COVID-19 weekly update

23rd October 2020

**clinical management**

**Title**: Remdesivir has little or no impact on survival, WHO trial shows

BMJ | 2020; 371: m4057 | 19th October 2020

The largest trial to date of treatments repurposed for use in the covid-19 pandemic has shown that none of the four drugs studied produced any measurable benefit in mortality or disease course. This includes remdesivir—a drug already recommended by several guidelines and pre-ordered by numerous governments around the world.

Hydroxychloroquine, lopinavir-ritonavir, and interferon beta-1a regimens also seemed to have little or no effect on 28 day mortality. None of the drugs delayed the need for ventilation or shortened the stay of patients admitted to hospital. “For each drug in the study, the effect on mortality was disappointingly unpromising,” said the World Health Organization in a statement.

The WHO Solidarity trial followed 11 266 adults at 405 hospitals in 30 countries and, although the results are preliminary, WHO said that the “conclusive” findings “suffice to refute early hopes” in the four drugs studied. The study, which awaits peer review before publication in a medical journal, has been posted on the preprint website medrxiv.org

Full detail: [Remdesivir has little or no impact on survival, WHO trial shows](https://www.bmj.com/content/371/bmj.m4057)

Related study: [Repurposed antiviral drugs for covid-19—interim WHO Solidarity trial results](https://www.medrxiv.org/content/10.1101/2020.10.15.20209817v1?ijkey=66e2db10c47e8caa1639f3172fe2efa6f47ce11d&keytype2=tf_ipsecsha)

**Title**: Cytokine elevation in severe and critical COVID-19: a rapid systematic review, meta-analysis, and comparison with other inflammatory syndromes

The Lancet Respiratory Medicine | 16th October 2020

The description of a so-called cytokine storm in patients with COVID-19 has prompted consideration of anti-cytokine therapies, particularly interleukin-6 antagonists. However, direct systematic comparisons of COVID-19 with other critical illnesses associated with elevated cytokine concentrations have not been reported.

This Rapid Review reports the results of a systematic review and meta-analysis of COVID-19 studies published or posted as preprints between Nov 1, 2019, and April 14, 2020, in which interleukin-6 concentrations in patients with severe or critical disease were recorded.

The findings question the role of a cytokine storm in COVID-19-induced organ dysfunction. Many questions remain about the immune features of COVID-19 and the potential role of anti-cytokine and immune-modulating treatments in patients with the disease.

Full paper: [Cytokine elevation in severe and critical COVID-19: a rapid systematic review, meta-analysis, and comparison with other inflammatory syndromes](https://www.thelancet.com/action/showPdf?pii=S2213-2600%2820%2930404-5)

**Title**: Efficacy of Tocilizumab in Patients Hospitalized with Covid-19

New England Journal of Medicine | 21st October 2020

The efficacy of tocilizumab was tested in a randomized, controlled trial involving patients with Covid-19 who had fever, pulmonary infiltrates, or a need for supplemental oxygen. The treatment had no significant effect on disease progression, independence from supplemental oxygen, or death.

 Some benefit or harm cannot be ruled out, however, because the confidence intervals for efficacy comparisons were wide.

Full article: [Efficacy of Tocilizumab in Patients Hospitalized with Covid-19](https://www.nejm.org/doi/pdf/10.1056/NEJMoa2028836?articleTools=true)

**Title**: Prediction models for covid-19 outcomes

BMJ | 2020; 371: m3777 | 20th October 2020

Robust models that predict the prognosis of coronavirus 2019 (covid-19) are urgently needed to support decisions about shielding, hospital admission, treatment, and population level interventions. With cases increasing in the UK and elsewhere, and winter approaching, such models could have a rapid clinical impact. This editorial looks at two linked articles which report on two newly developed covid-19 prediction models.

Full editorial: [Prediction models for Covid-19 outcomes](https://www.bmj.com/content/bmj/371/bmj.m3777.full.pdf)

Linked Research:

* [Living risk prediction algorithm (QCOVID) for risk of hospital admission and mortality from coronavirus 19 in adults](https://www.bmj.com/content/371/bmj.m3731)
* [Risk stratification of patients admitted to hospital with covid-19 using the ISARIC WHO Clinical Characterisation Protocol](https://www.bmj.com/content/370/bmj.m3339)

See also: [New risk model estimates likelihood of death or hospitalisation from COVID-19](https://www.nihr.ac.uk/news/new-risk-model-estimates-likelihood-of-death-or-hospitalisation-from-covid-19/25932) | National Institute for Health Research

**Title**: Video consultations in primary and specialist care during the covid-19 pandemic and beyond

BMJ | 2020; 371: m3945 | 20th October 2020

Even before the covid-19 pandemic, virtual consultations (also called telemedicine consultations) were on the rise, with many healthcare systems advocating a digital-first approach.At the start of the pandemic, many GPs and specialists turned to video consultations to reduce patient flow through healthcare facilities and limit infectious exposures.

