Assessing the health impact of a "No Deal" Brexit

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Standfirst:

Any form of Brexit is a threat to health and the NHS but leaving without a deal is a leap in the dark

Key Messages:

1. Leaving the EU without a deal threatens health and the NHS in many ways, but the scale of the threat remains unclear.
2. A No Deal Brexit is likely to have severe and profound consequences for health and the NHS and we propose a framework that could be the basis for the comprehensive health impact assessment that is needed to inform politicians and the public.
3. The time and money being used to prepare for No Deal could be much better used to support sectors that are already struggling.
4. The government's claims that it is prepared for No Deal are implausible and, at best, might mitigate some of the worst consequences.

No Deal Brexit and health

Boris Johnson says that the UK will leave the EU on the 31st October 2019, "do or die". Assuming he succeeds, the UK will leave without a withdrawal agreement, a so-called "No Deal" scenario.

Health is central to Brexit. The Leave campaign claimed that Brexit would provide £350 million per week for the NHS and Johnson, on taking office, announced what he misleadingly described as "new" spending on the NHS. Thus, many people may think that No Deal Brexit will do no harm and could even be good for health and the NHS.

But will it? Two previous analyses[1,2] have set out, in detail, why any form of Brexit will be damaging and a leaked government document, written in early August 2019, paints an even more alarming picture,[3] which contrasts starkly with the Prime Minister's reassurances that the UK will "cope easily". We call upon the government to be honest and spell out the many threats a No Deal Brexit poses for health.

First, we must clarify common but misleading statements about "No Deal". The often mentioned "managed No Deal" does not exist. New, time-limited EU laws on aviation and road freight are not "side deals", but unilateral time-limited measures by the EU27 to safeguard their interests. Suggestions that authorities might ignore actions lacking a legal basis, for example waving trucks through customs, are irresponsible, ignoring the risks if something goes wrong.

Second, we urgently need to assess the possible health impact. We know current preparations are inadequate, exemplified by the millions of pounds wasted when the government mishandled a procurement contract for medicine supplies post-Brexit, which included contracting with a 'shipping company' with no ships. The government talks of "turbo charging" preparations to leave without a Deal, supported by a major information campaign to prepare business and the public for such an event, but leaked documents and informed analysis

contradict public reassurances, highlighting the risk of serious damage including, but not limited to, consumer panic, trade disruption, and financial market volatility.

We realise that any health impact assessment (HIA) will be difficult so, to facilitate, we offer our attempt to begin this process. Based on accepted good practice, having identified No Deal Brexit as requiring a HIA, we have determined the main health issues and prioritised them, based on our assessment of likely effects (**Box and Figure 1**).

In the following sections we examine some of the issues we see as most important.

Box 1: Guidance for undertaking a Brexit health impact assessment

In the 46 years that the United Kingdom has been a member of the European Union (EU), almost every aspect of life has been guided by European laws and policies. Consequently, any analysis of the impact of leaving must, of necessity, be both partial and simplified. To make progress with what could easily be an insurmountable task, we have developed a simplified conceptual framework (**Figure 1**). This has three dimensions, although for simplicity we have only shown two. These are the mechanisms by which Brexit might impact on areas important for health and the areas that they may impact on. A third dimension is territorial, as the impact of Brexit will differ, most notably between Great Britain and Northern Ireland, but also within the United Kingdom, where there are many unresolved questions about whether powers taken back from the EU will reside in London, Edinburgh, or Cardiff, and beyond, because Brexit will have profound consequences for the dependent territories. We also include a simplified summary box of the current context in which Brexit is to occur. This is particularly relevant when considering the potential impacts of a No Deal Brexit and therefore in undertaking a comprehensive HIA.

The mechanisms involve a series of losses. Loss of money, as the economy contracts and the prices of imported goods rise. Loss of people, as a consequence of reduced migration of key workers from the EU 27. Loss of government capacity, as the civil service, already depleted by many years of cutbacks, is diverted to the task of managing the consequences of Brexit. Loss of access to European institutions, many of which fulfil roles that, in the long distant past, would have been undertaken by government departments in the UK and which will need to be recreated, such as for approval of medicines. Loss of the rules by which international trade takes place, and which have evolved enormously to allow for the free movement of goods and services within the EU. And finally, although more speculative, loss of societal norms, such as trust in government, that could pave the way for civil disorder, especially in the face of shortages of food and medicines. Related to this is the threat, recently highlighted by the police in Northern Ireland, of increased violence there as paramilitary groups exploit community tensions encouraged by Brexit.

