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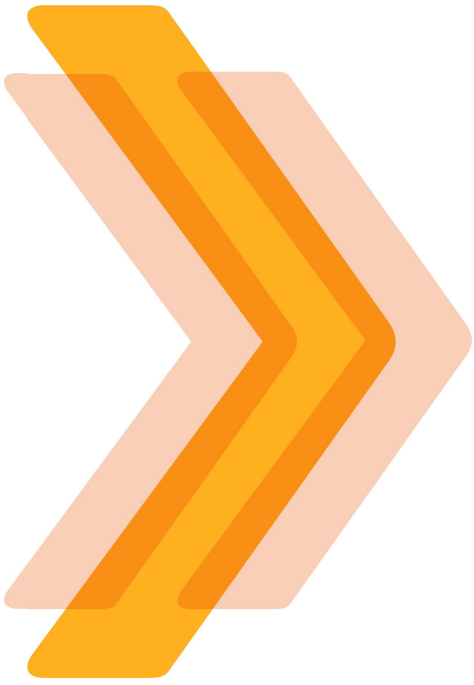
Assessing England's response to Covid-19

A framework



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Introduction

The Covid-19 pandemic has been a deep shock to England, whether counted in terms of deaths and ill health, the damage to the economy and livelihoods, or in the deep disruption to daily life.

The pandemic has not yet come to an end and yet it is clear that, to date, England has fared poorly when compared to many European countries (Raleigh 2021). The outcomes so far, particularly around the number of deaths, are profound and sobering. Understanding those outcomes is a critical part of reflecting on the experience of Covid-19.

How did England reach this position? What was it about England in 2020 and the response it adopted that led to the comparatively poor outcomes the country saw with the first two waves of the pandemic? Covid-19 has also had a disproportionate impact on some communities, increasing and emphasising the inequalities that existed before the pandemic arrived (Raleigh and Holmes 2021). This combination of high number of deaths and deep inequalities will leave a long and difficult legacy.

Learning the lessons from Covid-19 would allow England to better prepare for any future pandemic, but also to understand the general weaknesses and strengths of its health, care and public health systems. Given the wide-ranging nature of the pandemic and its impact on so much of so many people's lives, their health and the economy, a public inquiry to assess the response will be essential.

This paper aims to help with that assessment by setting out a framework to help untangle the complicated interactions between different elements of the response. It does not attempt to make a judgment itself on the successes and failures of that response. Each individual element could – and in many cases will – be subject to a deep investigation into the successes, failures and the lessons that can be learnt, but those deep dives must recognise how each individual element was connected to others and contributed to the success or failure of the whole response.

There are some core questions that apply to all the five elements and understanding the answers to these questions will help to identify relative strengths and weaknesses of England's response and help inform learning and future preparedness. The framework focuses on what was done; the following cross-cutting questions probe how things were done.

- Where did accountability for decisions lie?
- What information, evidence and data were used to inform decisions and how were different sources of evidence assessed and used?
- Was equity and inequalities an important factor in decisions and actions, and did recognition of the potential and actual impact on different communities' feature in the approach?
- How timely were decisions?
- How were decisions communicated and by whom?
- How effectively were decisions implemented?

Answering these questions will involve considering what happened at international, national, regional and local levels and whether that balance was optimal. While this paper primarily considers the context of England, a similar assessment framework could be used for understanding the response in other countries, although the structure of government and services will differ from country to country.

