



Department
of Health &
Social Care

COVID-19 response – health & social care

3-month battleplan to tackle the virus and protect life

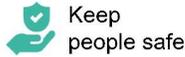
DRAFT FOR DISCUSSION – VERSION 1.1

March 2020

OFFICIAL: SENSITIVE [UNDER DEVELOPMENT]
Last updated 22 March 2020

Overall objectives and strategy for health and social care

Strategic objectives:



Keep people safe



Protect our NHS



Minimise deaths



Protect the adult social care system

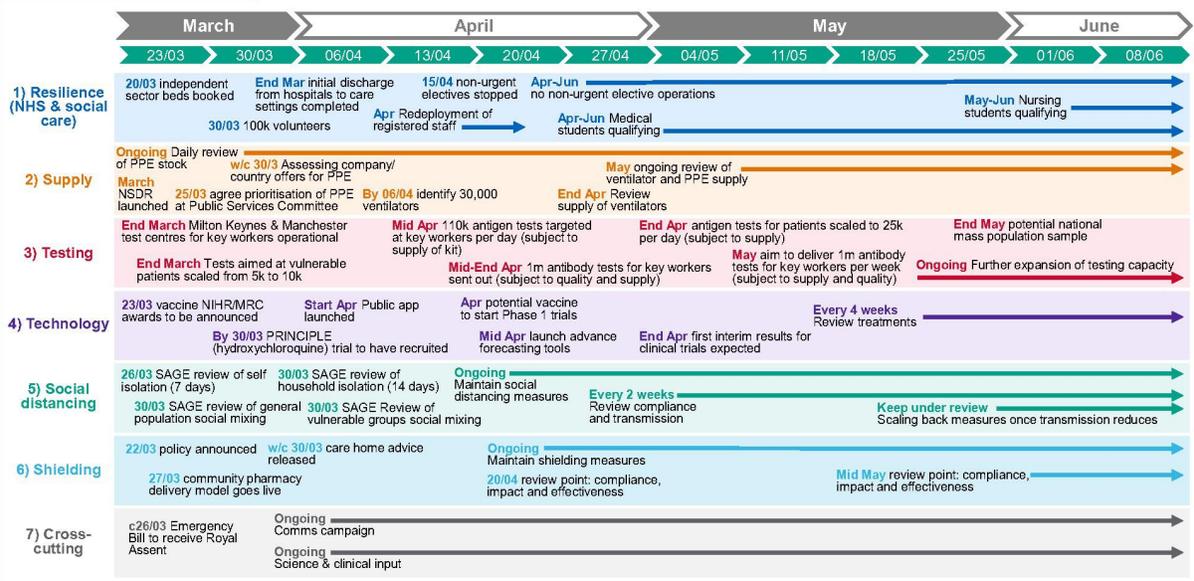
The overall phases of our plan to respond to COVID-19:



Six current workstreams, aiming to:

- | | |
|---|---|
| 1) Sustain health and social care resilience – especially critical care capacity and workforce | 4) Accelerate technology – incl. treatments, data, apps and vaccines |
| 2) Ensure supply to the NHS – incl. PPE and ventilators | 5) Slow the spread through social distancing |
| 3) Deliver widespread testing – incl. antibody tests | 6) Protect the most vulnerable through shielding |

