification for certain activities could help to increase societal activities, protect beneficiaries in healthcare, long-term care, and schools, that it could encourage acceptance of vaccination and reduce imported infections.

Different treatment of the vaccinated and the unvaccinated also poses risks of stigmatization, unfair disadvantage, difficulties in verifying the implementation of anti-pandemic measures, and strains on social cohesion. Moreover, some disadvantaged groups risk being further disadvantaged through the implementation of vaccine certification requirements. The use of vaccine certification requirements can therefore only be justified if the danger posed by the limited activity to unvaccinated persons cannot be sufficiently mitigated by a measure less restrictive than the restriction of access, and if the risk involved is sufficient to justify the restriction.

If vaccines were shown to reduce transmission, three scenarios are possible.

- 1) Before vaccines become universally accessible in Switzerland, the unequal treatment of those who have been vaccinated and those who have not been vaccinated requires a strong justification including the lack of alternatives to make the activity sufficiently safe for everyone.
- 2) Once all persons wishing to be vaccinated actually have real access to vaccination, the risk to unvaccinated individuals becomes a risk they have chosen to run. If a sufficient proportion of the population is vaccinated to protect the health system from becoming overwhelmed, then there is no longer a need for vaccination certification requirements except for very specific cases where such requirements exist today for other diseases: travel to specific countries, and the exercise of specific professional activities.
- 3) If vaccines are truly accessible to everyone but so many people refuse vaccination that the health system could still become overwhelmed then justification for requiring vaccine certification could still fulfil an important public health goal. This is the scenario where justification for such measures would be strongest.

Requiring proof of vaccination as a condition for certain activities could only be justified if:

- Data were to show that vaccination sufficiently effectively prevents the transmission of SARS-CoV2
- the satisfaction of fundamental rights and needs and access to essential goods remains guaranteed for all,
- sufficient opportunities for access to a good life remain guaranteed for both vaccinated and unvaccinated persons,
- equal access was guaranteed to vaccination and certification.

In addition, requiring vaccination certification for a specific activity could only be justified if:

- the danger posed by the activity to unvaccinated persons could not be sufficiently mitigated by a measure less restrictive than the restriction of access,
- the risk involved was sufficient to justify the restriction.

Proportionality should exist between the burden imposed by vaccination certificate requirements and the goal they are being implemented for. An activity which represents a low risk in any case would not fulfil this requirement. The National Ethics Commission NEK-CNE will soon publish a position paper on different ethical aspects of vaccination, which will include a discussion of vaccine certificate requirements.

Some disadvantaged groups, such as residents in long-term care, adolescents and young adults, migrants without residency permits, and individuals who cannot be vaccinated, risk being further disadvantaged during the implementation of vaccine certification requirements and merit particular consideration.

Any requirements for vaccine certification implemented because of specifically high risks at this time should be time-limited, as their justification will often end with the pandemic. The difficulty of implementing this requirement in practice should be taken into account when deciding whether to allow different treatments for vaccinated and unvaccinated individuals.

We must note that vaccination certificate requirements for access to essential goods in Switzerland would also be unjustified if implemented by the private sector. Since such access must nevertheless be guaranteed, we recommend examination of the need for legislation to prevent such inadmissible barriers to access.

Zusammenfassung

Die Gesundheitsmassnahmen zur Begrenzung der Übertragung von SARS-CoV2 zielen darauf ab, Menschen vor dem Risiko zu schützen, zu erkranken. Sobald ein Impfstoff zur Verfügung steht, stellt sich die Frage, ob bestimmte Einschränkungen, wie z. B. das Tragen von Masken, für Geimpfte aufgehoben oder ihnen der Zugang zu bestimmten Aktivitäten ermöglicht werden soll.

Länder könnten von ankommenden Reisenden das Mitführen eines Impfnachweises verlangen (solche Anforderungen bestehen bereits für Gelbfieber), und zwar in einer Weise, die den Anforderungen der Internationalen Gesundheitsvorschriften (IGV) entspricht. Das bedeutet, dass die Ausstellung eines Reisevisums von jedem Land, einschliesslich der Schweiz, vom Impfstatus abhängig gemacht werden könnte.

Jede unterschiedliche Behandlung von Geimpften und Ungeimpften Personen setzt jedoch die Reduktion der Übertragung durch die Impfung voraus. Ein hinreichender Nachweis, dass die Impfung tatsächlich die Übertragung verhindert, stellt eine notwendige Voraussetzung für die Rechtfertigung der Nutzung von Impfnachweisen dar . Ein solcher Nachweis liegt derzeit nicht vor. Der Grad der Wirksamkeit bei der Verhinderung von Krankheit und Übertragung, der erforderlich wäre, um es als unbedenklich erscheinen zu lassen, geimpfte Personen von einigen oder allen Regeln der sozialen Distanzierung auszunehmen, müsste modelliert werden, sobald die Daten vorliegen.

Argumente für eine differenzierte Behandlung von geimpften und ungeimpften Personen sind u. a., dass - wenn nachgewiesen würde, dass die Impfung die Übertragung signifikant einschränkt - die Aufrechterhaltung von Beschränkungen für geimpfte Personen nicht mehr gerechtfertigt wäre, dass die Lockerung der Massnahmen für Personen mit Impfbescheinigung für bestimmte Tätigkeiten dazu beitragen könnte, die gesellschaftlichen Aktivitäten zu erhöhen, die Personen im Gesundheitswesen, in der Langzeitpflege und in Schulen zu schützen, dass sie die Akzeptanz der Impfung fördern und importierte Infektionen reduzieren könnte.