Video and telephone consultations also enable clinicians who are well but have to self-isolate, or who fall into high risk groups and require shielding, to continue providing medical care. The scope for video consultations for long term conditions is wide and includes management of diabetes, hypertension, asthma, stroke, psychiatric illnesses, cancers, and chronic pain.

Video consultations can also be used for triage and management of a wide range of acute conditions, including, for example, emergency eye care triage.

 This practice pointer summarises the evidence on the use of video consultations in healthcare and offers practical recommendations for video consulting in primary care and outpatient settings.

Full detail: [Video consultations in primary and specialist care during the covid-19 pandemic and beyond](https://www.bmj.com/content/bmj/371/bmj.m3945.full.pdf)

**Title:** What is the role of T cells in COVID-19 infection? Why immunity is about more than antibodies

Centre for Evidence-Based Medicine | 19th October 2020

* CD4+ T cells help B cells to produce antibodies and help CD8+ T cells to kill virus-infected cells
* One of the dominant cytokines produced by T cells is interferon gamma, a key player in controlling viral infection
* Lymphopenia is a main feature of COVID-19 infection, affecting CD4+ T cells, CD8+ T cells, and B cells, and is more pronounced in severely ill patients
* T cell responses in severely ill patients may be impaired, over-activated, or inappropriate, and further research is required to elucidate this and inform treatment strategies
* There is some evidence of cross-reactivity with seasonal/endemic coronaviruses
* Emerging studies suggest that all or a majority of people with COVID-19 develop a strong and broad T cell response, both CD4 and CD8, and some have a memory phenotype, which bodes well for potential longer-term immunity
* Understanding the roles of different subsets of T cells in protection or pathogenesis is crucial for preventing and treating COVID-19

Full detail: [What is the role of T cells in COVID-19 infection? Why immunity is about more than antibodies](https://www.cebm.net/covid-19/what-is-the-role-of-t-cells-in-covid-19-infection-why-immunity-is-about-more-than-antibodies/)

**Title**: Endoscopy services during COVID-19 second wave

British Society of Gastroenterology | 16th October 2020

The British Society of Gastroenterology has published guidance for its members regarding endoscopy services during the second wave of the COVID-19 pandemic.

There is real concern that the already fragile endoscopy services may become even more stretched, risking further delays to the diagnosis and treatment of potentially serious gastrointestinal and liver disorders.

Since the pandemic began, we have learned a lot about both the virus and its impact on Endoscopy, including how to deliver endoscopy safely and the importance of senior decision-maker triage to prioritise patients most likely to benefit from procedures urgently (and conversely the most likely to come to harm from lack of them).

Endoscopy capacity may be affected again by:

* loss of endoscopy or recovery areas to become inpatient beds
* redeployment of nursing and A&C staff to other duties
* withdrawal of trainees from GI/Liver clinics, ward and scope lists to cover COVID wards

Full detail: [Endoscopy services during COVID-19 second wave](https://www.bsg.org.uk/covid-19-advice/endoscopy-services-during-covid-19-second-wave/)

**Title**: National guidance for the management of children with bronchiolitis and lower respiratory tract infections during COVID-19

RCPCH | updated 20th October 2020

With concerns of a possible second surge of COVID-19 cases this winter, maintaining robust infection control processes is essential to keep patients, parents/carers and staff safe.

However, it is also necessary to ensure that the flow of patients through the hospital is maintained during the winter period when it is predicted that demand for paediatric services will increase significantly and the onset of the bronchiolitis / respiratory virus season will place services under considerable pressure.

These recommendations on the management of children with bronchiolitis and lower respiratory tract infections in hospital settings during COVID-19 are for clinicians to support winter planning in partnership with local infection control prevention teams.

Full detail: [National guidance for the management of children with bronchiolitis and lower respiratory tract infections during COVID-19](https://www.rcpch.ac.uk/resources/national-guidance-management-children-bronchiolitis-during-covid-19)

**Title:** Virology, transmission, and pathogenesis of SARS-CoV-2

BMJ | 2020; 371: m3862 | 23rd October 2020

Since the emergence of SARS-CoV-2 in December 2019, there has been an unparalleled global effort to characterise the virus and the clinical course of disease.

