Summary

SAGE have considered six possible social and behavioural interventions to delay the outbreak based on the clinical evidence. The impacts have been modelled. They advised four for implementation in the coming 3-4 weeks:

(i) individuals stay at home for 7 days from the point of displaying mild symptoms - to delay the peak;

(ii) household stay at home for 14 days from the point that any member of the household displays symptoms - to delay the peak;

(iii) most vulnerable individuals stay at home for a period of 13-16 weeks - to reduce deaths and delay the peak;

(iv) significant reduction of social contact by the over 70s and at risk groups - to reduce deaths and delay the peak.

Implementing all measures at the right times in the outbreak has the greatest combined impact: 50-70% reduction in peak hospital bed demand; 35-50% reduction in deaths. The measures generate a range of other economic and social impacts.

A decision is needed on which interventions to announce and implement now, and which interventions to trail for future implementation.

Recommendation

We recommend COBR:

- Note SAGE advise that interventions 1-4 should each deliver benefits by delaying and flattening the peak and/or lowering overall deaths, and would deliver greatest overall benefit as a package;
- **Agree to implement intervention 1 (individuals staying at home) now;** and **interventions 3 and 4 (protection for the most vulnerable groups; and social distancing for the over 70s and those with chronic conditions) in 1-3 weeks' time.** This is intended to ensure that each measure impacts at the right point to delay the "peak" and reduce deaths among more vulnerable groups respectively, and to allow support to vulnerable groups to be put in place;
- **Decide whether to implement the revised approach to intervention 2 (household stay at home);** and if so **whether to do so now alongside intervention 1, or delay until 1 - 3 weeks' time;**
- **Decide whether to announce today that the change in advice to "stay at home" applies immediately, or from Monday 16 March** to allow revised public health advice and other preparations to be made;
- **Agree to announce today that we will implement interventions 3 and 4 in 1-3 weeks' time when the overall effect would probably be better**;
- **Discuss the approach to the two interventions (on school closures and mass gatherings) not advised by SAGE for adoption now.**

Interventions considered by SAGE

Measure and/ or combination of measure	SAGE advice	Degree of confidence in the effectiveness of the measure	Primary objective of measure	Potential effectiveness in delaying the peak of an outbreak	Potential effectiveness in reducing the peak of an outbreak	Potential effectiveness in reducing total number of cases and deaths (excluding excess deaths caused by lack of NHS capacity)
(1) Home isolation of symptomatic cases (individuals stay at home)	Advised for consideration now	Low confidence	Delay	Delay. 2-3 weeks delay to peak	Reduction in peak incidence of maybe 20% (uncertainty range at least 15-25%)	Modest impact (<5%)
(2) Whole household isolation (household stays at home)	Advised for consideration now	Medium confidence	Delay	2-3 weeks delay to peak	Reduction in peak incidence of maybe 25% (uncertainty range at least 20-30%)	Modest impact (<10%)
(3) Most vulnerable stay at home	Advised for consideration now	Currently being modelled by SAGE				
(4) Social distancing for 70+ (effect of including those with chronic health conditions being modelled by SAGE)	Advised for consideration now	High confidence	Reduce Deaths	Negligible impact	For 70+ cohort, reduction in peak incidence, reduction of, c.20-35% in deaths and peak hospital bed demand	15-35% of deaths. In the 80+ this drops to 5-15%.
(5) Closing schools	Maybe appropriate at a later stage	High confidence	Delay	No more than 3 weeks delay to peak and possibly much less	c.10%-20% reduction in peak hospital demand with closures of 8-13 weeks (if children have similar role in transmission as in pan flu)	Modest (<5%)
(6) Social distancing for all	Maybe appropriate at a later stage in some circumstances	Medium confidence	Flatten the Peak	3-5 week delay to peak	Substantial reduction in peak, may be up to 50–60%	Around 20-25% of deaths.
(7) Stopping large events	Not advised	Very low confidence		Very little on own	Very little on own	Very little on own

