A Matter of Life and Death: Explaining the Wider Determinants of Health in the UK
Supplement on Research Methods and Evidence

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This document is a research supplement for “A matter of life and death: Explaining the wider determinants of health in the UK” [link to brief]. It describes the methods used throughout the research process and provides evidence behind the recommendations included in the brief.
Research Methods

To arrive at the recommendations in “A matter of life and death: Explaining the wider determinants of health in the UK” [link to brief], we applied Strategic Frame Analysis® — an approach to communications research and practice that yields strategies for shifting the discourse around social issues. This approach has been shown to increase understanding of, and engagement in, conversations about child development and other scientific and social issues.

This work builds on earlier research in the first phase of the project, which included a literature review and cognitive interviews with members of the public. This earlier research explored and compared how experts and members of the public in the United Kingdom think about health and the factors that shape it. The full research report, which describes the gaps as well as overlaps in thinking between these two groups, is available online.

Below, we describe the research conducted as part of the second phase of the project, which involved the design and testing of frames to address the gaps identified in the first phase of work. These frames were tested and refined using three methods: on-the-street interviews, survey experiments, and peer-discourse sessions. All told, more than 7,000 people from across the UK were included in this research.
Adjusting the research for the COVID-19 pandemic

We were in the early stages of frame testing when the COVID-19 pandemic hit. We immediately recognised that the pandemic would affect thinking about health and might alter the kinds of responses we got from research participants. So in spring of 2020, we briefly paused the research to consider how our plan should be adjusted to account for this unprecedented event.

We quickly recognised the need to conduct research to understand if and how the pandemic was affecting underlying thinking about health and health inequality. We had previously planned on conducting a single round of peer-discourse sessions (a form of focus groups) after the survey experiment, but as we outline above, we adjusted our research plan and conducted an additional set of sessions in June 2020, before the experiment. These sessions were designed to help us understand the effect of the pandemic on public thinking, and gave us the information we needed to design subsequent research in a way that ensured both the durability of findings and our ability to provide strategic guidance to communicators about how to talk about COVID-19 in the broader context of the wider determinants of health. In both the experiment and a second round of peer-discourse sessions, we examined how frames can be used both to shift longer-term thinking about health and talk about the current moment.

Frame Design

To identify effective ways of talking about the wider determinants of health, FrameWorks researchers specified a set of tasks the frames needed to perform and then brainstormed potential reframing strategies that we thought might accomplish one or more of these tasks (for example, different explanatory metaphors, values, or ways of ordering message components). After generating a list of candidate frames to test, researchers solicited feedback on these ideas from project partners to ensure that the frames were both apt and potentially usable for those working in the field. Based on this feedback, researchers refined a set of frames and brought them into empirical testing.

What are Frames?

Frames are interpretive packages. They involve choices about how an issue is presented – what is and isn’t emphasised, how it is explained, what connections are made, and which commitments are invoked. Frames are not context-specific – the same frame (e.g., a value) can be applied in different ways in different contexts.
On-the-street interviews

Frame design was followed by a set of on-the-street interviews to explore potential framing tools with members of the public. In November 2019, we conducted 53 rapid, face-to-face on-the-street interviews in Glasgow and London. We first asked participants to respond to open-ended questions about health and the factors that shape it. Participants were then presented with a candidate frame and asked questions that paralleled the initial set to explore the frame’s ability to restructure understanding, open up new ways of thinking and give people productive language to use in discussing the issue under scrutiny.

Sample questions and candidate frames, as well as a full list of the metaphors we tested, are available in Appendix A.

Experimental surveys

Three online experimental surveys involving a total sample of 7,200 respondents were conducted between August 2020 and June 2021 to test the effectiveness of frames on public understanding, attitudes, and support for programmes and policies. We used a nationally representative sample.

In each survey, respondents were randomly assigned to a treatment or control condition. Those assigned to treatment conditions received identical information about the wider determinants of health in the UK, but framed with a particular frame element, such as “this issue is about” frames or values-based arguments. Those assigned to the control condition received no information at all. See Appendix B for a list of the treatments we tested in all three survey experiments, as well as sample treatments for each type of frame.

After reading the message, all respondents were asked an identical series of questions designed to measure knowledge, attitudes and policy preferences relating to health, the wider determinants of health, and health inequalities. Each battery consisted of multiple questions. Questions were Likert-type items with seven- or five-point scales, yes/no questions, or open-ended questions requiring free-text answers. Sample survey questions are provided in Appendix B below.

Multiple-regression analysis – a form of statistical analysis that identifies how a particular variable (in this case, a frame) affects particular outcomes – was used to determine whether there were significant differences in responses to questions between the treatment groups and the control group. A threshold of p.<0.05 (the standard scholarly threshold for statistical significance) was used to determine whether treatments had any significant effects – in other
words, whether particular frames had an impact on people’s understandings and attitudes. Significant differences were understood as evidence of a frame effect – an effect of the frame on the particular outcome (e.g., policy support, attitudes around the issue, understandings about the issue).

Peer-discourse sessions

We conducted two rounds of virtual peer-discourse sessions (a form of focus groups), with a total of 58 participants:

— Round 1 (four sessions) was conducted in June 2020, before sending the first survey experiment into the field. We used this round of peer-discourse sessions to (i) explore how the context of the pandemic was influencing people’s thinking about health and the wider determinants of health; (ii) explore how to adapt some of the frames developed before the start of the pandemic; (iii) generate new, promising framing strategies to test in the context of the pandemic.

— Round 2 (six sessions) was conducted in June 2021, after the three survey experiments had been run and analysed. We used this round of peer-discourse sessions to refine and build on findings from the three survey experiments (e.g., policy specific explanations, how to bring racism and discrimination into the conversation).

We used a sample designed to approximate the demographics of the country for both rounds.

All peer-discourse sessions were conducted on Zoom and recorded with written consent from all participants. Sessions included a variety of discussion prompts and roleplaying activities designed to evaluate which frames are most easily understood by the public, allow them to most productively use new information, and were most easily used during conversation with peers. See Appendix C below for sample activities from both rounds of peer discourse sessions.

Usability trials

We conducted five usability trials to ascertain the usability of frames – that is, to gauge how comfortable and willing field communicators are to use specific frames – and to help us understand how any barriers to usability could be overcome. The five sessions were conducted in August-September 2021 with 10 communicators in the field of public health.