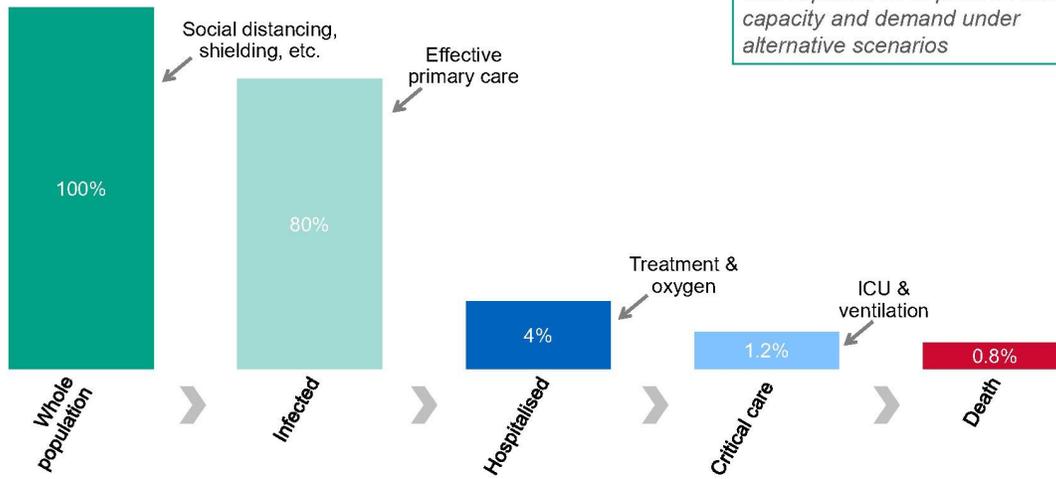




1. Resilience (NHS & social care)	2. Supply
1.1. Critical care bed (ICU+HDU) capacity [<i>#s now and planned/projected</i>] * 1.2. New bed capacity via cancellation of elective operations and discharge 1.3. Workforce registrations [<i>#s now and planned</i>] 1.4. Number of NHS staff not working due to COVID-10 (direct sickness or indirect) 1.5. Care home capacity measure 1.6. ASC provider resilience measure (incl. workforce & PPE confidence)	2.1. Volume of oxygen ventilators [<i>#s existing, new and planned</i>] 2.2. Stock levels of Personal Protective Equipment (PPE) [<i>#s now and planned, broken down by product</i>] 2.3. Supply of swabs and tests 2.4. Volume of calls to NSDR 2.5. Front line access to PPE (NHS, social care, and others) 2.6. Volume of treatment medicines purchased [TBC]
3. Testing	4. Technology
3.1. Number of patients having antigen tests per day (& per trust) [<i>#s now / planned</i>] 3.2. Number of key workers having antigen tests per day (and per local system) 3.3. Number of antibody tests per day (and per local system) [<i>#s now and planned</i>] 3.4. Number of tests available [<i>broken down by type & delivery</i>]	4.1. Number of NHS 111 calls per day 4.2. Number of NHS 111 online sessions per day 4.3. Number of NHS.UK visits to COVID-19 content 4.4. App downloads (once rolled out) 4.5. Treatments measure [TBC] 4.6. Number of patients in clinical trials
5. Social distancing	6. Shielding
5.1. Transmission (R force) * 5.2. Transport compliance measure [<i>e.g. TfL</i>] 5.3. Social interaction compliance measure [ONS] 5.4. Working at home measure 5.5. Household isolation measure 5.6. Sick notes [DWP]	6.1. Number of people receiving the support package [<i>#s now and planned</i>] 6.2. Infection rate [<i>amongst the shielded vs general population</i>] 6.3. Hospitalisation rate [<i>amongst the shielded vs general population</i>]
7. Cross-cutting	
7.1. Doubling time of cases, critical care bed cases and deaths * 7.2. Number of direct deaths from COVID-19 7.3. Reach and effectiveness of paid for communications campaigns	7.4. Emergency Bill start and stop measures 7.5. Supply disruption measure (non-COVID e.g. repeat prescriptions and pharmacy) 7.6. Wider public health measures (e.g. physical activity, mental ill-health, etc.)

Impact of critical interventions

Waterfall of interventions to protect life *



See separate NHS pack on bed capacity and demand under alternative scenarios

1. Resilience (NHS capacity)

Lead: Lee McDonough (DG Acute Care and Workforce, DHSC)
 [Acute capacity lead: Elin Jones (Director, DHSC); Safety lead: William Vineall, (Director, DHSC)]

COVID19 – BATTLEPLAN

Actions planned	Milestones	Funding commitments	Impact	Potential mitigations / escalations	Key data and trajectory
<p>NHSE/I announced 17 March:</p> <ul style="list-style-type: none"> Free-up the maximum possible inpatient and critical care capacity. Prepare for, and respond to, the anticipated large numbers of COVID-19 patients who will need respiratory support. Support staff, and maximise their availability. Play our part in the wider population measures newly announced by Government. Stress-test operational readiness. Remove routine burdens, so as to facilitate the above. <p>Actions planned:</p> <ol style="list-style-type: none"> Free up the maximum possible inpatient and critical care capacity: <ol style="list-style-type: none"> Postpone all non-urgent elective operations from 15/04 at the latest. Urgently discharge all hospital inpatients who are medically fit to leave. Nationally block-buying capacity in independent hospitals. Trusts are also taking action to create additional critical care capacity, including enacting internal surge arrangements, changing existing models of clinical care to maximise use of capacity. Agreeing support for additional capacity with MoD (field hospitals). Explore use of hotel beds and other accommodation Modelling of capacity requirements. Routine inspection activity by CQC and HSIB stood down and clinical staff are being re-deployed to the front line. Residual function to pick up most serious patient safety/abuse risks maintained. 	<ol style="list-style-type: none"> From 15/04, latest, with a period of at least three months (with full local discretion to wind down elective activity over the next 30 days). Community health providers must take immediate full responsibility for urgent discharge of all eligible patients identified by acute providers on a discharge list. Emergency legislation will ensure that eligibility assessments do not delay discharge. New Discharge Service Requirements, details published and mandated on Thursday 19 March. Deal has been signed. 	<ol style="list-style-type: none"> £1.2 bn fund to NHS to pay for accelerated discharge (announced 19/3). £345m p/m for independent sector deal. <p>Additional costs being collated and forecast by NHSE/I. Regular updates to DHSC and HMT.</p>	<ol style="list-style-type: none"> 12,500 to 15,000 hospital beds across England could be freed by postponing non-urgent elective operations. Will also free up staff for training and theatres/recovery facilities for adaptation work. Potential to free up to 15,000 acute beds currently occupied by patients awaiting discharge or with lengths of stay over 21 days. Deal includes the provision of 8,000 hospital beds across England, nearly 1,200 more ventilators, staffed by more than 10,000 nurses, 700 doctors and 8,000 other clinical staff. Initially to double the number of critical care beds from approximately 4,000 to 7,000 and then increase further. <ol style="list-style-type: none"> Analysis shows initial peak infection rate and demand is higher in the run with low compliance than in that with higher compliance. However if the model is allowed to run on in to a later period and we assume that NPIs are completely removed, the high compliance run has a more significant second wave. It may be possible that advances in treatment or the discovery of a vaccine could result in a dampening of the delayed peaks although uncertain at this stage. 	<p>Exploring more radical alternative such as the adaption of alternative facilities to create inpatient and critical care capacity.</p>	<ol style="list-style-type: none"> 15,000 additional hospital bed capacity by freeing up elective beds (day and night) by 15 April. The target trajectory is to release 15,000 beds compared to the normal level and seek to maintain the freed up capacity at least at that level for at least the next three months, whilst also bearing in mind excluding the creation of additional 'super surge' bed capacity from other facilities. <p>[PLACEHOLDER: Trajectories for bed capacity – particularly ICU capacity, in London in first instance due to data availability]</p>

