

comment

“What have we learnt about using frailty scores during the pandemic?” **DAVID OLIVER**

“One of the major constraints to expanding GP teams is physical space” **HELEN SALISBURY**

PLUS Health versus economic wealth; plan to build back fairer in Manchester

THE BOTTOM LINE Partha Kar

Let's avoid the trap of division

Last month an outcry erupted over comments by Dido Harding, former head of NHS Test and Trace, who has applied to succeed Simon Stevens as chief executive of NHS England. Harding was quoted in a *Sunday Times* story about her pitch for the role, headlined “Dido Harding: Make NHS less reliant on foreigners.”

The paper's Whitehall correspondent wrote: “Baroness Harding of Winscombe has vowed to end England's reliance on foreign doctors and nurses if she becomes the next head of the NHS . . . Harding, 53, would challenge the ‘prevailing orthodoxy’ in government that it is better to import medical professionals from overseas and benefit from the investment of other countries because of the huge cost of training a doctor.”

Putting aside the multiple layers to this story and how it was reported, the underlying issues that any candidate for the role would most likely have to tackle include workforce shortages, the desire to reduce overdependence on other countries' resources, and a drive to have more local graduates available for relevant roles. Aside from the divisive “foreigners” angle, the problem is how difficult it would be to achieve this, as data soon start to show.

The medical fraternity's response to Harding's comments has been interesting—invariably from those who haven't been labelled a “foreigner.” It's been surprising to see the lack of empathy or understanding as to why that term has stung. This raises a bigger question as to how much of this—consciously or otherwise—leads to the discrepancies in senior medical roles between people from different ethnic backgrounds. If you view someone as a foreigner, how much do you believe they should be leading “locals”?

Official data show that 14% of all NHS hospital and community staff have non-UK nationalities, and the proportion among hospital doctors is double that, at 30%. (Outside the NHS things aren't hugely different, as 12% of school staff and 28% of the research workforce

are born outside the UK.) If 30% of your medical colleagues are “foreigners,” you need to appreciate what does indeed touch a nerve and what doesn't.

This debate needs to move away from labelling any such topic or discussion as “woke.” We need a better narrative. For a start, the term “foreigner” needs to stop having a derogatory overtone. It certainly isn't if you're a Liverpool fan—where would the club currently be without an Egyptian? Yet somehow the term raises divisions in an NHS that has always depended, and will continue to depend, on staff born outside the UK.

We live in febrile times. The least we can do is look inwards, accept our blind spot, and perhaps inspire the rest of the population too. Having divisive narratives fuels an unnecessary divide when we've always been one NHS family, whether or not a small minority like it. Let's not divide people on the basis of a passport, and let's instead accept them for their skill sets. Many challenges lie ahead; this is one distraction we can avoid.

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Others need to appreciate what does indeed touch a nerve and what doesn't



Health versus wealth is not a zero sum game

In the midst of a pandemic, pitting economic recovery against public health could be devastating for the UK

Sajid Javid's policy of "opening up" seems ill timed. Since his appointment on 26 June as the new secretary of state for health and social care, another 100 000 people in the UK have developed covid-19. Hundreds of thousands of adults and schoolchildren are isolating. Events have been cancelled. Yet, lockdown restrictions—including physical distancing, the "rule of six" for meeting indoors, and wearing masks in public places—are set to be summarily withdrawn on 19 July.

Javid is correct that health depends on a thriving economy. He is correct that measures introduced to contain the virus will lower economic activity, reducing the circulation of money and hence tax revenue. He is correct that lockdown has taken a heavy toll on mental health and wellbeing, though there is no evidence that suicides have increased. He is rightly concerned about vulnerable children.

But as the nature of the crisis is virological, not economic, we cannot "grow our way out of it." Indeed, against a clear trajectory of exponential growth at the start of a probable third wave, phrases like an "irreversible road to freedom" appear populist and naive.

It is more than a year since I debated with the economist Andrew Sentance that pitting economic recovery against public health in a crude zero sum game could be devastating for the UK. The highly transmissible and serious delta variant, which may have entered the UK as a result of delayed border closure linked to a hoped-for trade deal with India, will leave much economic damage in its wake.

No quarantine for business activities

The announcement that senior executives may temporarily leave quarantine in England if they are undertaking business activities that will bring "significant economic benefit" to the country suggests that the new secretary of state has yet to read Andrew Nikiforuk's eloquent essay *The Pandemic Speaks*: "Your [political] leaders scoffed at what needed to be done, because they deemed such responses extreme. They could not imagine how small individual risks could rapidly amplify into collective tragedies. And so they moved like molasses to limit mobility, and then acted like a spring melt to open things up again, providing me with the advantage time and time again. They all thought they could turn

Until nobody has to choose between self-isolating and feeding their family, transmission of the virus will continue

me off like some computer game. My gratitude for such ineptness is truly boundless."

Drawing partly on previous publications from health economists, I encourage Javid to consider five measures designed to align public health goals with economic ones.

First, prioritise preventing disease. Sick workers are unproductive, contagious, and costly—especially if they develop long covid. Community engagement is needed to improve vaccine uptake. The virus is airborne, so anyone who shares indoor air with an infected person, within some arbitrary distance or not, is at risk. In the short term, this means persisting with indoor masking, and attending to ventilation, air filtering, and CO₂ monitoring.