Eine unterschiedliche Behandlung von Geimpften und Ungeimpften Personen birgt jedoch auch die Gefahr der Stigmatisierung, der ungerechtfertigten Benachteiligung, der Schwierigkeiten bei der Überprüfung der Umsetzung von Pandemiebekämpfungsmassnahmen und der Belastung des sozialen Zusammenhalts. Darüber hinaus besteht die Gefahr, dass einige benachteiligte Gruppen durch die Nutzung von Impfnachweisen weiter benachteiligt werden. Der Einsatz von Impfnachweise kann daher nur dann gerechtfertigt werden, wenn die Gefahr, die von der eingeschränkten Tätigkeit für ungeimpfte Personen ausgeht, nicht durch eine weniger restriktive Massnahme als die Zugangsbeschränkung ausreichend gemildert werden kann, und wenn das damit verbundene Risiko ausreicht, um die Beschränkung zu rechtfertigen.

Wenn Impfstoffe nachweislich die Übertragung reduzieren, sind drei Szenarien möglich.

- 1) Bevor Impfstoffe in der Schweiz allgemein zugänglich werden, bedarf die Ungleichbehandlung von Geimpften und Ungeimpften einer klaren Rechtfertigung, die auch den Mangel an Alternativen einschliesst, um die Tätigkeit für alle ausreichend sicher zu machen.
- 2) Sobald alle Personen, die sich impfen lassen wollen, tatsächlich Zugang zu einer Impfung haben, wird das Risiko für die allermeisten Ungeimpften zu einem Risiko, das sie freiwillig eingegangen sind. Wenn ein ausreichender Anteil der Bevölkerung geimpft ist, um das Gesundheitssystem vor einer Überlastung zu schützen, dann gibt es keinen Bedarf mehr für Impfnachweise, ausser

für ganz bestimmte Fälle, in denen solche Anforderungen heute für andere Krankheiten bestehen: Reisen in bestimmte Länder und die Ausübung bestimmter beruflicher Tätigkeiten.

3) Wenn Impfstoffe wirklich für jeden zugänglich sind, aber so viele Menschen die Impfung verweigern, dass das Gesundheitssystem trotzdem überfordert sein könnte, dann könnte die Rechtfertigung für die Forderung nach einem Impfnachweis immer noch ein wichtiges Ziel der öffentlichen Gesundheit erfüllen. Dies ist das Szenario, in dem die Rechtfertigung für solche Massnahmen am stärksten wäre.

Die Forderung nach einem Impfnachweis als Bedingung für bestimmte Tätigkeiten wäre nur dann gerechtfertigt, wenn:

- Daten zeigen würden, dass die Impfung die Übertragung von SARS-CoV2 ausreichend wirksam verhindert,
- die Befriedigung grundlegender Rechte und Bedürfnisse und der Zugang zu lebensnotwendigen Gütern für alle gewährleistet bleibt,
- ausreichende Möglichkeiten des Zugangs zu einem guten Leben sowohl für Geimpfte als auch für Ungeimpfte gewährleistet bleiben,
- der gleichberechtigte Zugang zur Impfung und zu Impfnachweisen gewährleistet ist.

Darüber hinaus könnte die Forderung nach einem Impfnachweis für eine bestimmte Tätigkeit nur dann gerechtfertigt sein, wenn:

- die von der Tätigkeit ausgehende Gefahr für ungeimpfte Personen nicht durch eine weniger restriktive Massnahme als die Zugangsbeschränkung ausreichend gemindert werden konnte,
- das damit verbundene Risiko ausreichend ist, um die Beschränkung zu rechtfertigen.

Die Belastung durch den Impfnachweis und das Ziel, für das er eingesetzt wird, müssen in einem angemessenen Verhältnis zueinander stehen. Eine Tätigkeit, die in jedem Fall ein geringes Risiko darstellt, würde diese Anforderung nicht erfüllen. Die Nationale Ethikkommission NEK-CNE hat Empfehlungen veröffentlicht und wird in Kürze ein Positionspapier zu verschiedenen ethischen Aspekten rund um das Impfen herausgeben, in dem auch der Impfnachweis behandelt wird.

Einige benachteiligte Gruppen, wie z. B. Bewohner in Langzeitpflegeeinrichtungen, Jugendliche und junge Erwachsene, Migrantinnen und Migranten ohne Aufenhaltsstatus und Personen, die nicht geimpft werden können, laufen Gefahr, bei der Umsetzung der Impfscheinnachweispflicht weiter benachteiligt zu werden und verdienen besondere Beachtung.

Eine Impfnachweispflicht, die aufgrund besonders hoher aktueller Risiken eingeführt wird, muss zeitlich begrenzt sein, da ihre Berechtigung mit der Pandemie endet. Die Schwierigkeit, diese Anforderung in der Praxis umzusetzen, sollte bei der Entscheidung, ob eine unterschiedliche Behandlung von geimpften und ungeimpften Personen zulässig ist, berücksichtigt werden.

Es ist anzumerken, dass die Impfnachpflicht für den Zugang zu lebenswichtigen Gütern in der Schweiz auch nicht zulässig ist, wenn sie von der Privatwirtschaft umgesetzt würde. Da ein solcher Zugang dennoch gewährleistet sein muss, empfehlen wir die Prüfung der Notwendigkeit einer Gesetzgebung zur Vermeidung unzulässiger Zugangsbeschränkungen.

Résumé

Les mesures sanitaires visant à limiter la transmission du SARS-CoV2 ont pour but de protéger les personnes contre le risque de tomber malade. Dès qu'un vaccin est disponible, la question se pose de lever certaines restrictions, telles que le port de masques, pour les personnes qui ont été vaccinées ou de leur réserver l'accès à certaines activités.

Les pays pourraient exiger des voyageurs entrants qu'ils soient munis d'une preuve de vaccination (de telles exigences existent déjà pour la fièvre jaune), conformément aux exigences du Règlement sanitaire international (RSI). Cela signifie que l'obtention d'un visa de voyage pourrait être subordonnée au statut de vaccination par n'importe quel pays, y compris la Suisse.

