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How pharmaceutical and diagnostic stakeholders construct policy solutions to a public health ‘crisis’: an analysis of submissions to a United Kingdom House of Commons inquiry into antimicrobial resistance

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ABSTRACT

Antimicrobial resistance (AMR) is often characterised as a ‘crisis’, requiring action by public, private, and third-sector stakeholders to achieve strategic change. Crisis narratives are powerful and may be co-opted to privilege solutions promoted by influential groups. In relation to AMR, this applies particularly to the pharmaceutical and medical diagnostics industries. Given the associated risk of inefficient use of public funds, critical attention must be paid to how the promoted ‘solutions’ to the AMR crisis are constructed, and their symbolic and material effects on health policy. We conducted a critical discourse analysis (CDA) of the seventy-one written submissions to the UK House of Commons Health and Social Care Committee’s 2018 inquiry into AMR. Two researchers collaboratively coded the findings and categorised the submissions. We applied the Policy Dystopia Model to further analyse the proposed solutions and ascertain the discursive and instrumental arguments in the industry submissions to the Committee. We found that industry submissions deployed economic and governance discursive strategies, articulating three main ‘market paradoxical’ arguments: (i) interference but non-interference; (ii) power but powerlessness; and (iii) for-profit but not-for-profit. The industry submissions also drew upon instrumental strategies including: coalition management, information management, and direct involvement and influence in policymaking. Our analysis suggests that commercial interests deploy crisis narratives to advocate for solutions involving market deregulation and industry subsidies. Thus, the solutions presented to the Committee were heavily shaped by a technocratic-industrial complex. This contributes to influencing what is seen as possible and acceptable in the global AMR policy landscape.

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Introduction

Antimicrobial resistance and ‘crisis’ narratives

Antimicrobial resistance (AMR) is an area of global policy attention. Patients with bacterial diseases that were once treatable with widely available and inexpensive drugs increasingly find themselves with fewer or no treatment options as bacteria develop resistance to antibiotics. The antibiotic resistance problem is represented by most policy and government actors, industry, charities, academics, and

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 Supplemental data for this article can be accessed [here](#).

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others as being a One Health (the interplay between humans, animals and the environment) problem of a complex system: a silent but important ‘crisis’ that will, in the worst case, have the potential to end the era of modern medicine (Castro-Sánchez et al., 2016; Kessel & Sharland, 2013; O’Neill, 2016). Crisis narratives have been used by government, public health policymakers and practitioners, the non-profit sector, and the private sector alike to marshal political attention and resources. Yet, crises are socially defined, and the choice to employ crisis vocabulary is necessarily ‘agentive and strategic’ (Fairclough, 2012). Evoking a sense of crisis implies an extraordinary situation that warrants well-resourced and timely responses. This language has been adopted in both media coverage and also the policy discussions of the breadth and depth of the AMR problem (O’Neill, 2016).

The need to critically interrogate industry narratives

The crisis narrative can lead to the privileging of solutions promoted by, and involving, the private sector; with this comes the risk of devoting public sector funds to subsidising the private sector – in particular, the pharmaceutical and medical diagnostics industries. Policy discourse and rhetoric can have a material effect on health. The recent policy discussions surrounding AMR are a prime example of this. Recently tabled resolutions at the UN, G20, and G8 have attracted front-page, mainstream media headlines, and more than half of the UN countries have produced AMR national action plans (NAPs) intended to mitigate the risks of AMR to human health (WHO, 2020). The Health and Social Care Committee of the UK House of Commons (henceforth ‘the Committee’)’s inquiry on AMR – indeed, Committee inquiries in general – are particularly susceptible to the skilful use of policy rhetoric and argument framings. Committees embody the Aristotelian tradition of deliberative democratic action, since they weigh submissions – termed ‘evidence’ but with no requirement to meet a particular standard of proof – in order to arrive at a conclusion. This is more inherently argumentative and interpretive than other methods for gathering and sifting evidence. There is no transparent process for evaluating the strength of evidence presented by submissions to such committees. In the absence of external metrics of quality, discursive considerations come to the fore. The material benefits accruing from winning the discursive framing or problematising of this particular crisis are clear; resources, (de)regulation, market access, and subsidies are all possible policy prizes for private sector actors. Specifically, the Department of Health and Social Care in England has already created a market entry reward for pharmaceutical companies who develop new antibiotics (Glover et al., 2019). There are similar – though not as substantial – market entry rewards for diagnostics companies, namely the Longitude Prize, which has yet to be awarded (“The Challenge: Reduce the Use of Antibiotics,” 2019). This paper aims to problematise the uncritical inclusion of industries at the AMR policy table and to engender much-needed reflection on the consequences for AMR policy.

