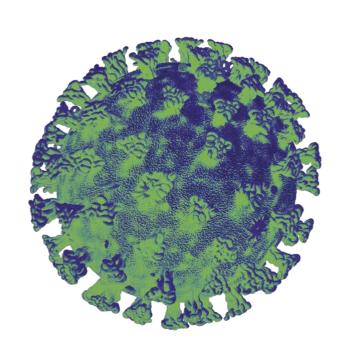
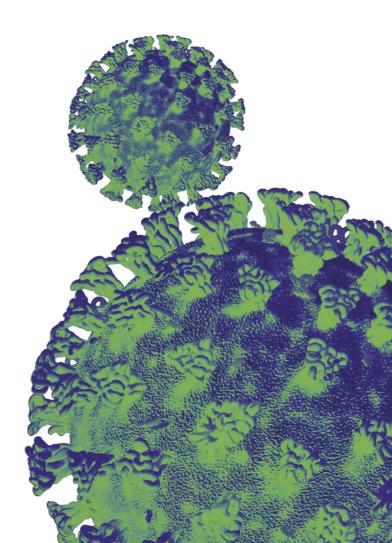


## **Technical Advisory Cell**

# Advice on 'Vaccine Passports'

14 September 2021





### Vaccine passports – TAC Advice

#### 14 September 2021

### 1. Background

- TAC was asked to provide updated advice on vaccine passports and transmission in nightclubs. Previous TAG advice on certification noted that much of the evidence to date relates to 'immunity passports or certificates', which provide proof the holder is fully vaccinated, has had a prior COVID-19 infection or a recent negative test result<sup>1</sup>. As was also noted, more recently the emphasis has been placed on a narrower vaccine passport, providing evidence the holder is fully vaccinated. As things stand, this form of passport has been considered and rejected by the UK Government but will be introduced in limited sectors in Scotland on 1 October 2021 (by which point all adults would have been offered both doses of a COVID-19 vaccine)<sup>2</sup>. Vaccine passports have also been implemented in a number of countries outside of the UK<sup>3</sup>.
- For the purposes of this advice the policy objective of introducing vaccine passports is assumed to be a reduction in transmission in higher-risk settings, to promote vaccine uptake where it is currently lower or a combination of the two. It is important this policy objective is clear and that the opportunity costs of their introduction is considered i.e. how might resources be used to achieve this objective though an alternative approach/es or building on existing work.

#### 2. Summary of previous TAG advice

- Even with careful planning and application there may not be a net benefit to the introduction of immunity certification. Reference to "immunity" may result in unreasonable expectations about the level of protection provided. A recent review concluded certificates have the potential for harm as well as benefit4.
- Levels of infection in the community will have an important impact on the level of risk and any effectiveness of certification, with effectiveness likely to be lower when infection rates are high.

<sup>&</sup>lt;sup>1</sup> Technical Advisory Group: advice for 5 August restriction review [HTML] | GOV.WALES

<sup>&</sup>lt;sup>2</sup> Vaccine certification plans approved by Scottish Parliament - gov.scot (www.gov.scot)

<sup>&</sup>lt;sup>3</sup> Vaccine passports around the world | The BMJ

<sup>&</sup>lt;sup>4</sup> Behavioural responses to Covid-19 health certification: a rapid review (biomedcentral.com)

- Were certification to be introduced, it should be alongside other measures to control transmission as part of a risk-based approach.
- Given the limited evidence and uncertainty around outcomes, SAGE has
  previously recommended use of **pilot studies** to understand the impact and
  practicalities of certification, including consideration of behavioural and ethical
  issues linked to variable vaccination uptake across groups in the population.
- Communication to the public on any certification policy would be important, and attitudes towards certificates can vary between different groups. Critically, messaging should stress certificates should not imply that an individual has no risk, rather they have a reduced risk. It will be important for individuals to continue to adhere to the usual testing and isolation requirements, even if they have a vaccine passport. This will require continued public health messaging that once a person has been vaccinated they can be re-infected and should follow existing guidance around symptoms and self-isolation.
- In addition to reduced transmission risk, certification based on vaccination could possibly encourage vaccine uptake although evidence is limited. Several concerns are identified, including the possibility of perverse incentives, complacency with regard to other personal protective behaviours and the possibility of increased opposition to vaccination among some groups.
- While evidence on vaccine uptake is limited, two recently published studies have suggested use of vaccine passports could backfire. The first presents UK data from a large-scale survey and modelling exercise carried out in April 2021<sup>5</sup>. The findings suggest the introduction of vaccine passports will likely lower the inclination to get vaccinated once baseline vaccine intent has been adjusted for, the decrease being larger if passports were used for domestic purposes (i.e. not for international travel). The authors conclude passports may result in lower vaccine inclination in socio-demographic groups that cluster geographically, possibly contributing to concentrated areas of low uptake and an epidemic risk. The second presents data from 1300 adults in the UK and Israel in May 2021<sup>6</sup>. The authors conclude that vaccine passports may have detrimental effects on people's autonomy, motivation, and willingness to have the vaccine, and affect longer-term relationships with local governments and health authorities (that are crucial for public health adherence and behaviour change to occur).