Second, protect the poor, who suffer a double burden—they are more likely to catch covid-19 and have an adverse outcome, and are also more vulnerable to the economic impacts of lockdown. Until nobody on a zero hours contract has to choose between self-isolating and feeding their family, community

BMJ OPINION Michael Marmot and Jessica Allen

Building back fairer in Greater Manchester



A question that has preoccupied so many of us, made more pressing by the impact of the pandemic, is when will the government finally act on social determinants of health, in order to improve health equity?

From 2010, the rate of increase in life expectancy slowed markedly; health inequalities increased; and life expectancy for the poorest people outside London declined. This worsening health picture, we suggest, is related to policies of austerity and regressive cuts to spending in that period.

If inaction, or worse, at national level has been the bad news, the good news has been local authority's interest in social determinants of health. Greater Manchester, along with the rest of the north west, suffered more than areas of southern England during the decade of austerity and regressive funding

We urgently need to build a society based on social justice principles

allocations. Then came the pandemic, which made it all worse: exposing the underlying inequalities in society and amplifying them.

Covid-19 mortality was 25% higher in Greater Manchester than in England as a whole. The effect was dramatic. During 2020, life expectancy fell by 1.2 years in women in the north west and 1.6 years in men, compared with a national fall of 0.9 and 1.3 years.

In our report, *Build Back Fairer in Greater Manchester*, we propose a framework built around six themes: future generations—improving equity in the prospects for young people; resources—compensating for public service cuts; standards—improving living and working conditions; institutions—businesses



transmission of the virus will continue apace.

Third, protect businesses from financial risk. Measures such as interest-free loans, deferred taxes, and furlough are likely to bring future dividends.

Fourth, control profiteering. The pandemic has enabled those seeking to make vast personal profits out of a global tragedy to do so. For everyone who profits, many will be thrown further into poverty.

Finally, strengthen health services—especially primary care. There is a pandemic driven backlog of unmet need in every branch of medicine, with everything from psychosis to cancer being diagnosed at a later, more-expensive-to-treat stage.

As a former chancellor, Javid brings knowledge of economics to his new brief. Rather than turning his back on public health, he should work quickly and collaboratively with his new department to avert further damage from the continuing pandemic.

Read Greenhalgh on “freedom day” at bit.ly/2Ur77HE

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and public sector to develop as “anchor” institutions with positive effects on the community; monitoring and accountability—we have developed 24 Marmot beacon indicators; greater local power and control—continue the process of devolution.

Our report is also a demonstration to national government as to what it needs to do if it is serious about levelling up. There is an urgent need to build a society based on principles of social justice, narrower inequalities in wealth and income, prioritising equity of health and wellbeing, while responding to the climate crisis. There is a great deal that we can do, but it will take commitment from national government, too.

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ACUTE PERSPECTIVE David Oliver

Pandemic lessons on frailty scales

For decades the geriatric medicine community has been discussing the concept, definition, causation, and clinical relevance of frailty, eventually influencing mainstream health policy and thinking. The pandemic response has pushed frailty onto a bigger stage: notably, the use of the clinical frailty scale (CFS) to triage, target, and potentially ration scarce intensive and high dependency care.

While I’m pleased to see frailty and structured assessments promoted so keenly, this hasn’t been without controversies. In particular, NICE’s rapid guidelines on covid-19 critical care in adults, issued in March 2020, had to be updated when advocacy groups raised concerns about using the CFS to withhold care from some patients.

Clearly, frailty does have great relevance to health service use, outcomes, and design of services. For instance, in over 75s registered with NHS practices, severe frailty as defined by an electronic frailty index is associated with far higher risk of hospital admission, death, or care home admission in the following 12 months. People with frailty have less functional reserve and are far more likely (with or without covid-19) to present with immobility, falls, confusion, or generalised failure to thrive, or to get stranded in hospital or experience acute loss of function. Those in care homes, or who have dementia or are receiving post-acute rehabilitation, will often be frailer and older. These groups are all at high risk from covid.

I think the explicit use of a CFS cut-off was a well intentioned attempt to put some structure and

transparent decisions around the rationing, or at least targeting, of critical care for the people with covid who were most likely to benefit when services were at risk of being overwhelmed. And since early pandemic decisions, several systematic reviews and cohort studies have indeed shown close correlations between very high scores and a poor chance of survival or benefit. Better, surely, an explicit decision making process that evolves as empirical evidence emerges?

But there was significant disquiet among the public, patients, and media, about what could be seen as the crude, depersonalising use of scales to determine whether someone might be given a chance of living. Don’t all such assessments need to be based on personalised clinical judgments, with a scale used merely as a guide? Beyond this, these indices are not designed to predict outcomes or the ability to benefit from critical or subcritical care in a SARS virus pandemic.

So, what have we learnt about using frailty scores? An editorial in the *British Journal of Anaesthesia* concluded that tools such as the CFS could never be used in isolation from clinical judgment or more recent, dynamic information about the patient’s physiology and acute comorbidities. NICE has emphasised that patients’ preferences and best interests are key factors. Let’s keep it that way, but let’s also not be squeamish in discussing these hard choices with the public, our patients, and the press.

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Tools such as the clinical frailty scale could never be used in isolation from clinical judgment



No room for growth

There aren't enough GPs to meet patient demand, and we've been invited to plug the gaps with other health professionals funded through the Additional Roles Reimbursement Scheme (ARRS). The plan is that by 2024 an extra 26 000 staff—physiotherapists, pharmacists, paramedics, social prescribers, and dietitians—will work in general practice teams, offering a better service to patients and (if all goes to plan) lightening the load for GPs.

