Department of Health & Social Care

Pandemic Preparedness Strategic Capability Review

DHSC Pandemic Preparedness Strategy Team

Official Sensitive

21/05/2021

Summary:

Context and scope:

On 10 March the Pandemic Influenza Preparedness Programme (PIPP) Board agreed to explore an expanded scope for pandemic preparedness, moving beyond preparations for pandemic influenza to address a broader range of public health hazards.

The board agreed to pursue a capabilities-based approach, whereby the UK would prepare or have available a suite of health and social care sector capabilities that could be deployed flexibly to address any of the hazards faced. In scope would be capabilities specifically designed to address pandemic and high-consequence infectious disease (HCID) hazards.

Capabilities that are not designed specifically to address pandemic or HCID hazards, such as those solely aimed at CBRN, counter-terrorism or non-specific capabilities have not been considered in scope for this exercise. Nonetheless, many of these capabilities remain essential to pandemic preparedness and/or wider system resilience and are detailed on slide 5.

Strategic Capabilities Review:

This slide pack contains the output of a strategic capabilities review, conducted by UK Health Security in DHSC. The review has aimed to capture an overview of the current pandemic and HCID preparedness and response **capabilities within the health and social care sectors**. For each capability, we have looked to capture a brief description, identify ownership and the strategic origin of the capability (e.g. COVID or 2011 strategy). Overviews of these capabilities are on **slides 4 & 5**, with detail in **Annex A**.

44 Capabilities Identified*

21 Standing Capabilities or Commissioned Services

23 Triggerable or scalable contingency capabilities

19 Reflected in the 2011 Pandemic Influenza Strategy

14 New capabilities built and designed for the COVID response

6 HCID-Specific Capabilities with up to **29** involved in an HCID response

5 Existing capabilities that are not mentioned within the 2011 strategy

* Excl. BAU capabilities that are non-specific to a pandemic response and supporting capabilities. E.g. police enforcement for business closures.

Capability Review Process:

We engaged with stakeholders to map out a common understanding of pandemic preparedness capabilities across the system…

Framework Development
We developed a working model to arrange capabilities, using thematic buckets from the 2011 Pandemic Influenza Preparedness Strategy, COVID response plan and WHO documentation. Individual capabilities may be applicable to several thematic buckets but have been assigned to only one to avoid duplication. Note* we have not included a 'recover' or 'adapt' theme as we could not identify pre-prepared capabilities in this area that are specific to pandemic preparedness. As the COVID recovery continues, additional themes may emerge.

Documentation Review
We reviewed key documentation, including the 2011 Pandemic Influenza Preparedness Strategy, COVID response plan and civil contingencies planning documents to identify key capabilities that HMG has or is able to deploy in an incident response.

Stakeholder Engagement
We held circa 20 specific engagement workshops with colleagues across Government and the health and social care sectors to identify pre-existing capabilities within their remits or that had been built as a response to COVID-19.

Identify
Capabilities that enable the UK to identify pandemic or HCID hazards domestically or overseas.

Contain
Capabilities that enable the UK to contain international infectious disease hazards at source and/or contain their spread domestically before they reach outbreak or epidemic scale.

Mitigate
Capabilities that help to mitigate the public health impacts of a hazard once it has reach outbreak, epidemic or pandemic scale.

Understand
Capabilities that help the UK to understand the nature of a hazard and determine the best clinical and policy responses.

Communications
Capabilities that help the UK public to understand the scale, risk and nature of the pandemic or HCID and to take appropriate precautions to stay safe.

Capability Buckets

The Strategic Capabilities Review has aimed to map two distinct buckets of capabilities.

Pandemic/HCID Capabilities

These capabilities are those that are specifically designed to prepare for and responded to a pandemic or HCID. Due to the majority falling under the responsibility and accountability of DHSC or its ALBs these are in scope of the SCR and subsequent strategy refresh.

Responsible

Accountable

Strategically Aligned Capabilities

These capabilities are those that will potential impact and contribute to a Pandemic/HCID response but are not specifically designed to do so. The majority fall under the responsibility of other OGDs and their ALBs, but due to the contribution they may have to a Pandemic or HCID response the strategy will aim to ensure that it contributes to and is informed of changes to these capabilities.

Consulted

Informed

Capability Landscape [In Scope]:

IDENTIFY

Capabilities that enable the UK to identify pandemic and HCID hazards domestically and overseas.

- I1: Global Surveillance – Official — UKHSA Global Public Health / DHSC Global Health — BAU
- I2: Global Surveillance – Classified — MOD Defence Intelligence — BAU
- I3: Domestic Surveillance (National) — UKHSA National Specialist Surveillance and Reference Labs — BAU
- I4: Domestic Surveillance (Local) — UKHSA Local Infection Specialist Services & Microbio Labs & NHSE — BAU

UNDERSTAND

Capabilities that help the UK to understand the nature of the hazard and determine the best clinical and policy responses

Expert Advice, Modelling & Evaluation

- R1: Government Emergency Medical Advice & Analysis — GO-S, UKHSA, DHSC — BAU
- R2: Enhanced Population Surveillance — UKHSA (NHS T&T) — Cont
- R5: Government Commissioned Research — SRE & UKHSA Infectious Diseases Research & Development — BAU

COMMUNICATE

Capabilities that help the UK public to understand the scale and nature of the pandemic and to take appropriate precautions to stay safe.