Understanding the dynamics of Covid-19

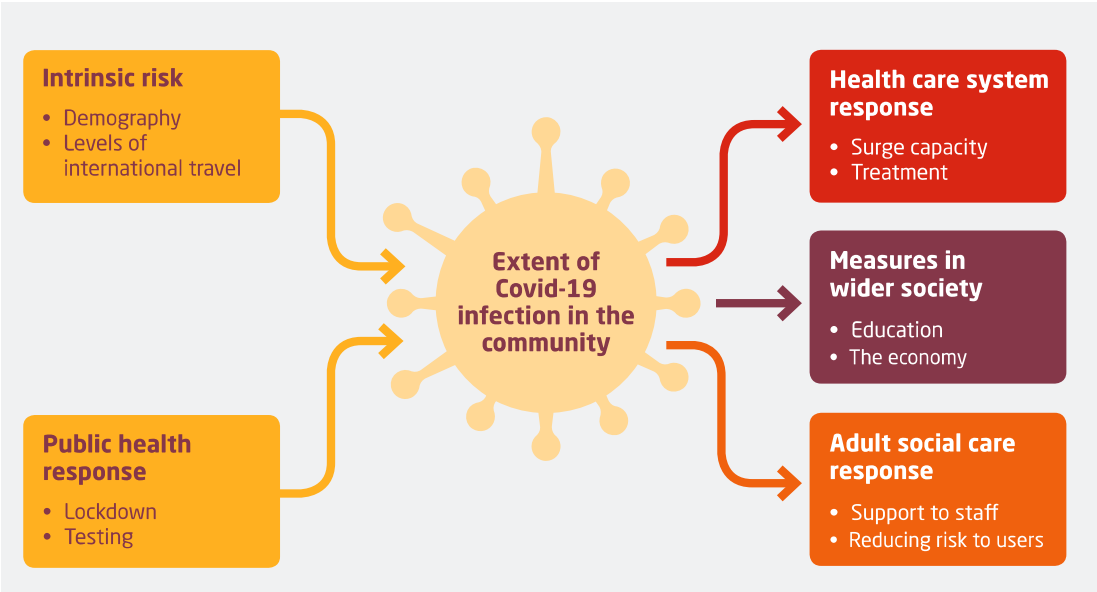
The framework is broken down into five key inter-related elements.

- The intrinsic risk to England, including its population demographics, health status, openness to international travel and social structure. This would include, for example, the proportion of older people in the population and the rates of obesity and diabetes (two risk factors for the severity of illness with Covid-19).
- The public health response, including rules over international travel, the timing and extent of lockdowns, and the measures put in place to support and enable compliance with these measures.
- The health care system response, including the re-organisation of services to maximise acute hospital and critical care capacity, the clinical quality of care, services for non-Covid-19 patients and the vaccination programme.
- The adult social care response, including support to social care providers and users including provision of testing, personal protective equipment (PPE) and staff training.
- Measures in the wider economy and society to manage the impact of the measures taken to combat Covid-19, including macro-economic and tax measures, education and employment.

These elements are deeply inter-related. For example, in 2020 with no vaccine and no specific community-based treatment for Covid-19, the extent of the challenge faced by the health service was largely determined by the intrinsic risk facing the country and the success (or otherwise) of public health measures. The health care system response – for example, when suspending treatments for non-Covid-19 patients – can only be judged within the context of very high and sustained emergency admissions to hospital that arose from the inability to keep community infection levels low. Similarly, with the adult social care response, any assessment of policies that restricted visiting to care homes needs to be done within a context of the very high number of Covid-19 infections in the wider community and the risk this posed to residents.

The intrinsic risk from Covid-19 is measured at the point just before the virus reached England. In all other cases, the effectiveness of the response can be assessed throughout the acute period of the pandemic response. With a fast-evolving epidemic, decisions need to be not only right but also timely. Looking back over the decisions of the previous 12–18 months also means any inquiry will benefit from hindsight when considering whether the right steps were taken. However, it is important to remember that this hindsight was not available to those making decisions at the time. There is a distinction to be made between 'Was it right?' and 'Did it seem right at the time with the information available?'.

Figure 1 Different elements of England's response to Covid-19



The intrinsic risk to England

Countries differ in terms of how intrinsically vulnerable they were to Covid-19. Within countries there may also be areas or communities at higher risk. This arises for a number of reasons.

- Covid-19 is both 'new' and infectious, and has spread more easily in societies with a high degree of international and internal travel (Pana *et al* 2021).
- There is a range of socio-demographic factors that increase the health risks from Covid-19 (Office for National Statistics 2020). This is because severe illness (including hospitalisation) and death occur predominantly in sub-groups within a population such as older people and people with health risk factors such as obesity or diabetes (Banerjee *et al* 2020; Docherty *et al* 2020). Economic risk factors for societies include the extent of low-paid work with little income security (House of Commons Women and Equalities Committee 2020); overcrowded or multi-generational households (as this will make self-isolation harder) may also be important (Nafilyan *et al* 2021). Some types of employment may also put people at higher risk of transmission due to the nature of the work, for example, in confined spaces with many other individuals (Lally 2020). Countries, and regions within countries, differ in both their age distribution and the prevalence of other risk factors.
- Social norms and behaviours also differ across and within countries and raise the risk from Covid-19. These include difficult to measure issues like the prevalence of 'loose' social norms (a greater tolerance for rule breaking, for example) which may increase a country's risk relative to those with 'tight' social norms (Gelfand *et al* 2021). Other more easily measurable factors will include familiarity with the use of face masks and the extent of trust in authority and expert figures. Taken together these factors may influence the extent to which different people respond to advice on social distancing and other key risk-reducing behaviours. However, there is clearly also an interplay between the quality, comprehensiveness and cultural sensitivity of any public health messages and public compliance as well, and these different factors may be difficult to disentangle.

