



# RAPID ETHICS REVIEW

## ETHICAL CONSIDERATIONS IN UNFAIRNESS AND MITIGATING SOCIAL DISPARITIES IN COVID-19 VACCINE DISTRIBUTION AND UPTAKE IN THE UK

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*Near-universal vaccination is key to defeating the covid-19 pandemic. Decisions must be made about how vaccines should be allocated and distributed to achieve this goal as quickly, successfully, and fairly as possible. Some social groups are at greater risk of harm and death from covid-19 than others because of biological or social factors, and there are different opinions about the most ethical order in which to prioritise their access to vaccinations. In addition,*

*some groups are reluctant to be vaccinated and their views must be respected while also trying to minimise harms. Equality and equity in allocation, and the mitigation of inequalities across society, are vital for the ethical acceptability of any vaccination strategy. This review examines these interlocking considerations in understanding the values at stake in attempting to decide the best possible approach for a vaccination strategy.*

### KEY POINTS

- Because vaccine supplies are limited and cannot be administered to all simultaneously, disagreement about what strategy is ethical and who should take priority is inevitable.
- Covid-19 vaccines have been offered to population groups in the UK according to risk factors that increase the chance of serious illness or death. Age is the most significant of these.
- Based on advice from the Joint Committee on Vaccination and Immunisation (JCVI), the UK government has been attempting to maximise the amount of people who receive a vaccine and to mitigate inequalities facing other population groups at high risk.
- The ethical values that drive the two arms of the government's strategy can conflict, and this poses challenges for ensuring an optimally ethical rollout of covid-19 vaccines.
- Some communities have higher proportions of people reluctant to have a vaccine. This must be addressed by avoiding coercion and responding to legitimate concerns.
- Addressing risk factors for harm from covid-19 in certain social groups is as ethically important as maximising the number of people who receive a vaccination, irrespective of individual risk.

### INTRODUCTION

When deciding how to prioritise access to vaccination, there are different views about the fairest way to do this and what it means to treat everyone equally

Initially, vaccine supplies are much lower than required to vaccinate the whole population; and because they

cannot be administered to everyone simultaneously this causes a bottleneck in distribution. This means a decision is needed about the order in which people should be offered them: should vaccines be distributed randomly? Or should some groups be given priority and receive a vaccine first, even though

this necessarily means treating people unequally? Given numerous competing factors, getting the strategy right requires a finely balanced judgement. This will inevitably be criticised for being unethical, because it will benefit some people more than others and there are good reasons in favour of prioritising multiple groups.

The government receives advice from an independent expert advisory committee, the [Joint Committee on Vaccination and Immunisation \(JCVI\)](#)<sup>1</sup>. Following this advice, the UK government claims its vaccine distribution programme is fair because it prioritises certain groups. These groups include elderly people or those with underlying medical conditions, on the basis of scientific information indicating that they are at a higher risk of serious illness or death from covid-19 than others. But the government also claims its programme treats all people equally, for example by ensuring that distribution is uniform across the regions.

The government's aim has been to prevent a market in covid-19 vaccine, ensuring rather that those who need it most get it first. It has assumed responsibility for deciding who should receive a vaccine and when. This strategy is open to ethical scrutiny against concerns for equal treatment and fairness. Vaccine allocation using a lottery system or a first-come-first-served basis would guarantee equal treatment. However, these would have problematic ethical

implications, which the implemented strategy has been designed to avoid. In a lottery system, someone with no underlying vulnerability to covid-19 is just as likely to receive a vaccine as someone at high risk of serious illness or death. A first-come-first-served approach would mean that people without the means to get themselves to the front of the queue are going to be further disadvantaged by those who do.

The aims of the government's vaccination strategy are to maximise the amount of people vaccinated and prioritise those most at risk from the disease. But these aims can conflict, and invite analysis of the fairness of the strategy. This review examines and explains the ethical implications for society of the principles underlying the vaccine distribution strategies of the UK nations, highlighting what is at stake when these principles come into tension.

#### Summary:

- Views differ about the fairest way to distribute covid-19 vaccines across the population.
- JCVI advice to UK governments recommends prioritising at-risk groups.
- The strategy aims to do this while also maximising how many people are vaccinated.

## VACCINE DISTRIBUTION: WHAT VALUES UNDERPIN THE PRIORITISATION THAT WE HAVE?

The governments of the four UK nations have all decided that a fair strategy for distribution is by *priority* according to risk factors, such as age or presence of underlying disease

The [two overarching goals](#)<sup>2</sup> of vaccination prioritisation are: maximising the amount of eligible people who receive it; and prevention of [covid-19 mortality and morbidity](#)<sup>3</sup>, including by protecting healthcare staff. Achieving this depends on being able to maintain immunisation services over time, so that vaccine-preventable death and disease can be [minimised](#)<sup>2</sup>. The main barrier to achieving this is likely to be [vaccine availability](#)<sup>4</sup>, globally. In the UK context, the governments' claim is that achieving the two goals is, on balance, best achieved by [prioritising first doses](#)<sup>2</sup> of vaccines for as many people on the priority list as possible, thereby protecting the maximum number of at-risk people in as short a time as possible.