We used these sessions to explore the usability of the Building Blocks metaphor, as well as policy framing that points to past policy decisions as the sources of current health inequalities.
Sessions began with an activity on the *Building Blocks* metaphor. Researchers spoke briefly with field communicators about how explanatory metaphors function as framing devices, and then shared the *Building Blocks* metaphor with them. After briefly discussing the metaphor with the communicators, researchers asked the communicators to prepare a brief presentation for members of the general public that used the metaphor to explain what they do. A couple of public participants were brought in, and the communicators gave their short presentation, which allowed researchers to see how the communicators used the metaphor. The researchers then debriefed with the field communicators about the experience and what they found useful and challenging about the metaphor. See Appendix D below for more on this activity.

Toward the end of the session, researchers introduced the policy frame and asked a series of questions to gauge communicators’ willingness to use this frame.

All usability trials were conducted on Zoom and recorded with written consent from all participants.
For each of the recommendations in the strategic brief, we describe evidence from relevant research methods. For survey experiments, we describe results and provide graphs to illustrate them. For the qualitative research methods, we describe findings from our analysis that support the recommendation.

The evidence below is intended primarily for researchers who are interested in the research basis for our recommendations. It is not intended to be read as a standalone document, but in conjunction with the strategic brief. Here, we simply describe the results from our analyses, whereas the brief provides a fuller interpretation and synthesis of research findings.

1. Show why the wider determinants of health matter

Raise the stakes by making the issue about inequalities in life expectancy and the fact that people are dying earlier than they should.

Survey experiments 1 and 2: As Figure 1 below illustrates, compared to the control group (participants who saw no frame before answering our survey questions), participants who received the Life Expectancy (negative valence) frame – which foregrounded the issue of life expectancy and wide inequalities in it – were better able to see the importance of policies addressing the wider determinants of health and reported stronger support for some of the policies on our list. (For a fuller description of the Life Expectancy frame and examples of what it looks like in practice, as well as descriptions and examples of the other frames discussed in this supplement, see the strategic brief.) This issue frame also appears to increase participants’ sense of collective responsibility for reducing health inequalities in the UK and to increase
people’s sense that something can be done to improve health and reduce health inequalities in the UK, though effects on these outcomes did not quite reach the significance threshold from a statistical perspective.

Interpreting the graphs. In Figure 1 and the graphs below, each frame is represented by a particular color, as indicated by the legend. The outcomes – the understandings or attitudes we measured in the survey – are listed on the horizontal axis. If there is a bar pointing up from the zero line over a particular outcome, that indicates that the frame had a positive effect on that understanding or attitude, while a bar that goes down indicates a negative effect. Statistical significance is indicated with asterisks, as listed in the legend. For research purposes, we only treat significant effects as meaningful effects, since insignificant positive or negative effects are more likely to simply result from chance (i.e., the specific participants in our survey happened to respond in a particular way that is not representative of how the general population would respond).

**Figure 1: The Effects of Issue Frames on Attitudes and Policy Support**

![Graph showing the effects of issue frames on attitudes and policy support.](image)
This version of the Life Expectancy frame (focus on people dying earlier than before) seems to be having similar types of effects on participants holding different political beliefs, and it is particularly effective with participants who identified as conservative. This is consistent with findings in the political science literature arguing that conservatives are usually more willing to devote attention to negative information (in this case, a focus on people dying early rather than living long lives). Another hypothesis is that focusing on death conveys a stronger sense of urgency and importance than focusing on poor health in general, which might sometimes be associated with benign issues.

On why to make the issue about life expectancy rather than just making it about health:

Peer discourse sessions (round 1): The term “health” is a powerful cue for thinking about individual behaviours and cultural norms, regardless of the valence of the frame. The “health prevention” and “health creation” frames, though differing in valence, led to similar thinking regarding diet, exercise, smoking, health education, and even budget control for families on benefits (for the Welsh session). In other words, because the term "health" is an incredibly strong cue for individualistic thinking, the term it modifies (creation, prevention) doesn’t do enough work to expand people’s understanding of what health actually means and the things that influence it. One English participant even said, “I think your health is a very personal thing” versus wellbeing which is a “wider” concept and takes into account your family, for example.

On why not to add complexity with terms like “disability-free life expectancy” or “healthy life expectancy”:

Peer discourse sessions (round 2): People don’t understand what “disability-free life expectancy” means. When participants were presented with data about “disability-free life expectancy,” they often reasoned that the data excluded people living with disability – instead of understanding the concept as the number of years one can expect to live without experiencing disability. Because the concept itself was not familiar to most participants, “healthy life expectancy” is likely to lead to similar confusion.

Why we should avoid focusing on the effects the wider determinants of health have on the economy.

Survey experiment 3: The two frames that made a distinctly economic argument for supporting the wider determinants of health (the “Future prosperity” value and the “Strain on NHS” frame) performed worse than frames proposing a more holistic view of the role of the wider determinants of health (e.g. the “meaningful lives” or “thriving society” values, the “historical explanation” NHS frame).
2. Harness the power of explanation

i. Use the ‘building blocks of health’ metaphor

Survey experiment 2: Compared to the control group, participants who received this frame showed stronger understanding of the role that the wider determinants of health play in shaping people’s health outcomes (vs. individual behaviours for instance). It increased people’s sense that something could be done to improve people’s health in the UK and appeared to increase people’s sense that something can also be done to reduce health inequalities and address the wider determinants of health in the UK (though this last effect did not quite reach the significance threshold from a statistical perspective). (See Figure 2.)

Figure 2: The Effects of Metaphors on Attitudes and Policy Support

On-the-screen interviews: The Building Blocks of Health metaphor helped participants see the role of inequality in shaping health. The image of multiple building blocks helped participants think beyond the level of the individual more consistently than other metaphors, including the Foundations metaphor. In addition, the Building Blocks metaphor was sticky – it stuck in people’s minds, and they frequently repeated it back to researchers of their own accord, indicating its likelihood of being picked up and used in public discourse.
In addition to being multiple, blocks are seen as modular: they can be rearranged in different ways. As a result, participants could see that while ultimately everyone needs the same types of support, there might be different ways of improving health depending on people’s circumstances, and how health problems might have different causes for different people or different geographical areas in the UK.

The image of “building blocks” led people to focus on how multiple factors interact to shape health outcomes. Participants talked about how only focusing on one factor wouldn’t be sufficient, because if one of the blocks only is strong and all the others are crumbling, the building wouldn’t hold up.

**Usability trials:** Experts engaged with the metaphor easily, and used it to build solid presentations that were well received and understood by members of the public. They were able to adapt the metaphor to their specific areas of expertise and interest.

The iteration we shared talked about the socio-economic building blocks of health, and experts were able to expand on this idea and talk about the environmental, emotional, cultural determinants of health. While this openness in the source domain can be a pitfall for members of the public (if they end up talking about diet and exercise as the building blocks), it is an asset for a wide-ranging group of stakeholders who will want to focus on slightly different aspects of the issue.