- CM1: Emergency Communications & Guidance — UKHSA Communications & CCS with DHSC and NHSE — BAU

CONTAIN

Capabilities that help the UK to contain international infectious disease hazards at source and or contain their spread domestically before they reach outbreak or epidemic scale.

International Prevention and Containment

- C1: LMIC Assistance — FCDO, DHSC & UKHSA Global Public Health — BAU
- C2: Travel Advice — UKHSA Global Health with FCDO, NHSE and DHSC — BAU
- C3: MED EVAC & Citizen Evacuation — FCDO with DHSC /UKHSA/NHSE/MoD — Cont

Port and Borders Containment

- C4: BAU Port Health Screening & Containment — UKHSA Regional and Local Health Protection & Travel and Migrant Health Service — BAU
- C5: Surge Port Quarantine (MQS) — DHSC, NHSE, MHCLG — Cont
- C6: Int. Travel Restrictions & Border Closures — DfT with DHSC / HO/ FCDO — Cont

Low-Volume Treatment & Containment*

- C7: Specialist Pre-Hospital Resources (Ambulance) — NHSE with DHSC — BAU
- C8: HCID Treatment Centres — NHSE — BAU

Domestic Outbreak Containment

- C9: Contact Tracing (Standing Capability) — UKHSA Regional and Local Health Protection — BAU
- C10: Public Space Decontamination & Incident Response — DEFRA with UKHSA — BAU
- C11: Contact Tracing (Surge Capability) — UKHSA (NHS T&T) — Cont
- C12: Community Testing (Surge Capability) — UKHSA (NHS T&T) — Cont
- C13: Vector Control (Insecticides) — DEFRA with UKSHA — Cont

MITIGATE

Capabilities that help to mitigate the public health impacts of a hazard once it has reached outbreak, epidemic or pandemic scale

Workforce Expansion and Training

- M1: NHS Capacity – Workforce Retention and Support — NHSE with DHSC — BAU
- M2: NHS Capacity – Training & Expertise — NHSE with DHSC — BAU
- M3: NHS Capacity – MACA — MoD with NHSE and DHSC — Cont
- M4: NHS Capacity – Emergency Recruitment & Registration — NHSE with DHSC — Cont

Primary Care Capacity

- M5: NHS Capacity – 111 Triage & NPFS — NHSE & DHSC — Cont
- M6: Primary Care Total Triage — NHSE & Community Pharmacy — Cont
- M7: Primary Care Mutual Aid — NHSE & DHSC — Cont

Secondary Care Capacity

- M8: NHS Capacity – Mutual Aid — NHSE — Cont
- M9: NHS Capacity - Cancellation of Elective Care — NHSE — Cont
- M10: NHS Capacity – Physical Estates Surge Capacity — NHSE — Cont

Adult Social & Community Care

- M11: Community Shielding — DHSC with NHSE, MHCLG and DEFRA — Cont
- M12: Secondary Care Discharge for Infected Patients — NHSE with DHSC, MHCLG — Cont

Clinical Countermeasures

- M13: Clinical Countermeasures (Stockpiles) — UKHSA Vaccines & Countermeasures with DHSC — BAU
- M14: Medicines Advance Purchase Agreements — UKHSA Vaccines & Countermeasures with DHSC & BEIS — BAU
- M15: Therapeutics & Diagnostics Development & Procurement — UKHSA & DHSC/BEIS (Therapeutics TF)with NHSE — Cont
- M16: PSV Emergency Vaccines Development & Procurement — DHSC (VTF) with UKHSA / BEIS — Cont

Vaccination Delivery

- M17: Immunisation – Local and National — NHSE with Community Pharmacy and UKHSA — BAU
- M18: Post-exposure Prophylaxis — NHSE with UKHSA — Cont
- M19: Population Vaccine Delivery Surge Capacity — NHSE with DHSC and UKHSA — Cont

Non-Pharmaceutical Interventions

- M20: Business & School Closures — DHSC with Cabinet Office — Cont
- M21: Social Interaction Restrictions — DHSC with Cabinet Office — Cont

Wider Health Sector Impacts Management

- M22: Secure Estate Containment & Management — UKHSA Health & Justice, MOJ, HO, DHSC — BAU
- M23: Specialist Death Management — NHSE with UKHSA and X-WH Support — BAU

KEY:

Name of Capability / Owner / lead

- BAU: BAU or Commissioned Service
- Cont: Triggerable or scalable contingency
- 2011: 2011 Pan 'Flu Strategy Capability
- COV: New COVID-19 Capability
- HCID: HCID Capability

Planning & Preparedness Lead:

- UKHSA
- NHSE
- DHSC
- Cab Off
- Other HMG

19 Reflected in the 2011 Pandemic Influenza Strategy

14 New capabilities built and designed for the COVID response

6 HCID-Specific Capabilities with up to 29 involved in an HCID response

5 Existing capabilities that are not mentioned within the 2011 strategy

Strategically Aligned Capability Landscape:

IDENTIFY

Capabilities that enable the UK to identify pandemic and HCID hazards domestically and overseas.