So far around 9000 of these allied health professionals are in post, but it remains unclear whether the 2024 target will be reached. Lack of suitably trained personnel is an issue, but one of the major constraints is physical space.

When I first joined our practice it occupied a too small, dilapidated building. It had only two consulting rooms for doctors, so to manage any work that wasn't directly patient facing, GPs had to jostle for space in the admin office so that someone else could use their room. Eventually, to make room for foundation doctor training, we had to convert one of the toilets. Once the porcelain was removed there was just enough room for two chairs, although patients had to be taken to a couch elsewhere in the building if they needed to be examined.

After many years of planning and wrangling, we finally moved into a purpose built surgery in 2012. My delight in the luxury of adequate space, level floors, and cleanable

surfaces still hasn't worn off, and I'm conscious of my good fortune. Many practices are not in this position. Eight in 10 practices are in purpose built premises, but needs and standards have changed, and what was once state of the art may no longer be fit for purpose.

When we moved, anticipating expansion, we created more rooms than we then needed. Even so, mapping staff to rooms is getting harder: it's a complicated logistical exercise, requiring constant juggling as it occurs alongside a stream of pleas to accommodate more services and new learners.

The ARRS won't fulfil its potential without paying a lot more attention to the GP estate and committing the necessary resources to expand it. NHS England seems to recognise the problem, but its response has been less than satisfactory. A recent communication included the advice that primary care networks should "reconfigure current estate to reflect patient need." Leaving aside the assumptions built into this statement about the relations between individual practices (which control premises) and the networks, this advice is insulting in its naivety. It's highly unlikely practices already struggling with lack of space will benefit from the proposed patient flow and workspace redesign tools. If it was that simple, we'd have done it already.

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NHS England's advice is insulting in its naivety



LATEST PODCAST



Women's health and gender inequalities: campaigning for change

It's been 25 years since the Beijing Declaration and Platform for Action on Women was signed, and in that time advocacy for women's health has changed dramatically. This podcast hears from a variety of women working towards building a future in which women can thrive.

Fila Magnus, director of communications at the International Youth Alliance for Family Planning, who was born the same year the declaration was signed, discusses the current landscape in women's health:

"Twenty five years on, it almost feels like we haven't moved as much as we need to. And with recent authoritarianism coming back to life in different governments around the world, we're seeing a huge wave of conservatism coming in yet again. And so, instead of moving forward even further with the cause, we're also having to make our cases again. It's as though the work that has been done for so long, not that it was useless by any means, but it just feels like we're fighting the same fight over and over again. As much as I am hopeful for the future, I am also pretty saddened by the reality."

Adrienne Germain, who started her career as an activist for women's health in the 1970s, shares the strategies that she and fellow feminists used to get to the negotiating table:

"First of all, when you decide there's a problem and you're going to advocate for improvement, you must do it from a base of evidence, otherwise you're in a very vulnerable position. Now, back in the day, we had almost no evidence. When I started back in the 1970s, we could hardly even make estimates of maternal mortality and there was zero about maternal morbidity. We didn't know those things then. We know them now and we really broke a whole lot of barriers."



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Edited by Kelly Brendel, deputy digital content editor, *The BMJ*

Could expanding the case definition improve the UK's response to covid?

Alex Crozier and colleagues evaluate the potential opportunities and challenges of expanding the symptom list linked to self-isolation and testing as vaccines are rolled out

During the pandemic the British public has been instructed: "If you have a high fever, a new continuous cough, or you've lost your sense of smell or taste or its changed, self-isolate and get a test."¹ Yet these symptoms are just a few of many described by those infected with SARS-CoV-2.²⁻⁵

Many people with mild-to-moderate disease don't have these symptoms (initially), and other symptoms often manifest earlier.^{3,6} Most spread is from symptomatic cases around the time of symptom onset,⁷⁻¹¹ and interrupting transmission depends on early identification and isolation of contagious individuals.^{12,13} The narrow UK case definition therefore limits this detection, restricting the effectiveness of the test, trace, and isolate programme.⁸⁻¹⁵

As vaccination progresses and social mixing increases, infections are now highest among young, unvaccinated, or partially vaccinated people, who are also more likely to experience 'unofficial' symptoms.^{16,17}

Many infected people do not present with loss of taste or smell, a cough, or fever

Variants are adding further to transmission, as predicted, with potential for another wave of hospital admissions and deaths.¹⁸

Improvements in transmission control are urgently needed. Here, we build on calls to broaden the UK's covid-19 case definition,^{5,19} analysing the potential to improve self-isolation and symptomatic testing guided by a case definition fit for the vaccination era.

Updating the UK's clinical case definition

The European Centre for Disease Prevention and Control described a breadth of symptoms associated with mild-to-moderate covid-19, the most commonly reported being headache (70%), nasal obstruction (68%), weakness or fatigue (63%), myalgia (63%), rhinorrhoea (60%), gustatory dysfunction (54%), and sore throat (53%).²⁰ Many infected people do not present with the symptoms used in the UK case definition: loss of taste or smell, a cough, or fever which, before vaccination rollout, were reported by 70%, 63%, and 45% of symptomatic cases, respectively.^{3,21}

While restricting access to symptomatic testing to those with "official" symptoms may control the volume of testing, this narrow definition is now likely to impede control of transmission.