Toute différence de traitement entre les personnes vaccinées et les personnes non vaccinées présuppose toutefois la réduction de la transmission par la vaccination. Une preuve suffisante que la vaccination empêche effectivement la transmission est une condition nécessaire pour l'utilisation justifiée des exigences de certification vaccinale. On ne sait pas à l'heure actuelle si cette condition est remplie ou non. Le degré avec lequel la vaccination doit être efficace pour prévenir la maladie et de la transmission, pour qu'il devienne pour pouvoir exempter les personnes vaccinées de certaines ou de toutes les règles de distanciation sociale en sécurité, ce degré devra être modélisé une fois que les données seront disponibles.

S'il était démontré que la vaccination limite la transmission de manière significative, les arguments en faveur d'un traitement différencié pour les personnes vaccinées et non vaccinées seraient notamment les suivants : le maintien des restrictions imposées aux personnes vaccinées ne serait plus justifié, l'obligation de certification vaccinale pour certaines activités pourrait contribuer à accroître les activités dans la société, à protéger les bénéficiaires des soins de santé, des soins de longue durée et des écoles, à encourager l'acceptation de la vaccination et à réduire les infections importées.

La différence de traitement entre les personnes vaccinées et non vaccinées présente également des risques de stigmatisation, de désavantages injustes, de difficultés à vérifier la mise en œuvre des mesures anti-pandémie et de tensions sur la cohésion sociale. En outre, certains groupes défavorisés risquent d'être encore plus désavantagés par la mise en œuvre des exigences de certification des vaccins. Le recours aux exigences de vaccinale ne peut donc être justifié que si le danger que représente l'activité limitée pour les personnes non vaccinées ne peut être suffisamment atténué par une mesure moins restrictive que la restriction d'accès, et si le risque encouru est suffisant pour justifier la restriction.

S'il était démontré que les vaccins réduisent la transmission, trois scénarios seraient possibles.

- 1) Avant que les vaccins ne deviennent universellement accessibles en Suisse, le traitement inégal des personnes qui ont été vaccinées et de celles qui ne l'ont pas été nécessite une justification solide, notamment l'absence d'alternatives pour rendre l'activité suffisamment sûre pour tous.
- 2) Une fois que toutes les personnes souhaitant être vaccinées ont réellement accès à la vaccination, le risque pour presque toutes les personnes non vaccinées devient un risque qu'elles ont choisi de courir. Si une proportion suffisante de la population est vaccinée pour éviter que le système de santé ne soit débordé, il n'est plus nécessaire d'imposer des exigences de certification vaccinale, sauf dans des cas très précis où de telles exigences existent aujourd'hui pour d'autres maladies : voyages dans des pays spécifiques et exercice d'un petit nombre d'activités professionnelles.

3) Si les vaccins sont réellement accessibles à tous mais que le nombre de personnes qui refusent la vaccination est tel que le système de santé pourrait encore être débordé, alors la justification de l'exigence de certification des vaccins pourrait encore remplir un important objectif de santé publique. C'est le scénario dans lequel la justification de telles mesures serait la plus forte.

L'exigence d'une preuve de vaccination comme condition pour certaines activités ne pourrait être justifiée que si :

- Les données devaient montrer que la vaccination prévient suffisamment efficacement la transmission du SRAS-CoV2
- la satisfaction des droits et des besoins fondamentaux et l'accès aux biens essentiels restent garantis pour tous,
- des possibilités suffisantes d'accès à une bonne vie restent garanties pour les personnes vaccinées et non vaccinées,
- L'égalité d'accès à la vaccination et à la certification a été garantie.

En outre, l'exigence d'une certification de vaccination pour une activité spécifique ne pourrait être justifiée que si :

- le danger que représente l'activité pour les personnes non vaccinées ne pouvait pas être suffisamment atténué par une mesure moins restrictive que la restriction d'accès,
- le risque encouru était suffisant pour justifier la restriction.

La proportionnalité doit exister entre la charge imposée par les exigences des certificats de vaccination et l'objectif pour lequel elles sont mises en œuvre. Une activité qui représente un risque faible ne répondrait pas à cette exigence. La Commission nationale d'éthique NEK-CNE a publié des recommandations et publiera bientôt un document de position sur les différents aspects éthiques de la vaccination, qui comprendra une discussion sur les exigences en matière de certificat de vaccination.

Certains groupes défavorisés, tels que les résidents des établissements de soins de longue durée, les adolescents et les jeunes adultes, les migrants et migrantes sans permis de résidence et les personnes qui ne peuvent pas être vaccinées, risquent d'être encore plus désavantagés lors de la mise en œuvre des exigences de certification vaccinale et méritent une attention particulière.

Toute exigence de certification vaccinale mise en œuvre en raison de risques particulièrement élevés à l'heure actuelle devrait être limitée dans le temps, car leur justification se terminera dans la plupart des cas avec la pandémie. La difficulté de mettre en œuvre cette exigence dans la pratique doit être prise en compte pour décider s'il convient d'autoriser des traitements différents pour les personnes vaccinées et non vaccinées.

Il convient de noter qu'exiger une preuve de vaccination en Suisse comme condition d'accès à des biens essentiels serait également inacceptable dans le cas où cette exigence serait mise en œuvre par le secteur privé. Comme cet accès doit néanmoins être garanti, nous recommandons d'examiner la nécessité de légiférer pour éviter des entraves inacceptables de ce type.

1. Introduction

In different countries, proposals for deconfinement strategies in the spring and summer of 2020 included tools aiming to certify the immune status of individuals to SARS-Cov2. While plans were different in different countries, most were based on the idea that holders of "immunity passports" could play an important role in gradually easing lockdown measures. The proposals were based on the assumption that certificate holders are immune and thus ideally placed to fulfil essential (or other) tasks without placing themselves or others at risk of contagion. This premise was unverified in the case of immunity after COVID-19 disease in the spring of 2020. For this and other reasons, the NCS-TF advised against the use of these "immunity passports" in a Policy Brief published in April 2020. The questions raised at the time are, however, arising again and centring this time on vaccination certificates. Since vaccination certificates are in many ways different from immunity certificates, and since the background situation has changed in the interval, this Policy Brief specifically examines vaccination certification requirements and their possible uses.