The image of building blocks protecting people from foul weather and other storms was sticky with experts, who used a version of it in their presentations. They saw it as a way to talk about the role of circumstances that are outside of people’s control. The ideas of safety and stability conveyed by the metaphor were also sticky for experts in their presentations.

Experts acknowledged the need for messages about the wider determinants of health to convey a certain degree of hope, to avoid triggering fatalistic thinking among the public. They explained that building blocks could contribute to building a sense of **hope** and efficacy among members of the public, at least partly because they can be changed, moved, and mended, (they’re not entirely immutable) and because they can be a tool to remind the public that systems are by definition designed by humans, which means they can be redesigned.
ii. Use jobs or housing as anchors to explain how the wider determinants shape health in different ways

Survey experiment 3: Compared to the control group, participants who received a deep-dive explanation of how jobs affect health showed significantly stronger understanding of the role that the wider determinants of health play in shaping people’s health outcomes (vs. individual behaviours for instance). The frame also helped people see that addressing the wider determinants of health should be a priority for government policy moving forward. By contrast, a deep-dive explanation focused on transport was ineffective, failing to produce significant increases in understanding or changes in attitudes. (See Figure 3.)

Figure 3: The Effects of Deep-Dive Explanations on Attitudes and Policy Support

On why to use jobs and housing as anchors rather than other social determinants:

On-the-screen interviews: People find it easier to reason about certain determinants than others. It is relatively easy for people to see different ways in which fair pay and job security influence health, even without a full explanation. Housing similarly struck a chord with some participants. By contrast, public transport surprised people and they struggled to make sense of it.
**Peer discourse sessions (round 1):** COVID-19 has made the issue of unemployment more salient for participants. The pandemic has made it more likely that people themselves have directly experienced, or know people who have experienced, unemployment for instance. In comparison to earlier research, more participants talked about their own experience with unemployment, making the problem more salient and more believable for them.

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**Why the public needs help to think about education and health**

**On-the-screen interviews:** When participants talked about education, they consistently understood it to mean “health education” – that is, providing people with better information so they can make healthier choices. People did not understand how quality of school education shapes health outcomes. Even when researchers focused attention on school education and made sure participants had this in mind, participants struggled to draw connections between education and health.

**Peer discourse sessions (round 1):** Lack of education and/or information about healthy habits was seen as one of the key reasons for individuals’ poor health outcomes. “Education and awareness” was not simply proposed as a good solution to improve individuals’ health; lack of education/ignorance was explicitly brought up as one of the causes of poor health, especially among poorer groups and communities. The link people made between poverty and ignorance was a fairly toxic combination that often led to moral judgment about and alienation of individuals and groups with lower SES:

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**iii. Use the pathway of chronic stress to deepen people’s understanding of the roots of inequalities in health.**

**Survey experiment 3:** Compared to the control group, participants who received this frame showed significantly stronger understanding of the role that the wider determinants of health play in shaping people’s health outcomes (vs. individual behaviours for instance). The frame also helped counter individualistic and “cultural” assumptions about the things that shape inequalities in health outcomes more specifically. (See Figure 3 above).

**Peer discourse sessions (rounds 1 and 2):** The pandemic has strengthened attention to mental health. In discussions of both COVID-19 and life expectancy, mental health came up a lot. Participants were able to describe the impacts of the pandemic on mental health (e.g. people living alone; multiple lockdowns) with some participants able to discuss how decreased mental health leads to lower life expectancy. The context of the pandemic also led people to talk about the role of social connections/isolation in shaping mental health, especially for older generations.

Stress was also a top of mind issue for participants, even more so than it was before the
pandemic. But once again, there was room to build a more detailed understanding of all the ways in which stress affects health – participants often talked about how stress levels shape mental health and behaviours like eating habits, but not necessarily the direct ways in which stress affects health as well, or the types of stress that are particularly harmful for health in the long term (chronic stress).

The “stress as a pathway” frame was particularly sticky for participants compared to other frames – it stuck in people’s minds and they easily took up and used the language of the frame. Among the groups that received this frame, participants were easily able to discuss the links between alleviating stress via policy and health. In the case of social housing, people were able to see how housing security alleviates stress and anxiety, which creates better health and also life expectancy. Participants could also see links between having more disposable income and being able to afford health insurance, which would also improve health. Once the concept of stress was introduced in the conversation, it was also taken up by other groups in their own explanations, thereby superseding the frames they were working with initially.

3. Show change is possible

i. Pair explanations of the issue with solutions and a sense of efficacy to help people to see that change is possible,

ii. To build public support for specific policies, bring the solution in early and explain how it improves health and life expectancy

Both of these specific recommendations are based on a common set of findings from peer discourse sessions.

Peer discourse sessions (round 2):

Explanations that focused on solutions were intuitively more appealing for participants. Participants found problem-focused explanations “negative” and unappealing, while the solution-focused explanations struck them as more positive and engaging.

More specifically, they interpreted problem-focused explanations as ominous warnings of things to come if a proposed policy wasn’t passed. They also explained that this type of argument was typical of UK public discourse and that they were tired of hearing the same old catastrophism.
The solution-focused explanations came across as more concrete and practical, because what was explained was the specific effect of one policy (vs. the overall causes of the problem in the problem-focused explanations). It encouraged a more forward-looking, efficacious attitude among participants, which they perceived as “positive” and “optimistic”.

**Explanations that focus on solutions helped participants focus on policies rather than blaming individuals.** By painting a concrete picture of what would change with a given policy, the solution-focused explanations helped participants see that the issues of housing and fair pay are what needs fixing rather than the people experiencing these issues. In contrast, explanations focusing on the causes of the problems were more likely to get participants to wonder about who is to blame and who the “problem” people are in society.

### 4. Talking about the NHS

**i. When you need to talk about the NHS, explain how it should fit within a broader system of support.**

**Survey experiment 3:** Two out of the three NHS-focused frames we tested did poorly. The “strain” frame did not perform better than the control group on any outcome, and sometimes approached significance for negative effects. The “common sense” frame consistently backfired – meaning that it significantly shifted participants’ thinking in the wrong direction, across outcomes.