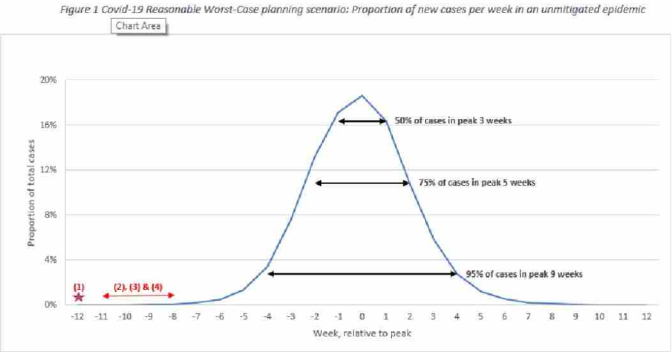
Interventions considered by SAGE

Measure and/ or combination of measure	SAGE advice	Degree of confidence in the effectiveness of the measure	Primary objective of measure	Potential effectiveness in delaying the peak of an outbreak	Potential effectiveness in reducing the peak of an outbreak	Potential effectiveness in reducing total number of cases and deaths (excluding excess deaths caused by lack of NHS capacity)
(1) and (4) Home isolation and social distancing (effect of including those with chronic health conditions being modelled by SAGE)	Advised for consideration now	n/a		2-3 weeks delay to peak	45-55% reduction in peak hospital bed demand	30-45% reduction in deaths
(1), (2) and (4) (effect of including those with chronic health conditions being modelled by SAGE)	Advised for consideration now	n/a		2-3 weeks delay to peak	50-70% reduction in peak hospital bed demand. Greater when started early.	35-50% reduction in deaths. Smaller impact on total cases.

When might the peak occur in the UK?

We currently expect the peak to be reached sometime between mid-May and mid-June.

Figure 1 Covid-19 Reasonable Worst-Case planning scenario: Proportion of new cases per week in an unmitigated epidemic



Week, relative to peak	-12 to -9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9 to 12
Proportion of total cases (%)	<0.1	0.1	0.2	0.5	1.4	3.4	7.6	13.2	17.1	18.6	16.4	10.9	5.8	2.8	1.2	0.5	0.2	0.1	<0.1

Note: this does not show the impact of the interventions on the peak and profile of the curve. It shows the epidemic curve on the basis that **no mitigations are put in place.**

SAGE Secretariat

What would the effect be on the NHS of interventions?

Demand will greatly exceed NHS supply before the peak of the virus is reached in a Reasonable Worst Case Scenario (RWCS).

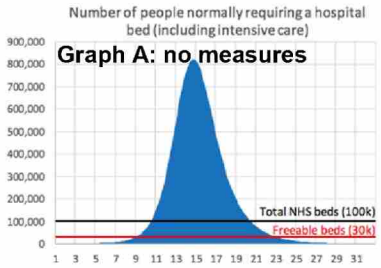
Table 1: Deficit between demand for and availability of NHS beds by nation

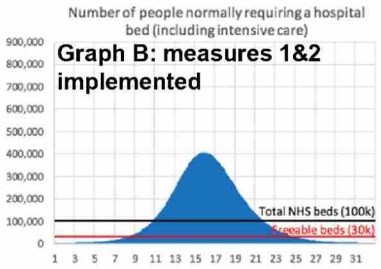
	England	Scotland	Wales	N. Ireland
RWC Scenario	-780,000	-77,000	-49,000	TBC
With interventions 1 and 2	-328,000	-37,000	-24,000	TBC

Table 2: Infection figures. NB: fatality rate modelling assumes sufficient ICU space available

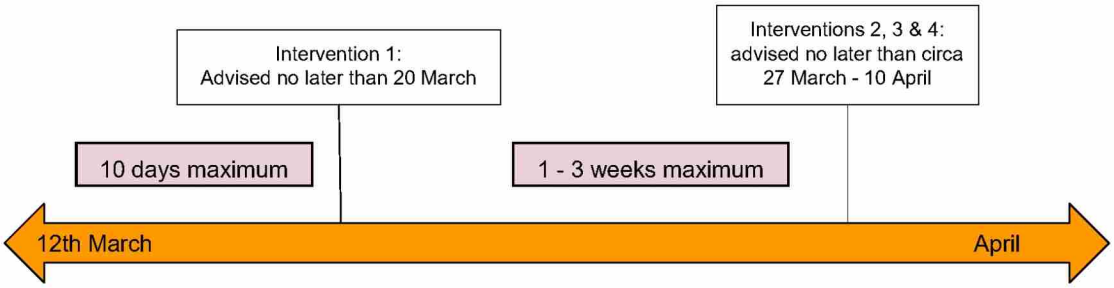
	0 to 10	11 to 20	21 to 30	31 to 40	41 to 50	51 to 60	61 to 70	71 to 80	80 to 100
Infection fatality rate	0.01%	0.01%	0.0%	0.1%	0.2%	0.7%	2.2%	5.9%	8.8%
Proportion of infections hospitalised	0.2%	0.3%	1.1%	2.3%	4.0%	9.8%	22.5%	36.2%	43.8%
Proportion of infections needing critical care	0.01%	0.01%	0.03%	0.1%	0.1%	0.5%	1.7%	4.4%	6.6%

NB: These figures will become higher when we reach the point that there are no ICU sufficient beds available. These are infection fatality rates so includes people infected with no symptoms. Will be higher for those people with just symptoms, but there are no agreed estimates on these.



