

HAVE
Vaccine
PASSPORT
WILL
TRAVEL

WHAT UK RESIDENTS THINK
ABOUT VACCINE PASSPORT

SCHOOL OF HOSPITALITY & TOURISM MANAGEMENT
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LOCKED DOWN

On 17 May 2021, the UK entered Step 3 of Covid-19 lockdown roadmap, which included lifting a ban on foreign travel. The UK implemented a travel traffic light system, categorising destinations based on risk and severity of coronavirus, with travel to red list countries carrying the strictest rules.

To ease these travel restrictions, UK residents can use proof of vaccination or Covid status (e.g. via NHS app), a scheme known as **vaccine passport**. Despite its potential to bring back 'normality' to society, the implementation of vaccine passport is still laden with complex issues, and public opinion seems polarised.

In this report, we present findings from two studies exploring public opinion about vaccine passport scheme. First, we collected tweets containing the keywords “*vaccine passport*” posted between December 2020, around the start of vaccination rollout in the UK, and April 2021 to mine opinions and identify issues emerging from relevant conversations on Twitter.

Will consumers use **vaccine passport** to travel again?

We then conducted an online survey targeting residents in the UK to gauge their attitudes toward vaccine passport and intention to use it for travel or to gain access to business and services, including hospitality, in the near future.



VACCINE PASSPORT ON TWITTER

TWITTER DATA COLLECTION & ANALYSIS

We used **Twitter API for Academic Research** to collect tweets containing “*vaccine passport*”, written in English, posted during 01/12/2020 - 31/04/2021, resulting in a dataset of quarter million tweets. All retweets, duplicates, and tweets including URLs, mentions, and emojis were removed. Hashtags, numbers, punctuations, special characters, and stop words were deleted. All tweets were then normalised into lowercase. We then used **NLTK tweet tokenizer** to combine words that appear most often in the dataset. Lemmatisation followed, by converting words into their basic forms. Only nouns, adjectives, verbs and adverbs were kept during this process.

We used **Latent Dirichlet Allocation (LDA)** topic modelling to cluster tweets into topics. The Coherence Score was used to select the optimal number of topics. We selected 14 topics to achieve as many distinct clusters as possible related to the implementation of vaccine passports.

ACCESS TO SERVICES

"require" + "show" + "vaccine" + "pub" + "proof" + "enter" + "place" + "public" + "school" + "order"

DIGITAL CERTIFICATE

"vaccine" + "passport" + "plan" + "call" + "digit" + "certify" + "global" + "today" + "propose" + "read"

CIVIL LIBERTIES

"govern" + "busy" + "freedom" + "force" + "free" + "medic" + "choice" + "private" + "person" + "mandatory"

CRIME

"vaccine" + "people" + "passport" + "crime" + "court law" + "dead murder" + "reason" + "worried" + "shit"

GOOD OR BAD

"passport" + "vaccine" + "idea" + "thing" + "good" + "really" + "make" + "talk" + "actual" + "bad"

REUNITE FAMILIES

"vaccine" + "passport" + "year" + "time" + "world" + "day" + "wait" + "long" + "hear" + "leave"

DISCRIMINATION

"passport" + "vaccine" + "vote" + "system" + "voter" + "support" + "law" + "racist" + "implement" + "oppose"

CONTROL

"vaccine" + "make" + "control" + "passport" + "push" + "try" + "happen" + "end" + "believe" + "mandatory"

RETURN TO NORMALITY

"stop" + "vaccine" + "virus" + "back" + "life" + "point" + "mask" + "normal" + "protect" + "safe"

ANTI-VACCINE

"vaccine" + "passport" + "state" + "open" + "anti" + "news" + "citizen" + "nation" + "ban"

TRACKING

"passport" + "vaccine" + "card" + "give" + "carry" + "app" + "problem" + "already" + "track" + "check"

ENABLE HOLIDAY

"vaccine" + "passport" + "issue" + "become" + "start" + "holiday" + "roll" + "possible" + "trial" + "consider"

RETURN TO WORK

"vaccine" + "passport" + "covid" + "work" + "test" + "prove" + "question" + "concern" + "pass" + "status"

INTERNATIONAL TRAVEL

"travel" + "vaccine" + "passport" + "countries" + "many" + "require" + "intern" + "already" + "able" + "fly"



ON CERTIFYING AN INDIVIDUAL'S COVID-19 VACCINATION STATUS

VACCINE PASSPORT

Major themes extracted from Twitter mainly represent opinions from the US and UK contexts.