The policy context for the Health and Social Care Committee’s AMR inquiry

Previous AMR reports in the UK had paved the way for industry to promote its own narrative and thereby its own interests. In 2011, England’s then new Chief Medical Officer (CMO), Professor Dame Sally Davies, commissioned her first annual report on the global risks of AMR. In response, Prime Minister David Cameron commissioned a review, led by the economist Jim O’Neill, into AMR (O’Neill, 2016). The CMO’s Annual Report and the O’Neill Review included significant focus on how best to encourage and support pharmaceutical and medical technology companies to bring solutions to market.

From the beginning, the O’Neill Review presented AMR as a ‘crisis’. Its first and second reports were entitled ‘Antimicrobial resistance: tackling a crisis for the health and wealth of nations’, and ‘Tackling a global health crisis: initial steps’, respectively. Alongside this work, the UK Government developed a five-year AMR Strategy (2013–2018; “UK Five Year Antimicrobial Resistance Strategy,” 2013).

In 2018, the UK Government called for evidence to inform a refresh of the AMR Strategy. On 4 September 2018, as the draft version of the next AMR strategy was being finalised for publication, the Committee sent out a call for written evidence. The submissions came from Government Departments, the private and third sectors, trade associations and private individuals, and were guided by two questions set out in the call for evidence: what results had been delivered by the UK AMR 2013–18 Strategy; and what should the key actions and priorities for the Government's next AMR strategy be? The call provided an opportunity for motivated stakeholders to influence the Government's policy agenda. We analysed the publicly available submissions to answer the question: how are the solutions proposed by the private sector submissions to the UK's House of Commons Committee on Antimicrobial Resistance discursively and instrumentally constructed?

Methods

Theoretical approach

We analysed the submissions using critical discourse analysis (CDA), specifically informed by Fairclough, Entman, and Fox and Waitt, who have both written about how to operationalise Foucauldian discursive examinations of power (Entman, 2007; Fairclough, 2012; Fox, 2000; Waitt, 2010). CDA sits at the 'macro' end of a broader family of discourse traditions that range from sociolinguistics and ethnography, to critical discursive psychology, including Bakhtinian and Foucauldian principles (Fairclough, 2012). Within this spectrum of discourse analysis traditions, CDA departs from more empirical and linguistic approaches and focuses on analysing power dynamics between and among individuals and institutions. It is a constructivist tool aimed at unpicking ideas, ways of thinking and ultimately decisions that are constructed by discursive choices (Wetherell et al., 2001). Using discourse analysis to critically analyse policy documents and communications is an established approach to research in the field of public health policy (Cummings et al., 2020; Eastmure et al., 2020; Knai et al., 2018). In the case of so called Unhealthy Commodities Industries (UCIs), analysis of policy and industry documents has been used to understand the strategies UCIs use to influence policy-maker and public understandings of public health problems and their potential solutions (Lee & Hawkins, 2017). Some of these discursive strategies have also been observed in the arguments made by pharmaceutical companies (Freudenberg & Heller, 2016). While there has been some examination of the discursive practices of industries involved in AMR, the 'crisis' narrative remains little analysed. In fact, the crisis narrative appears to have discouraged and even hindered more critical appraisals – and oversight – of industry's involvement in shaping the AMR policy agenda. A CDA approach should help address this limitation of previous research.

Both Fairclough and Entman have shown how 'claims', or 'remedy promotion', can prime the audience to frame its preferences and interpretations in a certain way. Priming work can widen or narrow the spectrum of policy options that seem reasonable to pursue, and characterise other policy options as radical or unacceptable (Morgan, 2020). The economic historian Asdal notes that policy documents not only describe reality but create it by explaining how the tools of deliberative democracy – of which Committees are one – can be tools to shift power away from the state to within reach of other actors (Asdal, 2008). Other commentators, including the political scientist Neal, have described the benefits (and importance) of analysing UK Committees' deliberations. Neal asserts that they '*can be interpreted in their own terms to greater extent than some other forms of parliamentary activity*' (Neal, 2018). Political philosopher Kamenshchikova has written that, though there has been a wont to align AMR policy discourses with a value-neutral technocracy, in fact they are constructed normatively like those in any other field (Kamenshchikova et al., 2021).