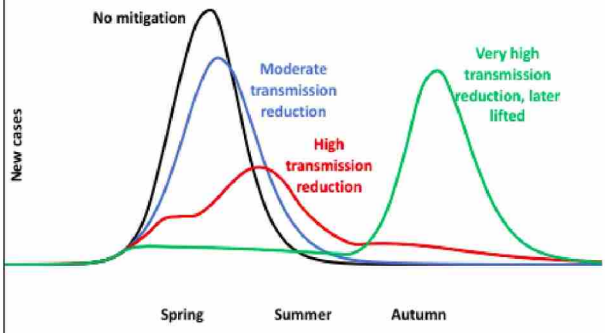


Advice on when the interventions should be triggered



Profile of the epidemic under different approaches

Illustrative impact of social and behavioural interventions lasting several months on a Reasonable Worst Case epidemic



Under the RWCS, cases are expected to peak during April-May, with a very high peak incidence (black line in graph).

Social and behavioural interventions may flatten the peak of the epidemic and increase its duration with the aims of relieving pressure on the NHS, reducing deaths and ensuring they are managed with dignity (red line).

Very stringent social and behavioural interventions (such as those in China) have the potential to prevent a major epidemic establishing, but risks a large epidemic re-establishing when lifted (green line). The advised approach seeks to avoid this possibility.

Vaccines are unlikely to be available until early 2021.

Intervention 1: Individuals stay at home (1/3)

What is the objective of the policy?
The primary policy objective is to delay and lengthen ("flatten") the peak of the infection to help the NHS to cope with demand.

What is the policy?
We want people to stay at home and avoid all but essential contact with others for 7 days from the point of displaying mild symptoms to slow the spread of infection.

Who does this apply to and why?
People who have mild symptoms and may therefore infect others. Individuals are infectious just before they show even mild symptoms, so people should act on this advice as soon as they show those symptoms. The symptoms are one or more of fever and new persistent cough.

When should this intervention be triggered?
The measure is intended to delay the outbreak, so needs to be implemented before it is widespread. SAGE advise that this should start before the end of next week (20 March).

Intervention 1: Individuals stay at home (2/3)

What does this mean in practice?

Individuals are asked to avoid all but essential contact with others for 7 days from the point of displaying mild symptoms. Individuals should not go to work or to school and should rely on friends and family or delivery services to deliver food rather than leaving the house if at all possible. They should only break isolation if they have no alternative, for example getting urgent medical supplies, and if doing so take all possible precautions (such as trying to remain at a 2 metre distance from others).

The guidance would be substantially similar to the current PHE guidance for isolation, but would need to be adapted for roll out at scale. We would advise people with symptoms to contact 111 if they are concerned.

The peak capacity for testing will be up to 7,500-8,500 cases per day. This means that in the next phase, health services will need to prioritise who is tested (i.e. hospital admissions).

Intervention 1: Individuals stay at home (3/3)

What is the modelling assumption for the effectiveness of this policy?
The greater the compliance rate the greater the impact (the relationship between compliance level and effects is approximately linear). The modelling of this intervention shows the intervention to be effective in delaying the peak even with less than full compliance and with some contact between the infected individual and others (including within the household).

Duration for the individual
The individual needs to self-isolate until the risk of that person infecting others is over. The guidance is that this is 7 days per individual. That is based on advice that the risk of infecting others has fallen by the time 7 days have elapsed from symptom onset. Modelling the difference between 7 and 14 days shows negligible difference in cases and deaths.

Core messaging
If you have symptoms, stay at home to avoid infecting other people and to protect your community. Messaging should instill a sense of civic duty and a feeling that others expect this of you.

Intervention 2: Households stay at home (1/4)

What is the objective of the policy?
The primary policy objective is to delay and lengthen ("flatten") the peak of the infection to help the NHS to cope with demand.

What is the policy?
We want people who live together to stay at home and avoid all but essential contact to prevent the spread of infection. This is because people who live with someone who is infected may also be infectious but not yet displaying symptoms and people are very infectious just before they have symptoms.

