



Mandating or Incentivising Vaccination in Care Homes

Response from the UK Pandemic Ethics Accelerator prioritisation workstream (in collaboration with Dr. Owen Bradfield and Dr. Alberto Giubilini) to the Department of Health and Social Care consultation on Making vaccination a condition of deployment in older adult care homes – 26 May 2021

The Department of Health and Social Care has launched a consultation into making covid-19 vaccination a condition of deployment in care homes with older adult residents. Whilst some providers have already implemented similar policies, the consultation is intended to inform decision-making about how such a policy could be implemented and whether it would be beneficial.(1)

This response to the consultation is from the UK Pandemic Ethics Accelerator's [prioritisation workstream](#). It highlights some of the ethical dimensions to implementing such a scheme. The UK Pandemic Ethics Accelerator harnesses and mobilises the UK's internationally renowned expertise in ethics research. Four major UK universities and the Nuffield Council on Bioethics form the collaborative which has received £1.4M funding from the Arts and Humanities Research Council (AHRC) as part of the UK Research and Innovation rapid response to covid. The Accelerator provides rapid evidence, guidance and critical analysis to inform policy and help improve decision-making. It also supports, informs and promotes public debate around key ethical challenges, and ensures that ethical thinking is embedded at the core of future pandemic preparedness.

[The public health rationale for increasing vaccine uptake in staff working in care homes with older adult residents](#)

Outbreaks of covid-19 had substantial effects in care homes in the first year of the pandemic. According to the most recent data from the Office of National Statistics, there have been 173,974 deaths amongst all care home residents in England and Wales since the beginning of the pandemic.(2) This represents an increase of 19.5% compared with the five-year average (145,560 deaths), suggesting that there may have been 28,414 excess deaths in this population. Of the total number of care home residents deaths, 42,341 involved covid-19 accounting for 24.3% of all deaths of care home residents.(2) A recent study of excess deaths in care homes in the first 23 weeks of the pandemic suggests that the odds of experiencing covid-19 attributable deaths were significantly higher in homes providing services to older people or those with dementia.(3) A further study suggests that both covid-19-related and non-covid-19 related excess deaths in this sector were concentrated in care homes with a confirmed outbreak of covid-19. This suggests that such outbreaks may have had a direct effect on care for other conditions in the homes affected.(4)

Effective vaccinations for covid-19 could thus serve to prevent a large number of excess deaths in older adult care homes. However, since the vaccines are not 100% effective, and given the role of outbreaks in individual homes in causing excess deaths, a high proportion of older care home residents and staff may need to be vaccinated in order to provide an acceptable minimum level of protection against outbreaks of covid-19. SAGE has suggested an 80% uptake threshold for care home staff working in care homes with older adult residents, and a 90% uptake threshold for residents in these homes. We shall assume these thresholds throughout the discussion, but it should be noted that this is not solely a scientific issue; what constitutes an acceptable minimum level of protection in this context requires an ethical judgment.

At present, only 53% of older adult care homes in England are currently meeting these thresholds.⁽¹⁾ However, it should be noted that at the national level, the figures are somewhat more promising. According to NHS statistics as of 13 May 2021,⁽⁵⁾ 286,767 of the 302,618 (94.76%) residents in older adult care homes in England have been reported as receiving at least one vaccine dose, with 235,270 having received two doses (77.75%). NHS data reports that 389,221 of the 474,670 (82%) staff in older adult care homes have received at least one vaccine dose, but only 264,661 have received two doses (55.76%).

Measures for increasing vaccine uptake among staff

There are a range of measures that could be employed to potentially increase vaccine uptake (6–8) – these include, amongst others, education campaigns, dialogue-based interventions, the use of incentives,⁽⁹⁾ and making vaccination a mandatory condition of employment.⁽⁶⁾ This latter strategy has previously been employed to increase influenza vaccination amongst front line health care workers in some US jurisdictions.⁽¹⁰⁾

