Evidence-informed COVID-19 policy: what problem was the UK Government trying to solve?

Abstract
This chapter uses research on policy analysis, policy processes, and critical policy analysis to identify the UK government’s framing of COVID-19. It helps situate the speed and substance of UK policy in comparative terms. Unlike in China and South Korea, the UK government rejected the idea that a government could fully suppress an epidemic. Unlike in New Zealand, it was unwilling to impose a lockdown at the first sign of transmission. Unlike the US and Brazil Presidents, UK ministers based their decisions strongly on information and advice from their scientific advisors. As such, the UK represents an unusual case in which its policy was evidence-informed but its outcomes were more in keeping with countries whose leaders emphasised individual freedom and downplayed scientific evidence. The chapter also widens our analysis to include less-visible aspects of problem definition in relation to the social and health inequalities reinforced by policy design.

Keywords
COVID-19; UK government; policy analysis; policy processes; health equity; social determinants of health

Introduction
Researchers of COVID-19 policy have begun to compare the relative success and failure of governments across the globe. Early measures of confirmed cases and excess deaths give them a simple way to compare outcomes, suggesting that countries such as New Zealand and South Korea represent success while countries such as the UK and US represent failure (Mazey and Richardson, 2020; Kim et al, 2020; Carter and May, 2020). Further, one useful way to compare initial interventions is the date of lockdown in relation to COVID-19 transmission. The UK government announced a lockdown on 23rd March, which suggests that, ‘with the exception of Sweden, the UK was the last major European country to introduce significant restrictions on social and economic life’ (Gaskell et al, 2020: 4). However, this evaluation is incomplete without establishing how different governments defined COVID-19 as a policy problem.

To define SARS-CoV-2 and COVID-19 as a physical problem is to identify the varying physical impact on individuals and populations of a virus and disease with a worryingly high transmission, incubation, and mortality rate and no known vaccine or cure (WHO, 2020). To define a policy problem, policy actors relate the physical problem to the nature of politics in their policymaking system. It is only a policy problem if policymakers are willing to define it as such and consider a solution (Kingdon, 1984: 115). While COVID-19 is too important to ignore, actors still compete to identify: the likely scale of an epidemic and the capacity of a government to address it, the necessary speed and substance of government action to influence
social behaviour, and which populations should be most protected. In that context, it is inaccurate to suggest that all governments simply responded more or less effectively to the same policy problem. A focus on effective responses to the same problem highlights factors such as policymaker competence and political system dynamics, but it is incomplete unless we also identify their values regarding the role of the state and social inequality.

This chapter draws on three approaches to studying problem definition to show how the UK Government defined COVID-19 (Cairney, 2020a):

1. Policy analysis: define a problem for your client (Bardach and Patashnik, 2020; Meltzer and Schwartz, 2019; Mintrom, 2012; Weimer and Vining, 2017; Dunn, 2017)
2. Policy process research: identify the capacity of policymakers to solve it (Cairney, 2020b)
3. Critical policy analysis: identify who is important to policymakers (Bacchi, 2009; Stone, 2012).

The concluding discussion shows how the UK government’s definition of the policy problem informed its response, and highlights the resultant unequal impact on mortality and wellbeing.

Policy analysis: define the COVID-19 policy problem for your client

Contemporary policy analysis advice emphasises the need to combine rhetoric and data to frame a problem’s severity, urgency, and cause, and the role of government in solving it (Cairney 2020b). This approach is evident in one of the most high-profile presentations and use of data in the UK: the report published by the Imperial College COVID-19 Response Team (2020) led by Professor Neil Ferguson (a key member of the UK Government’s Scientific Advisory Group for Emergencies, SAGE). It engages in framing to:

- Predict the spread of the virus and its impact on population illness and mortality.
- Warn against insufficient intervention
- Identify clearly differing forms of intervention
- Appear to rule some options out, including no action, and the elimination of COVID-19. It prioritises reducing the rate of transmission of infection (R) to below 1, or the point at which one person would infect no more than one other person.
- Temporarily downplay other options, such as aggressive tracing and testing geared towards elimination, based on the assumption that the numbers and rate of infection are too high in relation to capacity to intervene