Coronavirus disease 2019 (covid-19), caused by SARS-CoV-2, follows a biphasic pattern of illness that likely results from the combination of an early viral response phase and an inflammatory second phase. Most clinical presentations are mild, and the typical pattern of covid-19 more resembles an influenza-like illness—which includes fever, cough, malaise, myalgia, headache, and taste and smell disturbance—rather than severe pneumonia (although emerging evidence about long term consequences is yet to be understood in detail).

This review provides a broad update on the emerging understanding of SARS-CoV-2 pathophysiology, including virology, transmission dynamics, and the immune response to the virus. Any of the mechanisms and assumptions discussed in the article and in our understanding of covid-19 may be revised as further evidence emerges.

Full detail: [Virology, transmission, and pathogenesis of SARS-CoV-2](https://www.bmj.com/content/bmj/371/bmj.m3862.full.pdf)

**recovery**

**Title**: Coronavirus (COVID-19): evidence relevant to clinical rehabilitation

Cochrane Library Special Collections | 21st October 2020

Rehabilitation has been identified by the World Health Organization (WHO) as an essential health strategy, alongside promotion, prevention, treatment, and palliative care. The rehabilitation of individuals who have experienced COVID-19 must consider not only the consequences of the disease but also the effects of treatments applied during the acute phase.

This collaborative work identified the following conditions as relevant to the WHO rehabilitation programme:

* Acute respiratory distress syndrome (ARDS) and pulmonary restrictive syndrome
* Post-intensive care syndrome (PICS)
* Post-extubation swallowing disorders
* Multiple organ failure and shock
* PTSD, in the context of rehabilitation

This Special Collection focuses on rehabilitation interventions for each of these conditions, but it should be noted that the rehabilitation process of COVID-19 patients in practice will be performed by multi-professional teams with a strict interdisciplinary collaboration, in accordance with the individual’s needs.

Full detail: [Coronavirus (COVID-19): evidence relevant to clinical rehabilitation](https://www.cochranelibrary.com/collections/doi/SC000047/full)

**Title:** The Impact Of Covid-19 To Date On Older People’s Mental And Physical Health

Age UK | 9th October 2020

This research finds that some older people are coping with the pandemic, but a sizeable minority are finding life incredibly tough. Those who are not very well and have long term health conditions were particularly likely to report that this is an extremely challenging time for them.

The research was made up of a survey of older people, their friends, families, and loved ones (promoted across the Age UK social media channels for two weeks in August 2020 and completed by 569 people) and representative online polling of 1,364 people over the age of 60, conducted by Kantar Polling in September 2020.

Full report: [The Impact of Covid-19 to date on Older People’s Mental and Physical Health](https://www.ageuk.org.uk/globalassets/age-uk/documents/reports-and-publications/reports-and-briefings/health--wellbeing/the-impact-of-covid-19-on-older-people_age-uk.pdf)

**Title:** Out of sight, out of mind. The continuing impact of COVID-19 on people living with kidney disease

Kidney Care UK | 20th October 2020

This report (compiled using 860 responses from an online survey open from 28 August to 21 September 2020) finds that the majority of kidney patients have been expected to return to work once shielding ended and the furlough scheme ends. Nearly two thirds of respondents (63 per cent) said they were concerned for their safety but had to return regardless. Almost one in five (19 per cent) said that their employer has been ‘very unhelpful’ or ‘unhelpful’ in their return. The report states that the government needs to take immediate and long-term action to protect the wellbeing of around 70,000 vulnerable kidney patients.

Full report: [Out of sight, out of mind. The continuing impact of COVID-19 on people living with kidney disease](https://www.kidneycareuk.org/documents/442/Kidney_Care_UK_patient_survey_report_20.10.20_FINAL.pdf)

**TITLE:** CARING BEHIND CLOSED DOORS: SIX MONTHS ON. THE CONTINUED IMPACT OF THE CORONAVIRUS (COVID-19) PANDEMIC ON UNPAID CARERS

Carers UK | 20th October 2020

Carers UK carried out an online survey between 11 - 28 September 2020. A total of 5,904 carers and former carers responded to the survey. It finds that carers are desperately worried about how they will continue to care safely through the coming winter, and that they are already exhausted and close to burn out. Without urgent action from the government, many carers simply do not think they will be able to cope in the coming months.