Health measures to limit the transmission of SARS-CoV2 aim to protect people against the risk of becoming ill. As soon as a vaccine is available, the question arises of lifting certain restrictions, such as the wearing of masks, for those who have been vaccinated or reserving access to certain activities for them.

It must be stressed that exempting vaccinated people from social distancing rules presupposes that vaccination would be sufficiently effective in limiting the transmission of the virus, and that such an effect has not yet been proven. To date, vaccines that have completed Phase 3 trials and/or received regulatory approval have been shown to reduce, to varying degrees, symptomatic infection, but not yet been shown to reduce asymptomatic infection or transmission. Ongoing studies are expected to soon provide data and will be reviewed when available. Moreover, even if vaccines were shown to effectively reduce transmission, some degrees of risk would persist in any case since vaccines are not 100% effective in preventing disease and sick individuals are contagious. The degree of effectiveness in the prevention of disease and transmission that would be required to make it safe to exempt vaccinated individuals from some or all of the social distancing rules would have to be modelled once the data comes in.

2. Terminology: vaccine record, certification, passport, other terms (e.g. immunity passport)

Various terms have been used to refer to vaccination records that may be used for different purposes, including "vaccination record", "vaccination certificate", "vaccination passport" or "immunity passport." These terms refer to various forms of certification that a person has either been vaccinated or has acquired immunity against SARS-Cov2 through disease. Such documents may be in paper or digital format and can in theory be generated by different entities. The issues associated with the production of such documents under different options are examined in the Policy Brief on "Requirements and scope of digital certificates".

We use the term "vaccination certificate" in this Policy Brief, in the sense of a document certifying that a person has been vaccinated against SARS-Cov2. This term is broader than the concept of a "passport" used only for international travel and is also more specific than "immunity passport/certificate" since immunity could be gained through vaccination and/or infection.

3. Reasons in favour of vaccine certification requirements

Reasons in favour of authorising vaccine certification requirements almost all rely on the assumption that vaccination prevents infection or transmission. This effect has not yet been proven, but it has been suggested by some data¹ and assumed by some experts; more reliable evidence is expected in the coming months. If we assume there is a significant reduction in infection or transmission, the benefits of vaccine certificates could include the following:

Protecting freedom: Restrictions on individual freedom to maintain epidemic control only remains justified as long as it is necessary. If it was shown that vaccination significantly limits transmission, maintaining restrictions on vaccinated individuals would no longer be justified, since the freedom of vaccinated persons would no longer need to be restricted in order to protect others (Persad 2020). Similarly, if vaccination merely decreases transmission without truly preventing it, some degree of restriction on the freedom of vaccinated persons would still be justified by the necessity to protect others but since the risk would be less the acceptable degree of these restrictions would also be less.

Increasing societal activities: A primary argument for vaccine certificates is to enable at least the partial increase of economic, educational, cultural and social activities, as quickly as possible by allowing vaccinated individuals to participate (potentially with fewer or no restrictions) in such activities. If vaccines are proven to significantly reduce transmission, it is conceivable that various sectors of the economy (e.g. restaurants, bars, tourism, private healthcare clinics) could be reopened to those able to show a vaccination certificate, at least at reduced risk of transmitting and perpetuating the epidemic. Conceivably, tertiary education could be re-started in-person; religious gatherings, cultural exhibitions and performances, sporting events and other mass gatherings could also be re-opened to vaccinated individuals.

Protecting beneficiaries in healthcare, long-term care, schools: If vaccination was shown to reduce the risk of infection or transmission, care workers in healthcare settings, homes for the elderly, and schools could provide their employers with vaccination certificates to show they pose a lower risk of transmitting the virus to beneficiaries. For vulnerable groups who may not be able to be immunised, such as immunocompromised people or children, both encouraging and verifying that caregivers are vaccinated would provide important protections.

Encouraging vaccination: Allowing vaccine certificates to be tied to certain benefits or advantages, such as freedom to travel, and access to theatres or restaurants, may also encourage vaccine-hesitant individuals to come forward for vaccination and thereby contribute to achieving population immunity.

Reducing imported infections: Requiring incoming travellers to show proof of vaccination would, presumably, reduce the burden on the healthcare system as fewer people would be likely to become symptomatic, and reduce the risk of imported infections. Swiss residents may also be required to show either a negative PCR test or proof of vaccination for travel to specific countries. Requiring outgoing travellers to carry vaccination certificates when they travel from Switzerland could also be of particular ethical importance when travellers are headed to countries where limited access to Covid-19 vaccines has prevented or delayed the achievement of population immunity (again, if vaccines prove able to reduce transmission).

¹ Data from the Oxford-AstraZeneca vaccine published as a pre-print in Feb 2021 suggests a reduction in transmission of 67%. https://www.ox.ac.uk/news/2021-02-02-oxford-coronavirus-vaccine-shows-sustained-protection-76-during-3-month-interval. Notably, on 3 Feb 2021, Swissmedic announced its decision not to authorize this vaccine for use in the country and has requested further data: https://www.swissmedic.ch/swissmedic/en/home/news/coronavirus-covid-19/coronavirus-impfstoff-astrazeneca-weitere-daten-verlangt.html

It must be noted that most of these arguments presume that vaccines are shown to reduce or even eliminate transmission. Since restrictions are grounded in our duty to protect others from harm, lifting these restrictions for vaccinated individuals requires that vaccination remove the risk of harm to others. Should vaccines not adequately prevent transmission, requiring vaccine certification for incoming travellers would not be effective in reducing imported infections. In gatherings, restaurants, concerts, and so on, requiring vaccination certification would only be effective on site in preventing direct infections of those present if these individuals had a high degree of individual protection through their own vaccination. It would not, however, prevent more of them from becoming carriers and spreading the virus around them in their turn after the event. Vaccine certificates may offer a false sense of security if the strength or duration of protection from a particular vaccine is uncertain, diminishes over time, or is less effective against certain strains. They could also offer a false sense of security if vaccination turns out not to prevent transmission, or to prevent it insufficiently. Currently these parameters of existing vaccines are not known.