<sup>&</sup>lt;sup>5</sup> The potential impact of vaccine passports on inclination to accept COVID-19 vaccinations in the United Kingdom: Evidence from a large cross-sectional survey and modeling study - EClinicalMedicine (thelancet.com)

<sup>&</sup>lt;sup>6</sup> Vaccines | Free Full-Text | "Vaccine Passports" May Backfire: Findings from a Cross-Sectional Study in the UK and Israel on Willingness to Get Vaccinated against COVID-19 | HTML (mdpi.com)

#### 3. SAGE Advice

- Looking at SAGE papers in more detail, SAGE has not advised whether vaccine certification should be recommended per se. However SPI-B's detailed paper from December 2020<sup>7</sup> advises if they are introduced, this should be done with caution as a result of the extremely limited evidence on the nature and scale of its impacts, only provided key ethical considerations are met (particularly concerning equality and fairness), and in the context of pilot studies to assess the key uncertainties below:
  - o the impact of certification on behaviours that reduce transmission;
  - the differential impact of certification intended to enable or limit access to different activities e.g. access to a care-home to visit a relative versus access to a pub to drink with friends;
  - equality of opportunity to access certification and equality of outcome from certification. If used, certification of health status in relation to COVID-19 should be seen as just one part of a package of evidencebased measures to reduce transmission of SARS-CoV-2 equitably, including:
    - participation in NHS T&T, including supported self-isolation;
    - vaccination for COVID-19;
    - protective behaviours of social distancing, wearing facecoverings, and hand-washing;
    - shared spaces public and private that enable protective behaviours and provide sufficient ventilation.
- They also advise that if used, certification should be seen as just one part of a
  package of evidence-based measures to reduce transmission. Certification is
  an imperfect tool and a risk-based approach should be adopted. The
  prevalence of infection in the community will have an important impact on the
  level of risk and effectiveness of certification (it may be very effective when
  prevalence is low, but less effective at high prevalence).
- Trust in both the information provided and security of certification data storage will likely influence uptake, particularly in marginalised communities, but the scale of this is unknown.

5

<sup>&</sup>lt;sup>7</sup> <u>SPI-B: Health status certification in relation to COVID-19, behavioural and social considerations, 9</u> <u>December 2020 - GOV.UK (www.gov.uk)</u>

- A significant minority is strongly opposed to certificates of immunity for any purpose and there would be likely to be protests against Government measures, although the nature and scale of this is unknown. The possibility of fraudulent activity should also be considered.
- The reliability of any immunity certificate will be reduced if virus variants with significant vaccine escape are circulating<sup>8</sup>.
- SAGE has recently noted that European comparators with similar levels of vaccination have maintained more interventions (masks, vaccine certification, working from home) than the UK and are seeing their epidemics decline<sup>9</sup>.
- A SPI-B/EMG paper<sup>10</sup> noted that certification is a possible means of reducing the risk of transmission for those who may have COVID-19 but are not isolating. EMG also note the various ethical issues associated with certification.
- SPI-M<sup>11</sup> also suggested NHS pressure could be kept manageable if a 'basket of measures, light enough to keep the epidemic flat' were brought in early. More 'light touch' measures listed by SAGE include:
  - o clear messaging that recommends people acting cautiously,
  - o more widespread testing,
  - o a return to requiring all contacts of cases to isolate,
  - o and more mask-wearing.
- Certification was not considered in this list, although it was highlighted that certification for access to some venues is currently being reviewed by UK Government.

### 4. Current epidemiological position

In general, the ratio of cases to hospitalisations and deaths remains low. This is
due in the most part to vaccination and to the continued, although steadily
reducing, effect of protective behaviours by the population. However, the
growth of cases, hospitalisations and deaths is on an exponential, rather than
linear, curve and as with previous waves the potential for direct harm from
COVID-19 and indirect harm from loss of NHS services is not insignificant.

<sup>8</sup> NERVTAG: Immunity certification update, 4 February 2021 - GOV.UK (www.gov.uk)

<sup>&</sup>lt;sup>9</sup> SAGE 95 minutes: Coronavirus (COVID-19) response, 9 September 2021 - GOV.UK (www.gov.uk)

<sup>&</sup>lt;sup>10</sup> EMG, SPI-M and SPI-B: Considerations in implementing long-term 'baseline' NPIs, 22 April 2021 - GOV.UK (www.gov.uk)

<sup>&</sup>lt;sup>11</sup> SPI-M-O: Consensus statement on COVID-19, 8 September 2021 - GOV.UK (www.gov.uk)