The different strategies that might be employed to increase vaccine uptake involve different degrees of restrictiveness or interference with individual choice. The Nuffield Council on Bioethics has previously outlined an ‘intervention ladder’ to inform our understanding of the acceptability and moral justification of different public health interventions.⁽¹¹⁾ The ladder includes eight rungs, and interventions on higher rungs of the ladder are understood to require stronger forms of justification than interventions on lower rungs. A mandatory vaccination policy for care home staff would plausibly constitute a form of coercive interference (the second highest rung in the ladder), by rendering a staff member’s choice not to undergo vaccination difficult or practically unavailable.⁽¹⁰⁾

This is not to say that the use of a coercive public health measure would necessarily be unethical in this context. Indeed, some have argued that making covid-19 vaccination a condition of employment for front line health care workers can be morally justified.⁽¹⁰⁾ In outlining the intervention ladder, the Nuffield Council suggests that the permissibility of coercive interference must be judged on a case by case basis. In the context of vaccination, this assessment will depend on whether the approach minimises risks of harm to others, the risks associated with the vaccination and the disease itself, and the seriousness of the threat of the disease to the population.⁽¹¹⁾

More broadly, a number of different moral and legal frameworks have been outlined to clarify when interference with choice and restrictions of freedom may be imposed in the name of public health.(9,10,12,13) Many of these frameworks converge on the claim that such restrictions must, at least, be (i) *necessary* and (ii) *proportionate*. These concepts have also played a central role in the European Court of Human Rights interpretation of Article 5(1) and Article 8 rights,(14–17) and the concept of proportionality is also central to determining whether indirect discrimination can be lawful under the UK Equality Act 2010,(18) as we detail further below.

Effectiveness

In order to determine whether the use of mandates to increase vaccine uptake is either a necessary or proportionate public health policy, we must first assess whether the intervention is likely to be effective. If a method of increasing uptake involves significant costs or harms without being effective in increasing vaccine uptake, then it cannot be justified as a necessary or proportionate public health measure.

Mandatory vaccination schemes have been proven to be an effective method for increasing uptake of the influenza vaccine in healthcare workers,(19) where they have also been shown to reduce morbidity and mortality from influenza among those workers' patients.(20,21) However, we should exercise caution in translating this data straightforwardly to the context of mandating covid-19 vaccines in care home staff with older adult residents. One significant reason for this is the different safety profiles of vaccines for covid-19 and seasonal influenza. The safety profile of seasonal influenza vaccines is very well understood, and it has been established that these vaccines are safe in adults and children.(22) In contrast, although the novel covid-19 vaccines were approved following rigorous assessments of their respective safety profiles,(23,24) these assessments were unavoidably time-limited. Although many of the technologies used for the vaccines are well established, there is a remaining, unavoidable degree of uncertainty about their long-term safety profile; indeed, months after initially approving the Astra Zeneca vaccine, a number of countries have since limited the use of the vaccine to certain age groups on the basis of an association between the vaccine and rare cases of unusual blood clotting.(25) There have also been reports that scientific concerns about the safety profile of the Astra Zeneca vaccine have increased reluctance to receive this vaccine.(26) Similarly, if uncertainty about the safety profile of a vaccine can serve to undermine the effectiveness of a mandatory vaccination policy in increasing uptake, then the effectiveness of such policies in the context of seasonal influenza vaccination may not be replicated in the context of covid-19 vaccinations. In any case, if mandating covid-19 vaccination in care home workers would fail to effectively increase uptake on account of concerns about potential adverse reactions, then it ought not be mandatory.

Is a mandatory scheme necessary?

In assessing the necessity of a public health intervention, we are concerned with the question of whether there are preferable alternative measures that could be employed to achieve a public health benefit. To do so, we have to weigh the moral costs of the restriction to the individuals affected, against the moral cost of either doing nothing, or imposing a less restrictive (and potentially less effective) intervention.

Mandatory vaccination for staff in older adult care homes is being considered as a measure to prevent future covid-19 outbreaks in a highly vulnerable population. In this vein, Bradfield and Giubilini have recently defended a conditional covid-19 vaccine policy for frontline healthcare workers generally. On this approach, healthcare workers refusing vaccination without a medical reason would be temporarily redeployed and, if their refusal persists after the redeployment period, eventually suspended.(10) Among other things, this solution strikes some balance between guaranteeing the safety of patients in healthcare settings and giving frontline healthcare workers enough time to think through the issue and make an autonomous decision about whether to be vaccinated. However, these authors claim that the professional role of frontline health care workers requires putting patients' safety first, so ultimately the choice to refuse the vaccine by frontline healthcare staff cannot be unconditional.