4. Legal bases

From a legal point of view, there are different possible scenarios which require different (legal) approaches (Langer, 2021):

- 1) Either it is the State the Confederation or the cantons, depending on the division of powers that legislates to impose a vaccination certificate (just as it has, for example, imposed the wearing of masks) in order to be able to access to certain activities or services or to adopt certain acts (international travel, taking public transport, going to school, being admitted to hospitals, going to the theatre or cinema, going to restaurants, taking part in public demonstrations and meetings, etc.). Such a measure is (would be) constituting a restriction relatively serious (depending on the number and nature of the activities to which access would be denied) of fundamental rights and should therefore respect the usual conditions for limiting these rights, namely:
 - have a sufficient legal basis (in a law in the formal sense if the restriction is considered to be serious), and sufficiently clear and precise (the law should therefore clearly designate [all] activities to which access is not granted without a certificate, provide for possible exceptions, etc.); such a legal basis does not currently exist.
 - pursue an overriding public interest (protecting the health of others, which implies that the vaccine protects others against transmission);
 - and be proportionate to the public interest goal pursued (i.e. to be capable of achieving it, necessary to achieve it and not require a too great sacrifice of the freedoms involved; this is a delicate point here if it is true that once all people have been able to be vaccinated if they want to, the vaccine will no longer be necessary to protect others but only to protect oneself);
 - it must also be noted that such a measure would if the list of activities concerned is long practically amount to an indirect obligation to vaccinate, which makes it all the more delicate or legally debatable.
- 2) Either it is not the State that legislates to impose such a vaccination certificate the State, on the contrary, does nothing and imposes nothing –, but it is the private sector, or certain actors in this sector only, that introduce this requirement as a kind of condition for access to the services offered (air transport companies, restaurants, medical or paramedical practices, cinemas, etc.). In this case, according to the "classical" conception of Swiss law, there would be no infringement of fundamental rights, since Swiss law considers that fundamental rights do

not in principle apply – at least not directly – in the relations between individuals. However, it could probably be argued that there would be a obligation ("positive" obligation based on the European Convention on Human Rights) on the state, at least if the system becomes generalised, to act, if only to frame – regulate – this practice, so as to ensure that individuals are not discriminated, in particular deprived of all access to essential goods.

5. Ethical difficulties

Differentiated treatment of vaccinated and unvaccinated persons may result in a risk of public information on vaccination status -a breach of confidentiality on sensitive information- as well as risks of stigmatisation, discrimination, or an indirect obligation to be vaccinated if it becomes impossible to access the conditions of a good life without proof of vaccination. It could also render the implementation of current and future measures more difficult and hinder pandemic control. The National Ethics Commission NEK-CNE will soon publish a position paper on different ethical aspects of vaccination, which will include a discussion of vaccine certificate requirements.

Risks to privacy and confidentiality

Data protection issues are important, and are addressed in the Policy Brief on "Requirements and scope of digital certificates". Keeping information on a certificate private is technically possible and ethically important. The concrete implementation of the certificate, especially in digital form, may imply further disclosure of private information in the cases where the system relies on connections to servers for obtaining or verifying the authenticity and integrity of the certificates. Such leakage must be documented and quantified when assessing proportionality.

It must be pointed out, however, that even with appropriate data protection safeguards in place it is socially impossible to keep vaccination status private when vaccination status leads to different rights or access to activities. It must therefore be assumed that information on vaccine status will become public knowledge in many cases. This means that differentiated treatment of vaccinated and unvaccinated persons would often result in public information on vaccination status, which is health information and as such represents sensitive information. Those requiring vaccination certificates will not be directly revealing this information, but they would be designing conditions that place pressure on individuals to reveal their own information, and to do so in a very public manner.

This can still be justified, if it fulfils conditions of necessity, subsidiarity, and proportionality. The criterion of necessity requires that conditioning an activity on vaccination, and thus potentially revealing vaccination status through it, be effective in protecting persons. This could be fulfilled in certain cases, but only if vaccination prevents transmission. The criterion of subsidiarity requires that there be no alternative to requiring vaccination that would protect confidentiality better. Where alternative protection plans can be implemented, this criterion will not be fulfilled because implementing a protection plan rather than requiring vaccination would avoid the situation where individuals are pressured to reveal their vaccination status. The criterion of proportionality requires that the goal be sufficiently important to justify the breach. This is a societal question which cannot be answered on strictly scientific, or legal grounds. Since the different criteria should all be fulfilled, however, this question will only arise in circumstances which fulfil all the other criteria.

Stigmatisation

Stigmatization is the unfair public disapproval or devaluing of a person or group based on some visible characteristic. Making vaccination status visible, and treating the vaccinated and the unvaccinated differently, could result in the stigmatisation of one, or both of these groups. In order

to constitute stigmatization, public disapproval or devaluing must be unfair. Choosing whether or not to accept vaccination is, however, a highly moralized choice regarding which positions differ substantially within Swiss society. When is disapproval unfair, then? For example, could it be legitimate to publicly disapprove -to some degree at least- of those refusing vaccination if this leads to negative consequences for others? Even in such cases, there is still a risk of exaggerated and therefore unfair devaluing, however. Historically, frontiers between countries, social groups or epidemiological categories have always been integrated in social and cultural interpretations of diseases, especially when they are infectious (Joffe, 1999). Along these interpretations, discrimination and stigmatization based on these frontiers are also recurrent social mechanisms, used to provide a sense of subjective immunity by distancing oneself from those 'at risk or dangerous' (Douglas 1985). This can pose real risks to social cohesion. The identification of those who are, or are not, vaccinated can be expected to generate such processes and this risk may not decrease with general access to vaccination.