1. Resilience (NHS workforce)

Lead: Lee McDonough (DG Acute Care and Workforce, DHSC)

COVID19 – BATTLEPLAN

Actions planned	Milestones	Funding commitments	Impact	Potential mitigations / escalations	Key data and trajectory
1. Additional staff:	11aa. Letters from regulators sent 20/03.	If 50% of nurses return, £30-50m p/m.	Re-registration (estimated numbers having left the register)	Measures to be escalated as required, including for example expanding the scope of re-registrations.	Registration applications received by regulator: at 21/03, 3,986 completed applications from nurses, 495 from doctors).
a. Temporary re-registration of clinicians who have recently left their professional register (last 2/3 years).	11ab. SoFS letter to GMC/GPhC triggering emergency powers due to go 23/03.		- Nurses (last 3 years) – 15,500		Clinicians "re-registered" (once emergency powers triggered) – split per profession.
b. Clinical students to join the workforce.	11ac. Emergency Bill likely Royal Assent 26/03.		- Pharmacists (last 2 years) – 3,600		Students brought into workforce – split per profession.
c. Consider bringing in other clinicians (military combat medical technicians, clinical academics, clinicians supporting DWP assessments).	11b. Students graduating from April. Being deployed now.	Indicative financial modelling done by HEE to identify the costs of moving provisional registration for year 5 medical graduates four months early requires an investment of £2mn.	- Pharmacist technicians (last 2 years) – 2,200		Other clinicians.
d. Volunteering programme to support health and social care organisations.	11ca. MACA required w/c 26/03.	To accelerate full registration for F1, modelling shows an investment of £24mn is required.	- Paramedics (last 3 years) – 3,700		Volunteers.
2. Freeing up and skilling-up existing workforce:	11cb. DHSC negotiating with DWP w/c 26/03.	Both figures comprise of salary, tariff and supervision costs.	- Physiotherapists (last 3 years) – 3,700		Clinicians re or up-skilled.
a. Top-up training to augment skills needed (e.g. anaesthetists trained in ventilation).	11da. Volunteering programme (managed by RVS) and digital platform (provided by GoodSAM) to be launched 23 March.		- Radiographers (last 3 years) – 3,900		No of volunteers registered and available for placement (aiming for 100K by 30/03).
b. Stopped all doctors rotations and facilitating the movement of trainees into acute trusts from other areas of practice.	11db. Emergency Volunteering Leave (and compensation) to be introduced in Emergency Bill.		- Biomedical students (last 3 years) – 3,300		
c. Stopped trainees taking time out of the programmes.	3. NHS England Chief People Officer finalising plans for staff engagement and resilience but likely to include:		- Operating department practitioners (last 3 years) – 600		
d. All non essential/COVID-related educational activity stopped.	3a. Line management and team advice, information and support (within 2 weeks).		Students (numbers show total cohort)		
e. GMC defers doctors' revalidation requirement until next year.	3b. Self-help via Apps e.g. Shinyminds, Headspace / Samaritans (within 2 weeks).		- Y3 student nurses – 17,000		
f. Joint regulatory statement by prof. regulators, acknowledging that registrants will need to act and deliver care differently during the COVID-19 emergency in line with Government and public health guidance.	3c. Enhanced Employee Assistance Programmes and Occupational Health (Improved stress advice within a week, with full roll out over 2 months).		- Y2 student nurses – 17,000		
3. NHS England asked to develop a plan to maximise staff engagement and resilience during the pandemic through practical support for staff health and wellbeing.	3d. Compassion circles / Schwarz rounds to discuss emotional cases (from 2 weeks).		- F2 medics – 6,100		
	3e. 24/7 national helpline (2 weeks for field hospital level support; 4 weeks for switchboard service).		- F1 medics – 6,900		
	3f. End of life bereavement support (potentially 2 weeks).		- Y5 medical students – 5,750		
	3g. Fast-track into mental health services (building on NHS Practitioner Health programme) and group and 1:1 psychological support (TBC).		- Y4 medical students – 5,900		
			- Approx. 5,500 final year medical students who will qualify as doctors between April and June 2020		
			Other staff groups		
			- Military combat medical technicians - 950		
			- DWP clinical staff – 2,000 (75% nurses, 7.5% doctors, 7.5% physiotherapists, 5% occupational therapists, 5% paramedics)		
			- 3,200 doctors on academic programmes and a further 1,632 on research programmes		
			Engagement and resilience actions will address the high levels of stress and anxiety facing staff. It will support either preventing or minimising the length of staff sickness absence.		