Asdal's, Neal's, and Kamenshchikova's work elucidates how deliberative democratic tools like Committees can function not only as instruments of state power, but also, as Foucault demonstrates through the *pouvoir/savoir* paradigm, as creators of power and knowledge (Fox, 2000). Following this line of argument, our analysis of the largest single group of submissions to the Committee – those arising from industry – should necessarily begin with a reflection on the productive and

generative power of this sector to influence an apparatus of the parliamentary depoliticization process. The simple call for evidence means that those organisations with the strongest vested interests, the deepest pockets, and the best analytical and rhetorical skills may have an advantage in persuading any Committee to accept and act on their proposed responses to the crisis.

Policy Dystopia Model

When analysing the solutions proposed by industry, we adopted the Policy Dystopia Model, which asserts that interested parties (typically industry) will argue that policies disadvantageous to their interests will lead to a dystopian future including widespread adverse economic, political, and social effects (Ulucanlar et al., 2014). The Model distinguishes between discursive (argument-based) and instrumental (action-based) ways of doing this. Discursively, within specific domains (e.g. the economy and governance), interlocutors can adopt the voices of authoritative archetypes, including the Economist, the Concerned Business Owner, the Public Ethicist, the Criminologist, the Corporate/Trade/Administrative Lawyer, and/or the Concerned Citizen. Further, the Policy Dystopia Model identifies the following instrumental strategies: coalition management; information management; direct involvement and influence in policy; litigation; and illicit trade. Instrumental strategies can be deployed in order to further arguments put forward by the actor in question.

Data sources

There were 71 written submissions made in advance of the Health and Social Care Committee's AMR report. These were published online on 22 October 2018. A summary and breakdown of industries can be found in Supplementary Material (Table 1 and Figure 1). We accessed these submissions from the Health and Social Care Committee's website on 26 April 2019. We downloaded the documents and two researchers (REG and CT) collaboratively coded the Committee documents thematically, extracting relevant data according to the Fairclough CDA framework of stated problem, solution, goals, means-goals, values, argument from authority, counterclaim, and dealing with counterclaims (Fairclough, 2012). Two researchers (REG and MPP) then categorised the submissions by sector. When we discovered that the problem definition was similar between public, private, academic and third sector organisations – referencing the O'Neill review and the nature of the global crisis similarly in each submission – we decided to focus our attention less on problem definition and more on how the solutions varied. We paid particular attention to the industry submissions as they had been less critically interrogated at that time. Two researchers (REG and CT) then collaboratively classified and analysed the discursive and instrumental strategies according to the Policy Dystopia Model. Overall, guided by the theory and methods above, and informed by our own understandings of the documents, we used the following broadly defined steps in our analysis (guided by recent CDA research (Savona et al., 2020)):

- (1) Code remedy promotion framings across all data
- (2) Ask how they work to persuade and create effects of 'truth'
- (3) Look for references to and silences around the profit motive
- (4) Identify divergences between industry and non-industry sources, and within industry sources
- (5) Categorise solution framings using the Policy Dystopia domains, archetypes and strategies
- (6) Reflect on the limitations of this approach.

Results

The sectors represented in these submissions were industry, trade associations, non-governmental organisations (NGOs), professional associations, academia, government, public-private partnerships and homeopathy proponents. There were 25 from industry (including industry alliances, and public-

private partnerships); 28 submissions from NGOs, civil society, health-related trade or professional associations and academic organisations (non-industry sources); five submissions from complementary or alternative medicine proponents, two each from funders and government/statutory bodies, and nine from individuals (see Supplementary Material, Figure 1). Some submissions fell into two categories, and we resolved this by coding the submissions using the primary affiliation agreed upon by two individual coders.

We found that industry submissions concentrated their argumentation within a small subset of discursive strategies within the Policy Dystopia Model. Specifically, industry submissions asserted that there would be severe future economic and social costs to be paid if the UK Government did not adhere to the proposed measures to address the AMR crisis. The arguments used to further these discursive strategies were developed along three 'market paradox' axes that we will describe below: (i) interference vs non-interference; (ii) power vs powerlessness; and (iii) for-profit vs not-for-profit.

Paradox I: interference vs non-interference

The assertion frequently made in industry submissions was that intervening in the market in a specific set of ways – for example, through subsidies and incentives for antibiotic and diagnostic development – would help to reduce antibiotic resistance and avert morbidity and mortality. On the other hand, increasing regulation or targets, or increasing negative incentives, were presented by industry and trade associations as causing or increasing suffering. This paradox is, simply put, that action on AMR is purported to require both interference and non-interference in the market (that is, selective interference in the market in the interest of industry).