Discrimination

Discrimination is the imposition of a disadvantage, harm, or wrong on persons based on their belonging to certain groups. It is morally wrong if the characteristic it is based on is not relevant in certain ways to the disadvantage. For example, it is not wrong to limit the practice of medicine to those certified to practice it, because in this case the characteristic is a relevant one. It would, however, be wrong to limit access to a sports stadium to men, for example. In that case, the characteristic is not a relevant one. Discrimination is defined according to a baseline of how persons ought to be treated. If the right that is denied based on a non-relevant characteristic is a more important right, then the wrong of discrimination is greater as well.

Vaccination certificate requirements represent a risk of discrimination because they could lead to the imposition of disadvantages to persons based on their vaccination status. In some of these cases, vaccination status will be a non-relevant characteristic and the difference in treatment will therefore represent discrimination. In other cases, vaccination will be a relevant characteristic, but the disadvantage will be too great to justify and the difference in treatment will therefore still be unjustified. In yet other cases, vaccination will be a relevant characteristic and the disadvantage will not be too great: in such cases, a difference in treatment could be justified.

In order for vaccination to represent a relevant characteristic, limiting an activity to vaccinated persons must be an effective means to some sufficiently important goal. As long as vaccination is not truly accessible to everyone, protecting those who are waiting to be vaccinated from an unconsented risk of infection would constitute such a goal. Requiring proof of vaccination from incoming (and possibly outgoing) travellers would for example fulfil this relevance requirement. Protecting the health system from being overwhelmed could also constitute such a goal, as long as vaccination numbers remain too low. Requiring vaccination certificates for some activities would not represent discrimination under such circumstances.

The relevance of vaccination is not enough to justify different treatment of the vaccinated and of the unvaccinated, because such differences can be unjustified even without representing outright discrimination. Here, the importance of the activity being limited is crucial. Several categories can be identified:

Basic rights and the ability to fulfill basic needs should be guaranteed for all. The ability to exercise rights such as voting, holding public office, access to education, other public services, quasi-public services such as public transport or health care, should not be conditional on vaccination. This means that access to polling booths, public administration, public transport, hospitals or outpatient clinics, or schools at any level of the public system should not be made conditional on vaccination.

In some cases, there are legal conditions that explicitly allow the use of vaccination certificates as a condition. For example, countries could require incoming travellers to carry proof of vaccination (such requirements already exist for yellow fever) in a manner consistent with the requirements of the International Health Regulations (IHR). This means that obtaining a travel visa can be made conditional on vaccination status by any country, including Switzerland.

In other cases, there are <u>explicit</u> protections against differentiated treatment on health grounds. Access to basic insurance cannot be made conditional on vaccination against COVID19, or indeed against any other disease. Employers may not ask questions about the health status of prospective employees, unless the information is directly related to their work.

Where alternatives to vaccination exist to achieve the same objective, these should be preferred to differentiated treatment. Individuals should not be prevented from accessing areas where wearing masks or maintaining distance will be as effective in preventing infection as vaccination.

Many elements of life are not contained in any of these categories. In such situations, differences in the treatment of people according to their vaccination status will need to be proportionate to be justified: the burdens imposed on individuals should not be excessive in relation to the public health benefits. To examine more systematically the elements of life that are affected here, the capability approach of Martha Nussbaum and Amartya Sen is interesting. From the perspective of the substantial freedoms proposed here, it is important that all people have access to a sufficient level of the following goods: life, physical health, physical integrity, senses, imagination and thought, emotions, practical reason, affiliation, including social interaction and the social bases of self-respect, contact with other species, play and control of one's political and material environment (Nussbaum 2000). While it may be acceptable for certain activities to be accessible only to those who have been vaccinated, it would be problematic for access to these capabilities themselves to be restricted. In other words, it is important that at least some alternatives exist that allow access to every capability to people, whether they are vaccinated or not.

Indirect vaccine mandate

Requiring vaccination certificates could result in an indirect obligation to be vaccinated if it becomes impossible to access the conditions of a good life without proof of vaccination.

Limits to the implementation of measures

Releasing vaccinated individuals from restrictive measures while others still have to adhere to these measures could represent a disincentive more generally in the implementation of social distancing measures. For example, it would become socially acceptable to not wear a mask in a shop, as soon as it was known that some individuals do in fact have this right. Monitoring compliance with these measures could also be made difficult, since vaccination status is not visible externally (Langer, 2021).

6. Timing and scenarios

Before vaccines become universally accessible in Switzerland, the unequal treatment of those who have been vaccinated and those who have not been vaccinated requires a strong justification. From an ethical standpoint, if a protection plan is possible then it is not acceptable to use a vaccination requirement instead. If a protection plan is possible, this means that it is possible to make the activity accessible for everyone. Using the requirement for proof of vaccination instead of a protection plan is not acceptable in a situation where vaccination is not yet universally available.

Once all persons wishing to be vaccinated actually have real access to vaccination, the situation changes. On the one hand, restricting access to only those who have been vaccinated has less potential for discrimination or other unfair disadvantages, because vaccination status becomes a choice. On the other hand, however, restricting access only to those who have been vaccinated only serves to protect people who have chosen to remain unvaccinated, or who have received a less effective vaccine. Under scenarios where everyone has access to a vaccine that is very effective in preventing disease, those who wish to undertake an activity without being vaccinated and where no protection plan is in place either, are taking a risk for themselves. They are also possibly placing at risk others whom they will come into contact with, but in a scenario where all those who wish to be vaccinated have received vaccination, these others whom they place at risk will have similarly chosen to remain unvaccinated. Banning the unvaccinated from activities under these circumstances, then, amounts to protecting persons against a risk they have chosen to take. It does not aim to protect anyone else *from* the risk they may pose. Therefore, if everyone has access to very effective vaccination an important justification for vaccination requirements no longer exists.