These factors may also influence the ease or success of the response to the pandemic. For example, the structure of employment may influence how easy it is for staff to work from home, and the presence of a large domestic diagnostics

industry may also influence how easy it would be to increase testing, at least until it was possible to set up new supply lines.

Lastly, the preparedness of the public health system and other key services to respond to a coronavirus pandemic (or any pandemic) is largely beyond the influence of whoever was in government at the point at which the pandemic begins. Rather it will be the consequence of many decisions over previous years and may be influenced by any experience of previous severe coronavirus outbreaks. Nonetheless, the understanding of the potential risk from a pandemic, and the preparations for it, may determine the actions taken by government and wider society at least in the early stages of the response, until sufficient time has passed to develop a more tailored reaction to the arrival of the virus.

Table 1 The intrinsic risk to England

Area of risk	Example
Exposure	Levels of international travel Levels of internal travel
Socio-demographics	Age distribution Prevalence of key risk factors, eg, obesity and diabetes Extent of health inequalities
Preparedness	Specific pandemic preparedness plans Previous experience with a severe coronavirus outbreak Preparedness and capacity of key sectors to external shocks
Social norms	'Loose' vs 'tight' social norms Levels of trust in authority and experts Lifestyles, eg, multi-generational households Pre-existing use of face masks

Hence, for example, an older population, highly connected to the outside world with high levels of obesity would be more at risk from Covid-19 (in terms of mortality) than a weakly connected, younger population with low levels of obesity.

The public health response

Alongside the intrinsic risk, it is the success of the public health response that will largely determine the severity of the Covid-19 pandemic (WHO 2020b), and a comprehensive assessment needs to include the preparation for a pandemic in the years and months before Covid-19 struck (*see* previous section) and the response when Covid-19 became apparent.

A number of organisations, including the World Health Organization (WHO 2020a) and the EU (European Centre for Disease Prevention and Control 2020), published guidance on monitoring and evaluating the response to the pandemic. We have drawn on these with modifications. The measures are set out below in three broad categories:

- rules and guidance to limit the spread of Covid-19
- specific public health service interventions to limit the spread of Covid-19
- measures to help adherence to rules and interventions.

Any assessment of the use of these measures needs to consider:

- how comprehensive the package of measures was, how strict and how this compared to the threat level faced
- when the measures were applied and, equally, stood down. Application too late leads to high levels of community transmission, pressure on the health service and deaths. Leaving controls in place for too long heightens negative health consequences (such as isolation) as well as magnifying economic damage.

Rules and guidance to limit the spread of Covid-19

Rules and guidance can be stepped up and down as required with stricter and more comprehensive combinations corresponding to the various forms of 'lockdown'.

Table 2 Rules and guidance to limit the spread of Covid-19

Area of focus	Example
Reducing person-to-person contact	Social distancing Use of masks Hand hygiene Ventilation
Reducing crowding	Workplace re-design Closure of some or all non-essential business, schools, places of religion
Reducing movement	Reducing non-essential travel Quarantine for international travellers
Protecting the vulnerable	Shielding for the vulnerable Support for people living in communal spaces Outreach for specific groups, eg, homeless people, migrants

Specific public health service interventions to limit Covid-19

In England most public health services are commissioned either through local government (for example, sexual health services) or Public Health England (for example, national health campaigns) and are not part of the NHS. Vaccination programmes are classed as part of public health but are delivered by the NHS and so are dealt with in the next section on health care system response. In addition to these public health services, a range of specialist groups and standing committees, such as the Scientific Advisory Group for Emergencies (SAGE), exists to advise and support government to make decisions during emergencies.

For the purposes of this framework, we have classified the functions of the public health service into four groups.

- Surveillance: monitoring the spread of the virus, including the testing programme and genomic sequencing of existing and new variants. The availability and organisation of the test system also has an impact on the ability of other elements of the response to reduce cross infection (for example, in hospitals), and may reinforce self-isolation measures (by confirming actual rather than suspected infection).