* Four in five unpaid carers providing more care for relatives
* 78% reported that the needs of the person they care for have increased during the pandemic
* Two thirds (67%) worried about how they will cope through further lockdowns or local restrictions
* Carers UK calls on Government to help reinstate crucial support services as soon as possible, and implement a New Deal for Carers

Full detail: [Caring behind closed doors: Six months on. The continued impact of the coronavirus (Covid-19) pandemic on unpaid carers](http://www.carersuk.org/images/News_and_campaigns/Behind_Closed_Doors_2020/Caring_behind_closed_doors_Oct20.pdf)

See also: [Reduced services see unpaid carers pushed to the limit - and desperately worried about winter](https://www.carersuk.org/news-and-campaigns/press-releases/reduced-services-see-unpaid-carers-pushed-to-the-limit-and-desperately-worried-about-winter)

**Title**: Health Secretary warns of long-term effects of COVID-19

Department of Health & Social Care | 21st October 2020

The Health Secretary is urging the public – and especially young people – to follow the rules and protect themselves and others from COVID-19, as new data and a new film released today reveal the potentially devastating long-term impact of the virus. The data suggests long COVID affects around 10% of 18 to 49 year olds who become unwell with COVID-19.

The symptoms of ‘long COVID’, including fatigue, protracted loss of taste or smell, respiratory and cardiovascular symptoms and mental health problems, are described in a new film being released today as part of the wider national Hands, Face, Space campaign. The film calls on the public to continue to wash their hands, cover their face and make space to control the spread of the virus.

Full detail: [Health Secretary warns of long-term effects of COVID-19](https://www.gov.uk/government/news/health-secretary-warns-of-long-term-effects-of-covid-19-as-new-film-released?utm_source=c0dc82e9-886c-43df-8da5-a615494030e0&utm_medium=email&utm_campaign=govuk-notifications&utm_content=immediate)

**Title:** Mental health and wellbeing during the COVID-19 pandemic: longitudinal analyses of adults in the UK COVID-19 Mental Health & Wellbeing study

The British Journal of Psychiatry | 21st October 2020

Rates of suicidal thoughts have increased during lockdown, especially among young adults, a longitudinal study has found.

Research published in the *British Journal of Psychiatry* found that women, young adults, socially disadvantaged people, and people with pre-existing mental health problems reported the worst mental health outcomes in the initial six week period of national lockdown.

The study—funded by the Samaritans, the Scottish Association for Mental Health, and the Mindstep Foundation—claims to be the most detailed examination to date of the mental health of UK adults in the weeks after they were instructed to stay at home, on 23 March 2020. Researchers surveyed a national sample of 3077 adults three times from 31 March to 11 May. Participants have been followed up throughout the pandemic, and further results will be published in the coming months.

The study found that the proportion of respondents reporting that on at least one day in the previous week they had wanted to end their life increased from 8.2% to 9.2% and then to 9.8%, over the three waves of the study. These rates were highest in young adults (aged 18-29), rising from 12.5% to 14.4% throughout the three waves. The authors note that direct comparisons cannot be made but that this past week rate is higher than an 11% past year suicidal ideation rate reported by young adults in another pre-covid-19 study.

Full document: [Mental health and wellbeing during the COVID-19 pandemic: longitudinal analyses of adults in the UK COVID-19 Mental Health & Wellbeing study](https://www.cambridge.org/core/services/aop-cambridge-core/content/view/F7321CBF45C749C788256CFE6964B00C/S0007125020002123a.pdf/mental_health_and_wellbeing_during_the_covid19_pandemic_longitudinal_analyses_of_adults_in_the_uk_covid19_mental_health_wellbeing_study.pdf)

See also: [Suicidal thoughts increased in young adults during lockdown, UK study finds](https://www.bmj.com/content/371/bmj.m4095) | BMJ

**Title**: Coronavirus and the social impacts on Great Britain: 23 October 2020

Office for National Statistics | 23rd October 2020

Indicators from the Opinions and Lifestyle Survey covering the period 14 to 18 October 2020 to understand the impact of the coronavirus (COVID-19) pandemic on people, households and communities in Great Britain.

Full detail: [Coronavirus and the social impacts on Great Britain: 23 October 2020](https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandwellbeing/bulletins/coronavirusandthesocialimpactsongreatbritain/23october2020)

**Infection control**

**Title**: Evolution and effects of COVID-19 outbreaks in care homes: a population analysis in 189 care homes in one geographical region of the UK

The Lancet Healthy Longevity | October 2020

COVID-19 has affected care home residents internationally, but detailed information on outbreaks is scarce. We aimed to describe the evolution of outbreaks of COVID-19 in all care homes in one large health region in Scotland.

The effect of COVID-19 on care homes has been substantial but concentrated in care homes with known outbreaks. A key implication from these findings is that, if community incidence of COVID-19 increases again, many care home residents will be susceptible. Shielding care home residents from potential sources of SARS-CoV-2 infection, and ensuring rapid action to minimise outbreak size if infection is introduced, will be important for any second wave.