Critically, unofficial symptoms often manifest earlier.⁹ In a recent population based study in Arizona the most commonly reported first symptoms were sore throat (19%), headache (16%), cough (13%), runny nose or cold-like symptoms (12%), and fatigue (12%).²² These symptoms are more common in school age children¹⁶ and younger

people,¹⁷ who now account for an even greater proportion of transmission because older people are vaccinated.

The World Health Organization² and Centers for Disease Control and Prevention⁴ already include nine and 11 more case defining symptoms, respectively, than the UK. Greater testing capacity is now available to accommodate a wider case definition in the UK, particularly with rapid antigen tests. However, rapid tests are officially being used only for self-testing (at home or at testing centres) by people without symptoms,^{23,24} although some people with wider symptoms may also be using them.²⁵ Symptomatic testing using reverse transcription polymerase chain reaction (RT-PCR) tests meanwhile is open only to those declaring a high temperature, a new continuous cough, or a loss or change in sense of smell, and to confirmed contacts of RT-PCR positive cases.

The UK's narrow clinical case definition impedes not only the identification of cases but also the understanding of SARS-CoV-2 transmission. Although infected individuals without symptoms can clearly pass on the virus,²⁶ the characterisation of asymptomatic infection and transmission has been poor.³ It is important to distinguish between those not experiencing symptoms throughout infection (persistently asymptomatic), becoming infectious before symptoms manifest (presymptomatic), or having only unofficial or subtle symptoms (pauci-symptomatic).

Persistently asymptomatic cases probably account for less than 20% of infections, and these people

KEY MESSAGES

- Covid-19 is associated with a wide range of symptoms
- Many patients do not experience the UK's official case defining symptoms, initially, or ever, and other symptoms often manifest earlier
- Limiting the symptomatic testing to those with these official symptoms will miss or delay identification of many covid-19 cases, hampering efforts to interrupt transmission
- Expanding the clinical case definition of covid-19, the criteria for self-isolation, and eligibility for symptomatic testing could improve the UK's pandemic response
- Dynamic targeting based on data could avoid overloading resources

may be 3-25 times less likely than those with symptoms to pass on the virus.⁷⁻¹¹

Real world evidence suggests presymptomatic and (official and unofficial) symptomatic cases drive transmission more than asymptomatic cases.⁷⁻¹¹ It seems counterintuitive, therefore, to have no official UK guidance on wider symptoms, or to offer different testing routes for those with official symptoms and those with no symptoms, with nothing in between. People with unofficial symptoms can bypass the rules to get a test—legitimising this choice could be helpful.

Concerns have been raised over testing capacity, false negative rapid test results, and non-compliance with self-isolation.^{23 24} However, the benefits of identifying more cases sooner are likely to be substantial. The Scientific Advisory Group for Emergencies (SAGE) recommended “prioritising rapid testing of symptomatic people is likely to have a greater impact on identifying positive cases and reducing transmission than frequent testing of asymptomatic people in an outbreak area.”²⁷

Testing people with a single, non-specific symptom could, of course, overwhelm or waste capacity. Indeed, in September 2020 government advisory groups^{28 29} considered data from the First Few Hundred Study³⁰ and Covid Symptom Study App to reason against expanding eligibility for symptomatic testing. The data suggested expanding the definition would decrease symptom specificity from 97% to 94% while only marginally increasing symptom sensitivity from 85% to 95%.

However, more recent evidence on symptom combinations warrants reconsidering the case definition, especially since vaccination means the population most likely to be infected and transmit will now be younger or partially immunised, and so less likely to experience severe disease or official symptoms.

Combinations of symptoms could be used to help identify more cases sooner without overwhelming testing capacity. An age stratified approach derived from the React study selected



Leicester public health teams offer door to door covid testing in last summer

chills (all ages), headache (5–17 years), appetite loss (≥ 18 years), and muscle aches (18–54 years) as jointly predictive of positive RT-PCR results, together with the official symptoms.⁵ The authors concluded that triage based on these symptoms would identify more cases than the current approach, at any level of testing.

The Virus Watch cohort suggested using a wider symptom definition captured cases a day earlier than the current definition, on average,³¹ a critical time difference for preventing transmission. The Covid Symptom Study App was used to identify optimal symptom combinations for capturing most cases with fewest tests, and found that within three days of symptom onset, dyspnoea plus the official symptom combination (cough, fever, loss of smell or taste) identified only 69% of symptomatic cases and required 47 tests for each case identified.³² The combination with the highest coverage (fatigue, loss of smell or taste, cough, diarrhoea, headache, sore throat) identified 96% of symptomatic cases (requiring 96 tests per case identified).³² This combination of symptoms would increase the number of cases captured by symptomatic testing by over a third, and would likely result in earlier identification of many cases,²² potentially containing transmission more as we reopen society.

Implementing an updated clinical case definition

Expanding the case definition is likely to increase demand for testing and numbers self-isolating. The system-wide effects would be complex, requiring careful implementation.³³ Any change

The benefits of identifying more cases sooner are likely to be substantial



As PCR test lab capacity is limited dynamic targeting would improve turnaround of results

must neither overwhelm NHS Test and Trace nor impede existing symptomatic testing. Instructions such as “isolate if you have case defining symptoms, regardless of test status” must not lose clarity despite more complex lists of symptoms.