- Epidemiology and analysis: the understanding of the transmission of the virus and the modelling (forecasts) of its spread along with the impact of measures taken against it. Much of this understanding is brought together in the recommendations of the expert groups advising government on how and when to intervene.
- The test-and-trace system: ie, contact tracing, as undertaken at local level and at national level and associated self-isolation.
- Other specific local interventions in high-risk areas: eg, in abattoirs, delivery depots and other known areas at high risk of infection. These, by their nature, are likely to rely on local government as they are highly specific to each place though may be supported by national evidence on risk.

Measures to help adherence

Following the rules and guidance set out in Table 2 (above) represents a massive change in the daily lives of most people. As such, it can be a challenge to adhere to these rules and it is also important to consider how people are encouraged, supported and obliged to stick to the them. Measure to help adherence are set out, below, in Table 3.

Table 3 Measures to help adherence

Area of focus	Example
Communication and engagement	Communication is clear, consistent, credible and culturally sensitive Effective engagement with communities Combat misinformation Clear guidance to business and other organisations Reinforce messages by ensuring leaders and social figures model the required behaviours
Removing barriers	Support, eg, shopping and social support, for people who are ill, self-isolating, shielding Easy access to masks, hand hygiene
Mitigating negative side effects of measures	Income support for people ill, self-isolating or shielding Managed exemptions to counter effects of isolation, eg, childcare social bubbles
Enforcement	Routine monitoring of adherence Consequences for non-adherence for individuals and businesses/organisations

The effectiveness of these different facets of the public health response are clearly inter-related. For example, a country could combine an excellent public health service infrastructure, providing high-quality and timely monitoring and advice, and a well-balanced set of interventions to slow or halt the spread of Covid-19. However, insufficient support to individuals, communities and businesses to comply with these rules would undermine the strength of the other measures taken.

The health care system response

In England, many elements of the health care system response are synonymous with the NHS response, in the sense that the NHS was responsible for their design and delivery. However, the contribution of the voluntary sector was also important both on its own and in co-operation with the NHS (it also contributed to public health measures, eg, by supporting people who were shielding); the supply of PPE was largely taken over by government as were drives to increase the availability of mechanical ventilation; and the development and contracting for vaccines drew on the UK life sciences sector and the government taskforce on vaccines.

The response of the health care system to Covid-19 can only be understood when set within the context of two critical factors.

- The extent of community infection, which determines the increase in patients critically ill with Covid-19. This is largely (but not wholly) beyond the influence of the NHS itself. This would mean, for example, comparing the interruption in care provided for non-Covid-19 patients between England and a country that avoided large-scale community infection would not provide insight into the quality of the NHS response as it ignores the surge in Covid-19 patients that the NHS had to admit.
- Countries that successfully prevented large-scale community spread of Covid-19 did not need to further 'protect' their health services. However, for those that experienced large-scale spread, the capacity and capability of their health services has been tested. The NHS entered this crisis period with some strengths including pre-existing work to improve integration (Charles *et al* 2021) and a high degree of public support (Ewbank *et al* 2018) helping it become part of the overall messaging ('Save the NHS'). However, before the pandemic, the NHS was already facing challenges with deep staff shortages (Beech *et al* 2019) and low capacity (when compared to countries such as Germany and France) (Anandaciva 2020b), including in critical care (Anandaciva 2020a). These factors were important, not just for whether patients with Covid-19 could get treatment, but also the extent to which patients without Covid-19 would find their care interrupted as resources had to be diverted.

The assessment of the health care system response should not be limited to the impact on physical health care alone and needs to consider the impact on mental health and mental health services as well (Davies 2020).

Set within this context, there are six key dimensions to understand the response of the health care system to Covid-19.

Infection control

The aim of infection control is to limit the spread of disease within health care institutions, and includes controlling infection between patients, between staff and patients, and between staff themselves.

The factors to consider when assessing the success or failure of infection control include:

- the supply of PPE to staff
- the training provided to staff
- re-design of the estate to limit infection
- compliance with infection-control measures
- the use of technology to minimise face-to-face contact.

Surge capacity for patients with Covid-19

Health care relies heavily on highly trained professionals and it is not easy to sharply increase workforce capacity at pace. However, the pattern of the Covid-19 pandemic has been sharp surges in demand for specific services within health care as community infection levels rise. These surges increase demand for:

- acute hospital bed capacity
- critical care capacity, especially the ability to ventilate patients
- community services to support people attempting to self-isolate at home while ill or at risk.