Overall, age is the single biggest risk factor for serious illness or death from covid-19. As such, [JCVI advises](#)<sup>5</sup> an age-based programme of prioritisation into nine groups, to achieve optimal uptake in those at highest risk, followed by vaccination of younger adults at lower risk once this has been completed. However, it should also incorporate flexibility in vaccine deployment to account for local conditions with respect to:

- mitigating health inequalities, such as might occur in relation to access to healthcare;
- storage, transport, administration demands of [different vaccine](#)<sup>6,7</sup> products;
- exceptional individual circumstances, e.g. if a young person cares for someone at risk; and
- availability of suitable approved vaccines, given different risk profiles, e.g. in the case of controversy about the safety of the [AstraZeneca vaccine](#)<sup>8</sup>.

Although the four UK nations – [England](#)<sup>3</sup>, [Wales](#)<sup>9</sup>, [Scotland](#)<sup>10</sup>, and [Northern Ireland](#)<sup>11</sup> – are responsible for developing their own vaccination programmes and are different in some respects, all follow the nine-group prioritisation protocol recommended by JCVI. According to this overall strategy of age-based deployment to maximise uptake, the [JCVI recommends](#)<sup>3</sup> offering vaccination first to the top four of the nine priority groups:

- all residents in a care home for older adults and their carers;
- all those 80 years of age and over and frontline health and social care workers;
- all those 75 years of age and over; and
- all those 70 years of age and over and clinically extremely vulnerable individuals.

A distribution model like this is underpinned by what could be called [prioritarian](#)<sup>12</sup> principles. This is unsurprising, given the identification of *priority* groups. The next two sections look at why there are

tensions between different approaches to vaccination rollout, to see why there might be disagreement about what counts as a ‘fair’ approach to prioritisation. For instance, even though [The NHS Constitution for England](#)<sup>13</sup> confirms that it acts in the interest of the whole community, it also recognises that ‘some people need more help, that difficult decisions have to be taken’. The difficulty acknowledged here is that in making decisions that allocate resources according to need, there will be scope for disagreement about whether prioritisation decisions are fair.

#### Summary:

- Because vaccine supplies are limited, some people will have to be vaccinated ahead of others.
- At-risk groups have been identified and prioritised accordingly for allocation of vaccines.
- The allocation strategy adopted in the UK may be understood as broadly prioritarian.

## HOW ELSE COULD WE ‘MAXIMISE’ THE GOOD TO BE DONE BY THE VACCINATION PRIORITISATION STRATEGY?

The JCVI’s prioritisation strategy rests on value judgments, and it has been argued that alternative groups and risk factors ought to have been prioritised.

Ways to maximise the good to be done by the vaccination strategy would include ensuring that:

- data pertaining to prioritisation are relevant and accurate;
- the mechanisms for distributing vaccines are effective; and
- that public education about covid-19 vaccines is successful in instilling widespread confidence in the strategy and minimising hesitancy over uptake.

However, these goals may be difficult to achieve.

The vaccination prioritisation strategy has received criticism. This is, unfortunately, inevitable, because to prioritise one group inevitably means de-prioritising another, given that vaccine need currently outweighs supply and vaccinations cannot all be administered simultaneously. In certain instances, this has led to modifications of the strategy. For example, some local GP groups decided to prioritise all patients

with learning disabilities, in response to evidence that disabled people were at much higher risk from covid-19. As such, [it has been argued](#)<sup>14</sup> that 150,000 more people with learning disabilities should be offered the vaccine more quickly.

After production of this evidence, the [JCVI confirmed](#)<sup>15</sup> that updated analysis indicated that those on the GP register with learning disabilities have a higher risk of mortality and morbidity. It then supported the plan to invite anyone on the GP Learning Disability Register – as well as adults with other related conditions, including cerebral palsy – for vaccination as part of priority group six.

The strategy has also been [criticised](#)<sup>16</sup> on the basis that maximising coverage with the first dose, as intended by the UK Chief Medical Officers, could come at increased risk to other high-risk groups. For example, some key workers such as teachers and police officers have not been prioritised, despite increased risk they will come into contact with the virus. Despite these criticisms, the Secretary of State for Health and Social Care, Matt Hancock, [defended](#)<sup>17</sup> the strategy on the basis that prioritising these groups would not save the most lives, and as such that it is ‘the moral thing to do’. Accordingly, the government has largely stuck to [its](#)

[strategy](#)<sup>18</sup> of vaccinating people in order of age as the fastest way to cut covid-19 deaths.