Potential harms from false negative or positive results need mitigation. While it is essential to consider the pre-test probability of infection (based on background prevalence, epidemiological history, and clinical presentation) and the performance of the test used,^{34 35} a substantial net reduction in transmission is likely if more symptomatic people are identified and isolate sooner.

The decision to adopt a narrow case definition was based on ease of communication, avoiding confusion with other infections, and preserving testing capacity. This situation is now different—testing capacity is high. The emergence of the delta variant and the potential evolution of more transmissible or vaccine resistant variants means that, even with vaccination, further waves of cases, hospital admissions, and deaths may ensue.¹⁸ Mitigating



ABACA/ABACA/PAVALAWY

these waves, and the potential for enduring transmission,³⁶ requires agile intervention to minimise the risks of vaccine escape variants, long covid, further NHS disruption, and harms from restrictions. To realise the benefits of a wider case definition it will be necessary to revise policies for testing and self-isolation.

Since RT-PCR capacity is limited, and quick turnaround is vital, we suggest dynamic targeting of RT-PCR testing, guided by continuous review of symptoms, transmission patterns, variants, vaccination uptake, and circulation of other respiratory viruses. Routinely collected data could be used to adapt testing eligibility, access, and communications systematically and quickly.³⁷⁻³⁹ Communication is particularly important as only half the public can correctly identify the official covid symptoms.⁴⁰ Data intensive, intelligence-led adaptation of the test, trace, and isolate system could make an important contribution to the UK's pandemic responses while we wait for the vaccination programme to progress as far as possible and for covid to abate.

To reopen society with greater speed and fairness, control of transmission must improve

Refining test, trace, and isolate

Given the heterogeneity in SARS-CoV-2 transmission,⁸⁻¹⁵ whereby fewer than 20% of cases may account for more than 80% of transmission, reopening society ahead of maximum vaccination coverage requires better identification and self-isolation of infectious cases to contain emerging clusters. To achieve this, the NHS Test and Trace system must increase the proportion of cases tested (and isolated) early in their infection and trace more contacts before onwards transmission.

Early, active case finding combined with enhanced contact tracing (including backwards to identify source of infection),¹⁴ effective symptom monitoring,⁴¹ and prompt contact testing⁴² can also reduce transmission.¹³ Repeat testing of contacts may usefully replace isolation for those without symptoms.⁴³⁻⁴⁴ Viral sequencing can also help trace clusters back to their source,⁴⁵ as well as targeting resources to identify and contain more transmissible or vaccine

resistant variants. Hyper-local approaches—involving communities at neighbourhood or street level, in faith groups, and other local contexts—are also vital.

Testing uptake among people with symptoms has been low, and engagement with testing and isolation has been lowest in communities with the highest prevalence of SARS-CoV-2 and the gravest consequences from covid-19.²³⁻⁴⁰ Effective support, including prompt financial help, during self-isolation is the key to controlling transmission.⁴⁶⁻⁴⁷ To make the most of an expanded case definition, public health and NHS systems must integrate more at both local and national levels,⁴⁸⁻⁵⁰ enabling nimbler, more equitable targeting of test-trace-isolate resources⁵¹⁻⁵² and surge vaccination.⁵³ In addition, combinations of RT-PCR and rapid antigen tests may be helpful in reducing delays between symptom onset, testing, self-isolation, and initiation of contact tracing.³⁹

Vaccinations alone are unlikely to end the pandemic. New, more transmissible and (partially) vaccine resistant variants may spread through susceptible populations causing high hospital admission rates. Inequities in vaccination are also shifting the burden of disease and disruption to the most disadvantaged communities, who are also harmed most by covid-19 restrictions. To reopen society with greater speed and fairness, control of transmission must improve. This starts with an expanded and more context appropriate case definition and rests on adaptive, locally grounded, and information-led public health responses.

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Mandatory covid-19 vaccination for care workers

Unnecessary, disproportionate, and misguided

In a profound departure from public health norms, new law will remove the right of care home staff in England to choose whether to be vaccinated against covid-19.¹ The intended next step is expansion of compulsory vaccination to require covid-19 and flu vaccination of all frontline health and social care workers, subject to consultation.²

Official claims that “we are not forcing anyone to take the vaccine” are disingenuous.¹ Care home workers who reject covid-19 vaccination will be dismissed from employment without compensation and be barred from access to their occupation. A regulatory amendment will make it unlawful for care homes to permit care workers to enter the care home premises without proof of full vaccination.¹ This will impose a new duty on all registered providers of residential care to verify the medical status of each worker, including agency staff, and volunteers. It will give responsibility for compliance and enforcement to the Care Quality Commission (CQC).

The providers’ associations Care England and the National Care Forum, as well as trade unions, have expressed concern that coercion is not the best way forward.³⁻⁶ Vaccination is not a panacea for safety. Safety, according to current regulatory law, is achieved through adequate staffing levels, training, equipment, cleanliness, personal protective equipment, risk assessment, and consultation with staff and residents.⁷ Care home residents accounted for 40% of all covid-19 deaths in the first wave and 26% in the second wave, as a result of long term problems with care home provision, including staff shortages, but also deficiencies in the pandemic response.⁸

Vaccination protects individuals from covid-19 and reduces the risk of transmission.⁹ Vaccine efficacy against reinfection after two doses is around 85-90%, efficacy against risk of hospital admission and death from covid-19 is even higher.^{9,10}



LINDSEY PARNABY/AFP/GETTY IMAGES

Mandatory vaccination will not remedy the serious shortcomings of the care sector in England

Crucially, previous infection affords immunity against reinfection and provides comparable protection to vaccination.^{11,12}

The “liberty of non-vaccination” is a principle established in UK law since 1898. It followed vigorous and widespread protest about compulsory vaccination for smallpox that was imposed by the Vaccination Act 1853.

