Evidence summary:
Strategies to support uptake of Covid-19 vaccination among staff working in social care settings

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This summary presents a rapid review of international evidence on measures to increase uptake of Covid-19 vaccination among staff working in social care settings, covering evidence available up to May 2021.¹

Summary
• Modelling studies suggest that increasing levels of staff vaccination in care homes may significantly reduce the number of symptomatic cases among care residents, even in scenarios where the majority of residents are already fully vaccinated.
• Around 2 in 5 local authorities in England report staff vaccination rates below the 80% threshold advised by SAGE for older adult care homes.
• A number of factors are associated with lower uptake of Covid-19 vaccine among long-term care staff, including access barriers; lack of sufficient information and education about the vaccine; mistrust; and sociodemographic factors (age, gender, ethnicity and income). It is important that these factors are well understood.
• There are live discussions on how to increase uptake of vaccination among people working in social care settings, including, in many countries, a consideration of making Covid-19 vaccination mandatory for specific groups.
• To the knowledge of the authors, very few governments have mandated Covid-19 vaccination of people working in social care settings. Italy have mandated vaccination for healthcare professionals working across health and social care settings. A public health order introduced by the New South Wales state government in Australia requires Covid-19 vaccines for any person who has not received a flu vaccine, in order to enter a residential care home. To date, evidence of the effectiveness of mandatory policies compared to alternative strategies, in increasing uptake of Covid-19 vaccines among long-term care staff specifically, is limited.
• Other strategies to encourage vaccine take-up and reduce hesitancy, besides mandating, include strategies based on behavioural insights, such as the use of targeted communications, increasing the convenience of being vaccinated, and sufficient time for staff to discuss concerns with peers, managers and trusted professionals.

¹ This summary was prepared as part of the Social Care COVID Recovery and Resilience project. Further information about the project is available at: https://ltccovid.org/project/social-care-covid-recovery-resilience-learning-lessons-from-international-responses-to-the-covid-19-pandemic-in-long-term-care-systems/. The project is funded by the National Institute for Health Research (NIHR) Policy Research Programme (NIHR202333). The views expressed in this article are those of the authors and not necessarily those of the NIHR or the Department of Health and Social Care.
Context

Most countries have prioritized people working in social care, particularly in care homes, for Covid-19 vaccinations. In England, the Joint Committee on Vaccination and Immunisation placed social care staff working in care homes for older adults in priority group 1, and social care staff in all other settings in priority group 2\(^1\) in recognition of their increased risk of exposure to, and transmission of Covid-19.

As national guidance on care home visits continues to be reviewed and relaxed, there is growing reliance on the role of vaccines to enable safe face-to-face visits. To mitigate against future outbreaks, the SAGE Social Care Working Group have advised vaccination rates at 90% for residents and 80% for staff in older adult care homes.\(^3\)

As of 13\(^{th}\) May 2021, an estimated 82% of all social care staff working in older adult care homes in England had received at least one dose and 56% had received a second dose. Between 8\(^{th}\) April 2021 and 13\(^{th}\) May 2021, the number of local authorities with a staff vaccination rate under 80% reduced by nearly one third (from 89 to 63\(^4\), out of a total of 150 local authorities). There are 8 local authorities reporting a rate under 70%, 7 of which are London boroughs.

To address this variation, the Department of Health and Social Care (DHSC) are consulting on a mandatory Covid-19 vaccination policy for staff deployed in care homes for older adults.\(^5\) Notably, in England there are no laws mandating any vaccines for the general population or any occupational groups\(^6\) (such as for example, flu vaccines for health and care occupations).

There are however, employer requirements for some frontline healthcare workers to receive the Hepatitis B vaccine as part of NHS Trust health and safety and occupational health policies.\(^7\) A number of care providers have introduced so-called ‘no jab no job’ policies, making Covid-19 vaccination an essential requirement for new and/or existing staff.\(^8,9\) It is worth noting that social care workers are expected to oblige by a Code of Conduct, a voluntary set of standards of conduct and behaviour which states for example that staff must “always make sure that your actions or omissions do not harm an individual’s health or wellbeing” and “always behave and present yourself in a way that does not call into question your suitability to work in a health and social care environment”.\(^10\)

1. What levels of vaccination coverage are required to improve protection to residents?

While evidence on the effectiveness of COVID-19 vaccines in people using social care services was initially lacking, a body of evidence is now emerging that demonstrates protection against infection