Environment and Animal Health Monitoring
- Domestic Animal and Environmental Health Monitoring — DEFRA — BAU

UNDERSTAND

Capabilities that help the UK to understand the nature of the hazard and determine the best clinical and policy responses

COMMUNICATE

Capabilities that help the UK public to understand the scale and nature of the pandemic and to take appropriate precautions to stay safe.

Tackling Disinformation
- Health Misinformation/Disinformation — DCMS with DHSC, HO, NHSE and FCDO — BAU

CONTAIN

Capabilities that help the UK to contain international infectious disease hazards at source and or contain their spread domestically before they reach outbreak or epidemic scale.

International Prevention and Containment
- Overseas Development Assistance — FCDO — BAU

Domestic Prevention and Containment
- Domestic Health Promotion — DHSC — BAU
- Addressing Domestic Non-Clinical Vulnerabilities — X-WH — BAU
- Domestic Environmental and Animal Health Promotion — DEFRA — BAU
- Data and Identification of the Clinically Vulnerable — NHSE [Digital] with UKHSA, DHSC and MHCLG — BAU

Port and Borders Containment
- Border Security — Home Office — BAU

Domestic Outbreak Containment
- National Security and CBRN Operational Health Response — NHSE with UKHSA, DHSC and Home Office — Cont

MITIGATE

Capabilities that help to mitigate the public health impacts of a hazard once it has reached outbreak, epidemic or pandemic scale

Workforce Expansion and Training
- BAU NHS Workforce Capacity — NHSE and DHSC — BAU
- MACA Reservist Training — MOD with NHSE — BAU

Primary Care Capacity
- Community Pharmacy Contractual Capability & Capacity — DHSC with NHSE — BAU

Secondary Care Capacity
- BAU NHS Estates and Vehicle Capacity & Design — NHSE, CQC and DHSC — BAU
- BAU Primary, Secondary Infection Prevention Control — NHSE with CQC, DHSC — BAU

Adult Social & Community Care
- BAU Adult Social Care Infection Prevention Control — DHSC with CQC — BAU
- Adult Social Care MI Data and Outbound Comms — DHSC — BAU
- Adult Social Care Funding & Workforce Resilience — DHSC — BAU
- Local Authority Mutual Aid — Local Authorities with Cabinet Office Guidance — Cont

Clinical Countermeasures
- Countermeasures Regulation & Testing — MHRA with DHSC — BAU
- Healthcare Supply Chain Resilience — DHSC with NHSE and UKHSA — BAU
- Routine Immunisation — UKHSA with NHSE and DHSC — BAU
- National Security and CBRN Countermeasures — UKHSA with DHSC and Home Office — BAU

Wider Health Sector Impacts Management
- Surge Clinical Waste Management — DHSC with NHSE, DEFRA, DFT, EA — Cont — HCID
- Surge Death Management — CCS with DHSC, NHSE, HO, MHCLG, MoD, MoJ — Cont — HCID

KEY:

Name of Capability
Owner / lead

- 2011 Pan 'Flu Strategy Capability
- New COVID-19 Capability
- HCID Capability

BAU — BAU or Commissioned Service

Cont — Triggerable or scalable contingency

Planning & Preparedness Lead:

- UKHSA
- NHSE
- DHSC
- Cab Off
- Other HMG

24 Areas of identified Strategic Alignment*

*This is subject to change following the re-establishment of Cross-Whitehall Governance

Outcomes and Next Steps

Outcomes:

The 2011 UK Pandemic Influenza Strategy contains a significant proportion of the preparedness and response capabilities operated within the health and social care sectors. The COVID-19 response, however, has seen HMG significantly expand its suite of pandemic response abilities, particularly our ability to contain hazards and surge mitigation measures beyond previous capacity scenarios. There is significant opportunity and risk associated with capitalising on these new capabilities, both as the COVID response winds down and as we establish UKHSA.

Whilst there are a limited number of HCID-specific capabilities, a HCID response may call upon a flexible use of broader capabilities, with similarities and crossover for low case volume containment approaches across multiple hazards with differing plans for more acute risks.

Through this process, stakeholder feedback and initial COVID lessons have made clear that there are a significant number of aligned policy areas that would not fall in direct scope of a capabilities-based strategy and are broad in scope. Many of these are nonetheless essential to ensuring effective pandemic preparedness and overall resilience, e.g. public health promotion and adult social care reform. HMG's approach to addressing these issues is as, or arguably more, impactful than specific preparedness planning. How DHSC, CCS and UKHSA will identify and input into these considerations should be a priority to accompany specific next steps on a capabilities-based approach.

Next Steps:

Whilst this exercise has demonstrated what capabilities HMG currently has, it has not made a determination of whether these are all of the capabilities that HMG *needs* in order to respond to the full range of pandemic and HCID hazards. This exercise has also not been able to consider capabilities within the devolved administrations.