- The most recent COVID-19 Situational Report (CSR) from 9 September shows the position of the epidemic for Wales<sup>12</sup>. Incidence continues to rise with weekly cases at 500 cases per 100,000 and positivity almost 19%, against a background of a high number of testing episodes. The doubling time is estimated to be around 19 days in Wales. There is evidence of a continued steady increase in COVID-19 hospital admissions and ICU admissions. The median age of hospital admissions is increasing, and the balance of COVID-19 related admissions is now made up of primarily vaccinated rather than unvaccinated individuals in patients aged 60+ (88%). In admissions aged under 60, 51% are unvaccinated, while the average across all patients is 61% fully vaccinated<sup>13</sup>.
- The actual data for cases, hospitalisations and ICU admissions with COVID-19 is now well above the Most Likely Scenario (MLS) that was set in June<sup>14</sup>.
   COVID-19 patients now take up around one in three beds in intensive care.
   Currently approximately a third of COVID-19 cases in hospital are hospital acquired (nosocomial)<sup>15</sup>.
- It is important to note there is not enough information about the purpose of admission for a determination of whether people are being admitted because of COVID-19 or with COVID-19. PHW are analysing the data available to them on the burden of disease from COVID-19 in hospitals, however this is fraught with difficultly due to insufficient data capture in care settings. Working with the Wales COVID-19 Evidence Centre and SAIL we may be able to commission further analyses.
- The most recent short to medium term projections show that cases will continue
  to rise for some time. This is likely to be driven by the return to work and
  education of the population, as well as widespread seeding of infection from
  those who became infected on holiday or at a mass gathering. The apparent
  flattening in Scotland offers encouragement that schools may be less of a
  driving factor.
- There is no "one reason" for the increases currently occurring, but the
  prevalence, lack of restrictions and communications about relaxation and
  waning immunity all lead to an expected rise in the epidemic.

<sup>12</sup> COVID-19 situational reports | GOV.WALES

<sup>&</sup>lt;sup>13</sup> Public Health Wales Briefing: A rapid review of individuals admitted to hospital with a positive COVID-19 test within the 28 days before or 48 hours after hospital admission (publication pending)

<sup>&</sup>lt;sup>14</sup> Technical Advisory Cell Summary of Advice, 10 September

<sup>&</sup>lt;sup>15</sup> PHW report to COVID-19 Intelligence Cell, reporting date 7 day period ending 3/9/21

#### 5. Nightclubs

TAG have previously provided detailed advice on nightclubs<sup>16</sup>. While key risk factors associated with such settings have been described, empirical evidence to date remains limited to a small number of international case studies which show a wide range of infection rates from nightclubs, likely influenced by local restrictions and incidence rates and accuracy of testing regimes. Further intentional use cases on nightclubs may become available.

## 6. Opportunity costs - alternative/complementary interventions to achieve the policy objective

- As noted above, there are opportunity costs associated with the introduction of vaccine passports (or any intervention). For example, with finite operational resource and demand around additional vaccination of those immunesuppressed and forthcoming demand around children/young people and any population wide booster doses needing to happen before winter, there may be value in more detailed consideration of the relative contribution of each to the overall policy objective.
- This question is beyond the scope of this brief advice but in terms of reducing
  risk there is scope to emphasise the key interventions around making
  environments safe, with risk assessments focusing, for example, on ventilation
  and requiring proof of vaccine status as part of their broader risk based
  approach.
- A body of evidence is also emerging to address vaccine uptake. For example, the Wales COVID-19 Evidence Centre<sup>17</sup> have recently produced reviews into barriers, facilitators and interventions to increase vaccine uptake. Based on this emerging evidence, an immediate focus could be the continued systematic deconstruction of those 'yet to take-up' (who, where and why) to shape responses. Example activities could include:
  - Follow-up contact with those with appointments but yet to attend, as well as 'new' appointments, employing motivational interviewing where possible to increase rates of uptake and ensuring practical arrangements are in place (e.g. childcare at vaccination centres).

<sup>&</sup>lt;sup>16</sup> technical-advisory-group-advice-for-nightclubs-and-adult-entertainment-venues.pdf (gov.wales)

<sup>&</sup>lt;sup>17</sup> Vaccination uptake (barriers/facilitators and interventions) in adults from underserved or hard-to-reach communities. RES\_00006. (<u>Wales Covid-19 Evidence Centre</u>, July 2021, in press, available on request)

- Continued fine-tuning in the precision of communications work to ensure the right audience is being reached with targeted, tailored information sharing and encouragement from trusted messengers.
- Additional consideration of practical issues, known to be critical, to increase accessibility (e.g. pop-up centres).
- Further work to address online misinformation and disinformation, notably how social media accounts disseminating such material can be tackled and 'facts' more readily available.
- Building on the successful outreach approaches in place in different locations around the country.
- This is not to suggest a false dichotomy where ongoing work would not continue if vaccine passports were introduced. Rather, the relative allocation of resources for various interventions would need to be considered in attempting to achieve the policy objective/s.
- It is also essential that the above advice is seen in the context of the recent TAG paper on sustaining COVID-safe behaviours<sup>18</sup>, including the COVID-code, which reinforces the importance of a risk-based approach noted above. It is also important that there is a good understanding among the population of the current transmission risk, to support such a risk-based approach.

<sup>18</sup> Technical Advisory Group: sustaining COVID-safe behaviours in Wales | GOV.WALES