When should this be triggered?
The measure is intended to delay the outbreak, so needs to be triggered before it is widespread. SAGE advise triggering 1-3 weeks after initiating individual stay at home policy (intervention 1). The decision to trigger this intervention will be based on data from ICU cases.

Intervention 2: Households stay at home (2/4)

Who does this apply to and why?

As per intervention 1, when an individual displays mild symptoms (one or more of fever and new persistent cough), that individual would be advised to stay at home 7 days or longer if still showing symptoms after 7 days, until better. Individuals can spread the infection during this period of time.

Under this intervention, others in the household would also be advised to stay at home for 14 days - a period which allows time for symptoms to develop in those potentially infected.

For any household member that displays mild symptoms, they should self-isolate for 7 days (or longer if still showing symptoms after 7 days) the risk of them spreading the infection is reduced. The maximum time someone would stay at home for under this intervention is 21 days (13+7 days).

A household is defined as a group of people (not necessarily related) living at the same address who share cooking facilities and share a living room, sitting room or dining area. A household can consist of a single family, more than one family or no families in the case of a group of unrelated people. There are estimated to be 58.4million UK households (using ONS data).

Intervention 2: Households stay at home (3/4)

What does this mean in practice?

All individuals in a household are asked to avoid all but essential contact outside the household from the point of one of them displaying mild symptoms. Individuals should not go to work or to school and should rely on friends and family or delivery services to deliver food rather than leaving the house if at all possible. They should only break isolation if they have no alternative, for example getting urgent medical supplies, and if doing so take all possible precautions (such as trying to remain at a 2 metre distance from others).

Once the infected person has gone beyond 7 days he/she can leave the household as normal (unless still showing symptoms), depending on their state of health. This means that the originally infected individual can leave the household to visit shops, collect medicine etc.

For those households containing a person vulnerable to infection by the virus, people should follow do what they can to prevent that vulnerable person picking up the virus by following current PHE guidance - which includes, where possible, using separate bedrooms, cleaning bathrooms, good household cleaning, hand hygiene etc.

The guidance would be substantially similar to the current PHE guidance for isolation, but would need to be adapted for roll out at scale (see below). We would advise people with mild symptoms to contact 111.

Intervention 2: Households stay at home (4/4)

What is the modelling assumption for the effectiveness of this policy?

The greater the compliance rate the greater the impact (the relationship between compliance level and effects is approximately linear). Achieving adherence with the policy may be challenging, but it is unclear whether adherence will change if media reporting of a high mortality rate occurs. Nevertheless, the modelling of this intervention shows the intervention to be effective in delaying the peak even with substantially less than full compliance (50%) and with some contact between the infected individual and others (including within the household).

Duration

For the individual who first displays mild symptoms, they will stay at home for 7 days or until better (whichever is longest). Everyone else in the household will stay at home for 14 days. For any of these individuals who display mild symptoms, they need to stay at home for a 7 days from onset of symptoms (or until better if still showing symptoms after 7 days).

Core messaging

This measure aims to stop individuals who live with an infected person and so may be infectious, from infecting other people outside the household.

Early warning to the public that this policy is under consideration would allow people time to plan, particularly if they are actively encouraged to do so. This is particularly important for households that may struggle with outside responsibilities or that will require specific help.

Intervention 3: Most clinically vulnerable stay at home (1/3)

What is the objective of the policy?

This policy is intended to reduce infection and death amongst people who are most at risk from infection and death, rather than delaying the outbreak. We want the most clinically vulnerable people of all ages to protect themselves by staying at home for up to 13-16 weeks.

Who does this apply to?

Very high risk people of all ages who may be immunosuppressed or have other very specialist conditions. Estimated to be 1.2-1.5 million people (across the whole UK population) and could be identified between clinical reference groups, NHS SUS data and cancer registries.

This group consists of people: with moderate to severe respiratory disease; who require respiratory support, with a disease resulting in significant immunosuppression, requiring medications that result in significant immunosuppression (including many cancer treatments), who have a multisystem disease which will result in multi-organ issues, end-stage disease, and with moderate to severe frailty.

The list of conditions and medications for this cohort will receive clinical sign-off in the coming days. GPs should also have the discretion to advise certain people who do not automatically fall into category to follow the advice for intervention 3. GPs will contact all people who are at very high risk directly.

Intervention 3: Most clinically vulnerable stay at home (2/3)

When should this be triggered?
SAGE advise triggering 1-3 weeks after initiating individual stay at home policy (intervention 1).