Likewise, this exercise has not made a judgement on whether these capabilities are sufficiently prepared to address the full range of hazards that the UK faces. We therefore propose that this review is revisited during the proposed next steps are set out to the right of this slide:

1. Develop Planning Assumptions

Via the Clinical Countermeasures Review, prepare a revised suite of quantitative and qualitative reasonable worst case scenarios to inform planning assumptions for what we must prepare for. Include a hypothetical 'Disease X' to challenge existing assumptions.

2. Define Ambition

Based on the reasonable worst case scenarios, existing evidence, scientific advice and ministerial ambitions, devise a reasonable response ambition (e.g. contain or mitigate) for each hazard.

3. Revisit Response Capabilities

Review these capabilities in light of ambition and assess whether HMG has all of the capabilities it *needs* to address each hazard scenario.

3. Audit Preparedness

Audit whether our capabilities are ready to address each hazard, to the scale and ambition required. Determine a work plan to bring capabilities to the required standard.

Department
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Annex A:
Capability Summaries

Identify

Capabilities that enable the UK to identify new or emerging health hazards, domestically and overseas.

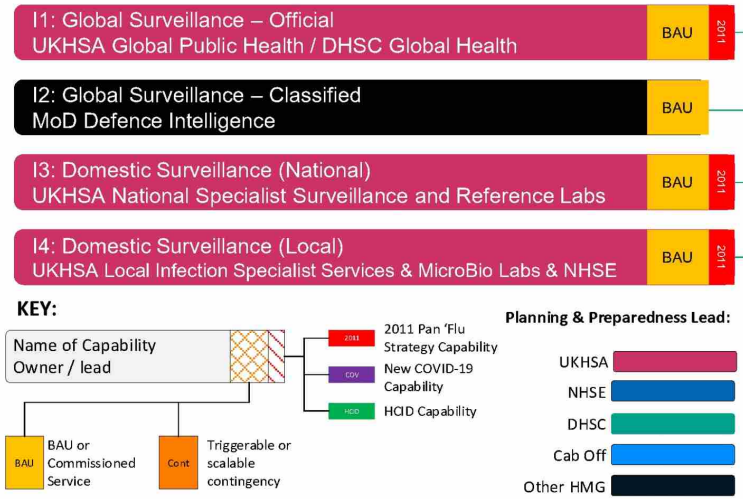
Sub Objective: N/A All capabilities in this strand have a common purpose

The risk posed by new and emerging hazards is a constant and so all the UK's current capabilities are business as usual, commissioned services*.

Identification capabilities appear in the 2011 UK Pandemic Influenza Preparedness Strategy and UKHSA are operationally responsible for many capabilities within this thematic strand.

The Ministry of Defence operate their own global surveillance function within Defence Intelligence. This all-source surveillance function has been expanded under COVID-19 and reports into the Health Intelligence and Effects Customer Committee.

**Excl. enhanced VoC sequencing, detailed in "Contain".*



I1 [UKHSA]: Global Surveillance - Official

The ability to monitor global health incidents that pose a risk to HMG or its interests. UKHSA conduct routine surveillance and risk assessment of emergent influenza viruses, HCIDs and other pathogens of concern using direct and open sources. Specialist expert panels, such as the New and Emerging Respiratory and Viral Threats Advisory Group (NERVTAG) in the case of respiratory pathogens, reviews the outputs of routine surveillance conducted by UKHSA to provide scientific risk assessment and mitigation advice on new and emerging respiratory viruses.

I2 [MoD DI] : Global Surveillance - Classified

The ability to use Intelligence to monitor, characterise and warn of global health incidents that pose a risk to HMG or its interests. The role of the Defence Intelligence (DI) Medical Intelligence team includes monitoring and warning of 'emerging infectious disease with pandemic potential' as part of a 5 Eyes network. They have capacity to identify and assess health incidents that are hidden or man-made. They fuse open sources with classified intelligence from Defence, UKIC and 5 Eyes and NATO partners. Outputs include escalated warning and probabilistic threat assessments.

I3 [UKHSA]: Domestic Surveillance - National

The ability to monitor domestic health security risks and provide specialist lab support to all four UK nations. UKHSA lead the domestic surveillance, convening expert panels such as Human Animal Infections and Risk Surveillance group (HAIRS) and act as the national point of contact for ensuring surveillance is compliant with WHO International Health Regulations and shared with relevant partners. National UKHSA laboratories providing critical and specialist microbiology testing services. UKHSA also commission specialist parasitology services from London School of Hygiene and Tropical Medicine and University College Hospital. National surveillance outputs can inform NHS strategies.

I4 [UKHSA & NHSE]: Domestic Surveillance - Local

The ability to provide real-time and localised domestic public health monitoring. UKHSA's Field Service is a national service comprising geographically dispersed multi-disciplinary teams, integrating field epidemiology, real-time syndromic surveillance, public health microbiology and food, water and environment microbiology to strengthen UKHSA's surveillance, intelligence and response functions. Includes port health screening capabilities. Some cases may arrive in the country prior to identification, and once present in primary and secondary care, will need to be quickly recognised by healthcare staff or technology, following assessment of symptoms and travel history.

Identify [Strategically Aligned]

Capabilities that enable the UK to identify new or emerging health hazards, domestically and overseas.