Among the areas that impact on health, and which will be affected by Brexit, perhaps the most important is government finances, with consequences for areas as diverse as welfare, industrial policy, local government, social care, and the NHS. The second is trade, which has grown in importance over recent decades because of the interconnectedness of manufacturing and services. Consequently, the UK is dependent on a well-functioning trade regime to provide adequate food and essential medicines, among many other things. The third is law and order, an area that only relatively recently fell within the scope of the European institutions, but which has grown increasingly important, with mechanisms for exchange of intelligence, including on organised crime, illicit drugs and food fraud, and cross-border justice, such as the European arrest warrant. The fourth is the NHS. Although, formally, the organisation of health services is a matter reserved to member states, many of the inputs required for healthcare, including medicines, isotopes, technology, and recognition of qualifications, are governed by EU law. This is followed by food and agriculture, additional sectors for which Brexit holds significant implications. Finally, we have included a miscellaneous category, “Other Infrastructure”, bringing together a diverse range of issues, some of which have profound implications for health, such as water and transport.

(**Note:** Further reading to accompany this analysis and aid HIA is available via Supplementary File 1)

Brexit and the economy

We begin with the economy. A strong economy is essential to provide the economic security that is the basis for good health and for paying for public services, such as the NHS and social care. Authoritative economic forecasts predict that a No Deal Brexit would send the economy into recession, with increasing unemployment, and falls in the value of sterling and thus rising prices of imported goods. While the government was able to intervene massively in response to the 2008 financial crisis, the economy is now much weaker. Promises to avoid some of the consequences of a No Deal Brexit made during the Conservative leadership campaign were greeted with barely disguised incredulity by the Office of Budget Responsibility.[4]

This is important because of growing evidence that weakening social protection and economic decline has contributed to the rapid slowing – and at some ages a reversal – of the upward trend in life expectancy in the UK.[5] So what can be expected from research on previous economic crises?

The picture is complex. Deaths from road traffic injury often fall due to reductions in road freight. It is estimated that a No Deal Brexit could reduce international lorry traffic by over 80%[6] and the Operation Yellowhammer document anticipates disruption of fuel supplies.[3] But other causes of death would be expected to increase, although much would depend on what policy responses are adopted. The government may increase taxation, contrary to what it has promised, or more likely increase borrowing. This could boost headline spending on the NHS but welfare and social care are unlikely to benefit significantly and widespread job losses seem inevitable, with planned investment decisions already being cancelled. Likely consequences include rises in suicides, alcohol-related deaths, and some communicable diseases, such as tuberculosis and HIV, especially among vulnerable groups.[7] Response will be more difficult following disruption of collaboration with the European Centre for Disease Prevention and Control.[8]

Brexit and international trade

Trade policy is another increasingly recognised determinant of health, for example where trade agreements limit scope to respond to threats to health. Supporters of Brexit argue that the UK can pursue an independent trade policy. Though theoretically true, success so far has been extremely limited. Agreements that have been negotiated, for example the free trade agreement with Chile and the open skies agreement with the US, are inferior to the current position, where, for instance, EU trade agreements secure food safety through on-the-ground inspections. On its own, the UK will inevitably lack the negotiating power of the much larger EU, which is important given the growing evidence linking trade policy and health.[9]

Most concern has centred on an expedited trade deal with the USA. In reality, this may be exaggerated, given the major obstacles to agreeing one. A desperate UK may, however, feel compelled to sign a deal with the USA, making considerable concessions to do so. If such a deal was agreed, then there could be major adverse consequences for dietary quality, food safety standards, animal welfare commitments, and the UK's ability to adopt public health policies, such as warning labels, which the US view as non-tariff barriers to trade.

It is often overlooked how the EU has repeatedly defended such policies on behalf of its members - including the UK - in international fora. The UK's lack of capacity in trade negotiations – after 25 years of conducting them as part of the EU – is understandable but will make it difficult to resist such pressures. Furthermore, Johnson's appointment of numerous individuals as advisers from extreme free-market organisations, some with ties to producers of health-damaging substances, raises questions about the UK's interest in fighting for these protections.