Its ‘unmitigated epidemic scenario’ predicts 510,000 deaths in the UK in the absence of government intervention (2020: 7). Its ‘mitigation strategy scenarios’ suggest that this figure can be halved if the UK government oversees voluntary measures such as self-isolation, household quarantine, and cocooning vulnerable people (2020: 8). It outlines ‘suppression strategy scenarios’ to describe what it would take to reduce the R from the estimated 2.0-2.6 to 1 or below. It predicts that a combination of four options - ‘case isolation’, ‘social distancing of the entire population’, ‘household quarantine’ and ‘school and university closure’ - would reduce critical care demand and contribute to a range of 5,600-48,000 deaths over two years (2020: 13-14). In that context, it argues that ‘epidemic suppression is the only viable strategy until a vaccine is produced (2020: 15-6).
Although one of the most high-profile presentations and use of data in the UK (published on 16th March), this report is not the most important contributor to UK government framing. UK ministers were already drawing on an earlier narrative of COVID-19 provided by key actors such as Sir Patrick Vallance, the UK government’s Chief Scientific Adviser and chair of SAGE, and Professor Chris Whitty, the Chief Medical Adviser. This ministerial and science advice narrative can be summed up as follows. We need to:

1. Respond to an epidemic that cannot be eliminated. ‘Herd immunity’ is only possible if there is a vaccine or enough people are infected and recover.

2. Use a suppression strategy to reduce infection enough to avoid overwhelming health service capacity, and shield the people most vulnerable to major illness or death caused by COVID-19, to minimize deaths during at least one peak of infection.

3. Maintain suppression for a period of time that is difficult to predict and subject to compliance levels that may diminish over time.

4. Avoid panicking the public in the lead up to suppression, avoid too-quick and too-draconian enforcement, and maintain wide public trust in the government.

5. Avoid (a) excessive and (b) insufficient suppression measures, either of which could contribute to a second wave of the epidemic of the same magnitude as the first.

6. Transition from suppression measures (to protect the economy, help students return to education, and foster a return to social life) without allowing $R$ to rise above 1. This strategy will involve social distancing and voluntary track-and-trace measures to isolate people with COVID-19.

Overall, the UK government’s definition of the policy problem incorporates the belief that policymakers can influence but not predict how people will behave, and manage but not eliminate the spread of disease. Therefore, focus on communication to encourage voluntary behavioural change, and gather evidence to identify the most impactful interventions in that context.

Policy process research: define what is possible

Policy process research suggests that policymakers have limited knowledge of policy problems and the impact of their actions in complex policymaking systems (Cairney, 2020b). It helps us understand why the UK government uncertainty about how to regulate social behaviour, and reticence to do so in a liberal democracy overseen by a Conservative government committed to relatively low state intervention.

In simple terms, its approach is one of two main possibilities. The other approach suggests that governments should intervene as early as possible, based on two assumptions: elimination is possible (Sridhar, 2020), and (b) act early on nascent evidence rather than waiting too long to produce new evidence (Greenhalgh, 2020). Table 1 summarises the distinction between:

- Approach 1. The UK government is addressing a chronic problem, being cautious about policy change without supportive evidence, identifying trigger points to new approaches, and assuming that the approach is based initially on exhortation.
- Approach 2. Pursue elimination aggressively, acting before there is complete supportive evidence of (a) a major problem and (b) the effectiveness of solutions. Invest
heavily in measures such as contact tracing and quarantine, and assume that the imposition of behaviour should be a continuous expectation.