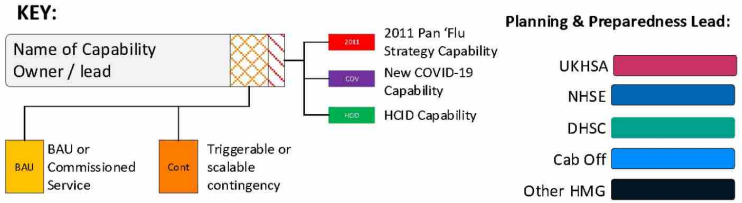
The ability to identify potential causes of a pandemic or outbreak resulting from zoonotic transmission is important and will stem from animal and environmental health monitoring. As this capability is not designed specifically for preventing pandemics or HCID outbreaks but to safeguard the countries animal and environmental health it is deemed as a strategically aligned capability

Domestic Animal and Environmental Health Surveillance
DEFRA

BAU

[DEFRA]: Domestic Animal and Environmental Health Monitoring

The ability to identify and control endemic and exotic diseases in pests in animals, plants and bees. DEFRA, via the Animal and Plant Health Agency lead the domestic surveillance of new and emerging pests and diseases within animals and plants. UKHSA may support this particularly in the cases of zoonotic transmission, with expert advice provided by the Human Animal Infections and Risk Surveillance group.



Understand

Capabilities that help the UK to understand the nature of the hazard and determine the best clinical and policy responses.

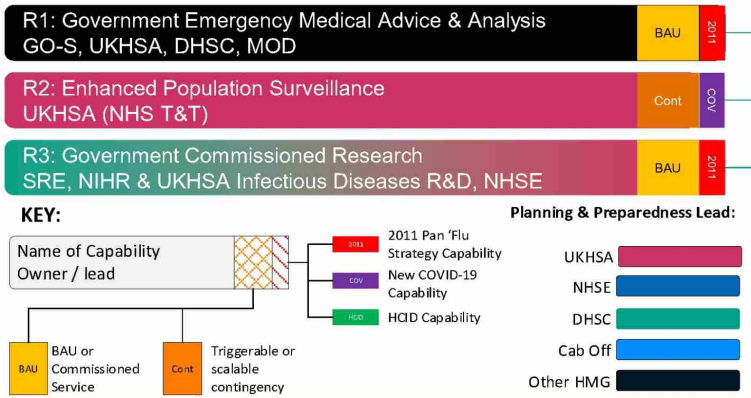
Sub Objective: provide emergency scientific evidence, insight, analysis and situational awareness.

For major emergencies, the principal advisory body to HMG is SAGE run by GO-S. Smaller-scale incidents will receive advice from DHSC advisory groups that may also feed into SAGE for larger incidents. Advice can be supplemented or shaped by academic research, including specific commissions or funding arrangements. The split of commissioning responsibilities between UKHSA and DHSC here is not yet clear, including the role and scope of the Health Protection Science Hub.

Built as a response to COVID-19, the UK currently has an enhanced population surveillance function within the Joint Biosecurity Centre. The ongoing shape and size of this function is to be determined.

Sub Objective: commission future focussed research and development to better prepare the UK for a pandemic emergency

Responsibility for commissioning and coordinating external scientific research sits with DHSC's SRE team, however, the role of UKHSA in this space is currently unclear.



R1 [GO-S and UKHSA]: Government Emergency Medical Advice & Analysis

The ability to provide expert scientific and medical advice to policy makers. GO-S are the secretariat for the Scientific Advisory Group for Emergencies, the overarching board responsible for provision of scientific and technical advice to support government decision makers during emergencies. In addition to SAGE, there are a range of standalone DHSC advisory groups that may provide advice for specific incidents depending on their nature, and will include NHS advice, most notably for pandemic and outbreak preparedness: NERVTAG, ACDP, SPI-M and SPI-B. Consideration also needs to be given for the commissioning and handling of intelligence from classified sources.

R2 [UKHSA]: Enhanced Population Surveillance

The ability to deeply assess population transmission and prevalence in order to understand the nature of the pathogen, impacts of infection and disease, and the effectiveness of policy interventions. Built in response to the COVID-19 pandemic, the government now has an enhanced population surveillance and analysis capacity, led by the Joint Bio-Security Centre in T&T, providing additional support to PHE's existing surveillance programmes. Genotyping assays and genomic sequencing have been used to understand variation in pathogens and assess changes to pathogenicity. This capability is also being utilised for outward facing surveillance of international variation.

R3 [DHSC and UKHSA]: Government Commissioned Research

The ability to coordinate and commission academic research to assist with public health policy decision making. DHSC's SRE team are responsible for engaging and coordinating the research community to provide expert advice for policy teams. This includes but is not limited to provision of direct funding for research via the National Institute for Health Research (NIHR) funding model. In addition to DHSC specific research, there is the BEIS-sponsored UKRI fund. UKHSA will likely undertake research or commission academics in the same way as PHE. NHSE have additional scientific expertise and laboratory capacity.