Actions planned	Milestones	Funding commitments	Impact	Potential mitigations / escalations	Key data and trajectory
<p>Overall: Increase system capacity to accept NHS discharges; maintain capacity to support shielding and protect NHS.</p> <p>System resilience:</p> <p>a. Extra funding to flow via NHS and LA; joint DHSC-MHCLG monitoring & intervention if not reaching front line.</p> <p>b. Capacity tracking via COC; LAs to monitor local resilience & facilitate mutual aid.</p> <p>Maintain/increase workforce:</p> <p>a. Childcare for key workers.</p> <p>b. Support employers' recruitment.</p> <p>c. Draw on volunteer workforce (incl. nursing/med students).</p> <p>Maintain/increase bed/package capacity:</p> <p>a. Guidance on caring for COVID cases published; new guidance from CMO on accepting discharges with COVID planned.</p> <p>b. Care Act easements to come into effect in April to enable prioritisation of essential care.</p> <p>c. Back-up bed/care capacity – to be secured.</p> <p>Provide PPE; Drop to all providers in progress; ongoing supply via single NHS & Social Care system.</p>	<p>1a. £1.6bn funding committed to Local Government primarily in ASC 19/03.</p> <p>1b. Initial guidance issued on commissioner support for care providers on 13/03. Reviewed by 31/03.</p> <p>2a. Care act easement bill for Royal Assent by 31st March.</p> <p>3a. Guidance published clarifying infection control, and respective roles on 13/03.</p> <p>3b. Guidance on shielding vulnerable groups, unpaid carers, shared lives and direct payments expected by 23/03.</p> <p>3c. Letter to sector planned w/e 27/03.</p> <p>4a. Fast-track DBS check (underway).</p> <p>4b. Construct new app for workforce (scope by 27/3).</p> <p>4c. Redirect Workforce Development Fund to support new care workers (11/4).</p> <p>5a. Guidance on enhanced discharge service announcement of £1.2b support package published on 19/03.</p> <p>5b. Providers and commissioners begun implementing new service requirements from 19/03. 5c. NHSE/I running webinars on guidance and for questions. Four sessions during w/c 16 and 23/03.</p> <p>6a. Initial PPE drop from 19/03.</p> <p>6b. Future demand modelling underway.</p> <p>6c. Data to track confidence in PPE in care homes set up from 30/03.</p>	<p>LG £1.6 billion fund of which majority expected to be for ASC (19/3). Payments to go out 03/04.</p> <p>Expect to develop a further bid for early April.</p> <p>£1.2 bn fund to NHS to pay for accelerated discharge (announced 19/03).</p>	<p>1. Free up 15,000 beds by 27/3 with discharge flows maintained afterwards.</p> <p>2. Enable adult social care provision to continue safely.</p> <p>3. Enable commissioners to prioritise if staff shortages in care afterwards.</p> <p>4. Enable fast pathway to bring new care workers into the sector.</p> <p>5. Support care workers provide care safely through ensuring supply chain of PPE.</p>	<p>Prioritisation by local authorities and NHS of work in community and social care services, enabled by changes in legislation.</p> <p>Local workforce planning to support NHS and social care mutual aid for specialist workforce.</p> <p>Purchase home care packages at scale beyond LA to expedite transfers into community.</p> <p>Call for more PPE to be provided.</p>	<p>Data on deaths in care homes coming on stream w/c 23/03.</p> <p>Capacity tracker in care homes coming on stream w/c 23/03.</p> <p>Data on provider resilience coming on stream w/c 23 March, including workforce and PPE confidence.</p> <p>Extra intelligence provided through, twice a week call with provider reps; weekly call with all regional DASS leads; reports through MHCLG of LRFs with daily calls DHSC-MHCLG.</p>

Actions planned	Milestones	Funding commitments	Impact	Potential mitigations / escalations	Key data and trajectory
<p>1. Help ensure sufficient treatment, supportive medicines and devices (e.g. Oxygen ventilators) available to patients suffering with COVID-19.</p> <p>2. Help ensure sufficient stock and distribution of PPE across health and social care system.</p> <p>3. Manage and escalate product shortages through National Supply Disruption Response (NSDR) and BAU shortage management processes.</p>	<p>1a. Sign contracts to secure available treatment medicines - 09/03; ongoing.</p> <p>1b. Engage with suppliers on all supportive medicines and devices to assure supply – ongoing.</p> <p>1c. Launch call for business to help make NHS ventilator – 16/03.</p> <p>1d. Identify total of 30,000 mechanical ventilators – 06/04.</p> <p>1e. Added all ITU products to parallel export ban list – 20/03.</p> <p>2a. Identify and procure as much PPE as available in the market - ongoing.</p> <p>2b. FCO call to posts to help secure leads for PPE. Supply – 20/03.</p> <p>2c. Stand up additional logistical support to push out delivery 23/03.</p> <p>2d. Agree process for OGD access to PPE - 25/03.</p> <p>3.NSDR stood up 24/7, will escalate as needed. 16/03.</p>	<p>Funding agreed in principle to ensure availability and distribution of essential products to health & social care system on the basis of no regrets.</p> <p>£130m worth of monitors ordered for ventilators.</p>	<p>1. Will help ensure hospitalised patients can get the care they need in relation to treatments and supportive products.</p> <p>2. Will help ensure front line health and care staff have sufficient PPE available across the system, allowing staff to protect themselves whilst caring for patients.</p> <p>3. Will ensure we are able to identify, triage and resolve shortages. Measured by number of completed/resolved cases by NSDR. Ongoing for duration of pandemic.</p>	<p>1. Further call to arms for devices; requisition/ ration supplies for use on COVID-19.</p> <p>2. Increase calls to other manufacturing businesses to manufacture more PPE; prioritise need/change PPE guidance; requisition manufacturing capacity and relevant components; limit density to emergency care only – helps with BAU demand for IIR masks.</p> <p>3. Use MOD ships/air freight to ensure vital medical supplies are delivered where logistics is the barriers; escalate to highest level/ work with G7/ WHO where national government export bans are the barrier to supply; increase capacity/resources in NSDR to triage calls.</p>	<p>PPE:</p> <ul style="list-style-type: none"> a. Over 300 "offers" for support from companies/countries. b. ~51.5m IIR and ~8m FFP3 face masks currently available and deployable in UK. c. ~22m IIR and ~5m FFP3 on order and confirmed delivery date. <p>Ventilators</p> <ul style="list-style-type: none"> a. Standard NHS capacity is 4,954 for adults (A) and 878 for paediatrics (P). b. Total expected conventional capacity (purchased and available online) is 12,392 (A) and 1,041 (P). c. Total devices available with theoretical contribution of new innovative manufacture is ~30k (A) and still 1,041 (P). <p>Other</p> <ul style="list-style-type: none"> a. Volume of treatment medicines purchased vs. projected need. b. Volume of calls to NSDR. c. Care home access to PPE.