The AMR industry small and medium enterprises (SME) group submission stated that there was insufficient ring-fenced government funding to provide a sustainable pipeline of 'life saving' medications for AMR. The Bioindustry Association claimed that if the UK Government did not provide (financial) incentives to its members, it would not be seen as 'credible' on the world stage. The submission from the British Generic Manufacturers' Association insisted on the one hand that any additional regulation in this area might cause drug shortages – thereby attempting to evoke a sense of fear and depicting a worse-case-scenario that is linked to a heightened regulatory environment. This depiction was juxtaposed by appeals for generic medicine prices to be raised and economic incentives introduced for the generic pharmaceutical industry to invest in drug manufacturing and the supply chain. The fear of shortages was again referred to because the proposed remedy of economic incentives would avoid the risk of having to switch to second line (more costly) antibiotics because of shortages in the first line, generic versions.

The non-generic industry submissions from pharmaceutical companies Pfizer, Merck Sharpe & Dohme (MSD), and GlaxoSmithKline (GSK), and the submission from UK trade association, the Association of the British Pharmaceutical Industry (ABPI), all centred their proposed remedies on economic incentives; specifically, the decoupling of antibiotic volumes sold from reimbursement, an incentive model that was announced in June 2019 as a policy pilot scheme in the UK, and implemented in June 2020 (Mahase, 2020). However, the companies also spent considerable time in each submission explaining regulatory areas that would harm their businesses. For example, GSK explained that it was working to reduce its factories' contamination of the environment via effluent waste, but insisted that it was concerned that regulation would hamper, not help, this effort. This is a common argument used by many industries, for example, to resist regulation, guidelines, and environmental and consumer protections (Eastmure et al., 2020; Wiist, 2010). And yet, the pharmaceutical submissions were clear that they would welcome piloting of new reimbursement models by government.

This is not to say that central Government and Government-sanctioned bodies such as the O'Neill Review did not propose market incentives for pharmaceutical companies; indeed, they were insisted upon in the submission by Anthony McDonnell and Flavio Toxvaerd, who were also contributors to the O'Neill Review. They suggested both market entry rewards for new drugs and funding for research

and development of early-stage diagnostics, among other financial interventions. However, the pharmaceutical companies presented these ideas for interference in the market while simultaneously arguing against interference in the areas that did not suit them. They might have been attempting, therefore, to circumscribe a narrow area of market interference while defending themselves against the risk of any further market interference not as aligned with their interests. In the language of the Policy Dystopia Model, the voices used to put forth these arguments are those of the Economist and the Concerned Business Owner, which amplifies the discursive paradox presented above.

Paradox II: power vs powerlessness

The ABPI emphasised the enormous scale of the pharmaceutical industry's investment into AMR globally, including having dedicated at least \$2 trillion to AMR-related products. In so doing, this submission emphasised the global scale of this industry, its contribution and its power. This is made clearer still when its other discursive choices are taken into account, such as using USD when describing investments, and employing the term 'global' throughout the submission. Alignments with international networks, and the largest reserve currency in the world, were included, demonstrating both strength and influence within the AMR arena.

In contrast to the rhetoric of global reach and power, industries simultaneously portrayed themselves as powerless to influence other interests which they held responsible for encouraging the spread of AMR, and powerless to invest in research without help from the public sector. This aspect relates again to the Model's Economy domain, using the voice of the Economist to insist on this argument. The ABPI submission claimed that:

Antimicrobial research presents unique scientific and economic challenges. The pharmaceutical industry recognises the need to develop more antimicrobials but a new funding and valuation model is needed to improve sustainability of R&D investments in antimicrobials. Creating a sustainable model that rewards innovation and shares the risk will be challenging.

Written submissions to the Committee, which are open to everyone, publicly available, and read by the MPs chairing that Committee, are necessarily dialogic – containing deflections of anticipated objections and attacks. In this case, the pharmaceutical industry submissions were, paradoxically, referencing their purported inability to act due to unfavourable market conditions in order to deflect from anticipated objections about the position of international power in the field. MSD wrote that the current market 'does not support the sustainable investment in antibiotic research and development'. They claimed that many pharmaceutical companies had left the field of antibiotic R&D; the implications were that MSD was not solely responsible, and that this mass market exit validated the powerlessness of the industry and thus its need for help.