As noted above, there are number of alternative, less restrictive, measures that could potentially be employed in an attempt to increase vaccine uptake with a view to preventing such outbreaks. While mandatory vaccination appears to be the most effective intervention for increasing influenza vaccine uptake amongst healthcare workers, data also suggests that soft mandates (such declination statements), increased awareness, and increased access also have some effect on increasing uptake.(19) Moreover, although the meta-analysis cited here found that the use of incentives and education did not increase uptake of influenza vaccination amongst health care workers, these measures have been effective in improving the uptake of other vaccines in other sub-groups.(6,8,27)

One alternative measure would be to financially incentivize covid-19 vaccination in health care staff working with older adults in care homes.(9) Indeed, financial incentives have already been employed in a number of jurisdictions to increase the uptake of covid-19 vaccines. For instance, in Serbia, citizens who get vaccinated before the end of May 2021 will receive 3,000 dinars (around 25 Euros).(28). With respect to care home staff working with older adults, it could be possible offer a bonus payment to staff who have undergone vaccination.

A payment model aiming to increase vaccine uptake could take a number of forms. First, on a simple incentive model, payment could be offered to individuals as a pure incentive aimed at simply encouraging vaccine behaviour. However, some commentators have raised concerns about financially incentivising vaccination in this manner.(29,30) A second alternative model that could potentially avoid some of the concerns about the straightforward incentivisation of vaccination could instead frame payment as a conditional bonus. The bonus would serve to reward all care home staff working with older adults for their outstanding service over the course of the pandemic, rather than to incentivize future behaviour. If receipt of the bonus reward payment were made conditional on the individual's vaccine status though, the bonus could plausibly have an incentivising effect.

One problem with the conditional bonus model is that framing such a conditional bonus payment as a reward rather than an incentive is somewhat misleading. If a bonus payment is intended to be a deserved reward for past service, then an employee's current vaccine status has no clear bearing on the question of whether they deserve payment. Accordingly, a conditional bonus model could potentially incorporate a form of injustice if it served to

render a deserved reward conditional on something that doesn't alter whether or not an individual deserves payment.

A third 'top up' payment model could combine a vaccine incentive payment with a flat bonus payment. All staff would be given a bonus reward payment that could be 'topped up' by a secondary incentive bonus payment for those who have been vaccinated. This model would avoid the unjust connotations of a conditional bonus model; however, the secondary payment would be straightforwardly incentivising.

The question of whether mandating or incentivising vaccination is necessary in this context depends on how much of an increase in uptake is necessary to ensure a minimum level of protection amongst care homes. If the proportion of staff vaccinated in care homes is currently falling a long way short of an acceptable minimum threshold, then it may be necessary to employ the most effective measure available to increase vaccine uptake, in order to ensure that the threshold is passed. However, if the proportion of staff vaccinated in care homes is only falling slightly below the target threshold, then it may be justifiable to consider less restrictive interventions that, although less effective than mandatory policies, will still be likely to be sufficient to secure a sufficient uptake. Nonetheless, even once the threshold of acceptable staff uptake has been passed, there will still of course be a public health benefit to having a greater number of staff vaccinated. The question of how to trade off the different public health benefits of interventions with different degrees of restrictiveness is a question of proportionality.

Would it be proportionate?

In assessing the proportionality of a public health intervention, we are concerned with the question of whether the benefit achieved by the intervention is sufficient to outweigh its moral costs.

The public health benefit of either incentivising vaccination or making it mandatory for care home staff working with older adults is that it may serve to prevent future outbreaks of covid-19 in these homes. As detailed in the first section of this response, data from the first year of the pandemic suggests that outbreaks in this setting were associated with a substantial number of excess deaths. The extent to which these policies will prevent such future outbreaks depends in part upon on how effective they would be in achieving a sufficient degree of vaccine uptake.