A third situation could exist, however, if vaccines are truly accessible to everyone but so many people refuse vaccination that the health system could still become overwhelmed if everything becomes open to everyone and virus circulation increases. In such circumstances -and if vaccination prevents transmission-vaccination certification requirements could still fulfil an important goal and so part of their justification could then remain. This is the situation during which justification for such measures would be strongest.

7. Conditions for justified vaccination certification requirements

Any difference in treatment of the vaccinated and the unvaccinated presumes the reduction of transmission through vaccination. Sufficient proof that vaccination does indeed prevent transmission is a necessary condition for the justified use of these requirements.

Equal protection of basic rights and the ability to fulfil basic needs and access essential goods must remain guaranteed irrespective of vaccination status, and irrespective of whether the providers for these needs are the public or private entities.

Because different treatment of the vaccinated and the unvaccinated poses risks of stigmatisation, unfair disadvantage, difficulties in verifying the implementation of anti-pandemic measures, and strains on social cohesion, the use of vaccine certification requirement can only be justified if the danger posed by the limited activity to unvaccinated persons cannot be sufficiently mitigated by a measure less restrictive than the restriction of access, and if the risk involved is sufficient to justify the restriction.

Any requirement for vaccination certification, public or private, would constitute an additional reason to guarantee equal access to vaccination and certification. Otherwise, barriers to access for vaccination and certification would also become unfair -and sometimes discriminatory- barriers to such activities.

Sufficient access to a good life should exist for all regardless of vaccination status, especially in countries which have decided against making vaccination mandatory.

Whenever alternatives exist which could make an activity sufficiently safe without using a vaccination certificate requirement, for example through distancing or wearing masks, then this

alternative will usually be preferable as it would not treat vaccinated and unvaccinated individuals differently and would not make vaccination status publicly visible.

Proportionality should exist between the burden imposed by vaccination certificate requirements and the goal they are being implemented for. An activity which represents a low risk in any case would not fulfil this requirement. This means that as vaccination progresses, and risks become lower overall, fewer situations will justify vaccine certificate requirements. As illustration, before the current pandemic it was deemed justified to require vaccination certification for travel to some countries and in some very specific instances for professional reasons. It would be strange for COVID19 vaccination certification to be considered acceptable beyond similar cases once general access to vaccination has made the risk much lower than it is now.

Requirements for vaccine certification implemented because of specifically high risks at this time should be time-limited, since their justification will often end with the pandemic. This could be a difficult requirement to fulfil in practice. The infrastructure built to implement this, in particular in a digital form, would require involvement of private parties. These private parties would become part of the intervention, they would have decisional power on this intervention, as well as a long-term infrastructure engrained in the health system that would create dependencies and effectively privatise some of the services and decisions we originally expect come from the state. Removing infrastructures once they are there is extremely difficult. Even in a privacy-preserving model, function creep would also have to be prevented.

Linking benefits to vaccine certificates also creates an incentive to falsify them in order to access those benefits.

8. Disadvantaged groups

Some disadvantaged groups risk being further disadvantaged during the implementation of vaccine certification requirements and merit particular consideration.

Residents in long-term care are highly dependent on the institution in which they live for most components of their lives. For this reason, allocating different rights to those who are vaccinated or unvaccinated will often represent a greater inequality than it would otherwise. On the other hand, they are part of the priority population for vaccination and therefore receive vaccination early and with a highly effective vaccine. Moreover, this population has already endured a particularly heavy burden during the COVID19 pandemic. Once vaccination is completed in an institution, the possibility of remaining shielded should exist for those who chose not to be vaccinated but different rules should not be imposed upon them.

Adolescents and young adults are not among those most vulnerable to dying of COVID19. They have therefore implemented measures largely for the protection of others since the beginning of the pandemic. For the same reason, they are not among the priority groups for vaccination either. Implementation of vaccine certification requirements before truly generalized access to vaccination would therefore represent a compounded burden for them, especially if such requirements were implemented for activities that could be made safe for everyone with other protective measures. Cases such as theirs illustrate how requiring vaccination certificates can disadvantage the already disadvantaged: a further reason for limiting their use.

Illegal immigrant workers are at high risk of lacking equal access to vaccination and also to certification. Devising mechanisms to enable equal access for this population is important to protect

their human right to health (Brolan 2013) and is also in the interest of pandemic control. Moreover, a vaccination certificate has two parts: an attestation of a claim "vaccinated" and a binding to an identity. The latter is needed for individuals to prove that the claim refers to themselves. Vaccination certificates thus imply that everyone must have proof of identity. For illegal migrants, getting that certificate will mean to get an identity that then will be with them forever. Imposing this increases the burden on them and may make this burden disproportional more often in their case.

Individuals who cannot be vaccinated because they have medical contraindications to the vaccination will be disadvantaged under a vaccination certification requirement scheme. Their case also illustrates how requiring vaccination certificates can disadvantage the already disadvantaged: a further reason for limiting their use.

9. International use of vaccination certificates

As noted, there is widespread precedent for requiring proof of vaccination in order to cross borders (i.e. the widely-implemented yellow fever vaccination certificate required to enter at-risk countries). Sovereign states can adopt vaccination certificates as a condition for granting entry to their territories. It is possible that Switzerland's neighbouring countries, and perhaps eventually the EU in a more uniform manner, will adopt such a requirement, as well as many other countries to which Swiss residents may travel. If this is likely, there is a case for issuing vaccine certificates that are standardized by the Confederation in some way so as to prevent a patchwork of cantonal or private-sector certificates that may be difficult to verify by other authorities receiving travellers from Switzerland. Issuing a state-sanctioned vaccine certificate to enable international travel need not imply that such certificates are permitted to be used in an unrestricted manner domestically (in the same way that holding a passport that permits international travel does not mean one needs a passport to access most services within Switzerland, for example).