What does this mean in practice?
The same avoidance of contact as stay at home policy, but for 13-16 weeks (rather than 7-14 days). Individuals would be contacted by the health system (probably a GP) to advise them to follow the policy.

These people would no longer need to continue self-isolating if they have had a positive test for Covid-19, and had recovered from illness (after a minimum of 7 days from the start of first symptoms). If they have not had a positive test they should continue self-isolating in case they have misdiagnosed themselves (and in fact had something like a cold). In the next phase, hospital admissions will be prioritised for testing and individuals who are vulnerable are more likely to be admitted to hospital.

Intervention 3: Most clinically vulnerable stay at home (3/3)

What is the modelling assumption for the effectiveness of this policy?
The impact of this intervention on total deaths is hard to assess as high-quality data on mortality in different risk groups is not available. Mortality rates are around 9% for those over 80, and could plausibly be similar for this group. Strict isolation of this group would be expected to save a large number of lives.

Duration
13-16 weeks (or until cases are significantly reduced), during the period when risk of infection is highest.

Core messaging:
People should understand that if they are in this group, they are at a high risk of infection and death. They should therefore self-isolate to protect themselves. Messages must be aimed at both the at-risk group, and at those who might wish to visit them.

Intervention 4: Social Distancing (1/2)

What is the objective of the policy?
This policy aims to save lives, rather than delay the spread of infection. We want people to protect themselves from coming into contact with infected people.

Who does this apply to?
All over 70s (9.2 million UK); and those with identified chronic health conditions that are under 70 but not in the highest risk category (approx 8 million UK).

When should this be triggered?
SAGE advise triggering 1-3 weeks after initiating individual stay at home policy (intervention 1).

What does this mean in practice?
This is not the same as the individuals stay at home policy (intervention 1). People should do activities that promote health and wellbeing but avoid contact with people as much as possible by keeping 2m aware from others if possible. There will be individual judgments to make when adapting behaviour. People who are 'social distancing' will be advised to work from home if possible, but could go to work. Activities like outdoor exercise should be encouraged, but people would be discouraged from spending time in busy places. **Further work is required to turn this into practical policy, and to ensure it is sufficiently clear and distinct from the stay at home guidance.**

Intervention 4: Social Distancing (2/2)

What is the modelling assumption for the effectiveness of this policy?
This intervention has been modelled for over-65s only. The assumption used was 75% compliance. For those who comply, workplace/school contacts are reduced by 50%; 75% reduction in external contacts outside of work and school; household contacts increased by 25% as people will be expected to spend more time at home.

Duration:
13-16 weeks (or until cases are significantly reduced), during the period when risk of infection is highest.

Core messaging
People should understand that if they are in this group, they are at a relatively higher risk of infection and death. They should therefore self-isolate to protect themselves. Messages must be aimed at both the at-risk group, and at those who might wish to visit them.

Economic impacts

Reasonable Worst Case Scenario (RWCS)

- The economic effect of COVID-19 will be significant but largely temporary – both to what it can produce (supply) and the demand for goods/services (demand). On labour supply only, a simple mapping of the DH/SAGE RWCS workforce absence figures due to illnesses implies a **reduction in the level of GDP of around 3.5% in 2020**.
- **This is highly partial – not capturing other supply effects or demand effects, which are expected to be material but are highly uncertain.** Illustratively, based on literature, these could up to double the labour supply impacts.

Interventions

- Interventions (as set out in this deck) will likely worsen both the supply and demand effects, though this will vary by intervention.
- Of all the interventions, **individuals stay at home for 7 days, along with the social distancing of the vulnerable and elderly, is likely to have the lowest economic impacts** – estimated around 155 working days lost and 10% of the workforce out at peak weeks, and lower demand impacts due to people's spending activities outside of the home being disrupted for a shorter period of time. (For the variant of individuals stay at home for 14 days, this will have significant economic impacts – roughly twice that of 7 days isolation.)
- **The impact of household quarantine for 14 days is very likely significantly higher than individual isolation for 7 days.** With the whole household in quarantine for a longer period, we expect bigger effects – from greater workforce absences and the possible negative impacts on household income, and additional disruption to consumption and confidence
- **Social distancing of the elderly is likely to have a much more limited economic impact than other measures.** This is because it has less impact on the majority of the working population and normal household activity. The employment rate of the over 70s is only around 6%, accounting for 1.6% of total employment.