In order for these policies to be proportionate, their respective public health benefits would have to outweigh the moral costs involved in the different strategies. A mandatory scheme would have more significant moral costs than an incentive scheme. The most obvious moral cost of a mandatory scheme is the degree of coercion it imposes on vaccine-hesitant care home staff. One of the reasons that coercion involves a more serious moral wrong than other public health measures on the intervention ladder is that it is a form of controlling influence that can serve to severely undermine an individual's autonomous decision-making, and the voluntariness of their consent to a medical intervention.⁽³¹⁾ In contrast, incentivising behaviour may be compatible with autonomous decision-making if the incentive offered is not large enough to undermine the recipient's evaluation of the potential costs of the incentivised behaviour.⁽⁹⁾ If it did, this could constitute undue

influence.(32) Crucially though, the offer of an incentive alone does not itself constitute coercion.(9)

Coercion can severely undermine autonomous decision-making. This represents a significant moral cost, given the salience that is attributed to personal autonomy and the individual's right to bodily integrity and right to a private life in liberal democracies.(33) Moreover, data regarding the use of soft forms of coercion in mental health care suggests that the experience of undergoing a medical intervention on the basis of a coercive interference with one's decision-making can lead to psychological harms.(34)

It should also be noted that a mandatory vaccination scheme in care home staff working with older adults would likely impose coercive pressure on a large number of people. NHS Data on the 13 May 2021 suggests that of the 474,670 older adult care home staff in May 2021, only 793 are currently ineligible to receive a vaccine (due to medical reasons or a covid-19 infection in the previous 28 days).(5) Accordingly, at the time this data was reported, there were 84,656 eligible older adult care home staff who were not yet reported to have received a single vaccine dose. Notably though, the government has suggested that "all eligible care homes have been visited and vaccines offered to staff and residents, with the vast majority of homes having now had repeat visits".(1)

However, whilst the moral cost of infringing the right to bodily integrity and the right to a private life are significant, it should be noted that these rights are typically not deemed to be absolute in the public health context.(35) Notably, the European Court of Human Rights recently ruled that a compulsory vaccination requirement for pre-school entry (with penalties for non-compliance) employed in the Czech Republic for different vaccines prior to the pandemic did not involve a violation of the Article 8 right to respect for private life.(17) The court held that the scheme was proportionate to the legitimate aims of the Czech state to protect against serious diseases that could pose a risk to health.

There are other potential harms that would have to be figured into a proportionality assessment of a mandatory vaccination scheme. The first is the potential for the harms of any adverse events caused by vaccination in the targeted sub-group. Whilst increasing the uptake of an effective vaccine may serve to prevent future covid-19 outbreaks in older adult care homes, individuals undergoing vaccination are exposed to some degree of risk. Of course, for many individuals, the direct and indirect benefits of vaccination are often sufficient to clearly outweigh those risks. However, in some cases, the trade-off may be less clear and the risks and benefits of vaccination in some groups may be more finely balanced than in others.(36) Indeed, although the European Medicines Agency states that the benefits of the Astra Zeneca vaccine outweigh its risks in adults of all age groups,(37) the UK Government now recommends that those under the age of 40 should be offered an alternative to the Astra Zeneca vaccine due to evidence linking the vaccine to rare blood clots. Although these adverse events are very rare, this policy may be justified by the fact that those under 40 have a lower covid-19 morbidity and mortality risk,(38) and the need to appropriately manage potential mistrust in the vaccines.

If a mandatory vaccination policy is to be justified, it is paramount that the vaccines employed are safe. The greater the extent to which the benefits of vaccination outweigh the

risks, the more likely it is that a mandatory vaccination scheme will qualify as a proportionate public health measure. If care home staff working with older adults are to be subject to a vaccination mandate, then they should be offered a choice of the safest available vaccinations given the best available evidence at the time. A failure to offer the lowest risk vaccine could be both unnecessary and disproportionate, and thus not morally justified.

A further moral cost to consider is the unequal effects of a mandatory vaccination scheme. Data suggest that ethnic minority healthcare staff are less likely to take up a vaccine; (39) as such the coercive effect of a mandatory scheme may particularly affect ethnic minority groups. This is particularly significant given the other inequalities that these groups have faced throughout the pandemic, including increased COVID-19 mortality/morbidity.(40) If a mandatory scheme were to disproportionately affect this group, it could represent a form of institutional disadvantage.