Methods to enable surge capacity in these areas include temporary measures such as:

- reducing staff–patient ratios, especially in critical care

- using staff in training to fill core roles
- re-allocating staff or resources from other services and sectors, including the independent sector. This is likely to require suspending or delaying non-Covid-19 health care
- relying on the goodwill and professionalism of existing staff to work harder and longer.

These measures are short term either because they are unsustainable or because their negative impact is only justified by the surge in demand caused by Covid-19. For example, suspending or delaying health care for non-Covid-19 patients is clearly undesirable but will be the least-bad option in the face of high and growing Covid-19 admissions to hospital. There are two core reasons to suspend services: first, to release capacity (especially staff) to be re-deployed; second, where infection risks are considered so high it is better to delay treatment. Given the negative consequences these measures are likely to have, their depth and duration are important to consider as part of any assessment of the health care system response.

There are measures to increase capacity that could endure into the longer term, including drawing back staff that have recently left the service (or whose registration has lapsed), using capacity in voluntary and community sector (VCS) organisations and volunteers, and increasing the number of ventilators.

Innovation: co-operation, technology and treatments

Innovation and its dissemination are also important to consider as they may increase the ability of the health care system to treat increased numbers of patients but also hold the key to an improved range of treatments.

Co-operation between providers can reduce the need to suspend services and also enable the system as a whole to treat more patients. This co-operation can take a number of forms, including the re-design of patient pathways to concentrate Covid-19 patients in fewer providers; re-directing patient flows away from providers at full capacity towards others in the system that may still have the ability to admit patients; and working with VCS providers and others to provide care, including support for patients at home or shielding which, in turn, can release hospital capacity (whether used to treat Covid-19 or non-Covid-19 patients). This effectively tries to ensure that the system works more as one, rather than each separate part working on its own.

The accelerated discharge of patients from hospital is also designed to release capacity and it also limit patients' exposure to hospital settings. This approach requires support from community and primary health care services, social care and the VCS.

Other innovations and changes to practice can also help to reduce face-to-face contact in the health services or mitigate the impact of cancelled services. These include enhanced support to patients and carers to self-care and the switch to digital and remote working to provide access to care but with reduced face-to-face contact.

As a new disease, best practice in the treatment of patients with Covid-19 was something that needed to be learnt and then disseminated across the system as quickly as possible. To do this effectively requires:

- suitable research and trial infrastructure
- agreement from patients to be enrolled in trials and capacity from staff to support and organise trials as well as other forms of research activity (if formal trials are not possible)
- early engagement and support from regulator; in the UK this is primarily the Medicines and Healthcare products Regulatory Agency (MHRA)
- the ability to disseminate results at pace and across all relevant providers.

A growing knowledge base on Covid-19 potentially reduces case fatality rates and lowers length of stay in hospital and critical care.

Support to staff

In countries with low or very limited community transfer of Covid-19, there has been limited increase in demand for health care with potentially little systemic impact on staff. In countries like England this has not been the case and staff have been called on to work both longer and harder, to re-deploy into new roles, and to work in very different ways. Many will also have experienced very high mortality rates in their patients and the loss of colleagues to Covid-19. The extent of the support package for staff both during Covid-19 and after it, will also be an important feature in the health care system response in countries like England.

Vaccination

Vaccination in England is funded as part of public health but is delivered by the NHS. It is partly a matter of choice where it sits in the framework. The development and large-scale use of vaccines is clearly important to later stages of the pandemic response. The elements within the vaccination effort include:

- the core science of developing vaccines, including from academia and industry
- the development and clinical trial effort, including industry, the NHS and MHRA (which will share many commonalities with the efforts to develop new therapeutics for Covid-19 as well as other aspects of best-practice care)
- the mix and design of contracts that lead to the purchase, at pace, of vaccines
- the supply and distribution network for delivering large numbers of vaccines at pace including the role of the MHRA, industry, NHS and voluntary groups
- the quality of the scientific advice on the prioritisation and use of vaccines, in particular the role of the Joint Committee on Vaccination and Immunisation (JCVI)
- public health messaging to address vaccine hesitancy and ensure equal access.

The health service has a critical role in mass vaccination but the design, production, approval and supply of vaccinations requires is driven by a wide variety of elements.