3. Testing

Lead: Kathy Hall (Director of Technology & Data Strategy, NHSX)

COVID19 – BATTLEPLAN

Actions planned	Milestones	Funding commitments	Impact	Potential mitigations / escalations	Key data and trajectory
<p>4 workstreams to achieve our ambition of 250k test per day:</p> <p>1. Increase clinical diagnostic capacity in the NHS, targeted at the most vulnerable patients - Nicola Hunt (NHSE/I), Sharon Peacock (PHE).</p> <p>2. Frontline testing for NHS staff, social care and other key workers - Kristen McLeod, OLS.</p> <p>3. Mass market antibody testing for key workers and wider public – Kathy Hall, NHSX.</p> <p>4. National mass population surveillance – Sir Jeremy Farrah, Wellcome Trust.</p>	<p>Overall: Call to arms for equipment – single point of triage via web & email. Build up supply function. w/c 23/03.</p> <p>Roche Partnership:</p> <p>1a. w/c 30/03 - Automated testing sites go-live in Manchester / Royal London.</p> <p>1b. w/c 06/04 Gateshead, W hampton go-live.</p> <p>1c. w/c 20/04 - Newcastle, Wales go-live.</p> <p>1d. New systems installed in Glasgow (w/c 30/4), Belfast (w/c 17/5), Salisbury (TBC).</p> <p>2a. New Milton Keynes test centre operational by end of w/c 23/03.</p> <p>2b. Further centres opened and regional testing model explored.</p> <p>2c. Logistics plan in development w/ Amazon.</p> <p>2d. Digital solution built & tested w/c 23/3.</p> <p>3a. By mid-April, 3.5m tests arriving (2.5m by 4/4, and another 1m by 11/4).</p> <p>3b. 1m antibody tests sent out (subject to quality and resolving supply issues) for mid-end April and 1m antibody tests a week (subject to quality and resolving supply issues in May).</p> <p>3c. Continue to explore suppliers, with a particular focus on domestic orgs.</p> <p>3d. Develop procurement strategy.</p> <p>3e. Logistical plan with Amazon, alpha for digital solution tested end March.</p> <p>4. NHSX developing back-end for data to flow and onto App, PHE surveillance, research programme. Further milestones TBC.</p> <p>All testing deadlines subject to a) resolving global supply issues; and b) the quality of the new antibody tests.</p>	<p>1. For the Roche Partnership, the cost is £13 per test. For w/c 28 this would give a cost of £0.9m for the week. Rising to £2.3m per week from 25 April.</p> <p>2. c.£60m committed as of 21/3. Full funding plan is being worked up now.</p> <p>3. £23m (plus shipping) for the 3.5m tests that have been secured so far. These are from x3 different providers.</p> <p>4. No firm commitments to-date.</p>	<p>1a. Most ill patients can be identified and treated appropriately.</p> <p>1b. Testing will support operational decisions on where resources (staff, equipment) are needed most.</p> <p>1c. Tracking the spread of the virus will inform decisions on national policy.</p> <p>2a. Key workers who have COVID-19 symptoms (but who do not have the virus) can return to work from self-isolation. This also applies to key workers living in the same household as others showing symptoms.</p> <p>2b. Availability of necessary level of PCR tests as specified by modelers as disease spreads.</p> <p>2c. Mitigates as far as possible against loss of key NHS workforce to run critical acute services across UK.</p> <p>3. Up to 1m key workers tested so they know if they are immune and can return to work. Then roll out to mass population so people know if they are immune and can return to daily life.</p> <p>4. Enhances knowledge of the disease to develop tests, treatments and vaccines.</p>	<p>Shortage of swabs and reagents as well as packaging material for return, reagents and workforce - All options to source are being investigated, supported by 'call out' w/c 23/3 managed by a cross-organisational triage team. Central mechanism to co-ordinate supply/ demand of critical consumables across programme.</p> <p>Enhancing sources of information on medical advice and test quality - PHE-lead identified to respond to technical and medical requirements. Expert panel has been set up to help. Skunkworks being set up to test kits and support process.</p> <p>Uncertainty in antibody test quality – range of tests being explored at pace to be tested. Develop procurement strategy to work with suppliers to improve quality.</p> <p>Commercial delays in buying key resources - Accelerated purchasing authority agreed with HMT. Fraud risk being managed by commercial function.</p>	<p>Overall: ambition for 1m antigen tests per week; 250k tests per day total in coming weeks and months.</p> <p>1. 10K per day by end March; 25k by end April subject to available supplies.</p> <p>2a. 110k tests per day by second week of April (depending on availability of critical items).</p> <p>2b. Test numbers increase day on day (subject to supply).</p> <p>2c. Number of patients successfully competing tests measured.</p> <p>3a. Subject to quality and logistics, 3.5m tests by mid April and 1m per week by end April.</p> <p>3b. Ultimate ambition over time for 1 million per day.</p>