Compulsory vaccination has not been attempted since in the UK. The Coronavirus Act 2020 was careful to avoid changes to the Health and Social Care Act 2008, which excluded mandatory medical treatment, including vaccination, from the secretary of state for health and social care’s power.¹⁵

Wales and Scotland

Wales and Scotland have rejected compulsory vaccination for care workers. Vaccine uptake for care workers in Wales is over 96% for the first vaccination and 85% for the second.¹⁶ “Virtually all” care home staff in Scotland have been vaccinated.¹⁷ Wales and Scotland have invested in systems of mandatory registration for care workers. Care worker registration aims to professionalise the sector, increase access to training, and embed a culture of continuous professional development. In England, successive ministers have rejected national care worker registration. The Department of Health and Social Care and the CQC

therefore don’t know who England’s care workers are, and training of the care workforce is woefully inadequate.

The Scientific and Advisory Group for Emergencies has recommended a threshold for minimum protection in residential care homes of 80% of care workers and 90% of residents to have had a first vaccination.¹⁸ By 20 June 2021, over 90% of care home residents in England had received two doses of a covid-19 vaccine, 84% of care workers in England had received a first dose, and 72% of care workers had received a second dose.¹⁹

The government’s decision on compulsory vaccination for care home workers was based on claims of low vaccine take-up in some care homes.²⁰ However, closer scrutiny shows that uptake of the first dose of vaccination among care workers is below 80% (68-74%) in only three upper tier local authorities in England, but these low percentages may be an artefact of small numbers of care home staff. For instance, the lowest uptake is in Haringey, with only 355 eligible staff in its older adult care homes compared with many thousands of staff in other local authorities.²¹ The government’s own methodology note warns that the numbers of staff and residents who have not received the vaccine cannot be directly derived from its data.²²

Civil liberty is a necessary component of strong public health. Mandatory vaccination is disproportionate and will not remedy the serious shortcomings of the care sector in England. Safety can be assured only by taking steps to build trust and to mitigate outbreaks. Care workers need paid time in which to access vaccination and good training, decent wages (including sick pay), personal protective equipment, and strong infection control measures. Mandatory vaccination in residential care is unnecessary, disproportionate, and misguided.

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LETTERS Selected from rapid responses on bmj.com

LETTER OF THE WEEK

Recognising the value of “shared pain”



There has been considerable discussion about the wisdom or otherwise of making covid-19 vaccination mandatory in certain settings, especially after Matt Hancock implied that most of the patients in hospital with covid-19 in Bolton had chosen not to be vaccinated (This Week, 29 May). That vaccination is to be made compulsory for care home staff in England comes as no surprise. It is currently unclear whether this applies to only “frontline care workers.”

A similar mandatory approach is being considered for NHS workers, although again it is unclear whether this would apply to only those who interact directly with patients. There is a broader issue of equity here that needs to be aired.

Multidisciplinary teams have become the universal approach to running the UK’s healthcare services, and this has promoted a shared approach to responsibility and risk across the range of professional groups in the NHS. Should mandatory vaccination be introduced, all NHS workers in the wider multidisciplinary team should be included—not just nurses and doctors but also leaders, senior managers, middle level managers, human resources staff, and others in administration and related fields.

Covid-19 clearly still harbours enormous potential for causing ill health and death, and defeating it is not a task for just doctors and nurses. A shared common obligation for all who work in the NHS and care homes—no matter what their role is—to be fully vaccinated would be good for staff morale across the board. It would also be an excellent example of colleagues from all professional backgrounds tackling and sharing a common burden.

In the words of the accomplished rapper and songwriter Negash Ali, “You have a deeper connection with people who you have shared experiences with and shared pain.”

Stephen T Green, honorary professor of international health, Sheffield

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PREPARING FOR THE NEXT PANDEMIC

The economy will recover—the dead will not

“Make it the last pandemic,” urges the report of the Independent Panel for Pandemic Preparedness and Response (Editorial, 5 June). Pandemics are foreseeable, have been with us always, and will almost certainly be with us forever.

The cause of the dismal UK record is having the wrong people, with the wrong mindset and educational background, in the wrong jobs. A pandemic is not a political or economic problem—it is a biological problem, which requires biological solutions supplied by qualified and experienced technical staff with unrestricted access to the required levers of power. The economy will recover—the dead will not.

We need an act of parliament that places an absolute duty on all future administrations faced with pandemic conditions to cede control of all national resources to a “plenipotentiary technically competent committee” that will decide when it is safe for the technically incompetent political cadres to emerge from pandemic purdah.

Steven Ford, retired GP, Hexham

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Taking a covid-like approach to other diseases

Why do we care more about pandemics than other disease epidemics that kill millions of people worldwide every year?

Covid-19 has brought academic organisations, private research and development companies, policy makers, regulatory authorities, clinicians, manufacturing experts, engineers, basic science researchers, and government machinery together across borders. This has led to the emergence of collaborations, alignment, preparedness, open science, and data sharing.