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\(^{1}\) Public Health England, COVID-19: the green book, chapter 14a


\(^{5}\) [https://fullfact.org/health/mandatory-vaccine-care-home-hepatitis-b/](https://fullfact.org/health/mandatory-vaccine-care-home-hepatitis-b/)


\(^{7}\) [https://www.carehomeprofessional.com/barchester-sets-april-deadline-for-staff-to-take-up-covid-vaccination/](https://www.carehomeprofessional.com/barchester-sets-april-deadline-for-staff-to-take-up-covid-vaccination/)

\(^{8}\) [https://www.personneltoday.com/hr/no-jab-no-job-care-uk-covid-vaccinations/](https://www.personneltoday.com/hr/no-jab-no-job-care-uk-covid-vaccinations/)

and severe outcomes. Nevertheless, protection of this population is less than 100% as not all residents can safely receive the vaccine (due to allergic reactions for example), and not all may develop an immune response to the virus. Infections can therefore still enter social care settings and breakthrough infections have been reported, even if high vaccination coverage is achieved. There have been at least two documented outbreaks where care staff introduced the virus to an otherwise highly vaccinated population.

Several studies have documented decreased rates of infection and severe outcomes among users and providers of social care services after the start of vaccination programmes. However, empirical evidence on the relationship between vaccination uptake among staff and infection rates of care recipients is mostly missing. One large US study found no clear pattern of different infection rates among residents of nursing homes with low versus high staff vaccination rates. Modelling studies of nursing homes, on the other hand, have consistently found that increasing staff vaccination rates leads to reduced numbers of infected residents and staff. Even in a scenario where 90% of residents are fully vaccinated with a highly effective vaccine, the difference between 50% and 90% of staff being vaccinated may amount to more than a 40% reduction in symptomatic cases among residents.

Another model estimated that, with 90% of residents vaccinated, a 70% uptake among staff would reduce attack rates among residents by 88.5%, and hospitalisations and deaths by 96% each over a 200-day period. A model for the UK context is being developed, but has not yet been published.

Evidence is still emerging on length of immunity, and the degree of protection against new variants of concern, that Covid-19 vaccines can offer.

2. Barriers to vaccination uptake among staff and others deployed in social care settings

Here we present findings from a number of studies on the reasons why social care staff may be hesitant or prevented from taking up COVID-19 vaccination. There is also substantial evidence on the

17 De Salazar PM, Link N, Larmara K, Santillana M. High coverage COVID-19 mRNA vaccination rapidly controls SARS-CoV-2 transmission in Long-Term Care Facilities. Medrxiv 2021. DOI:10.21203/rs.3.rs-355257/v1.
21 Le Khanh Nguyen, Tamar Megiddo, and Prof Susan Howick (forthcoming, University of Strathclyde)
factors that affect vaccine hesitancy and resistance in the general population and in specific groups such as those on low pay and those belonging to ethnic minority groups, who feature highly in the adult social care workforce.

Supply & access issues

A number of factors are known to impact uptake of the vaccine by care staff:

- **Logistical barriers**: too little notice of the date of vaccination (in some instances 1 hour beforehand) with no alternative dates offered or time to communicate concerns, supply of the vaccine and accessibility of the NHS vaccine self-referral portal (which was closed to care workers for a period at the start of April 2021); lack of a direct channel of communication to individual staff working across a diverse settings, with half of all staff working part-time and one quarter on zero hours contracts.

- **Inconvenience**: time and costs to travel to a vaccine centre, a particular barrier to those in low-paid roles who are less likely to have time freed up during working hours to access vaccination

- **Lack of opportunity**: one UK study found that despite being in priority groups 1 & 2, social care workers (in care homes, domiciliary care and other settings) were 50% more likely not to have been offered a vaccine than health care workers and those identifying as Black African and Mixed Black African were twice as likely as White British or White Irish not to have been offered vaccination.

Demand issues

Studies suggest a number of factors are associated with lower demand or uptake of the vaccine among care staff specifically:

- **Lack of credible information and sufficient education** to fully inform staff and address disinformation, including vaccine conspiracy beliefs on being microchipped. One US study noted most staff working in skilled nursing facilities received much of their information about vaccines from friends and social media. Higher staff vaccine rates were achieved where care home managers actively encouraged all staff to get vaccinated through education and open discussions, compared to when managers did not express an opinion.