Defending the strategy, the [covid-19 chair of JCVI has argued](#)<sup>19</sup> that since age is the most dominant risk factor, prioritising on this basis simplifies the deployment. This is judged to be important because simplicity ‘...has been a cornerstone in terms of speed and success...continuing the age-based rollout will provide the greatest benefit in the shortest time, including to those in occupations at a higher risk of exposure’.

It is important to be clear about what is at stake in the principles advanced by JCVI that drive the vaccination strategy across the UK. The strategy is defended on the basis that it is morally the right approach. But because any prioritisation strategy means that some people cannot come first, it will always be open to the criticism that it is unfair. In the instance above, both JCVI and the teachers’ groups give reasons that are based in fairness. But these are also reasons that are mutually exclusive. The fact that one or other view will have to be favoured, is what creates an ethical tension and why there is no single proposal that is the way to maximise benefit.

A straightforward way of understanding fairness is with reference to equality, which on its face means ensuring that there are no differences between how people are treated, and no greater weight attached to the needs of, or benefits to, one group over another. But even if a strategy tries to achieve this by maximising the amount of people who can be vaccinated as rapidly as possible, many people will be treated unequally. Pointing this out does not imply support for JCVI or government decision-making; rather it illustrates that ethical tensions arise from the weight given to different needs and risks. The consequence of this is that different perspectives on weighting to might lead to disputes about what should be done to maximise benefit. The next section explores in some more detail how such ‘equal’ treatment can be interpreted.

### Summary

- Because some groups must take priority, disagreement about the strategy is inevitable.
- Disagreement about who should take priority causes ethical tensions.
- This means there are different ways of understanding what it means to maximise benefit.

## IS IT POSSIBLE TO TREAT EVERYONE FAIRLY AND EQUALLY?

Although being fair is often associated with equal treatment, vaccine prioritisation means people are inevitably treated unequally, and this poses ethical challenges given societal diversity.

Several factors might come to bear on why equality might be hard to achieve in the current vaccine distribution strategy, including:

- biological differences –for example age, or underlying susceptibility because of pre-existing health conditions;
- geography – as some populations are practically harder to reach than others with medical services; and
- social or personal reasons why people may be harder to reach – for example because of religious objections to vaccination, or reluctance to vaccinate based on broader problems of distrust in authorities and medical institutions.

Most people want to receive a vaccine, but [not everybody does](#)<sup>3</sup> and the approach to deployment must be inclusive and address inequalities by taking into account the reasons why certain people or groups are hesitant about vaccination. This may be because while the data can appear to provide a valuable degree of certainty, ‘...*amidst a pandemic characterised by uncertainty, the vast gamut of available covid-19 data, including misinformation, has instead increased confusion and distrust in authorities’* [within certain groups](#)<sup>20</sup>. Underlying instances of scepticism and distrust by certain groups is the belief that the government is acting unfairly by discriminating against them and so not treating them in the same way as other groups. This belief is held against a background of, and prospects of, continued unfair treatment in future.

### Intersecting disadvantages

Giving [evidence](#) to the House of Commons Women and Equalities Committee, vaccines minister Nadim

Zahawi<sup>21</sup> said that even though only between 6-10% of the UK adult population are anything other than 'likely' or 'very likely' to take up the offer of vaccination, this '*skews heavily towards black, Afro-Caribbean Bangladeshi and other communities*'. One reason for this disparity along lines of ethnicity is a lack of trust in some public figures on coronavirus and the response to it, and a broader distrust of authorities based on institutional neglect. This distrust may or may not be warranted; but in relation to the point raised earlier about the importance of accurate data, if information pertaining to aspects such as ethnicity is unreliable or insubstantial, the fairness of any prioritisation strategy will be compromised. More generally, while those who distrust the government about the vaccine are in a minority, that scepticism puts people at unnecessary and preventable [risk of harm](#)<sup>22</sup> from covid-19 in a way that compounds harms caused by societal structures.

The issue of disadvantage is not restricted to race alone. It is used here as an example of how and why some groups are at greater risk than others of harm from covid-19, and why it is ethically important to get the vaccine distribution strategy right. For example, [socio-economic status](#)<sup>23</sup>, [sex](#)<sup>24</sup>, and [geographical deprivation](#)<sup>25</sup> can also be risk factors for worse outcomes in the pandemic, particularly when these factors combine or [intersect](#)<sup>26</sup>. The [intersection](#)<sup>27</sup> of risk factors can compound disadvantage. For instance, [evidence](#)<sup>28</sup> given to the Women and Equalities Committee confirms that some ethnic minority communities are also disproportionately employed in insecure job roles, within the service sector where there is a higher risk of exposure to coronavirus, and on zero hours contracts. In circumstances such as these, [compounding disadvantages](#)<sup>29</sup> can increase both risk of exposure to covid-19 and of unemployment if they do not take up the offer of a vaccine.