Actions planned	Milestones	Funding commitments	Impact	Potential mitigations / escalations	Key data and trajectory
<p>1. Clinical trials into several possible treatments to tackle COVID-19.</p> <p>2. Second stage of MRC/NHR COVID-19 research call.</p> <p>3. Deputy Chief Medical Officer Jonathan Van Tam is currently reviewing various drugs to take forward in clinical trials.</p> <p>CMO to review position and progress w/c 23/03.</p>	<p>1a. Work is ongoing but is moving at a very fast pace. Two major clinical trials identified as top priority.</p> <p>1b. First patient has already been recruited into the RECOVERY trial (std care vs lopinavir vs. hydroxychloroquine). The other high priority trial – PRINCIPLE (using hydroxychloroquine only) should begin to recruit 30.03.2020 latest.</p> <p>1c. DHSC has successfully acquired stock of the lopinavir/ritonavir sufficient for use in the RECOVERY TRIAL but has not yet secured meaningful post-trial population level stocks. DHSC has also obtained large quantities of hydroxychloroquine for the PRINCIPLE trial and sufficient for population use in severely ill patients if the trial proves the intervention).</p> <p>2a. Second stage of MRC/NHR research call well underway with recommended funding discussions currently taking place and due to be signed off within the next two weeks.</p> <p>2b. Other 2nd tier priority clinical trials to follow shortly, with personnel assistance from Astra Zeneca and Iqvia.</p>	<p>Funding to come out of the £30 million 'Fighting Fund' that sits with the National Institute for Health Research.</p> <p>Funding for acquisition of drug via DHSC Commercial.</p>	<p>The aim is to find a variety of possible treatments that will support the NHS in treating patients with COVID-19 and to have interim results early enough to implement treatments on a population level (selected subgroups) within the time frame of this pandemic wave.</p> <p>Secondary aim is to find treatments that will be long term additions to the armamentarium for treating severe coronavirus and other respiratory virus infections in the longer term.</p>	<p>Technical assistance and clinical trials personnel offered by Astra Zeneca and Iqvia.</p>	<p>Recruitment rates.</p> <p>Interim results.</p> <p>Aim: first interim results by end April 2020.</p>



Actions planned	Milestones	Funding commitments	Impact	Potential mitigations / escalations	Key data and trajectory
<p>1. Funding mobilised for UK international private and public efforts to rapidly develop candidate vaccines and put them into clinical trials.</p> <p>2. Funding to include support for other preventive approaches e.g. siRNA, neutralising antibodies.</p> <p>3. Convene international partners with CEPI to coordinate funding and other interventions.</p> <p>4. Regulatory easement/support based on discussions with research community to facilitate rapid but safe trials.</p> <p>5. Begin developing UK sovereign manufacturing strategy.</p> <p>6. Develop funding and operational plan for procurement and delivery.</p>	<p>Funding announcement (vaccines and other preventives).</p> <p>Regulatory discussions announcement.</p> <p>Collaboration agreement with international partners on research and trialling of UK vaccines and of trialling others vaccines in UK.</p> <p>Trials: at least one UK vaccine into early clinical studies April 2020.</p> <p>Trials: UK participating in at least 1 international vaccine trial April 2020.</p>	<p><u>CEPI contribution</u> HMG committed £40m to CEPI this year (£20m core funding in February and £20m to COVID19 specific programmes in March).</p>	<p>The outcome and impact is not yet known, however:</p> <ul style="list-style-type: none"> UK citizens especially high risk groups to be immunised as early as possible. Aim is to minimise UK excess deaths, alleviate pressure on NHS and allow lifting of NPIs. UK acknowledged as leader in international vaccine development and development of other preventive approaches. 	<p>Not known.</p>	<p>Number of potential vaccines at each stage of trials process (e.g. discovery / preclinical, phase 1 etc.) - both UK vaccines or vaccines being trialled in UK.</p>