Full document: [Evolution and effects of COVID-19 outbreaks in care homes: a population analysis in 189 care homes in one geographical region of the UK](https://www.thelancet.com/action/showPdf?pii=S2666-7568%2820%2930012-X)

**Title**: Will covid-19 vaccines save lives? Current trials aren’t designed to tell us

BMJ | 2020; 371: m4037 | 20th October 2020

The world has bet the farm on vaccines as the solution to the pandemic, but the trials are not focused on answering the questions many might assume they are as this BMJ Feature piece reports.

Full detail: [Will covid-19 vaccines save lives? Current trials aren’t designed to tell us](https://www.bmj.com/content/371/bmj.m4037)

**Title**: Contact tracing: digital health on the frontline

The Lancet Digital Health | November 2020

South Korea, China, and Singapore have successfully used digital contact tracing to control the spread of COVID-19, often putting public interest above individuals' right to privacy. Despite initial enthusiasm for this approach in the USA, Israel, and Europe, privacy concerns and technical issues inhibited uptake of digital contact tracing, and recent attempts to stem the first wave of SARS-COV-2 infections failed.

Effectiveness and uptake of technology are not the only factors in determining the success of a contact tracing programme. Other factors include whether users self-isolate and get tested quickly. Reports predict that less than 20% of people in England fully self-isolate when asked to do so. We know that people without privilege and wealth have limited capacity to self-isolate at home, therefore it is vital that contact tracing strategies recognise the financial barriers to complying with public health measures.

Full editorial: [Contact tracing: digital health on the frontline](https://www.thelancet.com/journals/landig/article/PIIS2589-7500%2820%2930251-X/fulltext)

**Title**: Covid-19 vaccine trial protocols released

BMJ | 2020; 371: m4058 | 21st October 2020

The ongoing phase III trials for covid-19 vaccines are some of the most consequential randomised trials ever done. In September, following months of campaigning for greater openness,four manufacturers made their full study protocols publicly available.

 The publications create a rare opportunity for “real time transparency” in which the conduct of clinical trials is opened to public scrutiny while the studies are still under way.

Whatever the results ultimately show, public release of these protocols - each over 110 pages containing far greater detail than was previously available - enables a more scientific, deliberative, and inclusive trial process.

Full editorial: [Covid-19 vaccine trial protocols released](https://www.bmj.com/content/bmj/371/bmj.m4058.full.pdf)

**Title**: Estimating the infection-fatality risk of SARS-CoV-2 in New York City during the spring 2020 pandemic wave: a model-based analysis

The Lancet Infectious Diseases | 19th October 2020

As the COVID-19 pandemic continues to unfold, the infection-fatality risk (ie, risk of death among all infected individuals including those with asymptomatic and mild infections) is crucial for gauging the burden of death due to COVID-19 in the coming months or years. Here, we estimate the infection-fatality risk of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in New York City, NY, USA, the first epidemic centre in the USA, where the infection-fatality risk remains unclear.

The results of this study are based on more complete ascertainment of COVID-19-related deaths in New York City than other places and thus probably reflect the true higher burden of death due to COVID-19 than that previously reported elsewhere.

Given the high infection-fatality risk of SARS-CoV-2, governments must account for and closely monitor the infection rate and population health outcomes and enact prompt public health responses accordingly as the COVID-19 pandemic unfolds.

Full document: [Estimating the infection-fatality risk of SARS-CoV-2 in New York City during the spring 2020 pandemic wave: a model-based analysis](https://www.thelancet.com/action/showPdf?pii=S1473-3099%2820%2930769-6)

**Title:** The Challenges of Expanding Rapid Tests to Curb COVID-19

JAMA | published online 21st October 2020

This Medical News feature examines the debate about the value of frequent testing for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

Full detail: [The Challenges of Expanding Rapid Tests to Curb COVID-19](https://jamanetwork.com/journals/jama/fullarticle/2772299)

**Title:** Herd Immunity and Implications for SARS-CoV-2 Control

JAMA | published online 19th October 2020

This JAMA Insights Clinical Update discusses herd immunity in the context of the COVID-19 pandemic and explains the herd immunity threshold as a function of transmissibility (R0), the role of an effective vaccine and vaccination program in sustaining herd immunity, and the risks of an infection-based herd immunity approach.

Full detail: [Herd Immunity and Implications for SARS-CoV-2 Control](https://jamanetwork.com/journals/jama/fullarticle/2772167)

See also: [Audio Clinical Review:](https://jamanetwork.com/learning/audio-player/18552659) Can We Count on Herd Immunity to Control COVID-19?