Many multinational pharmaceutical companies also have a diagnostics wing; these companies have a unique discursive challenge – to craft a narrative that benefits both wings of the business. Roche's was one such submission. It presented itself as powerless in the *antibiotic R&D* wing, in order to lobby for antibiotic market entry rewards:

Lack of clear return on investment, not least given the high costs associated with developing a new medicine, coupled with the unpredictable patterns of resistance, over time create uncertain and unfavourable conditions for industry. This threatens the investment that is needed to address this critical public health issue now and in the future.

By contrast (and in contradiction), Roche also expounded its powerful suite of diagnostic technologies and their role in hospitals and laboratories in the UK, claiming that it was a lack of *diagnostic uptake* that had led to the overuse of antibiotics (and thus, presumably the increase in resistance). While industry may ostensibly be seen to be a partner to technocracy in this field, this is largely because the dominant technocratic narratives are beneficial to the pharmaceutical and medical

diagnostics industries in particular. These help to demonstrate this case, since those that operate in both pharmaceutical development and medical diagnostics are trying to craft an argument that pushes both sectors forward as remedies to the AMR crisis.

Paradox III: for-profit, but not-for-profit

Pharmaceutical and medical diagnostics companies may further gain by positioning themselves between a discursive tradition of for-profit and not-for-profit work. For example, the ABPI emphasised the corporate social responsibility (CSR) activities of its members in relation to AMR, namely ‘providing lesson plans and toolkits’ to improve public awareness of AMR. GSK reminded the reader that it had led the development of the ‘Davos declaration’ on AMR, and Pfizer wrote that it had signed the Davos declaration.

In addition to insisting on their not-for-profit work, many corporate submissions adopted access and equity terminology. GSK used the word ‘access’ 22 times in a seven-page document, and insisted multiple times that ‘more people die from lack of access to antibiotics than from antibiotic resistance, mainly in low-income countries’. The problem, then, from this perspective, was lack of access to drugs, and so too was the solution, ‘improving reliable, appropriate access to high quality antibiotics is therefore an urgent priority, requiring public, private, and third sectors to work together’. Becton Dickinson, a medical technology company, expressed particular concern about patient safety, advocating that ‘the next strategy should include a specific section on how best-practice diagnostics must be utilised to optimise patient safety in this area’. Pfizer described their sponsorship of an AMR exhibition held at the Science Museum (while simultaneously shifting blame for AMR to a ‘personal responsibility’ narrative), writing:

Pfizer believes that education is critical if we are to enlist the public’s help in combating AMR. This is why we sponsored a free exhibition on AMR at the Science Museum; called ‘Superbugs- The Fight For Our Lives’, the interactive exhibit aims to show the Museum’s 3.2 million annual visitors how society is responding to the enormous challenge of antibiotic resistance, featuring scientific research from across the globe and the personal stories of those waging war on the superbugs.

This early insistence in submissions on activities that appear charitable or philanthropic is useful discursively to provide a counterpoint to the fact that pharmaceutical companies are required to be profit-driven. The discursive work being undertaken in submissions that stress CSR activities can also be seen as an attempt to gain insider status; industry partners may be listened to more attentively by a wider range of policy makers than would be the case if they only adhered to legally mandated for-profit activities.

Instrumental strategies

The arguments being deployed in the private sector submissions were made using discursive strategies that can be classified using the Policy Dystopia Model’s economy and governance domains, and thematically grouped into three main paradoxical positions. However, these arguments also draw upon instrumental strategies in the development and dissemination of the submissions in order to increase their influence and amplify their presence. Several of these strategies were apparent in the AMR inquiry. First, the industry and trade association submissions succeeded in *crowding* the policy discourse – they comprised fully 50% of submissions, and this represents how coalitions are built and managed in AMR policy. Next, there is the tactic of *coordination*. Submissions cross-referenced each other, indicating a coordinated approach. This coordination might have magnified the effect of their submissions, and the evidence presented therein. For example, the MSD and Roche submissions both officially endorsed the ABPI submission. This tactic creates multiple representations and configurations of the same actors and lobbying points and works to create the impression of a louder and clearer majority within the body of the submissions than exists in reality. In the Model, this type of coordination is a form of Coalition Management.