A second threat arises from the barriers UK producers face in exporting goods. For example, the government is planning to intervene on a massive scale to buy Welsh lamb that will no longer be competitive in European markets.[10] Yet this is still likely to devastate rural economies, with major consequences for mental health and, almost inevitably, suicides.[11] Similar threats face many small family businesses.

A third threat arises from risks to imports of foods and medicines, discussed below.

Brexit and law and order

The threat of civil unrest, and thus injuries and violence, cannot be ignored, especially with No Deal. Most obviously, as noted by the Police Service of Northern Ireland,[12] this includes the risk from dissident terrorist groups. Unless agreement can be reached on reintroducing a power sharing Assembly, considered very unlikely, a No Deal Brexit will require imposition of what would be highly contentious 'direct rule' of Northern Ireland from London to enact the necessary emergency legislation, thereby abrogating the Good Friday Agreement. Additional concerns relate to the proposed use of police officers from England and Scotland there, evoking memories of the deployment of British troops fifty years ago. Irish compliance with its EU treaty obligations would also necessitate some kind of checks on products crossing the border.[13] Any imposition of a hard border, for instance to check food safety and animal health, would be a magnet for attacks. The UK will lose access to the Schengen Information System (SIS II) and other information networks. The UK is part of an intricate web of collaborating crime and intelligence agencies across the EU, which serves a critical role in the management of illicit-drugs trade and organised crime, for example.[14] The UK's future relationship with these institutions remains unclear, a situation made ever-more concerning given the observed rise in drug-related gun and knife crime in the UK. Finally, senior police officers have warned of a threat from right wing terrorism, encouraged by xenophobic rhetoric by politicians.

Brexit and the health service: will it be able to pick up the pieces?

Previous analyses of how Brexit might affect the NHS identified many potential negative consequences, irrespective of the exit strategy adopted.[1,2] The leaked Yellowhammer document reveals that a No Deal Brexit will have especially severe implications for supply of medicines, medical devices, and medical isotopes.[3] Rehearsals of contingency measures have identified major weaknesses. The supply of plasma and plasma derived products has also been questioned. The supply of healthcare professionals is already being threatened, with an even greater threat to social care, a sector already under very severe pressure.[15]

The Department of Health and Social Care (DHSC), in consultation with NHS England and NHS Improvement, reported measures to mitigate the effects of a No Deal Brexit. Its 21st December 2018 operational guidance, based on anticipation of leaving on 29th March 2019,[16] placed much of the burden on NHS and social care bodies. They will have to undertake contingency planning,[17] working largely in the dark (**see Box 2**). We could locate no detailed guidance on how to undertake these assessments and there seems to be no recognition of the severe pressure these bodies are already facing after a decade of austerity. Worryingly, the government has also instructed trusts not to release them to the public.

Box 2: Example text taken from the EU Exit Operational Readiness Guidance

"The EU Exit Operational Readiness Guidance summarises the Government's contingency plans and covers actions that all health and adult social care organisations should take in preparation for EU Exit.

All organisations receiving this guidance are advised to undertake local EU Exit readiness planning, local risk assessments and plan for wider potential impacts. In addition, the actions in this guidance cover seven areas of activity in the health and care system that the Department of Health and Social Care is focussing on in its 'no deal' exit contingency planning:

- *supply of medicines and vaccines;*
- *supply of medical devices and clinical consumables;*
- *supply of non-clinical consumables, goods and services;*
- *workforce; reciprocal healthcare;*
- *research and clinical trials; and*
- *data sharing, processing and access.*

The impact of a 'no deal' exit on the health and adult social care sector is not limited to these areas, and the Department is also developing contingency plans to mitigate risks in other areas. For example, the Department is working closely with NHS Blood and Transplant to co-ordinate 'no deal' planning for blood, blood components, organs, tissues and cells (as detailed in the two technical notices on blood and organs, tissues and cells and the recent letter to the health and care system sent by the Secretary of State for Health and Social Care on 7 December 2018)."