While the “historical explanation” frame was not the most effective of the frames tested overall, it did help people see that addressing the wider determinants of health should be a priority for government policy moving forward. And – unlike the other ways of framing the NHS that were tested – it did not push thinking in the wrong direction. (See Figure 4 below.)
Peer discourse sessions (round 2): The “Reduce strain” NHS frame appeared to be linked to zero-sum thinking in people’s minds. In other words, it cued the idea that the amount of overall government spending can’t change, so any funding given to one area must be taken from somewhere else. When thinking about the impact that specific policies would have on health, participants sometimes brought up the idea that investing in housing or jobs would relieve some of the pressure the NHS is currently under because it would improve some people’s health. However, when thinking in this way, participants assumed that spending this money would require cuts that would themselves exacerbate strains on the NHS. In other words, “reduce strain” framing cues a spiral of thinking in which people assume that investing in the wider determinants would require problematic cuts to the NHS and other areas of spending, which led to resistance to shifts in funding.
5. Talking about racism and discrimination

**Peer discourse sessions (round 2):** Participants overwhelmingly thought about racism as interpersonal, not systemic. This was true not only of white participants, but of most participants of colour as well. Participants mainly understood racism as explicit abuse committed by one individual towards another, because they are, as one participant put it, “offended by other people’s skin color”. This was unanimously condemned by participants as wrong and unacceptable. More systemic or more subtle forms of racism were not on participants’ minds.

Most participants were uncomfortable talking about race and racism. Some participants tried to get away from race as a topic by talking about discrimination more broadly (e.g. it’s not just about race, it’s about gender, disabilities, or language), by making “both sides” arguments (i.e. arguing that racism happens among people of colour too), or by exaggerating and simplifying the issue to make it sound unreasonable (e.g. “we’re told we forced Black people to live in Grenfell tower”). Participants of colour, who were generally more aware that racism is an issue in the UK by virtue of their lived experience, also tried to mitigate their arguments by either balancing out racism with the image of the UK as a multicultural society, or trying to downplay their own racial identity in the description of their life achievements.

i. Always explain what data about racial inequality means. Don’t assume it will speak for itself.

**Peer discourse sessions (round 2):** There was a strong tendency – especially among white participants – to attribute racial inequalities to natural differences between racial groups. When talking about rates of COVID-19 infections and COVID-19 related deaths, as well as other health-related issues, participants often defaulted back to a genetics-based explanation, arguing that some races are just naturally more susceptible to certain diseases than others, including COVID-19.

Some white participants had a tendency to conflate race, nationality, and religion in their explanations, arguing that health-related racial disparities in the UK were either due to “cultural differences” between communities (e.g. religious beliefs that led to COVID-19 vaccine hesitancy, several generations of a family living on the same roof and therefore being more likely to pass on viruses to one another), or to the fact that it made sense for immigrants to be “behind” on the social ladder because they got started in the UK later than others.
ii. Position racism as an amplifier of broader societal issues to avoid “us vs. them” thinking and deficit framing.

**Peer discourse sessions (round 2):** Calling out policies and society as explicitly racist can quickly backfire. A good proportion of white participants pushed back against the idea that the UK was a racist society – because of their narrow/extreme definition of what racism entails (see above).

Embedding arguments about racism and discrimination within a broader argument about the wider determinants of health can help people open their minds to these issues. The three frames we tested led with a general statement about life expectancy and the role of the wider determinants of health in the UK. They then proceeded to explain that racism and discrimination make life even harder for some groups. When participants picked up on this part of the argument (which wasn’t always the case), they were more receptive to the whole message. This is probably because this type of explanation helped them see racism and discrimination as part of broader societal issues that also affect other groups, instead of singling out specific communities as being the victims of society.

iii. Use chronic stress as a pathway to start building public understanding of how racism shapes health and life expectancy.

**Peer discourse sessions (round 2).** Using chronic stress as a pathway helped participants link racism and health more than other frames. While health and life expectancy often fell out of the conversation when other frames were used, participants were able to keep these issues in mind in their presentation about stress as a pathway. This may be due to the fact that the concept of stress is itself sticky for people. It may also be due to the fact that you don’t have to think about systemic racism to understand that experiencing racism (even at an interpersonal level) leads to higher levels of stress and anxiety for people.
6. Talking about the pandemic

i. Why COVID-19 can be part of the story but shouldn’t take over the story.

**Peer discourse sessions (round 1):** Serious crises like the pandemic were mostly processed as “episodes” that have a beginning and an end, rather than as a catalyst that will change everything moving forward. Participants consistently brought up Brexit, the financial crisis, and COVID-19 as temporary disruptions or episodes in an otherwise stable environment and struggled to think about the longer-term effects that these crises might have on the systems and structures of the country as a whole. For instance, while people didn’t explicitly think that the Brexit crisis was over, they often spoke about it in the past tense (probably influenced by media coverage practices), arguing that “if it weren’t for COVID-19 we’d still be fighting over Brexit”. Only occasionally did people express concerns that ongoing Brexit issues were still serious but more difficult to read or hear about because COVID-19 is now the main issue being discussed in the news.

**Peer discourse sessions (round 2):** Compared to previous research for the project, COVID-19 seemed more prevalent in participants’ minds in discussions focused on health and life expectancy. Once the topic of COVID-19 was cued, it tended to dominate the conversation for some time, with people focusing on the pandemic’s impact on the population’s mental health and the strain the pandemic is putting on the NHS. Participants often explained that COVID-19 had put the issue of health in the spotlight in the UK generally and for them more specifically, as even benign symptoms could be the sign of something worse.

When thinking about health prevention, communicable diseases were top of mind for people, as some participants argued that wearing masks and washing hands should continue to be promoted even after the pandemic. The issue of obesity (typically understood as a non-communicable disease in and of itself), on the other hand, was still brought up by participants, at least partly because they saw it as an underlying cause of COVID-19-related death for some.

While it makes sense that people might not think of non-communicable diseases as the UK’s top priority during a pandemic, this shift can be problematic for future public health efforts – cancer and other non-communicable diseases are still serious issues in the UK that might no longer get the attention they deserve in the public’s minds because COVID-19 is taking over most conversations.
Appendix A: On-the-Street Interviews – Sample Questions and Frames

We tested eight metaphors in total in on-the-street interviews: Foundations of health, Building blocks of health, Fabric of health, Ingredients of health, Upstream/downstream, Chain reaction, Telling a new story of health, widening the lens on health,