Actions planned	Milestones	Funding commitments	Impact	Potential mitigations / escalations	Key data and trajectory
<p>1. Data – creation of a single store of data for all forecasting and data requests. Creation of a demand prediction tool.</p> <p>2. App – development of a new mobile app for public deployment, focused on enabling contact tracing and containment, information dissemination, and system forecasting and analysis.</p> <p>3. Social welfare – identification and rapid deployment of technologies to bolster social welfare and mental health.</p> <p>4. Clinical – development of 111 online pathways, text messaging provides test results to citizens faster, digitisation of testing journey, rollout of VC and remote working capabilities incl. for 111 call centres and remote consultation for primary and secondary.</p> <p>5. Staff-facing digital support tools.</p> <p>6. Public-facing digital tools – including coordination of digital communications activity.</p>	<p>1a. Creation of demand prediction tool by NHSX - complete.</p> <p>1b. Launch advanced forecasting tools first phase – mid-April.</p> <p>2a. Launch public app first phase – No later than first week of April.</p> <p>3a. Launch of online digital sick note – complete.</p> <p>3b. Worked with telecoms operators to provide charge-free access to NHS.uk – complete.</p> <p>3c. Launch TechForce Challenge to find digital solutions to social isolation – w/c 23rd March.</p> <p>4a. Worked with Microsoft to enable rapid deployment of Microsoft Teams for VC capability throughout the NHS – Complete.</p> <p>4b. Issue radically simplified Information Governance guidance – Complete.</p> <p>4c. 111 Online pathways improvement – already deployed, constant iteration.</p> <p>5a. VC for primary care – Contracts awarded w/c 23rd March.</p> <p>5b. VC for secondary care – ongoing over next fortnight.</p> <p>6. Launch 1st improved information dashboards – w/c 23rd / 30th March.</p>	<p>TechForce Challenge will have a Budget of £500,000.</p> <p>Costs incurred for development of the App include £450k to date.</p> <p>Significant work is being completed at zero or low cost with support from the tech sector, incl. free deployment of Microsoft Teams.</p> <p>Other costs will be incurred for VC rollout and 111 pathways adjustments. Figures not immediately available.</p> <p>Funding information is not in the public domain.</p>	<p>1. Data Workstream will result in significantly improved caseload forecasting capability. Benefits not quantified.</p> <p>2. App Workstream will result in vastly improved contact tracing capability and better adherence to social isolation instructions, as well as providing public reassurance. Benefits not quantified.</p> <p>3. Social Welfare Workstream will support the mental health of those in isolation.</p> <p>4. Clinical Workstream significant reduces demand on 111 call centres, incl. through enabling video-based triage, preventing face to face assessment. Self-certification enables those self-isolating to access sick pay or benefits.</p> <p>5. Large volumes of COVID clinical calls (whether via 111 online or telephony) have impacted 111 performance. Clinical teams increased by 50% weekend of 21st march, and solution to use extra staff deployable w/c 23rd March.</p> <p>6. Demand prediction tool will result in ability to direct resource to where they're needed.</p>	<p>Emergency procurement methods are being deployed as required.</p> <p>On the instruction of SoS, we will significantly increase capacity in the App team, including establishing a second team.</p>	<p><u>Data accurate to 19th March:</u></p> <ul style="list-style-type: none"> NHS.UK visits to COVID content peaked at 2.1M on 17/3. On 19/3 approx 45,000 calls were triaged by 111 and 999, with 11% closed with care or online advice, and 29% triaged for clinical assessment. 111 online sessions peaked at just under 1m on 16/3. <p><u>Future data available will include:</u></p> <ul style="list-style-type: none"> Various data dashboards, including showing a 5-day demand forecast at regional and Trust level. Total downloads of the App. Geolocation and 'proximity event' frequency data, as a proxy of efficacy of social distancing measures. More complex 111 triage data.

Actions planned	Milestones	Funding commitments	Impact	Potential mitigations / escalations	Key data and trajectory
1. Self isolation for symptomatic cases (7 days).	1a. Announced on 12/03. SAGE / SPI-M advice on impact of interventions in 2 weeks (26/03).	Communications campaign and materials for Stay at Home (CO/DHSC) and Mental Health support.	1. 2-3 weeks delay to peak Reduction in peak incidence of maybe 25% (uncertainty range at least 15-25%) Modest impact (<5%) in reduction of cases and deaths.	Consider further measures if/as necessary.	<u>Compliance data:</u> Consistent downward trend (e.g. tube travel down 69% year on year, London bus down 40%, West End footfall down 80%, national hotel occupancy down 23%).
2. Household isolation for symptomatic cases (14 days).	2a. Announced 16/03. SAGE / SPI-M advice on impact of interventions in 2 weeks (30/03) 2b. Guidance for care homes, home care and assisted living published 19/03. Advice for non-health atypical settings to be cleared 23/03.	Funding for SSP/UC self-certified sick notes and 14 day household isolation – DWP/HMT.	2. 2-3 weeks delay to peak Reduction in peak incidence of maybe 25% (uncertainty range at least 20-30%) Modest impact (<10%) in reduction of cases and deaths.	Escalated timescale for introduction of current measures.	National polling data to compare to c75% modelling by SAGE (after < 1wk of advice: e.g. 37% have stopped seeing family members they don't live with, more than 50% of full time workers have changed their workplace attendance).
3. Reducing social mixing (general population).	3a. DCMS withdrew gov't support for mass gatherings, 13/03. General social distancing announced 16/03. 3b. School closures – announced 17/03. 3c. Closure of non-essential shops/leisure outlets with on-site consumption to be enforced by legislation, 20/03.	Indirect cost from reduction in available workforce.	3a. Social distancing: 3-5 week delay to peak Substantial reduction in peak, up to c.50-60% Around 20-25% of cases and deaths. 3b. School closures: max 3 week delay to peak c10-20% reduction in peak Modest (<5%) reduction in cases and deaths.	Communications campaign to support understanding and 'nudge' behaviour to increase compliance.	DFE data on school compliance available from 23/03.
4. Vulnerable groups reduce social mixing: • 70+; • underlying conditions; • pregnant women.	3d. Consider further options – e.g. broader scope of the legislation; narrow the scope of 'key worker' exemptions; restrictions on personal movement.		3b. School closures: max 3 week delay to peak c10-20% reduction in peak Modest (<5%) reduction in cases and deaths.	Review impact against SAGE modelling and consider further measures if necessary.	
5. Implementation of measures.	4a. Announced 16/03. 4b. Consider curfews / legal enforcement. 4c. Consider extension of 'shielding' support package to this group.		4a. Negligible impact on delay to peak Reduction of maybe 25%-35% in peak beds demand 15-35% reduction of cases and deaths. But NB some overlap with 'shielding' impact.		
6. Scaling back measures once transmission reduces.	5a. SSP and UC eligibility extended. 5b. Guidance for care homes, home care and assisted living published 19/03. Advice for non-health atypical settings to be cleared 23/03. 5c. SAGE /SPI-M tracking lead indicators (ongoing) and advice on impact of intervention in 2 weeks. 5d. Identify further guidance for specific groups or those in atypical settings. 6. Keep under review.		All data from COBR(M) 12 March.		