Source: EU Exit Operational Readiness Guidance. Actions the health and care system in England should take to prepare for a 'no deal' scenario, DHSC, 2019 (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/768077/eu-exit-operational-readiness-guidance.pdf)

The DHSC is undertaking contingency planning but few details are available. Much is secret, and it has imposed at least 26 non-disclosure agreements on those advising it.[18]

What details exist provide little confidence, with one doctor who has seen some plans for medicines supply reporting a risk of severe patient harm.[19] DHSC has asked pharmaceutical companies supplying the UK from, or via, the EU or European Economic Area to stockpile a minimum of 6 weeks extra supplies, with similar requests to suppliers of medical devices and clinical consumables. Yet revised assessments describe reduced access by sea for up to six months[16] and evidence to the Health and Social Care Select Committee (October 3rd 2018)

suggested that planning assumptions were extremely optimistic. The DHSC has established an *Operational Response Centre*[16] but it is difficult to see what it can do given the lack of clarity about what a No Deal means. There is little information on how it will "*Manage the department's reciprocal healthcare obligations, payments and receipts as part of the work involved in the UK's exit from the European Union*",[20] given concerns that the challenges may be insurmountable. There are concerns that this will force large numbers of British pensioners who have retired abroad to return.[21]

Brexit and Food systems

No Deal Brexit will have profound consequences for the UK food system, which is highly integrated with the EU. Impacts from No Deal Brexit are likely to include: (1) significant disruption to supply chains especially for fruit and vegetables and imported chilled (short shelf-life) foods; (2) price increases from a drop in the value of sterling, the impact of as-yet unannounced tariff levels, plus expected additional transport-related costs; (3) shortage of migrant workers throughout the food system (seasonal harvest workers, food manufacturing and catering); (4) consequences of leaving the EU food standards framework (already influencing trade bargaining in possible deals with the USA),[22] with uncertainty about default reversion to trading on World Trade Organisation terms; and (5) disruption of food production involving cross-border flows in Ireland, not least due to personnel and paperwork burdens from the necessary huge increase in Export Health Certificates.[23] Health implications for consumers on low-incomes are likely and there is already concern about rising dependency on foodbanks in the UK.[24] Foodbanks and distribution schemes themselves expect worse supplies.[25] If disruption to food supply is as extensive as the Government's planning assumption predicts, people on low incomes will be severely affected by expected price rises of 10% (more if sterling drops further).[3] Areas far from retail Regional Distribution Centres (wholesale hubs)

and local convenience stores are expected to be worst hit, affecting areas already disadvantaged.

There are few legal duties on local authorities to ensure disadvantaged social groups are fed, with only the Education Act 1996 S.512 applying. A guidance note sent to schools advises that *"the government does not have control over the checks imposed by EU Member States at the EU side of the border"*[26] and suggests schools to *"contact your food supplier(s) if your school procures food directly (or your local authority or academy trust, if they arrange food on the school's behalf) to ensure they are planning for potential impacts of a no deal scenario.".*[26] A leaked document suggests that the government has little confidence that these arrangements will work, warning of severe disruption to schools.[27] What guidance exists places the burden on local Resilience Forums set up under the Civil Contingencies Act 2004, which have not been resourced for the enormity of a No Deal Brexit. There are deep anxieties among food retailers and within the Cabinet about civil unrest and panic buying, while leaked documents reveal that local authorities are seeking exemption from nutrition guidelines for school meals.[28]

Re-framing Brexit: Putting health and prosperity top of the agenda

Early in the Brexit process, the Faculty of Public Health called on the government to transpose the obligation in the European Treaties to ensure a high level of health in all policies into national legislation. Ministers refused, but did give an assurance that Brexit-related policies would "do no harm" to health. This analysis offers little assurance in this respect.

Ministers sometimes have to make decisions that will lead to death and disability of their citizens, as when they commit to military action. However, they should do so after weighing up the costs and benefits, and ensuring that those most adversely affected have adequate protection from harm where possible.

With Brexit, we see no evidence that the government has undertaken such an analysis. It seems inconceivable that it should proceed with a No Deal Brexit without an independent, transparently conducted assessment of the health impact, including the voices of those likely to be most affected. This is arguably the only way the government can fulfil its commitment to do no harm and maintain high standards of public health during and after exiting from the EU. With the appointment of a new Prime Minister, a few weeks from exit day, we need to scrutinise how Brexit is handled, and its impacts framed. We should not, as was the case with the Iraq war, have to wait many years for the failings in the decision-making process to be revealed. The promised benefits for the NHS and commitment to 'do no harm' mean a concern for health should now guide the actions of the UK Government. The government has a duty to be transparent, vocal, and realistic about the health impacts of Brexit.

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Contributions

MvS and MM conceived the work and drafted the first version. All authors contributed to reviewing and finalising the content of the manuscript.

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