- **Concerns not well addressed**: these include medical concerns regarding fertility; concerns about medical racism; the safety and efficacy of the vaccine; that vaccines were developed too quickly without being sufficiently trialled in ethnic minority groups; and fears about the vaccine negatively impacting pre-existing health problems.

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24 Giebel et al (2021) Are we allowed to visit now? Concerns and issues surrounding vaccination and infection risks in UK care homes during COVID-19 [https://www.medrxiv.org/content/10.1101/2021.05.20.21257545v1](https://www.medrxiv.org/content/10.1101/2021.05.20.21257545v1)


27 Giebel et al (2021)

28 Tulloch et al (2021) COVID-19 vaccine hesitancy in care home staff: a survey of Liverpool care homes, [https://www.medrxiv.org/content/10.1101/2021.03.07.21252972v1](https://www.medrxiv.org/content/10.1101/2021.03.07.21252972v1)


30 Giebel et al (2021)

• **Complacency (perception of risk):** feeling ‘not at risk’ of severe Covid-19 was reported among health and social care workers, particularly White-British and Irish staff. Some staff who had previously tested positive for Covid-19 were not convinced of the benefits of the vaccine to themselves.

• **Sense of coercion:** Staff who had declined or intended to decline the vaccine were more likely to state that they felt under pressure from their employer to get the vaccine.

• **Confidence (level of trust):** trust in government and health authorities is lower among groups who “generally feel disrespected and vulnerable to exploitation” or marginalized, and those who view themselves as lower on the social ladder. Health and social care workers declining the offer of a vaccine are more likely to state that they mistrust information from government, vaccine manufacturers, and the media; and trust was in particularly short supply among members of some ethnic minority groups.

• **Sociodemographic factors:** In the UK, one study found intention to decline was highest among Black British Caribbean and Mixed Black Caribbean (22.7%) and Black British African and Mixed Black African health and social care workers (9.5%). One US study reported differences among staff categories in terms of willingness to receive the vaccine: staff over the age of 60, male, and white ethnicity were more willing to receive the vaccine, and staff providing direct care, including nurses, were less willing than dietary, housekeeping, and administrative staff. Vaccine hesitancy is associated with a number of sociodemographic factors including female gender, lower education, lower income, black and mixed ethnicities, and not being employed full-time. Many of these characteristics apply to the adult social care workforce: it is a low-pay sector; 4 in 5 are women; 20% of workers identify as minority ethnic, rising to 66% of the workforce in London. Religious reasons have also been cited as rationale for refusal.

The effectiveness of any policy intervention to drive uptake of the vaccine will therefore depend on addressing these factors. A longstanding body of research on behavioral insights and public health, summarized by the Hertfordshire Behaviour Change Unit, sets out recommendations on how to reduce vaccine hesitancy. They recommend using targeted communications to achieve increases in:

- Belief that there is a risk of getting Covid-19 and that this could have severe implications for health
- Belief that the Covid-19 vaccine is safe and effective, and trust in local authorities and scientific/medical institutions
- Understanding of the importance of the Covid-19 vaccine (e.g. the importance of individual vaccination in achieving herd immunity to protect the most clinically vulnerable)
- Knowledge on how to register to get the COVID-19 vaccine and ability to do so

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32 Bell and others (2021)
34 Bell and others 2021
36 Bell and others 2021
37 Bell and others (2021)
38 Unroe and others (2021)
39 Freeman and others (2021)
44 https://www.local.gov.uk/case-studies/covid-19-vaccination-increasing-uptake
• Convenience of being vaccinated
• Identification of information gaps and correcting misinformation

They note that willingness to receive a vaccine falls on a continuum from refusal, passive acceptance, and demand, and therefore strategies may need to be different for different groups of people. More coercive strategies have the potential to exacerbate concerns or entrench intentions to refuse vaccines. This is supported by Bell and others who report that: “Feeling pressurized... cemented several participant’s stances on declining vaccination, making them more vaccine hesitant”. Alternative strategies to mandating may therefore be more effective for certain subgroups of the social care workforce, for example:

• Ensuring staff have sufficient time to have their concerns addressed through one to one conversations with trusted health professionals
• Open conversations with care home managers and colleagues can also encourage previously hesitant staff to receive vaccination.
• Communication and engagement from trusted providers and community leaders, with clear, repeated and compelling education and role modelling by leaders in social care
• It may be more persuasive to see peers and members of the same community being vaccinated (“someone like me”) rather than politicians and other figures of public life.