<table>
<thead>
<tr>
<th>Sample questions and candidate frames used in On-the-Street interviews</th>
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<tbody>
<tr>
<td><strong>Sample default questions</strong> (before exposure to candidate frame)</td>
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<tr>
<td>• What comes to mind when you think about health?</td>
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<td>• What are the key things that influence people’s health?</td>
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<td>• Are some people more likely to have poor health than others?</td>
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<td>• What needs to happen for health to improve in the UK?</td>
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<tr>
<td><strong>Sample questions about candidate frames</strong></td>
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<tr>
<td>• Tell me how you understood this message. What is the main point you took away from that?</td>
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<td>• Keeping the metaphor of [named metaphor] in mind, what is health?</td>
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<td>• According to this image of [named metaphor], why might some people have poorer health than others?</td>
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<tr>
<td><strong>Sample candidate frames</strong></td>
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<td>• <strong>Fabric of health.</strong> The health of our population is like woven fabric. Fabric that stands the test of time needs many different threads to work together to make it strong. In the same way, the threads of job security and fair pay, access to public transport, housing, and education are woven together to set patterns for the options we have, how much say we have in what happens in our lives, how much stress we’re under, and how healthy we are as a result. But for many people in the UK, these threads have become frayed or loose, which means that not everyone has what they need to be healthy. If we want our population to be as healthy as it can be, we need to strengthen the fabric of health by taking action on job security and fair pay, access to public transport, housing, and education in the country.</td>
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<tr>
<td>• <strong>Telling a new story of health.</strong> It’s easy to tell a story of health that focuses on key moments when we have to go to hospital because we’re injured or sick, or on the decisions individuals make about their lives. But the story of our population’s health isn’t just about these episodes and these characters. It is about the scenarios that shape our lives and lead up to the big moments: things like job security and fair pay, access to public transport, housing, and education. And although more and more people in the UK don’t have what they need to be healthy, we’re too focused on single episodes and characters to see that we actually need to fix the whole scenario. If we want our population to be as healthy as it can be, we need to listen to a new story of health and take action on job security and fair pay, access to public transport, housing, and education in the country.</td>
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Sample questions and candidate frames used in On-the-Street interviews

Sample candidate frames (cont’d.)

• **Ingredients.** The health of our population is made up of many ingredients that need to work together. Things like job security and fair pay, access to public transport, housing, and education are like key ingredients in a recipe. They flavour and influence what options we have, how much say we have in what happens in our lives, how much stress we’re under, and how healthy we are as the result. But for many people in the UK, these ingredients have lost their quality or have gone missing, which means that not everyone has what they need to be healthy. If we want our population to be as healthy as it can be, we need to boost the supply of the key ingredients of health by taking action on job security and fair pay, access to public transport, housing, and education in the country.
Appendix B: Survey Experiment – Sample Composition, Outcome Measures, Candidate Frames, and Sample Treatments

Demographic breakdown of participant sample across all three survey experiments

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>Wave 1</th>
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<td>Wave 2</td>
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<td>Sinn Fein</td>
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<td>n/a</td>
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<td>&lt;1</td>
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Sample questions from survey experiment

<table>
<thead>
<tr>
<th>Scales</th>
<th>Sample questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wider determinants</td>
<td>People have recently argued that all national government departments should be required to evaluate how all new laws and policies will affect people's health.</td>
</tr>
<tr>
<td>policy salience</td>
<td>How much do you favour or oppose requiring that all national government departments evaluate how all future laws and policies will affect people's health? [7-point Likert scale: 'Strongly oppose'; 'Oppose'; 'Somewhat Oppose'; 'Neither favour nor oppose'; 'Somewhat favour'; 'Favour'; 'Strongly Favour']</td>
</tr>
<tr>
<td>Understanding of systemic</td>
<td>Which of the following statements comes closest to your opinion?</td>
</tr>
<tr>
<td>vs. individualistic causes</td>
<td>*Randomise the order of options</td>
</tr>
<tr>
<td></td>
<td>a. The best way to improve people's health in the UK is to ensure everyone has the information they need to make healthy choices for themselves.</td>
</tr>
<tr>
<td></td>
<td>b. The best way to improve people's health in the UK is to ensure everyone has decent living and working conditions.</td>
</tr>
<tr>
<td>Specific policy questions</td>
<td>How much do you favour or oppose the following policies? In considering these policies, please keep in mind that putting these policies in place might in some cases involve raising local and national taxes. [7-point Likert scale: 'Strongly oppose'; 'Oppose'; 'Somewhat Oppose'; 'Neither favour nor oppose'; 'Somewhat favour'; 'Favour'; 'Strongly Favour']</td>
</tr>
<tr>
<td></td>
<td>*Randomise the order of options</td>
</tr>
<tr>
<td></td>
<td>14 policies total were presented, including: “Introduce a universal basic income, paid by the government, that pays every adult over 18 in the UK £800 per month”; “Double government funding for local debt-relief services”; “Build 2 million new, high-quality social homes over ten years”; “Increase funding per pupil for secondary schools in deprived areas in the UK by 20%”; “Cut bus ticket prices and increase the number of bus routes across the UK”.</td>
</tr>
<tr>
<td>Collective efficacy</td>
<td>General health</td>
</tr>
<tr>
<td>(&quot;we can fix this&quot;)</td>
<td>Thinking about the next ten years and beyond, how much do you agree or disagree with the following statement: We, as a society, can reduce inequalities in how healthy people are in the UK. [7-point Likert scale: 'Strongly disagree'; 'Disagree'; 'Slightly disagree'; 'Neither agree nor disagree'; 'Slightly agree'; 'Agree'; 'Strongly agree']</td>
</tr>
<tr>
<td></td>
<td>Health disparities</td>
</tr>
<tr>
<td></td>
<td>In your view of the next ten years and beyond, how much can government do to improve the health of people who live in poverty in the UK? [7-point Likert scale: 'Nothing at all'; 'A very small amount'; 'A small amount'; 'A moderate amount' 'A large amount'; 'A very large amount'; 'An extremely large amount']</td>
</tr>
<tr>
<td></td>
<td>Wider determinants</td>
</tr>
<tr>
<td></td>
<td>In your view of the next ten years and beyond, how much can we as a society do to ensure that everyone has good living and working conditions in the UK? [7-point Likert scale: 'Nothing at all'; 'A very small amount'; 'A small amount'; 'A moderate amount' 'A large amount'; 'A very large amount'; 'An extremely large amount']</td>
</tr>
</tbody>
</table>
### Sample questions from survey experiment