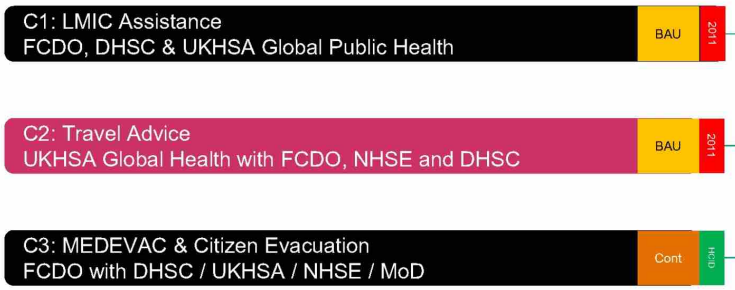
Contain – International Prevention and Containment

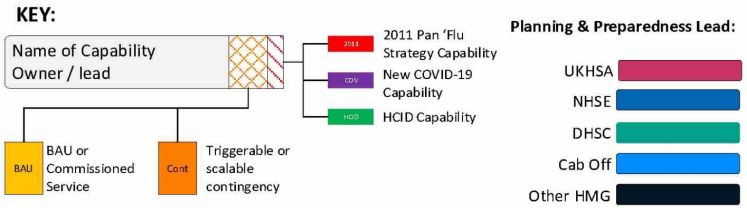
Capabilities that help the UK to contain international infectious disease hazards at source and or contain their spread domestically before they reach outbreak or epidemic scale.

Sub Objective: To prevent transmission and contain a pathogen of pandemic or HCID potential overseas to limit its impact on the UK.

The risk of an emerging pathogen appearing overseas is high (as seen with COVID-19) therefore several capabilities in this theme are business as usual, commissioned services, with FCDO being a key player in all capabilities.

The UK has the ability to trigger the evacuation of infected or non-infected nationals if the need arises, with the aim that BAU capabilities will limit the need for this to happen.





C1 [DHSC, FCDO,UKHSA]: LMIC Assistance

The ability to assist LMIC countries to prevent or contain the spread of pathogens of concern. Through a series of programmes, some funded by Official Development Assistance, the UK provides support to low and lower-middle income countries to help them prepare for and respond to health hazards – historically, AMR. These programmes include direct support to develop interventions (such as testing), new vaccines and therapeutics, and public health capacity. ODA is also used to deploy the UK Public health support team (led by PHE/UKHSA) to LIC/LMIC countries responding to a disease outbreak.

C2 [UKHSA, FCDO, DHSC, NHSE]: Travel Advice

The ability to provide informed advice to UK citizens travelling to areas that may pose an increased public health risk. The National Travel Health Network and centre (commissioned by PHE/UKHSA) provide travel health advice to UK nationals wishing to travel overseas. This is incorporated in FCDO country specific travel advice with a view to enabling BNO's to take suitable steps to manage their risk of contracting or spreading an infectious disease. NHSE may play a role in assessing patients ability to travel and provision of health care subsequently (as appropriate).

C3 [FCDO et al]: MEDEVAC and Citizen Evacuation

The ability to safely evacuate British nationals back to the UK to receive specialist medical treatment. FCDO lead on MEDEVAC of British Nationals overseas, NHSE and UKHSA provide a crucial role in assessing if the patient can travel and the risk they pose to public health on entry to the UK.
A similar response was used during the initial COVID-19 response to evacuate larger numbers of non-infectious British nationals from areas of concern.

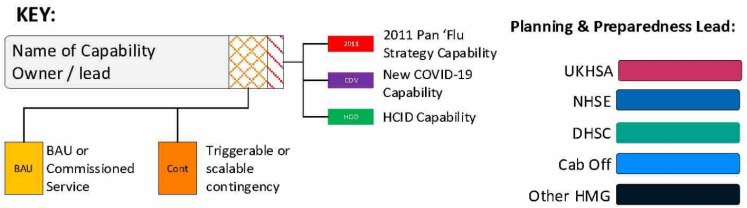
Contain – International Prevention and Containment [Strategically Aligned]

Capabilities that help the UK to contain international infectious disease hazards at source and or contain their spread domestically before they reach outbreak or epidemic scale.

Whilst some ODA is utilised to strengthen other L/LMIC countries preparedness and response to pandemics and HCID outbreaks, the majority of ODA is used in other means. Therefore it is important to ensure that other ODA is utilised in a way that ensures that pandemic/HCID preparedness objectives are not undermined thus strategic alignment between this strategy and the ODA strategy will be needed.

[FCDO]: Official Development Assistance (ODA)

The ability to ensure that HMG's foreign policy and ODA agenda is aligned towards pandemic preparedness objectives, including objectives beyond specific funding for pandemic and HCID response capabilities. FCDO are responsible for the government's ODA budgets and agenda, with "strengthening resilience and response to crises" as a core mission statement as well as responding to 'diseases of poverty', such as Malaria. NHSE also have established health system strengthening partnerships with LMICs which would assist collaboration in a crisis.