Additional impacts of advised interventions (1/2)

There are some social and practical effects that these interventions would create or amplify for individuals who comply. Urgent work is underway across Government to scope the impacts fully and develop a package of mitigations.

Health and social care

- Mental health and loneliness: significant impact for high risk social distancing cohort in particular from very limited social contact for up to 13-16 weeks.
- Primary care, community and pharmacy services: risk of reduced access. *Mitigations*: reducing need for face-to-face contact through technology; and home deliveries of medicines.
- Dementia: patients may experience permanent loss of skills from reduced contact and care.
- Household transmission: asymptomatic vulnerable individuals at risk under household isolation. *Mitigation*: guidance to reduce risk of infection within isolated households.

Access to food

- Limited capacity for retailers to scale-up from current 7% of groceries that are home delivered. Most powerful *mitigation* likely to be mobilising support from friends, family and civil society to deliver groceries. Households would need to visit shops if there was no alternative.

Additional impacts of advised interventions (2/2)

Welfare and employment

- Low income households: loss of earnings for self-employed and zero-hours workers in particular. Further additional costs relating to children, specifically Free School Meals (see slide 25). *Mitigations announced at Budget:* £500m hardship funding for local authorities.
- Delivery of benefits for those not eligible for SSP. *Mitigations announced at Budget* (see slide 24): extension of SSP, UC advances, contributory ESA available from 1st rather than 8th day.
- Pensioners: DWP identifying c 2,000 who use Payment Exception Service (PES) to collect pension in person.
- Volunteering: reduced provision, in particular from older volunteers.
- Continuity: risk to critical jobs that will require business continuity planning for backup resource.

Criminal justice

- Work needed to establish how these interventions would operate for custodial settings. Some prisons have high concentrations of older prisoners (e.g. sex offenders). It is unlikely that transmission risk to these prisoners could be managed over an extended period.

Summary of Budget measures to mitigate the impact of staying at home

At Budget the Chancellor set out a £12bn package of temporary, timely and targeted measures to support public services, people and businesses. This includes the following measures for businesses: Statutory Sick pay for SMEs; Time to Pay; Business Rates Relief and pub support; small business grant funding; and Coronavirus Business Interruption Loan Scheme.

It also includes the measures below which will help mitigate the impacts on individuals of complying with the policy interventions:

Measure	Description	Cohort affected
Statutory Sick pay (SSP)	Extension of SSP to self-isolators and those within same household caring for self-isolators	Employees eligible for SSP - who earn over £118 per week from a single employer
Universal Credit (UC and contributory Employment and Support Allowance (ESA)	UC advances for those directly affected or self isolating accessible online or via phone. Minimum Income Floor temporarily relaxed for self-employed claimants. Contributory ESA available from 1st rather than 8th day for those who can't work because of COVID-19 or self-isolate.	UC: c. 150k self employed claim UC (3% of self-employed population) ESA: people who are unable to work, with two year's full NICs records
Hardship funding	£500m for Local Authorities in England to support economically vulnerable people and households	We want it to benefit the most economically vulnerable people and households

Impact of staying at home on Free School Meals (England Only)

- Free School Meals are available to 1.3m eligible children when they attend school premises during term time. DfE is concerned about the impact on this provision from children staying at home to comply with policy interventions 1 and 2.
- The policy is equivalent to £11.50 per week, costing the Exchequer c£515m a year. Parents self-certify to schools and DWP verify the claim. Take up varies across the country and within regions. All those households benefiting from FSM will also be in receipt of benefits. DfE funds schools directly through the schools funding formula. FSM provision is often contracted with a food supplier.
- Should Ministers wish to mitigate the impact of policy interventions 1 or 2, this could be considered through:
  - DfE and schools network;
  - DWP/HMRC and the benefit system (Universal Credit and Tax credits, or Child Benefit)
  - Local Authorities
- A bespoke mechanism would be required for delivery through Schools or Local Authorities, which depending on policy design could be administratively challenging, but likely introduced quickly. LAs are already being asked to deliver an increased role in Covid-19 mitigations.
- Delivery through the benefit system, whilst an existing mechanism, is complex, blunt and likely considerably more costly as it would be harder to target on those in receipt of FSMs. Temporary changes are also difficult to manage in the benefit system, not least as they would likely require legislation.
- Any mechanism would require additional funding, given FSM funding is already in the schools' budget and could not be removed.
- **Further work would be required to develop a robust, fully costed lead option. Does COBR wish us to pursue that?**

Comms plan and implementation - objectives

Through open, transparent, clear communications from the PM, Ministers, CMO and the scientific community, we must ensure that citizens are able to act on the advice. To do this, they must feel like this is:

- Practical and possible; that they can join the 'national effort' to protect the population and themselves from this virus.
- Fair to them; that they are able to adopt the recommendations regardless of their social grade or status.
- Effective; that the science and evidence, as well as the reassurance provided by government, will have an impact across society and for the individual.