<table>
<thead>
<tr>
<th>Scales</th>
<th>Sample questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Collective responsibility to act</strong></td>
<td><strong>General health</strong>&lt;br&gt;How much do you agree or disagree with the following statement? Government has an obligation to reduce inequalities in how healthy people are everywhere in the UK. [7-point Likert scale: ‘Strongly disagree’; “Disagree”; Somewhat disagree”; “Neither disagree nor agree”; ‘Somewhat agree’; ‘Agree’; ‘Strongly Agree’]</td>
</tr>
<tr>
<td></td>
<td><strong>Health disparities</strong>&lt;br&gt;How much of a responsibility do we, as a society, have towards the health of people who belong to racial and ethnic minorities in the UK? [7-point Likert scale: ‘No responsibility at all’; ‘A very small responsibility; ’A small responsibility; ‘A moderate responsibility; ‘A large responsibility; ‘A very large responsibility; ‘An extremely large responsibility’]</td>
</tr>
<tr>
<td></td>
<td><strong>Wider determinants</strong>&lt;br&gt;Thinking about the next ten years and beyond, how much do you agree or disagree with the following statement? We, as a society, have an obligation to give everyone in the UK enough money and resources to have good quality of life. [7-point Likert scale: ‘Strongly disagree’; ‘Disagree’; ‘Slightly disagree’; ‘Neither agree nor disagree’; ‘Slightly agree’; ‘Agree’; ‘Strongly agree’]</td>
</tr>
<tr>
<td><strong>Understanding of what shapes inequalities in health</strong></td>
<td>In the UK, some groups of people have much better health than others all through their lives. Which of the following statements comes closest to your opinion of why that might be?&lt;br&gt;Randomize the order of the options&lt;br&gt;a. Because there are big inequalities in money and resources in the UK.&lt;br&gt;b. Because some people in the UK take responsibility for their own health, and others don’t.</td>
</tr>
<tr>
<td><strong>Open-ended questions</strong></td>
<td>What are the key factors that shape people's health in the UK? Required number of words for each question: 25 words</td>
</tr>
</tbody>
</table>
List of candidate frames tested in all three survey experiments

The first survey experiment tested nine message treatments. We tested:

— six “this issue is about…” frames (Health creation, Health prevention, Wellbeing and quality of life, Life expectancy, Social connection, Strength and Resilience)
— three explanatory metaphors (Fabric, Foundations, Building Blocks)

The second experiment tested seven message treatments:

— four “this issue is about…” frames (Health creation, Health prevention, Life expectancy (positive valence), Life expectancy (negative valence));
— three metaphors (revised versions of Fabric, Foundations & Building Blocks)

The third experiment tested 13 message treatments:

— five values-based messages (Fairness across places, Moral argument, Meaningful lives, Thriving society, Future prosperity);
— five explanatory chains (Stress as a pathway, Empowerment as a pathway, Deep dive into jobs, Deep dive into public transport, Historical policy explanation)
— three “NHS” frames (Historical explanation, Reduce strain, Common sense)
Sample candidate frames tested in survey experiments

<table>
<thead>
<tr>
<th>Type of candidate frame</th>
<th>Sample candidate frame</th>
</tr>
</thead>
</table>
| "This issue is about..." frame | **Health creation**

We need to reduce health inequalities and improve health in the UK [formatted as headline]

To improve people's health in the UK, it is vital to create the social and economic conditions for good health in the country. When people have job security and fair pay, quality housing and education, and good access to public transport, it creates better health for everyone in society. When these social and economic conditions are met, they help people face life's uncertainties and challenges, which limits the stress and anxiety that often affect physical and mental health. People have more of a say over what happens in their lives, which enhances wellbeing and self-worth. Being better off socially and economically also improves access to healthy food and behaviours, and limits the influence of unhealthy solutions.

But right now, it is hard to create good health in the UK, as there are big inequalities in jobs, housing, education, and transport across the country. As a result, some people are much more likely to miss out on good health than others.

If we want our society to be as healthy as it can be, we need to create the social and economic conditions for good health in the UK. We need to reduce inequalities in jobs, housing, education, and transport and help everyone according to their needs and the needs of their communities.

| Explanatory metaphor | **Foundations of health**

We need to fix rifts in society and strengthen the foundations of health in the UK [formatted as headline]

To support people's health in the UK, our society needs strong social and economic foundations, just like a sturdy building. When a society is firmly grounded in job security and fair pay, quality housing and education, and good access to public transport, it provides a strong base for good health in society. These social and economic foundations give people strength to withstand life's shocks and pressure, which limits the stress and anxiety that often shake physical and mental health. When these foundations are in place, people have more space to shape what happens in their lives, which enhances wellbeing and self-worth. They also have more social and economic stability, which brings healthy food and behaviours within reach, and absorbs the impact of unhealthy solutions.

But right now, the UK's social and economic foundations have become weak and unstable, causing rifts and inequalities in jobs, housing, education, and transport across the country. As a result, some people are much more likely to miss out on good health than others.

If we want our society to be as healthy as it can be, we need to strengthen its social and economic foundations. We need to fix the rifts and inequalities in jobs, housing, education, and transport by helping everyone according to their needs and the needs of their communities.
To create more fairness across places in the UK, we need to address gaps in life expectancy.

Everyone in the UK deserves to be treated fairly, no matter where they live, so no one’s life is cut short by poor health. Right now, our society doesn’t treat everyone fairly: people are dying earlier than they should. Some people actually die almost a decade earlier than they should, just because of where they live. To create fairness across places and close the life expectancy gaps in the UK, we need to deal with the unfair social and economic conditions that contribute to poor health and cut lives short in some areas more than others.

When people live in areas that are rife with job insecurity and unfair pay, poor-quality housing and education, and lack of access to public transport, it creates health problems and unfairly makes their lives shorter. Areas with poor social and economic conditions cannot provide people with the resources they need to face life’s uncertainties and challenges, causing more stress and anxiety in those places than in others around the country. This stress and anxiety then affect their physical and mental health, and ultimately how long they can expect to live. When people live in areas with little access to education, good housing, or public transport, they get very little say over what happens in their lives. This is unfair, because it undermines their wellbeing and self-worth simply because of where they live. Areas that are worse off socially and economically also unfairly constrain what healthy foods and behaviours are available to the people who live there, and strengthen the influence of unhealthy solutions instead.