The tactic of *coordination* is amplified when accompanied by the tactic of *obfuscating funding sources*. In many cases, the trade associations representing multinational companies described themselves as not-for-profit or independent, when their funding comes directly from industry. An example of this is the Responsible Use of Medicines in Agriculture Alliance (RUMA), which described itself as both 'independent' and 'non-profit', but whose members include some of the largest agricultural bodies in the UK. The Policy Dystopia Model describes this as a component of Information Management, namely for the purposes of building credibility; the further away a company can position itself from lobbying activities, the more credible it may appear to be (Ulucanlar et al., 2014).

Next, submissions to the Committee actively engaged in *blame shifting*; from pharmaceuticals to diagnostics, from animal health to human health, from acute care professionals to community care professionals and back again. There were also several instances of submissions purporting to identify culprits worse than themselves in the context of work to reduce the rates and risks of AMR. The British Poultry Council, for example, wrote that the risk of resistance being passed to humans through food is 'relatively low'.

Finally, the fifth instrumental strategy is to *jostle for insider status* in order to garner privileges and influence. Within written submissions, an offer to also provide oral evidence was sometimes made. This offer makes the body providing the submission appear to be highly available. This seems to be an industry tactic, for the most part, with four out of five submissions making this offer being industry bodies; GSK, the ABPI, Johnson & Johnson and the BioIndustry Association all offered to supply oral evidence in addition to their written submissions. These offers are similarly worded and typically made at the outset of a document, usually in combination with the strategy of *coordination*. For example, GSK writes that it is 'ready to provide oral evidence to the House of Commons Select Committee Inquiry, if helpful', and Johnson & Johnson 'would welcome the opportunity to give oral evidence to support this inquiry'.

The work that these industry sources are undertaking, of appealing for influence through the text, along with offers of oral evidence and further materials to the Committee, has been previously examined in the Commercial Determinants of Health literature (Cave, 2014). It can be understood as a discursive variation of what Althusser described as 'the interpellation of the subject'. In other words, when industry bodies 'hail' the Committee in a situation where they have the attention of that body, industry is thereby reinforcing the hegemony of the dominant power structure (Althusser, 1971). Interpellation is recognised as a discursive strategy to gain and wield power and to dominate an interaction, by turning any action from the interpellated party into a *re-action*; even a lack of reply becomes a response to any given interpellation (Althusser, 1971). In this case, it positions industry actors as legitimate interlocutors in the debate.

Conclusion

We found that the main discursive strategies used by industry sources were the deployment of arguments from the economic and governance domains of the Policy Dystopia Model to caution against unanticipated costs to the economy and society if industry was not supported (predominantly in the voices of the Economist, the Concerned Business Owner and the Public Ethicist). The specific argumentation to advance the discursive strategies developed along three discursive paradoxical axes: interference/non-interference; power/powerlessness; and for-profit/not-for-profit. These arguments were further strengthened using the main instrumental strategies of crowding, coordination, obfuscating funding sources, blame shifting, and jostling for insider status.

Our analysis has extended the understanding of both discursive and instrumental positioning of the private sector in relation to AMR policy in the UK. Specifically, this analysis suggests that commercial interests deploying crisis narratives do so to lobby for specific solutions, in particular deregulation and subsidies that favour their interests. Their discursive choices appear to be deployed to redefine the pathways to success, monitoring, and decision-making in the global AMR arena. In AMR, the UK Government has traditionally leaned heavily on private-sector involvement for solutions

to the so-called AMR 'crisis'. To date, industry bodies have been relatively uncritically accepted when they propose 'solutions' and are on track to receive the largest investments in the near future. For example, in June 2020, a major pilot programme to provide pharmaceutical companies with payments for antibiotic development was initiated, showing how solutions advocated by industry have been privileged (Mahase, 2020).

Further to previous scholars' characterisation of AMR advocacy as a 'science-policy complex' (Chandler, 2019), we would argue that the uncritical inclusion of industry at all costs into policy development and solutions has contributed to presenting the response to AMR as focused on the activities of a relatively narrow technocratic-industrial complex. Moreover, the pharmaceutical and diagnostics industries use discursive strategies that mirror private sector involvement in other areas of public health policy, such as the UCIs' involvement in food and alcohol policy.

The call for evidence to a Parliamentary Select Committee appears consistent, at least on the surface, with an Aristotelian vision of deliberative democracy open to all view points, but, in this case, the voices of those promoting public health-related responses such as infection prevention and control, plus stronger environmental controls tend to be crowded out (both numerically and discursively) by those lobbying for solutions that match their self-interest such as greater public subsidies for the development of diagnostics and new antibiotics. These are not necessarily more cost-effective than the alternatives but are much more strongly promoted in the body of evidence received by influential committees.

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