SUPPORTING VACCINE PASSPORT

The implementation of vaccine passport is believed to help society emerge from lockdown and **return to normality**, allow people **access to services**, facilitate safe **return to work**, enable people to go on **holidays** and take **international travel**, and **reunite families**. Conversations around these topics point toward the role of covid certification as a tool to restart the economy and regain normality in society, particularly to give people a sense of safety as they return to work, travel, use public services, etc.

REJECTING VACCINE PASSPORT

For consumers who are against vaccine passport, they view its implementation as an infringement to individual's freedom and **civil liberties**, a mechanism of **control** and surveillance (**tracking**), a cause for **discrimination** (exclusion of those unable to get vaccination), and an enabler for criminal activities. These conversations focus on the role of vaccine passport as government's tool to control their citizens, taking away their freedom. People who are opposed to **vaccination** are also involved in these topics.

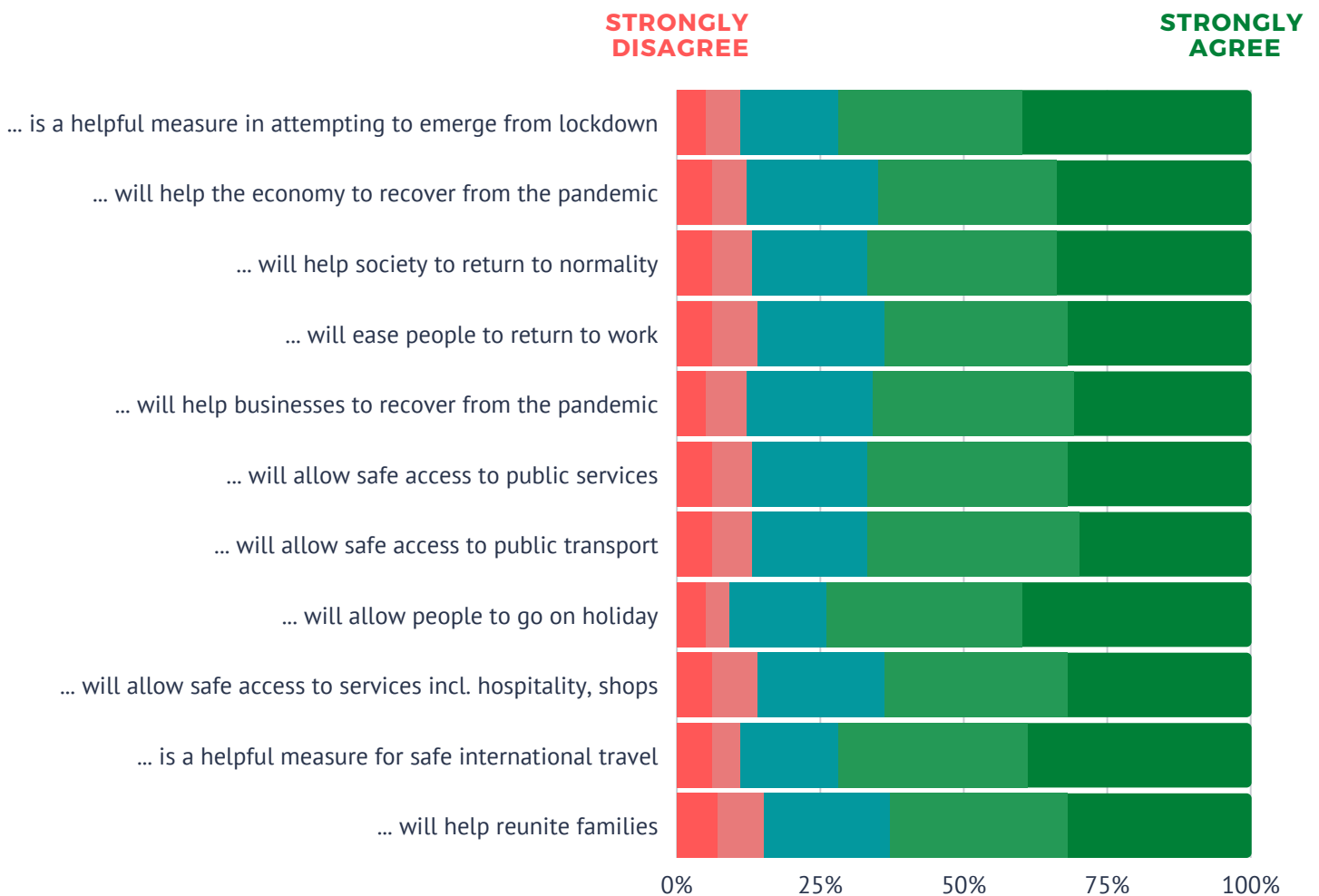
UK RESIDENTS: ATTITUDES TOWARD VACCINE PASSPORT