Outcomes and access

Measures such as crude mortality rates from Covid-19 give little indication of the success of the health care system response to the pandemic as they largely reflect the spread of the virus across the community (ie, the success of public health response in constraining spread, or the intrinsic risk to England from its socio-demography). However, there are outcome measures that could be used to inform the success of the health care system response. These include:

- age and risk-adjusted case fatality rates on admission to hospital and to critical care
- estimates of infection rates for staff and patients in health care settings
- measures of the provision of ongoing rehabilitation support post-Covid-19 and their outcomes.

All lockdowns were partially justified by the need to 'protect the NHS' from being overwhelmed by the number of patients requiring care (**Prime Minister's Office *et al* 2021**). If health services had been overwhelmed, the primary risk would be to patients as there may have been widespread denial of care (patients who would have benefited from treatment in hospital or critical care would have been denied treatment because of inadequate capacity). While there were clear (indeed, unprecedented) signs of stress across the NHS and critical care (**England 2021**), there does not appear to have been any systematic denial of care for patients with Covid-19 (**NHS England and NHS Improvement 2020**). For this reason, we do not propose including measures of the scale of such rationing for England although they may be relevant in other countries.

The adult social care response

As with the health care system response, the adult social care response can only be understood fully within the context of some critical factors.

- The extent of community infection, which determines the risks to individuals who rely on social care, and the social care workforce.
- The state of social care before the pandemic. Social care was already facing significant challenges before the arrival of Covid-19, with high levels of unmet need, pressures on family carers, a workforce crisis with staff paid at or near the minimum wage, and very fragile provider finances.
- The demographics of people being supported by social care. Older people and working-age adults with disabilities are groups that are more at risk of serious illness from Covid-19.

The adult social care sector includes services provided for working-age adults and for older people in their own homes and in care homes; the commissioners who arrange for care locally; and individuals who arrange for their own care, either as self-funders or by using direct payments to employ people directly. Within this broader context, there are four key dimensions to understanding the response of the social care system to Covid-19.

Infection control

As in health care, the aim of infection control is to limit the spread of disease, which will include infection between users of social care, between staff and users, and among staff.

Factors to include when considering the success or failure of infection control include:

- the supply of PPE to staff
- the training provided to staff
- compliance with infection-control measures, including for staff who worked in multiple care settings
- policies on restricting visits to care homes, which were also intended to minimise the spread of infection from the community to care settings.

Support to staff

Around 1.5 million people work in the adult social care sector in England, with many paid at or near the minimum wage (Skills for Care 2020c). They play a critical role in supporting the health and wellbeing of people using social care. Some key aspects to consider are:

- how were staff supported – through guidance, training and sick pay policies – to understand what was needed to protect people using social care from infection, be that the correct use of PPE, or the need (and ability to) to isolate when showing symptoms
- how was staff wellbeing supported – given there have been high levels of mortality for people using social care, and also in those working in the sector, during Covid-19, how was the physical and emotional wellbeing of staff protected to ensure they were able to continue to support people who receive social care services?

Support to providers

In the adult social care sector in England, there are 18,000 organisations providing care, with the vast majority being small, single-handed operations (Skills for Care 2020b). In addition, 70,000 people in England directly employ their own personal assistants through a Personal Budget or Direct Payment (Skills for Care 2020a). This is a very different sectoral structure to the NHS. Given the intrinsic risk and the state of the sector at the start of the pandemic, the key considerations are:

- the provision of timely, accurate and clear guidance to all employers, of all shapes and sizes
- the provision of timely financial support to ensure employers could meet the higher costs of PPE, covering higher levels of staff absence, the higher costs of insurance premiums etc
- amendments to the regulatory regime to reduce the burden on regulated social care providers so they could focus on delivery of care during Covid-19 – to free up capacity to both focus on provision of direct care and support to staff.

Co-operation between social care and health care services

Many people who draw on social care to support them will also have health care needs that require the support of the health service. Given the changes required to the delivery of NHS care in the face of the pandemic, changes were also made

in how the NHS supported social care and these had an impact on how social care providers could meet the needs of their users and protect them from infection. Key considerations include:

- discharge policies and practices from hospitals to care homes
- support from primary care and community health teams to care homes, and to those receiving care in their own homes
- whether people in receipt of social care continued to get appropriate access to health care services for their Covid-19 and non-Covid-19 health needs, equivalent to the access other people were receiving
- delivery of vaccinations to people receiving social care, and those working in the sector.