Actions planned	Milestones	Funding commitments	Impact	Potential mitigations / escalations	Key data and trajectory
<p>1. Identify vulnerable patient list (900k – 1.5m).</p> <p>2. Agree shielding guidance.</p> <p>3. Contact 900k identified as at risk from central NHS data by text and letter.</p> <p>4. Website and phone line, alongside back up contact measures, established to ensure individuals register for support (GDS/MHCLG).</p> <p>5. Local Support System – essential grocery deliveries provided for shielded people needing support to get food and basics (DEFRA/MHCLG).</p> <p>6. Pharmacy – arrangements with community pharmacy to enable delivery of medicines to shielded who require delivery.</p>	<p>1a. Initial group identified 20/03 by NHS Digital – 898k.</p> <p>1b. GPs and specialist doctors to identify other at-risk people not on initial list who they believe should also be shielding (from 23/03).</p> <p>2. Guidance agreed 21/03 (to be published 22/03).</p> <p>3. Letters and text messages to commence being sent 23/03.</p> <p>4. Website currently planned to go live 23/03. National helpline expected to go live 23/03 for support registration (GDS / MHCLG).</p> <p>5. First food deliveries expected to start within 7 days (DEFRA/MHCLG).</p> <p>6a. Prescription funding agreed and distributed to community pharmacy network 21/03</p> <p>6b. Community prescription delivery model goes live 27/03 (note 75% of pharmacies already deliver, the model increases capacity).</p>	<p>£90-250m agreed in principle with CST for community pharmacy prescription deliveries.</p> <p>£1.6 billion announced for LAs to support care providers with additional cost pressures from Covid-19.</p>	<p>900k in England have been identified by patient lists and advised to shield. Additionally, GPs are able to also recommend that their vulnerable patients shield – these patients will also be eligible for support.</p> <p><u>Impact on mortality and rates of incidence</u> If we had no other interventions in place, this policy might reduce the number of deaths in these 900,000-1,500,000 people by 70,000-120,000 and ICU by 95,000-160,000.</p> <p>If the other interventions were to reduce the total number of cases during the epidemic by 50%, the policy might reduce the number of deaths by 35,000-60,000 and ICU by 45,000-80,000.</p> <p>If the other interventions were to reduce the total number of cases during the epidemic by 90%, the policy might reduce the number of deaths by 7,000-12,000 and ICU by 10,000-16,000.</p> <p><u>Impact on NHS ICU bed need if no other interventions in place</u> Estimated 1.0m-1.6m ICU bed day reduction.</p> <p>This means on average 22k-40k fewer ICU beds needed each day over peak 3 weeks (or 20k-35k fewer each day over peak 5 weeks).</p>	<p>Shielding is for the personal protection of the clinically extremely vulnerable, it is ultimately for the individual to decide whether to comply. Behavioural nudges and ongoing clinical support to individuals will promote compliance.</p> <p>DHSC will continue working closely with MHCLG and Defra to ensure the x-gov Local Support System package.</p> <p>Wider guidance / support for LAs.</p> <p>Military planners to help LRFs scope out their plans for shielding and delivery of the Local Support System in situ on the ground; risk assessments of LRFs by the regional leads.</p>	<p><u>Pharmacy delivery numbers</u> (data will be provided by community pharmacies to generate payment for deliveries).</p> <p>Number of people receiving the support package (DEFRA / MHCLG).</p> <p><u>Measuring transmission and hospitalisation rates</u> It will be possible to retrospectively report true ICU and hospitalisation rate. We will know exactly who the group are via coding.</p> <p>Even if patients in this group stay at home with/without mild symptoms and are never tested we could in theory report a true hospitalisation/ICU rate retrospectively.</p> <p>It is likely that anybody who gets the disease from this vulnerable group will have a severe illness so we will find out who they are.</p> <p>Transmission rates – tbd (high complexity).</p>