An online survey was distributed to circa 1,000 UK residents (general population) aged 18 years or older from 14-20 May 2021 via an online market research company, Dynata. Informed by the results from Twitter topic modelling analysis, the purpose of this survey was to explore UK residents' attitudes toward vaccine passport and their intention to use it for travel and to access businesses and services.

The survey also asked whether UK residents were planning to travel domestically or internationally within the next two weeks (immediately after the start of Step 3 of the Government's lockdown roadmap) or in Summer 2021 (after Step 4 of the roadmap).



I THINK VACCINE PASSPORT...



N = 934

BENEFITS OF VACCINE PASSPORT

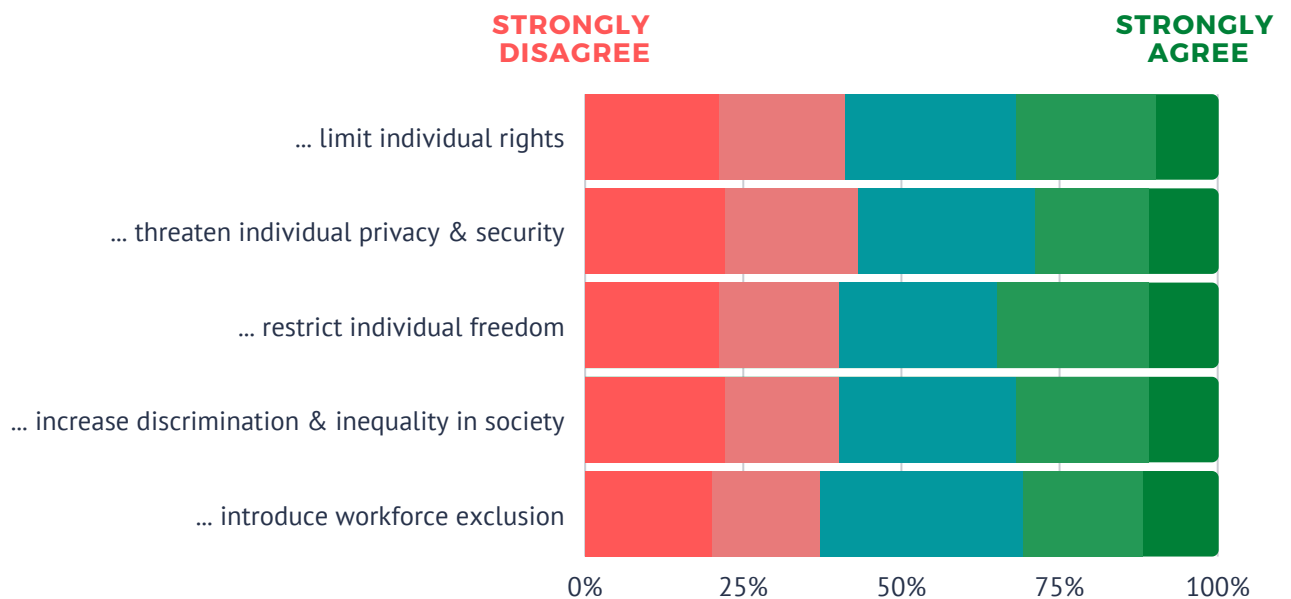
UK residents surveyed show positive attitudes toward the implementation of vaccine passport with the majority agreeing that the scheme is a helpful measure in attempting to emerge from Covid-19 lockdown (*mean: 3.96, st.dev: 1.13*) and for safe **international travel** (*mean: 3.97, st.dev: 1.12*), and it will allow people to go on **holiday** (*mean: 4.02, st.dev: 1.06*)*.