In combination, our communications, policy implementation, and public infrastructure (including the NHS and local services) will give people the capability to do as we are asking, ensure they have equal opportunity to do so, provide the motivation to join the national effort, to lead population-wide behaviour change

Comms plan and implementation - strategy

Media

- PM, CMO and CSO press conference to brief the public via the media about the latest evidence, the spread of the virus, the symptoms to look out for, and the measures we are recommending.
- No10, DHSC and PHE lobby briefings to commence in advance of press conference

Campaign:

- The public information campaign can be switched on and phased in as soon as a move to delay is announced. Updated creative with symptoms, and action to take - isolate yourself, stay at home… (go online or call 111)

Key considerations:

- NHS 111 online algorithm cannot be implemented by Thursday. 111 call handler advice requires a 5 hour minimum turnaround.
- Making a public announcement about the next measures will lead to an increase in public action, promt widespread questions, and require clear explanation of the implications for society and the individual.
- Given the unprecedented awareness of and interest in Coronavirus, we should expect that this announcement will lead to a surge in online activity, calls to NHS 111, and visits to the NHS 111 Symptom Checker.

Comms plan and implementation - tools

Media:

- Plain English science explainer - background paper setting out clear rationale for WHY the approach the scientist, medics, and government are making the recommendations set out. Critical to bring people with us, and to explain the importance of isolation to protect others, who the vulnerable groups are, and why it is necessary to time this response precisely.
- A media friendly infographic explaining the virus spread (graph)
- Comms narratives - written for PM, CMO, and CSO

Public information materials

- Guidance - will be published simultaneously (assuming we move to 'Delay') advising people of the self-isolation guidance in plain English
- Public information campaign

Supporting documents and products

- Media Q&A, plus technical documentation for NHS 111 and updates to the case definition.

Comms plan and implementation - indicative timeline if intervention 1 starts on Monday

	Milestone	Products
Thursday 12/03	- Decision taken - Announcement - Case definition change (following CMO sign-off) - Publication of detailed PHE Guidance - Increase UK risk assessment from moderate	- Statement and narrative - Media Q&A - PHE Guidance
Friday 13/03	- NHS operational letter to issue - Extension of SSP eligibility will come into effect	
Monday 16/03	- Start of intervention 1 - Focus clinical testing on particular cohorts, not all suspected cases	- Detailed Q&A - NHS 111 script
Tuesday 17/03	- Public Information Campaign to go live	
Wednesday 18/03	- Online symptoms checker to go live	- Updated NHS 111 script and increased digital capacity to be in place

Intervention 1 case studies: individuals stay at home

Sumayyah, a 25 year-old office worker has a fever and a sore throat. She is advised to isolate at home, relying on family and/or friends to deliver food and supplies if she needs them, or ordering online deliveries that are left outside her door. If her symptoms worsen, she would call 111 for medical attention rather than going into her GP or A&E.

Tom, a 35 year-old stay at home dad has a sniffle and slight fever. He is advised to isolate at home, minimising contact with his partner and children as much is practical by following current public guidance. For example, he would use separate utensils to cook and eat food, and use the bathroom after his family has used it, cleaning it afterwards.

Jay, a 50 year-old self-employed plumber, develops a severe cough. He is advised to self-isolate and therefore can't work. For the month he only manages to work an average of 20 hours a week rather than his usual 35 hours a week. Usually the Minimum Income Floor (MIF) would mean that his Universal Credit payment wouldn't change to reflect the fact that his earnings have dropped because he has been off sick. However, under Budget changes relaxing the MIF, he would be paid more to reflect his lower earnings.