### 'More equal' than others?

A strategy that seems to aim at equality by maximising the number of people vaccinated is open to the criticism of being unfair. This is because if the strategy does not prioritise people already experiencing social disadvantage, making up the deficit by vaccinating people at lower risk [would not help to close this gap](#)<sup>30</sup>. Similar [criticisms of vaccine passports](#)<sup>31</sup> have been made on the basis that they are unfair and treat people who do not take up the vaccine unequally. Indeed, France's European affairs minister has objected to vaccine passports on the basis that they do not promote equality, stating that 'It would be shocking...for there to be more important

rights for some than for others'. Criticisms like this are significant. It might seem obvious that to treat people as equally as possible you should overlook differences between them and so, in this context, seek to vaccinate as many as possible. But [even the World Health Organisation](#)<sup>32</sup> which defends the principle of treating all individuals as having equal moral standing, acknowledges that any form of prioritisation is open to criticism as being unfair 'because it implies that not everybody will receive the vaccine despite their equal moral value'.

A response to this criticism is to point out a distinction between two senses of equal treatment: first, as entitlement to equal shares in the distribution of some good – in this case, a vaccine; or second, entitlement to treatment as an equal in the sense of deserving the same respect and concern as any other person. Viewed through the lens of this distinction, a government could still treat people equally if they observed it in the second sense.

For example, just because some people may need reassurance about the safety of vaccines via educational material or by endorsement from someone prominent in their community does not mean that everyone will need it. In both cases the aim is to ensure that people make a decision about vaccination based on reliable and accurate information, even though one person may need this more than another. So, seen this way, it is still possible to respect all people as being equally valuable while treating individuals differently where there are good reasons for doing so.

Another way to frame this response is in terms of the difference between equality and equity. The latter refers to the principle of providing resources to people according to what they need, given that some people will need them more than others. This approach to vaccine distribution is justifiable and reasonable, but it is not equivalent to equality, so it is important to scrutinise what the government means when it refers to 'equal' treatment under its strategy. As this point suggests, key to the legitimacy of prioritising some groups over others is that the reasons for doing so are good reasons. This means being rational, ethically justifiable, objective, and non-arbitrary.

### Summary

- Fairness and equal treatment must be balanced against the inevitability of prioritisation.
- Some groups are at risk of harm because of biological or social needs which must be met.
- Good reasons for a strategy are based on factors that are non-arbitrary and morally relevant.

### Conclusions

The introduction suggested what it might mean to genuinely treat all people equally in terms of access to vaccination, given that 'equally' can be understood in conflicting ways: vaccinating as many people as possible because all people have equal moral worth, so that the strategy achieves the maximum possible good; and prioritising people at particularly high risk of harm because of biological or social factors, because this equalises the disparity between them and groups at low risk. The government has tried to achieve both in its vaccination strategy, even though these goals are in tension with each other, by pointing to opposing models of distribution.

Two ways of committing to the equal value of all individuals and avoiding having to systematically de-prioritise certain groups would be to offer vaccines: via a lottery system; or on a first-come-first-served basis. A third, but more radical, option would be to offer a vaccination to nobody – this certainly treats everyone as equal, but the fact that it is so morally unpalatable suggests that straightforward equal treatment cannot be the single most important overriding ethical principle to be followed.

Along with the third strategy, the UK government has adopted neither of the first two. From the justifications given by the government for its strategy, and in light of the data reviewed here, it would reject the lottery and first-come-first-served options because neither would ensure that the most at-risk groups in society are vaccinated, and people who are already socially advantaged or easy to reach would be most likely to secure a place near the front of the queue. This means that the government has, on balance, opted for a prioritarian strategy based on greatest need.

When considering approaches such as that taken to vaccine roll-out in the UK, it is important to separate the principles being applied in the strategy from claims about the principles involved. The claim that the strategy treats all people in society equally is

rhetorically powerful. But for the reasons outlined here, there is a sense in which prioritising vaccination according to risk conflicts with treating everybody as being the same. Of course, the view that people most at risk should take priority implies that the ethical course of action is to mitigate the differences that drive the inequalities in question, rather than to uphold raw equality at any cost.

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- All cited materials were freely available online through the URLs provided on 14 April, 2021.

## About this submission

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