Measures in the wider economy and society

The intrinsic risk to England combined with the public health response largely determines the level of infection in the community, which determines the need for harder public health measures such as lockdowns (*see* above). These measures bring shocks to the economy and society – either in whole or in part – which require mitigation to limit the impact in both the short and the long term.

Protecting the economy

Looking beyond measures that were specifically intended to encourage compliance with the new rules, supporting the resilience of the economy broadly requires a focus on measures to mitigate the extreme impact of the lockdown period itself, with support to encourage returning consumer confidence when lockdowns end.

- Protecting employment and businesses during the lockdowns, for example through furlough schemes, business loans, pausing liabilities such as business rates. These measures are intended to enable businesses to maintain employment in the medium term in the face of extreme short-term challenges, through either zero demand for their service or product, or an inability to keep their supply maintained due to lockdown.
- Outside the periods of lockdown, stimulating consumer demand, through, for example, tax measures (such as lower rates of VAT) or incentive schemes (Eat Out to Help Out), to encourage greater consumer confidence and engagement.

When considering the effectiveness of these responses, it is important to consider how comprehensive the package of measures was, and how this compared to the size of the economic shock faced; when the measures were applied, to what or whom, and subsequently stood down; what behaviours the measures prompted; and what, if any, unintended consequences resulted.

Protecting education

One of the biggest societal impacts of the need for strict lockdowns is the impact on education – be that primary or secondary for children, or higher and further education for young people and adults. Given the importance of learning and

development to children's later life chances (Marmot *et al* 2020, 2010), how measures taken to control the pandemic impacted on education will have consequences for several decades to come.

The key areas to consider in the effectiveness of the response on education are:

- starting lockdown: the timing of the switch to remote learning for different parts of the education system
- during lockdown:
  - the quality of the remote learning offer
  - ensuring all children and students had equal access to alternative learning facilities, for example, access to school, provision of laptops and data
  - managing the impact on assessments and qualifications for key year groups
- after lockdown: how students are supported to catch up on lost learning and development.

Protecting society

While the economy and education are the largest aspects of the economic and social response and impact on the greatest number of people, society is much more than this. How other parts of society were protected, to both mitigate the impact of the pandemic and to support recovery from it, is an important part of the overall response and impact. This includes, for example, impacts on religion and places of worship, culture and arts, and sport (grass roots and spectator). Whether and how these activities are protected during the pandemic helps mitigate the short- and long-term impact on mental health of lockdown measures by helping people keep social connections and maintain wellbeing.

The VCS plays a critical role in many communities. The strength of the VCS, and the extent to which it was supported and enabled to work effectively during the pandemic is an important part of how communities were protected. The contribution of this sector could range from activities to help people understand the risks and the rules, to practical support to those shielding, to wider fostering of community cohesion and resilience, building on the strengths and assets of communities. An inquiry could consider how the VCS was supported to thrive in the years before the pandemic, and how the unique opportunities of the VCS to support the response were factored into decisions.

Conclusion and looking ahead to recovery

Covid-19 has had an extraordinary impact on people's lives and health, and more widely on society and the economy. In England, it has profoundly exposed inequalities across society. It is right that there is a time of reflection and learning to understand what worked well, and what didn't in the handling of the pandemic, so the country is better prepared for the next one. This paper hasn't attempted to provide the judgement itself but has set out a framework to help make sense of many connected issues.

It focuses on the response in the acute phase of the pandemic – the first 12–18 months. Covid-19 will cast a long shadow, and the country's successful recovery from it will take many years, if not decades. As the approach to recovery is determined, there is international and domestic experience to draw on in learning from recovering from other economic shocks, and, importantly, in recovering from other emergencies and disasters (Cream *et al* 2021). A similar approach to systemically assessing the interconnected strengths and weaknesses of our approach to recovery will be important to undertake at the right time.

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Most recently, Sally worked at the Department for Environment Food and Rural Affairs as Director of the Agri-Food Chain, and latterly Director of EU Exit Preparedness and Response.

Richard Murray was appointed as Chief Executive of The King's Fund in January 2019, after five years as the Director of Policy.

Before joining the Fund in January 2014, Richard was chief analyst at NHS England and previously held a number of roles at the Department of Health, including director of strategy, director of financial planning and chief economist.

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