*ON A 5-POINT SCALE

74%

agree that vaccine passport
will allow people to go on
holiday

I THINK VACCINE PASSPORT WILL ...



N = 934

DRAWBACKS OF VACCINE PASSPORT

Although they do not represent the majority's assessment (all mean values are lower than neutral, thus leaning towards disagreement), around a third of UK residents surveyed agree that the implementation of vaccine passport will pose limitation to individual rights and freedom. Less than a third also agree that the scheme will increase discrimination, inequality, and exclusion.

35%

agree that vaccine passport will restrict individual freedom

Most people surveyed show positive assessment of the vaccine passport scheme, with strong agreement regarding its value to facilitate travel. On the other hand, issues associated with civil liberties, infringement of freedom and rights, and discrimination still persist, despite with a small proportion of the residents surveyed. With these in mind, we proceeded to analyse whether these factors can be associated with people's willingness to use proof of vaccination for the purposes of travel and hospitality consumption (e.g. going to pubs & restaurants).



WILL UK RESIDENTS USE VACCINE PASSPORT?

First, we asked if those surveyed will use vaccine passport in general (without specifying a purpose); only 14% indicated they will not use it. Then, we asked if they will use it for travel and to access services such as pubs, restaurants, and shops. Around 20% indicated they will not use vaccine passport for these purposes. About half of the UK residents surveyed stated they will use vaccine passport in general and for travel and consumption purposes in the near future. Around 30% are undecided.

55%

intend to use vaccine
passport in the near future

52%

intend to use vaccine
passport for travel

49%

intend to use vaccine
passport to go to pubs,
restaurants, shops



WHY USE VACCINE PASSPORT?

CORRELATIONS BETWEEN BENEFITS & DRAWBACKS AND ADOPTION INTENTION

We calculated the correlations between positive/negative assessment of vaccine passport and people's intention to use it. We checked for construct reliability of the positive and negative assessments, then calculated their aggregate mean value by averaging the mean values of all items that make up the construct.

We found significant positive correlation between perceived benefits of vaccine passport and people's intention to use it ($r = .786$). Significant negative correlation was found between perceived drawbacks of vaccine passport and adoption intention, although the coefficient is weaker in magnitude ($r = -.376$). It can be suggested that communicating the benefits of this scheme will be helpful to encourage uptake, while addressing issues around civil liberties and exclusion will be necessary to remove barriers to adoption.

POSITIVE CORRELATION BETWEEN BENEFITS OF VACCINE PASSPORT AND ADOPTION INTENTION

.786

SIGNIFICANT AT .01 (1%) SIGNIFICANCE LEVEL
 $N = 934$

Higher degree of benefits of vaccine passport is associated with higher intention to use vaccine passport

NEGATIVE CORRELATION BETWEEN DRAWBACKS OF VACCINE PASSPORT AND ADOPTION INTENTION

-.376

SIGNIFICANT AT .01 (1%) SIGNIFICANCE LEVEL
 $N = 934$

Higher degree of drawbacks of vaccine passport is associated with lower intention to use vaccine passport

WILL YOU TRAVEL WITHIN THE NEXT TWO WEEKS?

34% of the UK residents surveyed reported they intend to travel domestically within the next two weeks. Only 15% of them stated they intend to travel internationally within the next two weeks (Step 3 of lockdown roadmap).

34%

intend to travel **domestically**
within the next two weeks

55%

intend to travel **domestically**
this summer

WILL YOU TRAVEL THIS SUMMER?

55% of those surveyed reported they intend to travel domestically this summer. 25% of them stated they intend to travel internationally for summer holiday (after the planned Step 4 of the lockdown roadmap).

IS WILLINGNESS TO USE VACCINE PASSPORT ASSOCIATED WITH TRAVEL PLANS?