**Title:** What Is Herd Immunity?

JAMA | published online 19th October 2020

This JAMA Patient Page describes what herd immunity is, how it limits disease spread, and how it is achieved in a population either by vaccination or by infection and recovery from a disease.
Full detail: [What is Herd Immunity?](https://jamanetwork.com/journals/jama/fullarticle/2772168)

**Title**: Vaccine trials need more transparency to enable scrutiny and earn public trust, say experts

BMJ | 2020; 371: m4042 | 22nd October 2020

Eleven covid-19 vaccine candidates are in phase III clinical trials. But while the scientists involved have been praised for their speed, others are calling for more transparency to ensure studies are robust and the evidence is sound as this BMJ Feature piece reports.

Full details: [Vaccine trials need more transparency to enable scrutiny and earn public trust, say experts](https://www.bmj.com/content/371/bmj.m4042)

**TITLE:** HUMAN CHALLENGE STUDIES WILL SEE PEOPLE PURPOSEFULLY INFECTED WITH VIRUS

BMJ | 2020; 371: m4101 | 22nd October 2020

Human challenge studies of covid-19, which involve volunteers being deliberately infected with the virus under controlled conditions, could start in January, UK researchers have said.

The project, which would be a world first, is a collaboration between Imperial College London, hVIVO (part of the drug company Open Orphan), and the Royal Free London NHS Foundation Trust. It has been supported by the government through a £33.6m investment.

In the first stage the researchers will work to determine the smallest amount of virus needed to cause infection and elicit an immune response. To do this they will slowly increase the viral dose to which small groups of volunteers are exposed.

In the second stage vaccine candidates that have been shown to be safe in initial trials will be given to a small number of healthy volunteers, who will then be exposed to the virus. The team will then monitor the participants to see how the vaccine works and to identify any side effects.

Full detail: [Human challenge studies will see people purposefully infected with virus](https://www.bmj.com/content/371/bmj.m4101)

**Title:** Government shelves plans to invest £100bn in mass testing

BMJ | 2020; 371: m4112 | 23rd October 2020

The UK government has abandoned plans to spend £100bn on a massive expansion of its national testing programme, legal documents have shown.

A letter from government lawyers also reveals that the ambitious Operation Moonshot programme, first revealed in leaked documents seen by *The BMJ* last month, has now been quietly subsumed by the national test and trace programme.

The documents seen by *The BMJ* last month detailed the government’s plan to carry out 10 million tests a day by early 2021. They showed that ministers were prepared to spend almost as much as the budget of the NHS in England each year (£130bn) to fund mass testing of the population “to support economic activity and a return to normal life.”

But a letter from government lawyers dated 6 October, issued in response to a threat of legal action against the proposals from the not-for-profit Good Law Project, shows that the government has modified its plans.

The Good Law Project claimed that the Moonshot project was unlawful because it ignored scientific evidence and committed a vast sum of public money with no transparency as to how the decisions were made. In their response the government’s lawyers wrote, “The Project Moonshot Briefing Pack was a document designed to provoke discussion: it did not and does not reflect an adopted policy”.

Full detail: [Government shelves plans to invest £100bn in mass testing](https://www.bmj.com/content/371/bmj.m4112)

**Title:** The temporal association of introducing and lifting non-pharmaceutical interventions with the time-varying reproduction number (R) of SARS-CoV-2: a modelling study across 131 countries

The Lancet Infectious Diseases | 22nd October 2020

Non-pharmaceutical interventions (NPIs) were implemented by many countries to reduce the transmission of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the causal agent of COVID-19. A resurgence in COVID-19 cases has been reported in some countries that lifted some of these NPIs.

The authors of this study aimed to understand the association of introducing and lifting NPIs with the level of transmission of SARS-CoV-2, as measured by the time-varying reproduction number (*R*), from a broad perspective across 131 countries.

Individual NPIs, including school closure, workplace closure, public events ban, ban on gatherings of more than ten people, requirements to stay at home, and internal movement limits, are associated with reduced transmission of SARS-CoV-2, but the effect of introducing and lifting these NPIs is delayed by 1–3 weeks, with this delay being longer when lifting NPIs.

These findings provide additional evidence that can inform policy-maker decisions on the timing of introducing and lifting different NPIs, although *R* should be interpreted in the context of its known limitations.

Full paper: [The temporal association of introducing and lifting non-pharmaceutical interventions with the time-varying reproduction number (R) of SARS-CoV-2: a modelling study across 131 countries](https://www.thelancet.com/action/showPdf?pii=S1473-3099%2820%2930785-4)

**Title:** The engines of SARS-CoV-2 spread

Science | 23rd October 2020 | Vol. 370, Issue 6515

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has spread rapidly across the globe, causing epidemics that range from quickly controlled local outbreaks (such as New Zealand) to large ongoing epidemics infecting millions (such as the United States).