To ensure that everyone in the UK is treated fairly and lives are not cut short by poor health, we need to deal with the unfair social and economic conditions that affect some areas of the country more than others, and directly lead to shorter lives. To create fairness across places, we need to reduce inequalities in jobs, housing, education, and transport in our communities.
### Sample candidate frames tested in survey experiments

<table>
<thead>
<tr>
<th>Type of candidate frame</th>
<th>Sample candidate frame</th>
</tr>
</thead>
</table>
| Explanatory chains     | **Empowerment as a pathway**  
                        | To address gaps in life expectancy, we need to give people and communities what they need to shape their own lives [formatted as a headline]  
                        | Right now, people in the UK are dying earlier than they should. To prevent this, we need to address the social and economic conditions that make it hard for people and communities to decide what happens to them, because the power people and communities have over their lives directly shapes their overall health and life expectancy.  
                        | When people struggle with job insecurity and unfair pay, poor-quality housing and education, and lack of access to public transport, it reduces how much control they have over their lives, which shapes their health and life expectancy in three important ways. First, when someone has little control over what happens at their job, at home, or in their neighbourhood, it can cause anxiety, depression, and other mental health issues. Second, when people have no influence over what shops and restaurants open in their neighbourhood or whether parks and green spaces are available, they may have little access to healthy food or opportunities for physical activity, which in turn affects their health and how long they can expect to live. Finally, when people and communities struggle to access education, good housing or public transport, they have little say over what they learn, where they feel safe, and where they can go. This lack of control undermines wellbeing and self-worth, which strengthens the pull of unhealthy coping behaviours like smoking or drinking, and leads to poorer health and shorter life expectancy.  
                        | Right now in the UK, some people are powerless in their own lives because of job insecurity and unfair pay, poor-quality housing and education, and lack of access to public transport. As a result, they die almost a decade earlier than they should. To close these gaps in life expectancy, we need to deal with the social and economic conditions that take away people's and communities' power and cut lives short in the first place, by reducing inequalities in jobs, housing, education, and transport in our communities. |
Explanatory chains (cont’d)

Lack of access to good transportation systems shapes people’s health and life expectancy in three important ways. First, when someone is constantly worrying about how they will get to work or school, it can cause anxiety, depression, and other mental health issues. Second, when a person doesn’t have access to public transport, they are limited by what is available nearby. If there is no high-quality food nearby, or people can’t easily get to it, then poor nutrition will affect their health and how long they can expect to live. When people don’t have easy access to bike paths, parks, and other green spaces, they are less able to engage in healthy physical activities. Finally, when people don’t have affordable ways of connecting with their friends and family, it can lead to social isolation. This undermines wellbeing and self-worth, which strengthens the pull of unhealthy coping behaviours like smoking or drinking, and leads to poorer health and shorter life expectancy.

Transportation systems are just one way that social and economic conditions shape people’s health. Much like lack of access to good transportation systems, other challenges like job insecurity and unfair pay, and poor-quality housing and education, also affect people’s health and life expectancy. Right now in the UK, some people are much more likely than others to struggle with these issues. As a result, they die almost a decade earlier than they should. To close these gaps in life expectancy, we need to deal with the social and economic conditions that lead to poor health and cut lives short in the first place, by reducing inequalities in jobs, housing, education, and transport in our communities.

NHS frames

Common sense
To make the work of the NHS more meaningful, it just makes sense to improve social and economic conditions [formatted as a headline]

Right now, the NHS is caring for people and sending them back to the lives that made them sick in the first place. This just doesn’t make sense, and ultimately ends up leading people to repeatedly use the NHS for the same health issues. To ensure that the work of the NHS can be as meaningful as possible, we need to be practical and address the social and economic conditions that lead to poor health in the first place.

When people struggle with job insecurity and unfair pay, poor-quality housing and education, and lack of access to public transport, it creates health problems that the NHS might help address, but not prevent. When social and economic conditions are bad – which the NHS just doesn’t have a cure for – people don’t have what they need to face life’s uncertainties and challenges, which creates more stress and anxiety. This stress and anxiety will continue to affect their physical and mental health, even if the NHS provides temporary relief. When people struggle to access education, good housing or public transport, they have little say over what happens in their lives. This undermines their wellbeing and self-worth, which can ultimately end up strengthening the influence of unhealthy solutions and make the work of the NHS even harder. It just doesn’t make sense for the NHS to treat people again and again for the same health problems if we don’t address the social and economic conditions that cause these problems in the first place.

The NHS can treat physical and mental health but will ultimately send patients back into the bad social and economic conditions that caused their health problems in the first place. This doesn’t make sense. To ensure that the NHS can work in a meaningful way, we need to be sensible and deal with the social and economic conditions that lead to poor health by reducing inequalities in jobs, housing, education, and transport in our communities.
Appendix C: Peer Discourse Sessions – Sample Activity

In the first round of Peer-Discourse Sessions we conducted, we tested unframed facts on life expectancy in England, Scotland, and Wales, and a fact on differences in COVID-19 mortality rates in Scotland between poorer and wealthier areas. We tested four “this issue is about” frames: health creation, health prevention, wellbeing, and life expectancy. And we tested two metaphors: Foundations of health and Fabric of health.

In the second round of Peer-Discourse Sessions we conducted, we tested three frames: the Building Blocks of Health metaphor, a deep-dive explanation and jobs, and chronic stress as a pathway. We also tested unframed facts about “disability-free life expectancy.” We concluded with an activity to explore the potential of three frames to talk about racism: empowerment as a pathway, chronic stress as a pathway, and the historical explanation of the NHS’s role.

Sample activity from Peer-Discourse Session guide for round 2.

Frames in action: Building support for specific policies (45-50 minutes)

OPENING QUESTIONS (8-10 minutes)

1. When you’re deciding which candidate to vote for in elections – like elections for members of Parliament or local elections – what would you say are the policy issues you focus on in candidates’ platforms?
   a. Why is that important?

2. If you had to come up with three policy proposals for a policy platform focused on improving health and closing gaps in life expectancy across the UK, what would you pick?
   a. For each, ask: how would that help?

Now I’d like us to talk more about specific policies.

First off, let’s talk about the idea of raising national minimum wage from £8.72 to £17 per hour / building 2 million new, high-quality social homes over tens years.

3. I’m wondering, if this policy were implemented, what do you think its effects would be generally?
   a. What would it have an effect on?
      i. How would that work?
b. Who would it have an effect on?
   i. How would that work?

4. [If not mentioned yet, ask:] What effect, if any, would you say this policy would have on people’s health in the UK?
   a. How about on their life expectancy?

**GROUP WORK (25-30 minutes)**

Now I’d like you to imagine that you’re part of a citizens’ committee tasked with improving people’s health and life expectancy in the UK over the next ten years. You’re presenting your work at a public meeting, and you need to build public support for implementing the policy we’ve just discussed as part of your plan (raising national minimum wage from £8.72 to £17 per hour / building 2 million new, high-quality social homes over tens years).

I’m going to give you some help in the form of two different versions of a pitch. I want you to pick one version to build your presentation around.

I’m going to divide you up into groups of two, and the end goal of all of your messages is the same: helping people see that **raising national minimum wage from £8.72 to £17 per hour / building 2 million new, high-quality social homes over tens years** is a good way to improve people’s health and life expectancy in the UK.