**POSITIVE CORRELATION
BETWEEN INTENTION TO USE
VACCINE PASSPORT AND
INTENTION TO TRAVEL AFTER
STEP 3 OF ROADMAP**

.230

SIGNIFICANT AT .01 (1%) SIGNIFICANCE LEVEL
N = 934

Higher intention to use vaccine passport is associated with higher intention to travel within the next two weeks (Step 3)

**POSITIVE CORRELATION
BETWEEN INTENTION TO USE
VACCINE PASSPORT AND
INTENTION TO TRAVEL AFTER
STEP 4 OF ROADMAP**

.304

SIGNIFICANT AT .01 (1%) SIGNIFICANCE LEVEL
N = 934

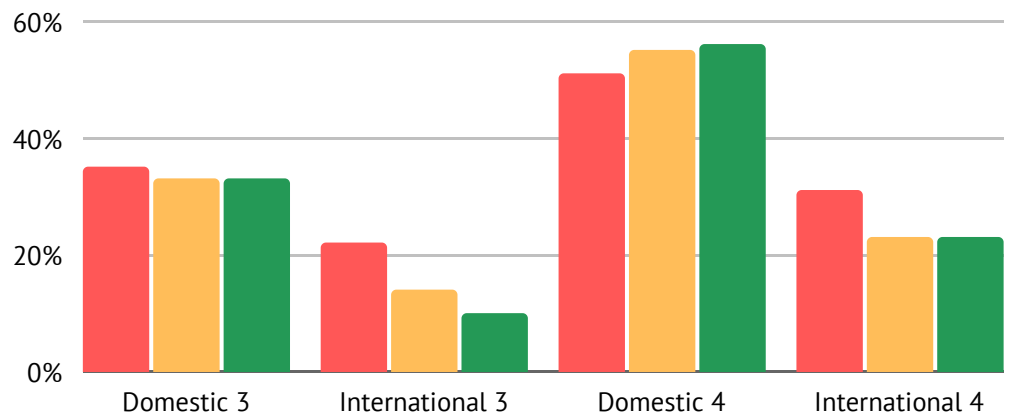
Higher intention to use vaccine passport is associated with higher intention to travel in Summer 2021 (Step 4)



DOES OWN VACCINATION STATUS MATTER?

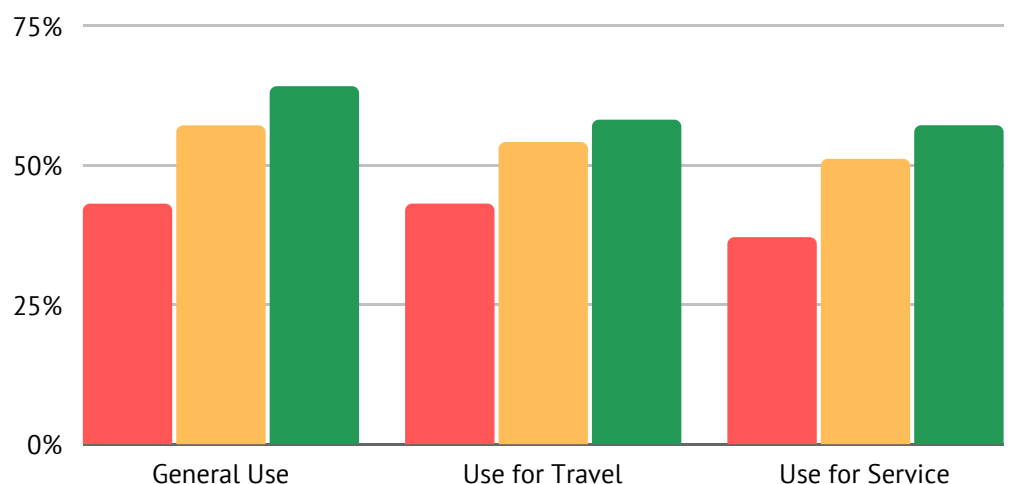
TRAVEL PLANS

We compared between those surveyed who have not had Coronavirus vaccination (red) to those who have had one (amber) and two (green) doses of vaccines in terms of their travel plans within the next two weeks (Step 3) and this Summer (Step 4). No stark differences were found. Respondents intending to travel internationally are slightly higher in the group who have not received vaccination. Fully vaccinated respondents do not exhibit higher intention to travel.