Intervention 2 case studies: household stay at home

John (45), Nadia (47) and their son Jake and daughter Maya (10 and 12) live in a small house with one bathroom. Nadia begins to suffer from a cough. She would self-isolate for 7 days and is then able to leave the house again to go to work if she is better and no longer has symptoms. As they live in a house with her, John, Jake and Maya are also advised to stay at home for 14 days in case they are infected too. Jake begins to display symptoms after 3 days, so if he is better after day 10 he can leave the home. John shows symptoms only on day 13 and isolates for a further 7 days, taking him to 20 days in total. Since Nadia can leave the house after 7 days, she can return to her everyday activities and go shopping for the family. Maya hasn't had symptoms so she can leave the house after 14 days. If Maya then develops symptoms, the whole household will not need to stay at home for another 14 days. Instead, Maya will self-isolate for at least 7 days, or longer if she is not better.

Hasan (35) lives with his mum Soria (69) who is recovering from lung cancer so is clinically vulnerable. He develops a fever and sore throat so self-isolates, and because they share a home Soria is advised to isolate for 14 days. However, because she is vulnerable, Hasan should follow PHE guidance to distance himself from Soria, to the extent possible, to prevent Soria picking up the virus - for example, good hand hygiene, avoiding sharing cooking utensils and thoroughly cleaning the bathroom after using it.

Intervention 3 case study: most vulnerable stay at home

Keith (55) is a care worker with immunosuppression who falls in the category of very high risk. He does not have a fever or a cough when the policy is introduced. He cannot work from home and so could be off work for 13-16 weeks. He has a neighbour who helps with his groceries. One day he urgently needs to collect a prescription but his neighbour is away so calls his GP to arrange for his prescription to be delivered. When he needs groceries but his neighbour is away, Keith visits the supermarket but goes at a very quiet time of day when the aisles are not crowded, avoids social contact as much as possible when doing so, and hand sanitises frequently. Keith's sister used to visit him each weekend, but they now speak over the phone instead.

Intervention 4 case study: social distancing

Karen (50), a civil servant with motor neurone disease, is able to work from home over the 13-16 week period when social distancing is advised. Karen knows she should reduce her social contact outside work, but has judgments to make in doing so. She decides to no longer attend her weekly choir practice, and to completely avoid pubs, bars, restaurants and cinemas, ands to have no friends round for dinner; but she continues to visit a 75 year old uncle to provide support and care.

ANNEX

Current Planning Assumptions 1/2

Duration of Illness	• Most cases probably resolve 7 days after symptom start. • From symptom onset to hospitalisation: Average of 7 days. • From onset of illness to discharge from hospital: Average of 23 days but may include avoidable delay in discharge. • From onset of illness to death: Average of 22 days for severe cases, but large variation around this. Longest time so far appears to be 41 days.
Duration of infectivity	• Duration of infectivity likely to vary depending on severity of individual cases. • 14 days as upper limit. • Peak infectivity is probably around the start of symptom onset, average 2 to 6 days, then falling off rapidly.
Infection fatality rate (IFR) **"The proportion of all those infected who die because of Covid-19."** **This count deaths from those showing clinical symptoms and those not showing clinical symptoms.**	• 1% of all infection • Age distribution:

Age Band	Proportion of infected that die
0 – 9	0.01%
10 – 19	0.01%
20 – 29	0.04%
30 – 39	0.09%
40 – 49	0.15%
50 – 59	0.69%
60 – 69	2.21%
70 – 79	5.92%
80+	8.76%

Current Planning Assumptions 2/2

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<td>Infection attack rate (IAR)

“The proportion of the population infected over the duration of the epidemic.”

This counts both those showing clinical symptoms and those not showing clinical symptoms.</td>
<td>

80% of the total population.
Age distribution:

<table>
<tr><th>Age Band</th><th>Proportion of infected people hospitalised</th></tr>
<tr><td>0 – 9</td><td>0.24%</td></tr>
<tr><td>10 – 19</td><td>0.34%</td></tr>
<tr><td>20 – 29</td><td>1.05%</td></tr>
<tr><td>30 – 39</td><td>2.34%</td></tr>
<tr><td>40 – 49</td><td>3.95%</td></tr>
<tr><td>50 – 59</td><td>9.81%</td></tr>
<tr><td>60 – 69</td><td>22.50%</td></tr>
<tr><td>70 – 79</td><td>36.20%</td></tr>
<tr><td>80+</td><td>43.79%</td></tr>
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<td>Duration of the outbreak</td>
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Single wave with 95% of cases in peak 9 weeks, half of cases in peak 3 weeks.

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<td>Workforce absences</td>
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21% nationally during peak weeks. This may vary for individual businesses.
Average absence duration of 14 days based on current government advice.
Most cases probably resolve 7 days after symptom start so may be lowered depending on government messaging.
Includes absences due to covid-19, background rates of influenza-like illness and caring for others.

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