A tremendous volume of scientific literature has followed, as has vigorous debate about poorly understood facets of the disease, including the relative importance of various routes of transmission, the roles of asymptomatic and presymptomatic infections, and the susceptibility and transmissibility of specific age groups. This discussion may create the impression that our understanding of transmission is frequently overturned.

This article states that although our knowledge of SARS-CoV-2 transmission is constantly deepening in important ways, the fundamental engines that drive the pandemic are well established and provide a framework for interpreting this new information.

Full paper: [The engines of SARS-CoV-2 spread](https://science.sciencemag.org/content/sci/370/6515/406.full.pdf)

**workforce wellbeing**

**Title:** NHS strengthens mental health support for staff

NHS England | 20th October 2020

NHS staff will get rapid access to expanded mental health services that are being rolled out across the country as part of efforts to deal with the second wave of coronavirus.

NHS England and NHS Improvement will invest an extra £15 million to strengthen mental health support for nurses, paramedics, therapists, pharmacists, and support staff.

Staff referred by themselves or colleagues will be rapidly assessed and treated by local expert mental health specialists. Those with the most severe needs will be referred to a specialist centre of excellence.

The investment will fund outreach work among those deemed most as risk such as critical care staff.

Full detail: [NHS strengthens mental health support for staff](https://www.england.nhs.uk/2020/10/strengthening-mental-health-support-for-staff/)

**Health management**

**TITLE:** INCREASE MEDICAL WORKFORCE TO TACKLE COVID-19 BACKLOG, DOCTORS’ LEADERS URGE

BMJ | 2020; 371: m4056 | 19th October 2020

The NHS will not be able to meet the demands of the covid-19 pandemic and a potential second wave without more staff, doctors’ leaders have warned.

In a reportpublished on 19 October, the BMA, with support from medical royal colleges, said that medical workforce numbers—including consultants—must increase to overcome the backlog of work from the pandemic, reduce NHS waiting lists and waiting times, and restore activity to previous levels. To do this, medical school, foundation training programme, and specialty trainee numbers must be increased, the report said.

The report set out a range of short and medium term solutions to tackle consultant shortages and meet the demands of the pandemic. Among the suggested short term measures were making the most effective use of retired doctors who would like to return to work. “During the first peak of the pandemic, 28 000 doctors made themselves available to return to work,” the report said, “but only a small proportion of them were eventually deployed.”

The wellbeing of consultants and tackling the long term impacts of covid-19 on staff mental health, should also be priorities, the report said.

Full detail: [Increase medical workforce to tackle covid-19 backlog, doctors’ leaders urge](https://www.bmj.com/content/371/bmj.m4056)

Related report: [Consultant workforce shortages and solutions: Now and in the future](https://www.bma.org.uk/media/3429/bma-consultant-workforce-shortages-and-solutions-oct-2020.pdf) | BMA

See also: [Consultants face recruitment crisis](https://www.bma.org.uk/news-and-opinion/consultants-face-recruitment-crisis) | BMA

**Title:** Workforce flexibility in the NHS: Utilising COVID-19 innovations

NHS Providers | 22nd October 2020

The outbreak of COVID-19 has presented one of the biggest challenges which the NHS has ever faced, against a backdrop of sustained underfunding and growing workforce pressures. Responding to the pandemic has placed new and drastically increased demands on services, equipment, and staff. To meet these demands, innovations and change were brought about in the NHS at a rapid pace during the initial peak of the pandemic.

This briefing focuses specifically on NHS workforce flexibilities and innovations. It has been directly informed by trust leaders, drawn from the conclusions of a roundtable discussion held in July, which focused on changes to workforce management during the first peak of COVID-19 in England. The briefing explores and makes recommendations on six key areas of change:

* staff wellbeing
* flexibility in staff deployment and roles
* cross-organisational working and regulation
* technology
* making use of new roles
* funding.

Full briefing: [Workforce flexibility in the NHS: Utilising COVID-19 innovations](https://nhsproviders.org/media/690388/workforce-flexibility-during-covid19.pdf)

**other**

**Title:** Patients’ views on GP premises during COVID-19

The Patients Association | 15th October 2020

With the emergency response to the Covid-19 pandemic disrupting many patients’ access to GP services, this survey investigated what patients felt about their GP’s premises, and whether they would be confident to return to them.

It found ongoing high levels of confidence about visiting GP premises, and a strong expectation among patients that they would feel welcome, confident and safe on future visits.