But diagnosis and treatment options remain limited for life threatening diseases like stroke, lung diseases, metabolic disorders, cancer, malaria, HIV, Ebola, tuberculosis, and hepatitis. We need to harness the convergence and synergy that we have seen in covid and apply a similar research approach to non-pandemic diseases that could save millions of lives.

Dipshikha Chakravorty, professor, Astra chair; K S Nandakumar, practising medical scientist, Bangalore

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FUNDING FOR GENERAL PRACTICES IN DEPRIVED AREAS

Correcting flaws in GP funding

We support the “levelling up” of funding for practices in deprived areas (Seven Days in Medicine, 29 May), but the analysis failed to explore fundamental flaws in current allocation, namely its application to too wide a geographical area and that shorter life expectancy may reduce capitation.

Approaches to allocation are based at primary care organisation (PCO) level, within which there can be marked differences in deprivation. Resources should be allocated based on practice population needs. This could be based on electoral wards or by using individual



patient or postcode data.

Our practices serve two of the four most deprived wards in our PCO but have the lowest and third lowest weighted capitation. The shorter life expectancies in our area, perversely, reduce our funding and consequently what

we can do for our population.

We need a more granular approach to assessment of need, and shorter life expectancies should increase funding.

Susan Denton, GP partner and clinical director, Guildford; Simon de Lusignan, GP partner and professor of primary care and clinical informatics; Nuffield Department of Primary Care Health Sciences, University of Oxford

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OBITUARIES

James Alexander May Findlay

Consultant orthopaedic surgeon Royal Alexandra Infirmary, Paisley (b 1935; q Aberdeen 1959; FRCS Edin), died from suspected pneumonia on 22 March 2021



James Alexander May Findlay ("Alastair") spent a house year in Aberdeen and then pursued his love of anatomy as demonstrator at Glasgow University. He met his future wife, Mary, also a doctor, at the city's Royal Infirmary, where he was an orthopaedic registrar in 1960-62. In 1972, they moved to Glasgow with their three young children, and Alastair commuted to Paisley. His diagnosis in the early 1970s with rheumatoid arthritis led to his specialisation in hand surgery. Pneumonia in 2016 led to the first of several hospital admissions, the last of which ended in November 2020. In his final illness he declined hospital or antibiotics. He leaves Mary, three children, grandchildren, and his sister.

Elsbeth Jajdelska

Cite this as: *BMJ* 2021;373:n1073

Sheema Habib-ul-Hasan

Professor department of pathology, Aga Khan University Hospital, Karachi, Pakistan (b 1941; q Fatima Jinnah Medical College Lahore, Pakistan, 1966; FRCPath), died from covid-19 on 11 February 2021



Born in Aligarh, India, Sheema Hasan had severe tuberculosis as a teenager. She was persuaded to become a doctor by an uncle and did not regret the decision. Marriage brought her to the UK and serendipity to histopathology. She was a consultant histopathologist at Westminster Hospital for two years before relocating to Pakistan. During a career lasting 40 years, she tirelessly promoted her specialty. Her legacy is rich, with over 100 publications. Her greatest pleasure was to see her trainees establish their own careers and departments within and outside the country. She leaves her husband, Habib-ul-Hasan; a son; and a grandson.

Asif Hasan, Naila Kayani, Islam Junaid

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Katherine Brenda Mansfield

GP Wellington Road Family Practice, Yate, south Gloucestershire (b 1959; q King's College Hospital, London, 1983), died from metastatic breast cancer on 30 May 2020



After graduating, Katherine Brenda Kelly ("Katie") married Nick Mansfield, a GP. She did GP training in Bath, Bristol, and Birmingham but took a 10 year career break while raising their four children. She then became a salaried doctor in her husband's practice. In 2007 Katie and Nick took over a small practice, aiming to deliver a more personal style of care. As the practice grew, Katie became increasingly involved in work for the clinical commissioning group and local public health service. She took her diagnosis of breast cancer with courage and after her treatment she returned to work for a few months but stopped again because of extensive metastatic disease. She leaves Nick and four children.

Nick Mansfield

Cite this as: *BMJ* 2021;373:n1031

Fred Riach Ironside Middleton

Consultant in neurological rehabilitation medicine (b 1942; q Trinity College Dublin, 1967; MA, FRCP), died from covid-19 on 5 January 2021



Fred Riach Ironside Middleton attended Trinity College Dublin, initially to study classics, but he turned to medicine after two years. During his junior years at the old Adelaide Hospital, Dublin (now Tallaght Hospital), he met Rosette Devereux ("Rowy"), a professional ballet dancer from Stillorgan, Dublin. They were married in January 1968 and moved to England. Fred continued his trainee years working in the Forces with postings in Yorkshire, Kent, and Surrey. He left the Forces in 1976 and continued his training in Edinburgh. In 1982 the family moved back south, and Fred became clinical director of the spinal injuries unit at the Royal National Orthopaedic Hospital, Stanmore. He had longstanding health problems, including severe asthma, and latterly prostate cancer. Predeceased by Rowy in 2018, he leaves three daughters.