Some have further suggested that a mandatory vaccination scheme for staff in older adult care homes would also be discriminatory.(41) In addition to the concern that the scheme might disproportionately affect ethnic minority groups, concerns about discrimination may be grounded in the fact that, although the government's proposed scheme would allow for medical exemptions to vaccination, individuals with religious or philosophical objections to vaccination would not be exempt from the proposed policy. It could thus be argued that making vaccination a condition of employment in a manner that does not allow for such exemptions could amount to a form of discrimination.

However, it is important to be clear about the nature of the discrimination that is at stake here. Direct discrimination occurs when a policy involves unfavourable differential treatment solely on the basis of a protected characteristic, such as sex, age, race or religion. In contrast, indirect discrimination occurs when a policy ostensibly applies equally to all members of a population, but disproportionately affects a sub-group with a protected characteristic. Since vaccination status itself is not typically understood as a protected characteristic, but an individual's reason for declining vaccination may be related to a protected characteristic (such as religion), a mandatory vaccination scheme could plausibly involve indirect discrimination, even if would be unlikely to involve direct discrimination.

Although some courts have recognized important similarities between these two forms of discrimination,(42) direct discrimination is often understood to involve more serious wrongdoing than indirect discrimination. Indeed, indirect discrimination may be justifiable under the Equalities Act 2010 (UK) if it can be shown to be a proportionate means of achieving a legitimate aim.(18,43) Accordingly, just as the infringement of the right to bodily integrity and/or the right to a private life may potentially be justifiable in order to pursue a legitimate and proportionate aim, so too can some forms of inequality and indirect discrimination. Moreover, it is plausible that a mandatory vaccination policy for care home staff may also bring benefits to disadvantaged groups, including the family, friends and community of staff, who may belong to disadvantaged groups. Indeed, we ought not forget that care home residents themselves are among society's most vulnerable and disadvantaged.

One final set of costs to consider are the broader consequences of a mandatory vaccination scheme in this sector. Vaccine mandates for healthcare staff can, in some circumstances, serve to engender resentment and mistrust, and they might generally undermine goodwill between care home staff and their employers.(10,44,45) The recruitment and retention of staff is a widely acknowledged and significant challenge for the care sector,(46,47) and some have expressed the concern that a mandatory vaccination scheme could lead to a mass exodus of staff.(48) Of course, the overall significance of this potential cost turns on the empirical issue of what the downstream effects of a mandatory vaccine policy will be on staff recruitment and retention. Ultimately, this is an issue that requires a deeper investigation into the actual attitudes of care home staff towards a mandatory vaccination policy in the context of the covid-19 pandemic.

Incentivising vaccination with bonus payments is less likely to adversely affect staff retention and recruitment, and it would not undermine individual autonomy in the same way as a mandatory vaccination scheme. However, in addition to concerns that an incentive scheme may be less effective in increasing uptake, such a scheme would also involve a significantly higher financial cost. Of course, the overall cost of the scheme will depend on the amount offered and the number of people targeted by the scheme; however, if the incentive is to be large enough to be effective in modifying behaviour, then the financial cost of the scheme could be high.

Conclusions

In this consultation response we have highlighted some of the primary ethical issues for government and policy-makers when contemplating a policy of mandating or incentivising vaccination for staff working in older adult care homes. The moral justification of these schemes depends a great deal on the safety profile of the vaccines, and the predicted effectiveness of these policies for increasing uptake. However, even if these are both acceptable, mandating or incentivising vaccination involves other costs that must feature into a moral analysis of these policies. Mandating vaccination involves more significant moral costs than incentivising vaccination, although the extent of some of these costs again depend on empirical features. Nonetheless, in view of the significant risk posed by covid-19 in care home populations, the policies we have considered here could potentially represent necessary and proportionate responses in homes with unacceptably low vaccine uptake rates, if the vaccines used are sufficiently safe, and the policies sufficiently effective in increasing uptake.

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