A related question is whether Switzerland should require proof of vaccination for international travellers seeking to enter the country. As noted above, there is a rationale for requiring such certification to reduce potential burden on the healthcare system from individuals who may become ill from severe Covid19. If vaccines reduce transmission, then there is an even stronger rationale for requiring such certification to reduce the risk of sparking new outbreaks through imported cases and strains. It would be important to include a regime of exceptions, for example to asylum seekers coming from countries where vaccination may not be widely available for several years. A system could be envisioned, at a time when vaccines are universally available in Switzerland, in which some select travellers are able to be vaccinated upon arrival and quarantine until sufficient time has passed that they will be expected to have developed immunity (estimated to be several weeks). The authorities would also need to decide which vaccines they would accept as fulfilling their requirements (would it be only those approved by Swissmedic or a wider set?), given the variable levels of protection and other traits of the many vaccines now coming onto the market worldwide. Finally, as scientific uncertainty remains high regarding the duration of protection and degree of protection against novel variants, we can expect that policies will need to be regularly adjusted to reflect the changing scientific knowledge base.

An important policy question on the horizon, outside the scope of this memo, is whether a negative PCR test (recently adopted as a requirement to enter Switzerland, and many other countries) should be accepted in lieu of a vaccine certificate, especially if cases reach a low level in Switzerland (implying a low risk of locally acquired infection).

Currently, examples of the use of vaccine certification requirements in other countries include the development of an international vaccination certification by the EU in collaboration with the WHO. Some countries (for example Greece, Portugal, and Spain) have announced plans to require vaccine certification for entry into their borders.

The "International Health Regulations (2005) Emergency Committee regarding the coronavirus disease (COVID-19) pandemic" has advised against the use of vaccine certification requirements for travel, based on the lack of data regarding the effect of vaccination on transmission (WHO 2021). Austria, where a requirement for negative PCR tests has been introduced for a number of activities, has not planned to exempt vaccinated individuals, or those who have already recovered from COVID19. Germany's Ethikrat has just published a position paper warning against the use of special rights for vaccinated persons as long as the effect of vaccination on transmission is unknown, underlining that the implementation of measures would become harder if they were to be imposed only on unvaccinated persons, and stressing the importance of protecting basic rights for all regardless of vaccination status (Deutscher Ethikrat 2021). Several countries, including France and the UK, probably have legal obstacles to the implementation of such documents to give different rights to individuals within their borders. In some of these countries, one considered option would be to require either proof of vaccination or a negative test, and thus bar access to contagious individuals, rather than to unvaccinated ones. Israel, on the other hand, gives out "green passports" to vaccinated individuals and this document exonerates them from restrictions outside of lockdowns. These documents are part of the incentive structure for the large-scale vaccination campaign there.

10. Recommendations

Any difference in treatment of the vaccinated and the unvaccinated presumes the reduction of transmission through vaccination. Sufficient proof that vaccination does indeed prevent transmission is a condition for the justified use of vaccine certification requirements.

Equal protection of basic rights and the ability to fulfil basic needs and access essential goods must remain guaranteed irrespective of vaccination status, and irrespective of whether the providers for these goods are public or private entities.

Different treatment of the vaccinated and the unvaccinated poses risks of stigmatisation, unfair disadvantage, difficulties in verifying the implementation of anti-pandemic measures, and strains on social cohesion. Moreover, some disadvantaged groups risk being further disadvantaged through the implementation of vaccine certification requirements. The use of vaccine certification requirements can therefore only be justified if the danger posed by the limited activity to unvaccinated persons cannot be sufficiently mitigated by a measure less restrictive than the restriction of access, and if the risk involved is sufficient to justify the restriction. The National Ethics Commission NEK-CNE will soon publish a position paper on different ethical aspects of vaccination, which will include a discussion of vaccine certificate requirements.

If data were to show that vaccination sufficiently effectively prevents the transmission of SARS-CoV2, requiring proof of vaccination as a condition for certain activities could only be justified if

- the satisfaction of fundamental rights and needs and access to essential goods remains guaranteed for all,
- sufficient opportunities for access to a good life remain guaranteed for both vaccinated and unvaccinated persons,
- equal access was guaranteed to vaccination and certification.

In addition, requiring vaccination certification for a specific activity could only be justified if:

- the danger posed by the activity to unvaccinated persons could not be sufficiently mitigated by a measure less restrictive than the restriction of access,
- the risk involved was sufficient to justify the restriction.

Proportionality should exist between the burden imposed by vaccination certificate requirements and the goal they are being implemented for. An activity which represents a low risk in any case would not fulfil this requirement. This means that as vaccination progresses, and risks become lower overall, fewer situations will justify vaccine certificate requirements. As illustration, before the current pandemic it was deemed justified to require vaccination certification for travel to some countries and in some very specific instances for professional reasons. It would be strange for COVID19 vaccination certification to be considered acceptable beyond similar cases if in the future general access to vaccination makes the risk much lower than it is now.

Any requirements for vaccine certification implemented because of specifically high risks at this time should be time-limited, as their justification will often end with the pandemic. The difficulty of implementing this requirement in practice should be taken into account when deciding whether to allow different treatments for vaccinated and unvaccinated individuals.

We must note that vaccination certificate requirements for access to essential goods would currently be legal in Switzerland if implemented by the private sector. Since such access must nevertheless be guaranteed, we recommend examination of the need for legislation to prevent such barriers.

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