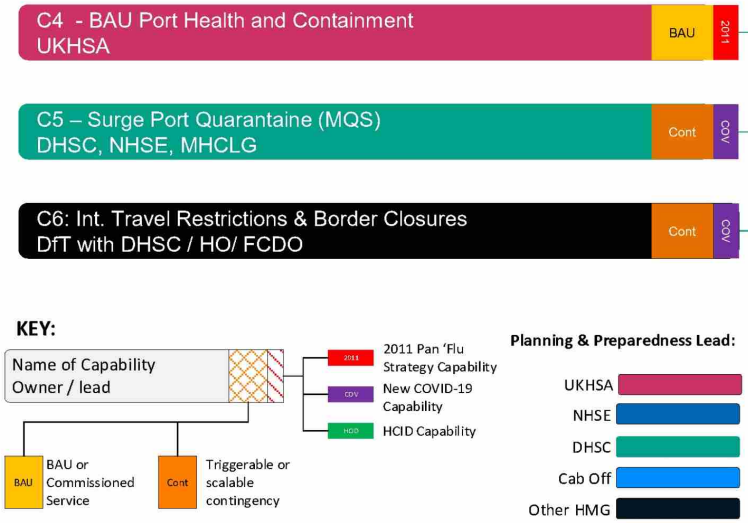
Contain – Port and Borders Containment

Capabilities that help the UK to contain international infectious disease hazards at source and or contain their spread domestically before they reach outbreak or epidemic scale.

Sub Objective: To contain those with a high risk of carrying a pathogen of concern on entering the UK to reduce the risk to public health.

Whilst UKHSA have a standing business as usual capability to identify individuals at the border or on entry to the UK with the pathogens of concern, the majority of capabilities in this thematic strand are contingency measures for use in the event of increased risk.

The ownership of these contingency capabilities is spread widely across multiple departments and ALBs and could benefit from cementing established protocols and procedures from the COVID-19 response, to ensure we can act quickly and capitalise on the learnings from COVID-19.



C4 [UKHSA]: BAU Port Health and Containment

The ability to carry out a range of health checks at the border to prevent a pathogen from being imported into the UK. This includes screening both people, items and food products from high-risk countries. PHE (UKHSA) and Border force, undertake identification, monitoring and provision of advice to those arriving from high-risk countries. The Porth Health authority – usual the local authority of the port – carry out a range of checks on imported goods and food to ensure that they do not pose a public health risk.

C5 [DHSC, NHSE & MHCLG] : Surge Port Quarantine (MQS)

The ability to quarantine large numbers of new arrivals, to contain the spread of pathogens from overseas. Due to the rise in COVID-19 Variants of Concern, a surge quarantine system – called the Managed Quarantine Service – was established to isolate and test travellers entering the UK from high risk countries. Supported by priority testing, travellers are required to take two tests on entry into the country which are sequenced to examine for VoCs. This compulsory isolation, paid for by the traveller, reduces the risk of imported infections and allows HMG to test individuals for COVID-19. Consideration needs to be given to potential mass transit of quarantined individuals to hospital or quarantine sites. Local area support will be provided by LRFs, using NHSE staff to provide healthcare.

C6 [DfT et al]: Int. Travel Restrictions & Border Closures

The ability to restrict travel into and out of the UK, in order to reduce the risk of imported pathogens of concern. For the most part, this is a restriction on domestic travellers going overseas and restricting travel from certain high-risk countries. In extreme circumstances this capability covers complete closure of the border to all but essential travel. This would create a range of secondary impacts that would require mitigation across government.

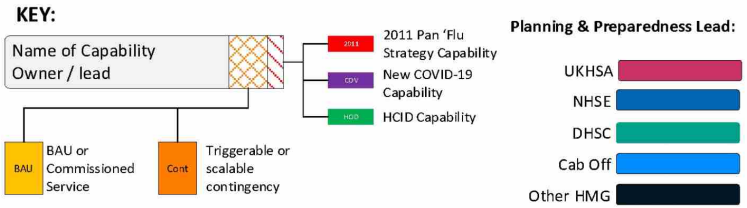
Contain – Port and Borders Containment [Strategically Aligned]

Capabilities that help the UK to contain international infectious disease hazards at source and or contain their spread domestically before they reach outbreak or epidemic scale.

Border Security is an important part of our defence against imported pathogens and/or cases of a new disease. Whilst the remit of HMG's border security agenda goes beyond that of just protecting against health hazards, and therefore not a direct pandemic or HCID capability, it is important that this capability is monitored to ensure that border security agencies have the required mechanisms to combat this hazard.

[Home Office]: Border Security

The ability to ensure that GB and NI has a robust border to deter and detect human, plant or animal health threats from entering. Operation of any border or travel restriction policy in the event of a large-scale pandemic hazard will be subject to effective border enforcement. Home Office, via Border Force and other law enforcement agencies, are responsible for securing the border, including to the risk posed by clandestine arrivals that may evade pandemic-specific borders arrangements.



Contain – Low Volume Treatment and Containment

Capabilities that help the UK to contain international infectious disease hazards at source and or contain their spread domestically before they reach outbreak or epidemic scale.

Sub Objective: The ability to treat small numbers of infected individuals in an environment that limits the likelihood of onward transmission.

These capabilities are all business-as-usual commissioned services managed by NHSE, with the mostly likely use being the treatment of individuals infected with a HCID transmitted by airborne or contact routes.