3. International learning: national discussions about mandatory policies to increase vaccination uptake for staff deployed in long-term care settings

A number of countries have proposed, trialled, and in some cases implemented, mandatory vaccination policies for staff and other demographic groups who frequently visit long-term care settings, either for Covid-19 or for other viruses. It is important to note that:

• Data on the effectiveness of mandatory Covid-19 vaccination policies (including the impact of more coercive interventions to enforce policies) on care staff is limited.
• Note that levels of vaccine hesitancy or acceptance in the general population will shape each government’s perceived need for, and impact of, mandatory policies.

45 Bell and others (2021)
46 Giebel et al (2021)
47 Harrison J, Berry S, Mor V, Gifford D. 2021. “Somebody like me”: Understanding COVID-19 vaccine hesitancy among staff in skilled nursing facilities. JAMDA. https://doi.org/10.1016/j.jamda.2021.03.012
Table 1. Select examples of mandatory vaccination policies relevant to long-term care

<table>
<thead>
<tr>
<th>Mandatory Covid-19 vaccination (enforced through a penalty or cost for unjustified refusal)</th>
<th>Country</th>
<th>Occupational or demographic group</th>
<th>Precedent for mandatory vaccination?</th>
<th>Detail</th>
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<tbody>
<tr>
<td>Italy</td>
<td>As of March 2021, Covid-19 vaccination is mandatory for healthcare workers(^49) - this may include for example, GPs, nurses and pharmacists who are deployed in social care settings. Tuberculosis vaccination has been mandatory since 2001 for healthcare professionals.(^50) In 2017, 10 vaccines were mandated for children. Children born after 2012 must be vaccinated to enter school; those refusing can face fines of up to 500€.(^51) A decree was approved by the Prime Minister in March 2021, introducing emergency legislation to make Covid-19 vaccines mandatory for all health professions working in health and ‘social and welfare’ settings (both public and private).(^52) Those who refuse cannot have their employment terminated;(^53) instead the employer is responsible for 1) transferring the employee to another job where the risk of spreading infections is lower (without affecting salary)(^54) or 2) enforcing unpaid leave, with suspension of pay until 31(^{st}) December 2021.(^55,56) Staff are given multiple prompts before vaccination is mandated, and have 5 days to demonstrate vaccination certification (^57) before being officially being invited to be vaccinated. There is a lack of clarity over which health and/or social care professionals must be vaccinated by law.(^58) There are also questions about whether this applies to new employees given the need to respect private information when hiring new staff. There has been much discussion on making vaccination compulsory for long-term care staff, however the vast majority of political parties are against such an approach.(^59)</td>
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49https://www.reuters.com/article/us-health-coronavirus-italy-vaccine-idUSKBN2BN34F
50https://www.salute.gov.it/portale/vaccinazioni/dettaglioContenutiVaccinazioni.jsp?lingua=italiano&id=4822&area=vaccinazioni&menu=fasce
51https://www.salute.gov.it/portale/vaccinazioni/dettaglioContenutiVaccinazioni.jsp?lingua=italiano&id=4824&area=vaccinazioni&menu=vuoto
56https://www.bmj.com/content/373/bmj.n905
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<tr>
<th>Country</th>
<th>Mandated Vaccinations Status</th>
<th>Description</th>
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<tr>
<td>China (Shanghai)</td>
<td>Covid-19 vaccinations are not mandated in law for long-term care staff, however for the last 3-4 months, in practice local government and care providers have made Covid-19 vaccination a contractual requirement for both existing and new care staff, and for other manual occupations. [60]</td>
<td>The cost of vaccines are covered by the government. Each city district has been set key performance indicators for vaccine rates. Care providers are responsible for registering their workers for vaccination, who are then vaccinated in cohorts. Incentives have been offered by some providers, such as annual leave.</td>
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<td>Denmark</td>
<td>Mandatory Covid-19 vaccination was proposed but not implemented</td>
<td>In November 2020 new legislation was proposed which would give the Danish Health Authority the power to “define groups of people who must be vaccinated in order to contain and eliminate a dangerous disease”. [61]</td>
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62 https://prodstoragehoeringspo.blob.core.windows.net/3c60f361-f79d-4596-8e6e-1f64d973b9fd/Lovforslag.pdf
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<th>Country</th>
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<tr>
<td>Hong Kong</td>
<td>Government proposal to require mandatory Covid-19 vaccination for foreign-born domestic workers who provide services to older adults in their own homes.</td>
<td>On 11th May 2021 the government abandoned their proposal following discussions with the governments of Philippines and Indonesia and in light of concerns raised by labour groups.</td>
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<td>Australia</td>
<td>Covid-19 vaccination is not mandated by the federal government, however, in 2020 the government mandated flu vaccinations for social care staff.</td>
<td>See for example, “No Jab, No Pay” scheme which withholds child benefits if a child is not vaccinated.</td>
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<td>There is variation in the requirements at state and territory level. In New South Wales, a public health order requires all people entering residential care homes to have received the flu vaccine. This includes staff, visitors, health practitioners, volunteers, and other people entering the facility (e.g. cleaners, tradesman, gardeners and maintenance staff). Those who have not had a flu vaccine but can demonstrate Covid-19 vaccination in the last 2 weeks are allowed entry.</td>
<td>From 1 June to 30 September 2021, in New South Wales, all visitors and staff entering a residential aged care facility are required to provide evidence that they received a dose of the 2021 influenza vaccine. Special exemptions include for medical reasons; where a person has had a Covid-19 vaccine in the last 2 weeks; or is booked in to have a Covid-19 vaccine.</td>
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<td>The federal government National Cabinet are deliberating on whether to mandate Covid-19 vaccination for staff in the aged care sector. There are live discussions among employers on whether care providers will be able to require their staff to receive a Covid-19 vaccination, following a recent verdict by the Fair Work Commission which upheld the sacking of a childcare worker who refused a flu jab.</td>
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<tr>
<td>France</td>
<td>Covid-19 vaccination is not mandatory, but in 2005/6, legislation was passed mandating a number of other vaccines for health and social care staff.</td>
<td>The 2005/6 law introduced mandatory vaccination for tuberculosis, DTP (diphtheria, pertussis, tetanus), hepatitis B, and typhoid on the legal basis of personal (rather than societal) risk.</td>
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<td>The 2005/6 law introduced mandatory vaccination for tuberculosis, DTP (diphtheria, pertussis, tetanus), hepatitis B, and typhoid on the legal basis of personal (rather than societal) risk.</td>
<td>An amendment to the Public Health code of 2016 introduced a condition that health and social care professionals should be vaccinated if it presents a risk to those they care for.</td>
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71 [https://www.service-public.fr/particuliers/vosdroits/F724](https://www.service-public.fr/particuliers/vosdroits/F724)
DTP is mandatory for all citizens and since 2018, all newborns must receive a number of vaccinations. 73