Table 1: Two contrasting approaches to evidence and action

<table>
<thead>
<tr>
<th>Approach 1: manage a chronic and seasonal problem</th>
<th>Approach 2: pursue the elimination of the virus</th>
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<tbody>
<tr>
<td>How to deal with uncertainty/ limited evidence</td>
<td>Support policy change before all evidence is available clear</td>
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<tr>
<td>Be cautious about policy change in the absence of evidence on effectiveness</td>
<td>Focus intensely on elimination, such as through aggressive and well-resourced contact tracing, backed by early quarantine to contain spread</td>
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<tr>
<td>Find trigger points between stages: move to mitigation and suppression when contain and delay no longer work</td>
<td>Impose behavioural changes when necessary</td>
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Assumption on behavioural change

Focus on exhortation and encouragement

Note: these are models or ideal-types. Each approach is more nuanced in practice, and there could be many variations which take elements from each box (e.g. SAGE supported contact tracing for the most part).

The UK government’s problem definition is based on approach 1, which helps explain its initial approach in January and February: ministers and their science advisors focused on exhortation and perceived the direct regulation of behaviour infeasible (Calvert et al, 2020). SAGE minutes and meeting papers suggest that the aim was to motivate people by relating behavioural change to their lives, stressing ‘personal responsibility and responsibility to others’ (‘we are all in this together’), and providing clarity on which measures are effective by maintaining continuous communication with citizens, emphasizing transparency, honesty, clarity, and respect, to maintain high trust in government (Cairney, 2020c: 4-5). The UK government only accepted towards the end of March the need to change its approach dramatically, based on: (a) the realisation that SAGE had underestimated the rate of transmission and doubling time of COVID-19 prevalence and that there would soon be an overwhelming spike in demand for healthcare capacity, and (b) other lockdowns (such as in Italy) which made regulation seem more politically feasible (Grey and MacAskill, 2020; Freedman, 2020).

Still, its actions focused on managing the epidemic to avoid overwhelming health services and repeated waves of infection (rather than elimination). For example, SAGE papers stress continuously the need to (a) introduce isolation and social distancing measures to slow down the epidemic and protect health service capacity, while (b) avoiding excessive suppressive measures on the first peak that would contribute to a second peak. Originally, it recommended the gradual accumulation of measures, describing more extreme measures in Hong Kong, Singapore, and China as effective in the short term but likely to contribute to a ‘second wave of exponential epidemic growth – requiring measures to be re-imposed’ (see Cairney, 2020c: 16-17).
Critical policy analysis: identify who is important to policymakers

Critical accounts challenge the dominant ways to frame issues which benefit the powerful and marginalise the powerless, often by highlighting the tendency for policymaker elites to define problems in closed-doors conversations with few participants (Bacchi, 2009; Michener, 2019; Stone, 2012). Levels of policymaker attention to particular frames have major distributional consequences, such as when they cause some groups to receive high attention while others are ignored (Jones and Baumgartner, 2005), or some groups are demonised and others romanticised (Schneider and Ingram, 1997). In particular, research on global health equity contrasts:

1. A tendency for UK governments to relate health inequalities to ‘lifestyles’ and individual choices, in relation to healthy eating, exercise, and the avoidance of smoking and alcohol (Cairney and St Denny, 2020)

2. A World Health Organisation focus on the ‘social determinants’ of health inequity, in which the most profound impacts on population health come from (a) environments largely outside of an individual’s control (e.g. in relation to threats from others, such as pollution or violence), (b) levels of education and employment, and (c) economic inequality, influencing access to warm and safe housing, high quality water and nutrition, choices on transport, and access to safe and healthy environments (WHO, 2020; Whitehead and Dahlgren; 2006; Solar and Urwin, 2010).

The UK Government’s tendency to focus on individual behaviour contributed to early rhetoric about coronavirus being a ‘great leveller’ (particularly when the Prime Minister was hospitalised for COVID-19 treatment), which fostered the sense that ‘we are all in this together’ and that all populations are equally vulnerable. It reduced attention to a range of health inequalities that require policy responses (Aiken, 2020). Some relate to high vulnerability to COVID-related illness in relation to pre-existing conditions of the heart, lungs, diabetes, or obesity. Others relate to the relatively low ability to take preventive action to avoid COVID-19, including in relation to:

- **Income and wealth.** Only some can afford to work, exercise, or isolate at home.
- **Gender.** Lockdown and school closures exacerbates the unequal distribution of wages and caring responsibilities and the relative vulnerability of women and girls to domestic abuse (Close the Gap, 2020; Home Affairs Select Committee, 2020).
- **Race and ethnicity.** Black, Asian, and Minority Ethnic (BAME) populations are less able to isolate (Atchison et al, 2020), and more vulnerable to COVID-19 related death, particularly among NHS staff and other key worker jobs with insufficient personal protective equipment (PPE) (Public Health England, 2020; Siddique, 2020; Keval, 2020)
- **Age and disability.** Older people and people with disabilities are more vulnerable to COVID-19 related illness and death and more affected by reduced access to health and social services (Office for National Statistics, 2020a; Tidball et al, 2020).
- **Mental health.** ‘Mental ill health is a major cause and indicator of health inequality’ (Cairney and St Denny, 2020: 156), and long periods of ‘social distancing’ can exacerbate mental health problems and contribute to physical problems, during a period in which access to child and adult mental health services is severely diminished (Miller, 2020).
In other words, the UK government’s problem definition did not anticipate the unequal consequences of initial government inaction and tended to minimise the social and health inequalities associated with a lockdown (Cairney, 2020d).

Concluding discussion
This discussion of approaches to problem definition helps provide a more detailed narrative of the UK government’s initial response to COVID-19. First, multiple aspects of the UK government’s response exacerbated each other. It was slow to lockdown to reduce community transmission (with unequal effects on people vulnerable to illness) and to boost its capacity to conduct antigen testing for COVID-19 or secure adequate levels of PPE. Its response was informed heavily by a problem framing that focused on protecting healthcare capacity during the peak of infection. As such, it prioritised testing and PPE for NHS staff and patients and discharged older people to care homes without routine testing or adequate PPE for staff (National Audit Office, 2020), which contributed to the 17,478 COVID-19-related deaths of people from care homes in England (27% of relevant deaths recorded up to 12th June - Office for National Statistics, 2020a).

Second, its post-lockdown actions had many unequal consequences. Its response often reflects a consistent focus on protecting the economy or businesses, coupled with ad hoc ways to address other issues that arise sporadically on the media agenda. In each case, its aim is to help individuals rather than focus on social determinants or marginalised groups. For example, it engaged in unprecedented levels of borrowing and spending, most of which reinforced economic inequalities by funding tax reliefs, grants, and loans to businesses and furlough schemes for businesses who would otherwise make employees redundant (Office for Budget Responsibility, 2020; Alves and Sial, 2020).

In contrast, its attention to reducing inequalities was less predictable and more fleeting. The UK government’s Home Office (2020a; 2020b) exempted domestic violence from ‘stay at home’ regulations but did not ensure adequate services, particularly for migrant women (Step-Up Migrant Women Coalition, 2020), and it struggled to enforce powers to close down companies undermining public safety and modern slavery laws. Disability Rights UK and Liberty (2020) criticised the loss of rights to the forms of care that are ostensibly guaranteed in the Care Act. The rules to address the cancellation of school exams had major unequal impacts, initially in relation to an ill-fated algorithm to standardise results based on a school’s previous performance, then in relation to the teacher assessments that underestimate the attainment of working class and ethnic minority students (House of Commons Education Committee, 2020).

Overall, this wider focus highlights the short and long term consequences of the UK government’s COVID-19 problem definition. Its focus on exhortation and gradual restrictions on social behaviour helps explain a relatively late lockdown in relation to other European countries. Its focus on epidemic management rather than elimination helps explain its approach to introducing and relaxing lockdown measures. Further, its focus on individual liberty and economic activity, rather than the social determinants of health, helps explain the highly unequal short and long term consequences for population mortality and wellbeing. While most comparative accounts focused on initial excess deaths and unnecessary illness, they should be accompanied by this wider focus on inequalities in relation to government action and inaction. These inequalities will become ever more important during the longer term management of COVID-19, but tend to be minimised by the governments responsible for them.
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1 The UK and devolved governments in Northern Ireland, Scotland, and Wales have separate responsibilities for public health. The UK government has primary responsibility for economic policy.