The survey responses also shed further light on patients’ access to GP services during the pandemic, with many being offered phone consultations, and relatively few getting online video calls. For a substantial minority of patients, online contact was not sufficient to resolve their issue, and they needed to make an in-person visit.

Full survey: [GP premises survey post Covid-19](https://www.patients-association.org.uk/Handlers/Download.ashx?IDMF=8d055884-82ca-4d07-945a-45a188312df6)

See also: [Patients’ views on GP premises during COVID-19](https://www.patients-association.org.uk/Blogs/reports/patients-views-on-gp-premises-during-covid-19)

**Title:** Updating ethnic contrasts in deaths involving the coronavirus (COVID-19), England and Wales: deaths occurring 2 March to 28 July 2020

Office for National Statistics | 16th October 2020

This report confirms that when adjusting for age, rates of death involving Covid-19 remain greater for most ethnic minority groups, and most notably so for people of Black African, Black Caribbean, Bangladeshi and Pakistani ethnic background.

The statistical modelling shows that a large proportion of the difference in the risk of Covid-19 mortality between ethnic groups can be explained by demographic, geographical and socioeconomic factors. It also found that although specific pre-existing conditions place people at greater risk of Covid-19 mortality generally, it does not explain the remaining ethnic background differences in mortality.

Full detail: [Updating ethnic contrasts in deaths involving the coronavirus (COVID-19), England and Wales: deaths occurring 2 March to 28 July 2020](https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/updatingethniccontrastsindeathsinvolvingthecoronaviruscovid19englandandwales/deathsoccurring2marchto28july2020)

**Title:** Increased risk among ethnic minorities is largely due to poverty and social disparities, review finds

BMJ | 2020; 371: m4099 | 22nd October 2020

Most of the increased risk of infection and death from covid-19 among people from ethnic minorities is explained by factors such as occupation, where people live, their household composition, and pre-existing health conditions, a government review has concluded.

But the first quarterly report from the government’s Race Disparity Unit (RDU), based in the Cabinet Office, notes that a part of the excess risk “remains unexplained” in some groups such as black men, and it said that further work was needed to understand which factors may be causing the disparities.

The report summarises progress towards tackling covid-19 health inequalities since Public Health England published a review on 2 June setting out the disparities in risks and outcomes.Since then the RDU has been working with the equalities minister, Kemi Badenoch, across government, with the Office for National Statistics, and with academics to examine what is driving these disparities and how to tackle them.

Full detail: [Increased risk among ethnic minorities is largely due to poverty and social disparities, review finds](https://www.bmj.com/content/371/bmj.m4099)

See also: [Quarterly report on progress to address COVID-19 health inequalities](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/928646/First_Covid_Disparities_report_to_PM___Health_Secretary_Final_22-10-20.pdf)

**Title:** Excess mortality in the first COVID pandemic peak: cross-sectional analyses of the impact of age, sex, ethnicity, household size, and long-term conditions in people of known SARS-Cov-2 status in England

British Journal of General Practice | 19th October 2020

This study sought to describe the rate of all-cause mortality throughout the first peak of SARS-CoV-2 as recorded in the Oxford RCGP RSC; the impact of age, sex, and household size on any excess mortality observed; and the association of SARS-CoV-2 status and demographic and clinical risks factors with mortality.

The study concludes that the first SARS-CoV-2 peak in England has been associated with excess mortality. Planning for subsequent peaks needs to better manage risk in males, those of black ethnicity, older people, people with learning disabilities, and people who live in multi-occupancy dwellings.

Full document: [Excess mortality in the first COVID pandemic peak: cross-sectional analyses of the impact of age, sex, ethnicity, household size, and long-term conditions in people of known SARS-Cov-2 status in England](https://bjgp.org/content/bjgp/early/2020/10/19/bjgp20X713393.full.pdf)

We

[TRFT Library & Knowledge Service](https://www.trftlibraryknowledge.com/) aim to bring together the latest guidelines, research and news on Covid-19 through our [Covid-19 portal](https://www.trftlibraryknowledge.com/coronavirus.html). For daily updates on Covid-19 visit our '[Latest Health](https://trfthealthweeklydigest.wordpress.com/)' newsfeed, or use the hashtag [#covid19rftlks](https://twitter.com/hashtag/covid19rftlks?src=hashtag_click) to see our latest tweets on Covid-19 research, guidelines and news.

We also produce a range of subject-specific news feeds to ensure our clinical and professional teams stay up to date with developments in their work areas. Please visit our [website](http://www.trftlibraryknowledge.com/) for more information

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