Each group will be getting two versions of a different pitch to build their message. I really want you to play around with them when developing your presentation in your small group. Your goal is not just to pick one. You need to build on the version of the pitch you think will be most helpful to convince your audience that your policy is a good idea to improve health and life expectancy in the UK.
### Group 1: Building blocks
- a. Explanation of problems the policy is supposed to solve
- b. Explanation of how the policy would work

### Group 2: Deep dive explanation
- a. Explanation of problems the policy is supposed to solve
- b. Explanation of how the policy would work

### Group 3: Stress as a pathway
- a. Explanation of problems the new policy is supposed to solve
- b. Explanation of how the new policy would work

Small group work:

- You have to make the case for the policy you’ve been assigned.
- I’m going to give you two options for the argument you can use. Pick the one you find most promising.
- In your own words, how would you use this pitch to make the case for your policy?

*Moderator: give pairs ~5 minutes in their breakout rooms. Then bring everyone back into the main room. Each group shares back. After each presentation, ask:*

1. Why did you pick this version of the pitch? What came to mind for you?
2. Why didn't you pick the other one?
Once all presentations are completed, remind participants of the strategies that have been picked so far (Building Blocks + cause/solution, Deep Dive + cause/solution, Chronic stress as pathway + cause/solution). Then ask full group:

3. If you had to pick one of these strategies to make a case for raising national minimum wage from £8.72 to £17 per hour / building 2 million new, high-quality social homes over ten years to improve health and life expectancy in the UK, which would it be?
   a. Why?

4. Would you have picked the same, or differently, before COVID-19? Why? Why not?

**FULL GROUP DISCUSSION (5-10 minutes)**
Now I'd like us to talk about two more policies.

*Moderator: screenshare list of policies:*

- Raise national minimum wage from £8.72 to £17 per hour
- Increase funding per pupil for secondary schools in deprived areas in the UK by 20%.

- Build 2 million new, high-quality social homes over ten years.
- Increase funding per pupil for secondary schools in deprived areas in the UK by 20%.

Remind participants of the explanations chosen by each small group (Building Blocks problem/solution, Deep dive problem/solution, Stress as a pathway problem/solution). Then ask full group:

1. If you had to pick one of the strategies we’ve just discussed to make a case for these two policies as a way to improve health and life expectancy in the UK, which would it be?
   a. Why?

2. In your own words, how would you make this case? What would it sound like?
Appendix D: Usability Trials – Sample Activity

In the Usability Trials we conducted, we examined the usability of the Building Blocks metaphor and framing current health inequalities as the result of past policy decisions. Below is an excerpt from the activity about the metaphor.

Excerpt from metaphor activity from Usability Trials guide.

Begin with two experts in the room. Set up the following question as what the session will be focused on: “What are the things that shape health in the UK?”

*Read metaphor aloud*

— What is the main idea that you got from this metaphor?
— What is this metaphor saying about what shapes health in the UK?
  — Can you walk me through how the metaphor works?
— As I said before, we’re interested in how you might use this metaphor to talk about the wider determinants of health. I’ll give you about 10 minutes to prepare an informal 2-3 minute mini-presentation together. In your presentation, you should use the metaphor to address some of the following sorts of questions:
  — What are the wider determinants of health?
  — How do they shape people’s health in the UK?
  — What needs to happen to improve people’s health in the UK moving forward?
— As I said before, we’re interested in how this metaphor works – or doesn’t work – as a communications device, so the goal is to use the metaphor (BUILDING BLOCKS) in a bunch of different ways to talk about these issues. And again, we’re testing the metaphor, not your communication skills, so don’t worry about how polished the presentation seems.
— After you’ve come up with a presentation that uses the metaphor to address some of these questions, I’ll bring in two members of the public and ask you to give them your presentation. I’ll give them an opportunity to ask questions, if they have any, and then after they leave the three of us will talk about what you thought about the metaphor: what was useful, what wasn’t useful, how it could be improved, and what resources you would need to use it in your work.
I’m going to leave the main room for 10 minutes and will return at the 10-minute mark to make sure you are ready for me to bring in the members of the public.

Stop screensharing and “leave” the room for 10 minutes. Once the 10 minutes are up, return to the main room to check if experts are ready. If they are, bring in two members of the public.

**EXPERT PRESENTATION TO THE PUBLIC [30 minutes in]**

*Explain the task to the public participants:*

- We will be talking about the question: *“What are the things that shape health in the UK?”*
- These two people work in this field [adapt as necessary to reflect experts in the session] and are going to talk about this question for a few minutes.
- Your job is to listen and take notes about your thoughts and any questions that you have.
- You will have a chance to provide your comments and ask questions later.

Experts give 2-3 minute presentation.

Public asks whatever questions come to them (not predetermined) – see if/how the experts respond to the questions using metaphor.

If members of the public truly cannot come up with questions to ask, probe:

- Do you have any questions about the things that shape health and how they work?
- Do you have any questions about what needs to happen to improve health in the UK?

Dismiss public participants.

*Ask experts follow-up questions:*

- What parts of the metaphor did you find particularly helpful? Why?
- I’m interested in whether the metaphor can be extended to touch on some other things we haven’t yet addressed. For example:
  - *Probe extensively:* How would you use the metaphor to make a case for implementing a “health in all policies” approach at the national level?
  - *Probe extensively:* How would you use the metaphor to make a case for a specific policy that would be part of a health-focused platform, like “raising the minimum wage to £17 per hour?”
— *Probe extensively:* How would you use the metaphor to talk about how systemic racism and discrimination shape health in the UK?

— Can you see yourself using this metaphor in your work?

  — If so:
    — In what contexts would you use it?
    — What points would you use the metaphor to make?
  — If not, why not?

— How would you tweak/change the metaphor to make it more helpful?

— What additional tools/training/support would help you feel comfortable using this metaphor in your work? For example, example op-eds, tweets, or before/after scenarios to show you how to use the metaphor.

— *[IMPORTANT]* How would you refer to this metaphor, if you didn’t have the entire text in front of you? What would you call it? Or, to put it another way, how would you tweet it?
Endnotes

The FrameWorks Institute is a non-profit think tank that advances the mission-driven sector’s capacity to frame the public discourse about social and scientific issues. The organisation’s signature approach, Strategic Frame Analysis®, offers empirical guidance on what to say, how to say it, and what to leave unsaid. FrameWorks designs, conducts and publishes multi-method, multidisciplinary framing research to prepare experts and advocates to expand their constituencies, to build public will and to further public understanding. To make sure this research drives social change, FrameWorks supports partners in reframing, through strategic consultation, campaign design, FrameChecks®, toolkits, online courses, and in-depth learning engagements known as FrameLabs. In 2015, FrameWorks was named one of nine organisations worldwide to receive the MacArthur Award for Creative and Effective Institutions.

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