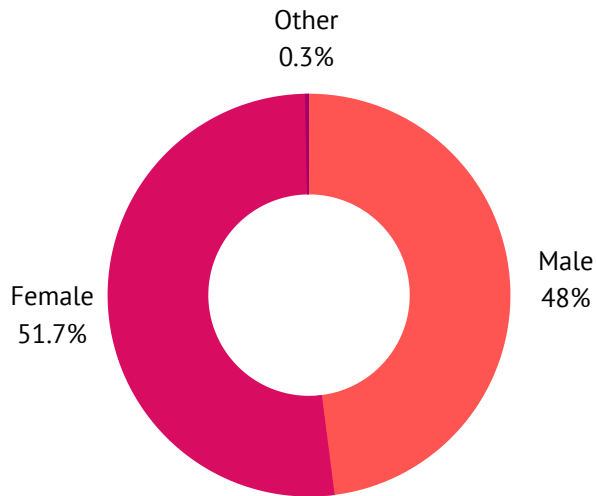
VACCINE PASSPORT ADOPTION INTENTION

Similarly, we compared intention to adopt vaccine passports amongst the surveyed according to their own vaccination status (red: no, amber: 1 dose, green: 2 doses). The percentages of fully vaccinated UK residents surveyed who selected agree to use vaccine passport are higher than those who have had no vaccination and those who have had one dose.



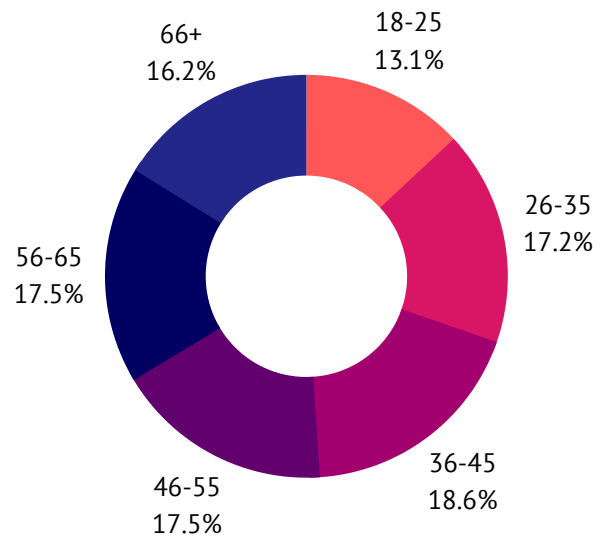
GENDER

N = 934



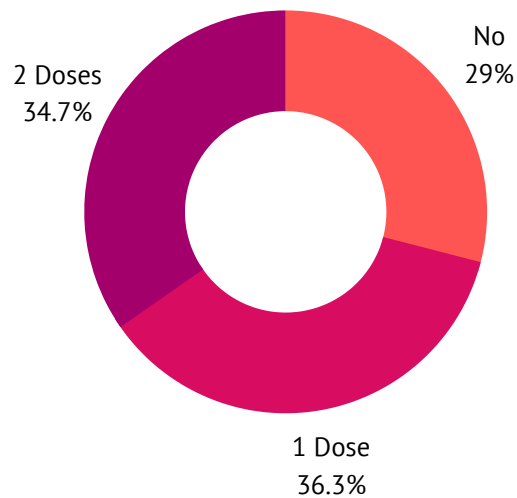
AGE GROUP

N = 934



VACCINATION STATUS

N = 934



CHARACTERISTICS OF

RESPONDENTS





Study Findings

LESSONS LEARNED

The findings show that residents in the UK have a **positive outlook** on the use of vaccine passport. Most people surveyed agree that the scheme will help society to return to normality. In particular, there is a strong support that proof of vaccination will help restart travel, allowing people to go on holiday and easing international travel. Issues around individual rights, privacy, security, and discrimination exist, but they are less prominent. This indicates that when it comes to vaccine passport, **the benefits outweigh its drawbacks.**

More than half of the people surveyed will adopt vaccine passport, including for travel and hospitality. Only 20% reported unwilling to use the scheme.

There is a small but significant correlation between acceptance of vaccine passport and travel plans. No significant differences were found amongst respondents with different vaccination status in terms of travel plans.

UK residents surveyed are in agreement that vaccine passport is a useful mechanism to ease travel restrictions, thus key to restarting the travel and hospitality industry.

As residents are aware of its benefits, key to encourage uptake of proof of vaccination is to take necessary measures to address concerns of discrimination, privacy, and civil liberties. This includes offering alternative mechanisms (such as negative test results) to ensure safe travel, work, and social activities as we gradually come out of Covid-19 lockdown.

GOING FORWARD

Recommendations



SAFE TRAVELS

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