Stephanie Marlow

Cite this as: *BMJ* 2021;373:n1029

John Knowles Stanley

Consultant hand surgeon Wrightington Hospital and professor of hand surgery Manchester University (b 1944; q Liverpool 1968; FRCS), died suddenly from longstanding ischaemic heart disease on 4 February 2021



John Knowles Stanley was appointed consultant orthopaedic surgeon at Ormskirk and District General Hospital and Wrightington Hospital in 1979. Shortly afterwards he had a myocardial infarction requiring bypass surgery. In 1984 he moved to full time hand surgery at Wrightington. By the time he retired in 2009, the hospital's upper limb unit had 13 consultants dealing with all conditions of the upper limb, from shoulder to elbow and hand. John Stanley's research produced many publications, presentations, and lectures. Throughout his career he had four open cardiac operations and numerous other procedures. John leaves Gail, his wife of 54 years; two children, who both followed him into medicine; and three grandchildren.

Sian Stanley

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Richard Willcox

GP (b 1947; q Liverpool 1970; DOBst RCOG, MRCPGP), died from oesophageal carcinoma on 17 August 2020



Richard Willcox started his career at Broadgreen Hospital, Liverpool. After completing senior house officer posts in obstetrics and gynaecology at Liverpool Maternity Hospital and the Liverpool Royal Infirmary, he followed a career in general medicine. In 1974 he entered general practice in Neston, south Wirral, where he worked as a respected family doctor for the next 33 years. He was appointed a GP trainer in 1977 and enjoyed a clinical assistantship in colposcopy at Liverpool Women's Hospital before becoming senior partner in January 1999. In retirement (June 2007) Richard pursued his love of fell walking in the Lake District. He sat on the ethics committee for Unilever and the committee for Age UK Wirral. Richard leaves his wife, Elizabeth; his three daughters; and his much loved six grandchildren.

Elizabeth Willcox

Cite this as: *BMJ* 2021;373:n1024

David Anton

Aviation doctor who investigated air crashes and became the first occupational physician with the RNLI

David Anton (b 1946; q 1971; DAvMed, MSc (Occ Med), FFOM), died from metastatic prostate cancer on 13 February 2021

David Anton was born in London to Tony Anton, a solicitor, and Vera (née Dobson). He was educated at Strode's School, Egham, and Solihull School.

His lifelong interest in mountains and the outdoors was sparked by an inspirational teacher who had the class follow the progress of John Hunt's Everest expedition, building a model of the mountain and studying the climbers and their equipment. During Anton's life, he travelled to many mountain ranges, including Everest base camp, and studied the physiology of survival.

Anton summed this up on his blog in 2019: "I have always been interested in why things go wrong and the physical and mental consequences that follow.

"I suppose it started when I was a boy. My parents took me to the Farnborough Air Show from a very young age, but we missed the day when John Derry crashed into the crowd, killing 31 people. The aircraft fell where we used to sit. Had we been there we would have died, and to this day I remember my parents' shock and relief at our narrow escape.

"Sometime around then I resolved that Farnborough would be part of my life; an ambition I achieved much later when I went to work at one of the establishments on the Farnborough site."

Anton studied medicine at Charing Cross Medical School. During the holidays, he drove to India, where he worked in a children's hospital for a year.

Aviation medicine

After he qualified, he joined the Royal Air Force in 1975, first as medical officer, then chief

medical officer, then as head of biomechanics and aircraft accident investigation. He investigated more than 200 air crashes. He investigated the Kegworth air disaster in 1989, when a Boeing 737 carrying 126 passengers and crew crashed on to the M1 motorway, killing 47 people and severely injuring 74.

In one of Anton's papers on Kegworth he called for more research into the fact that rear facing seats are much safer than front facing ones. He was also responsible for the updated design of the ejection seat, which is still used today.

Anton was involved in NATO groups, acting as secretary to the advisory group for aerospace development in 1982-84 and as chairman of the biodynamics committee, Aerospace Medical Panel NATO. He was also consultant to the US navy and air force.

He won the Richard Fox Linton memorial prize in 1981 for his "sterling efforts in the investigation of flying accidents and the advancement of measures for the promotion of safety in flight."

He was first married to Helen and they had three children. After their divorce, he reconnected with his childhood sweetheart, Helena Felix, on Facebook, who in the intervening decades had also been married, brought up a family, and been widowed. Although they had not met for 25 years, they discovered they were still kindred spirits, and their close relationship lasted until his death.

Occupational medicine

In the next decade, his career took a different turn when he worked as an occupational physician for Unigate and other

companies, having previously worked in occupational health in NHS trusts. In 1995 he founded the firm of Anton, Hodges, and Baron. He trained occupational medicine physicians and in 2005 was on the working group that was established to develop new methods of assessing the competence of specialist registrars.

His stepdaughter, Toni Hazell, a GP in London, recalled: "He had a particular interest in industrial diseases. He was often frustrated when companies didn't want to put in place relatively simple measures because there was an upfront cost but the benefits would come later.

"He was also interested in the social determinants of health and dealt a lot with men whose heavy industries had been damaged. He talked about how much you could learn from visiting someone at home rather than in your consulting rooms."

He was part of the Aviation Study Group and contributed to a 1995 report revealing that the warning time which people had before a helicopter crash was often very short and that this needed to be taken into account.

In 2000 Anton went to work with the RNLI as its first occupational physician. He drew on his knowledge of post-traumatic stress disorder to produce the earliest guidance for the RNLI on fitness to serve.

In 2003 Anton was awarded the Queen's Golden Jubilee Medal. In his retirement, he embarked on a new career as a writer.

He leaves his fiancée, Helena; three children; seven grandchildren; a stepdaughter; and two step grandchildren.

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Anton investigated over 200 air crashes