The introduction of mandatory vaccinations for newborns in 2018 enabled an amendment to the legal basis for vaccinating health and social care staff from personal risk, to societal risk to patients (‘altruist motivation’).

This is now amended for existing mandatory vaccinations. The government’s ambition was to reintroduce mandatory flu vaccination due to very low uptake among staff. 74 The penalty for non-compliance would fall on the employee. mandated list as it was not deemed to present a significant personal risk to healthcare/social care professionals contrary to other mandated vaccines, and there was limited evidence as to the impact of infection from personnel in residential care for the over 60s on flu rates, and very low impact on hospital admissions. 75

With equally low numbers of covid-19 vaccination across health and social care staff groups, the National Academy of Medicine has called for mandatory vaccination, stating it to be “ethically unacceptable” for health and social care staff (including personal assistants for older people) to not do so. 76 This would however require new legislation, rather than an amendment to existing legislation. 77 The issue was discussed in Autumn 2020 in the context of Covid Winter planning. 78

73 https://www.service-public.fr/particuliers/vosdroits/F724
74 http://www.slate.fr/story/191553/gouvernement-loi-obligation-vaccination-altruiste-contre-grippe
78 https://www.academie-medecine.fr/communique-de-lacademie-vacciner-tous-les-soignants-contre-la-grippe-une-evidente-obligation/#:~:text=En%20cons%C3%A9quence%2C%20l%27Acad%C3%A9mie%20nationale%2C%20auxiliaires%20de%20vie%20pour%20personnes
Appendix: Additional reading

Opinion pieces on mandatory vaccination of health and care workers in other countries:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7537350/

Studies from previous vaccination efforts (e.g. influenza):


Studies and viewpoints on mandatory vaccination in general population:

https://jamanetwork.com/journals/jama/fullarticle/2774712
https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0248372