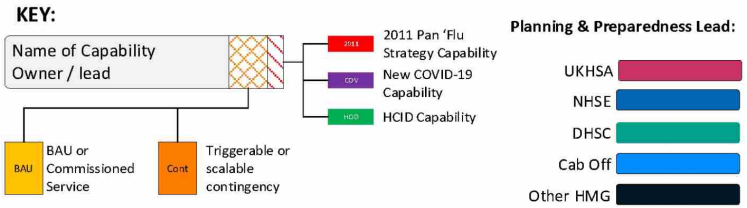
In a HCID incident low volume treatment and containment is likely to involved post-exposure prophylaxis vaccination as outlined in M16.

C7 [NHSE]: Specialist Pre-Hospital Resources (Ambulance)

The ability to provide medical assistance and transportation to potentially infectious individuals prior to their arrival to a specialist IPC hospital environment. All NHS Ambulance trusts have the capability to deploy specially trained staff (often working in Hazardous Area Response Teams) who, among other things, are able to undertake the treatment and transport of patients with HCIDs. Whilst many of the specialist skill sets of HART teams are out of scope of this review, their HCID skill set is often critical to a HCID response thus this specific skill set/capability is in scope.

C8 [NHSE] : HCID Treatment Centres

The ability to provide specialist hospital treatment to individuals who have been infected by a HCID. The UK has several specialist units within specific hospitals which can provide care to patients with both airborne and contact HCID. These have staff trained to use specialist equipment and a limited number high-level isolation beds, with the ability to surge facilities if needed. Consideration needs to be given to the use of these limited resources that do not have the capacity to contain large patient volumes beyond their current criteria.



Contain – Domestic Outbreak Containment

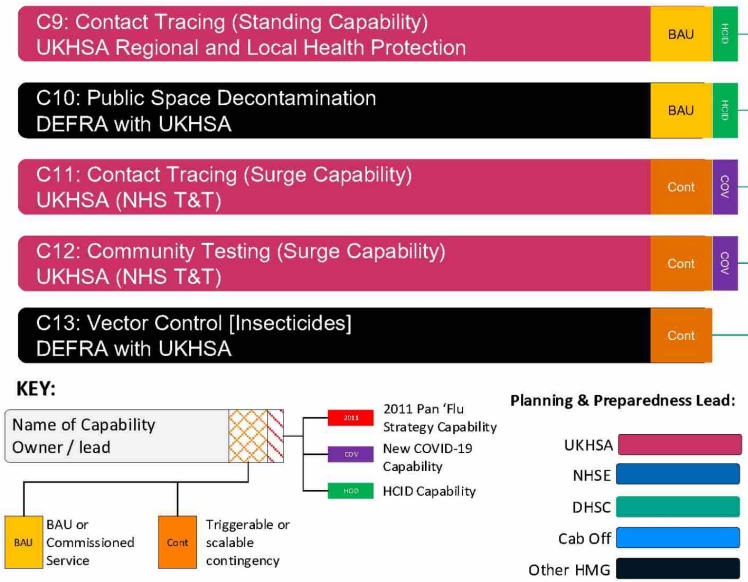
Capabilities that help the UK to contain international infectious disease hazards at source and or contain their spread domestically before they reach outbreak or epidemic scale.

Sub Objective: The ability to locate and test people or items that have come into contact with an infected person.

This theme outlines the capabilities available to conduct initial contact tracing of a small number of cases, and the decontamination of sites or items they have been in contact with if needed.

It also outlines the surge capabilities for contact tracing and community testing in the event of a growing domestic outbreak.

All capabilities in this strand will be led or supported by UKHSA.



C9 [UKHSA]: Contact Tracing (Standing Capability)

The ability to contact-trace limited or small-scale domestic outbreaks in order to contain transmission. UKHSA have a standing capability delivered by local and regional health protection teams to conduct contact tracing of individuals and items that have been in contact with someone with an infectious disease of concern. This includes both "on the ground" and desk-based tracing of contacts.

C10 [DEFRA, UKHSA]: Public Space Decontamination

The ability to decontaminate public spaces that may have been exposed to a pathogen of concern in order to contain transmission. In the event of an individual becoming infected with a pathogen of concern – most likely a contact HCID, there may be a need to, following location, decontaminate items they have been in contact with. Such decontamination would be led by DEFRA with support from UKHSA health protection teams to render spaces or items safe from being contagious.

C11 [UKHSA]: Contact Tracing (Surge Capability)

The ability to provide up-scaled contact-tracing in the event of a large-scale outbreak or epidemic in order to contain the spread of the disease. In the event of a larger domestic outbreak, in which UKHSA regional or local health protection teams are overwhelmed, surge contact tracing would be required like that delivered by NHS T&T in the COVID-19 pandemic.

C12 [UKHSA]: Community Testing (Surge Capability)

The ability to provide mass community testing in order to identify infected individuals. In the event of a larger domestic outbreak, there may be the need to conduct large scale community testing including that of asymptomatic individuals. Therefore UKHSA (when NHS T&T is absorbed) will need a triggerable surge capability to conduct this.

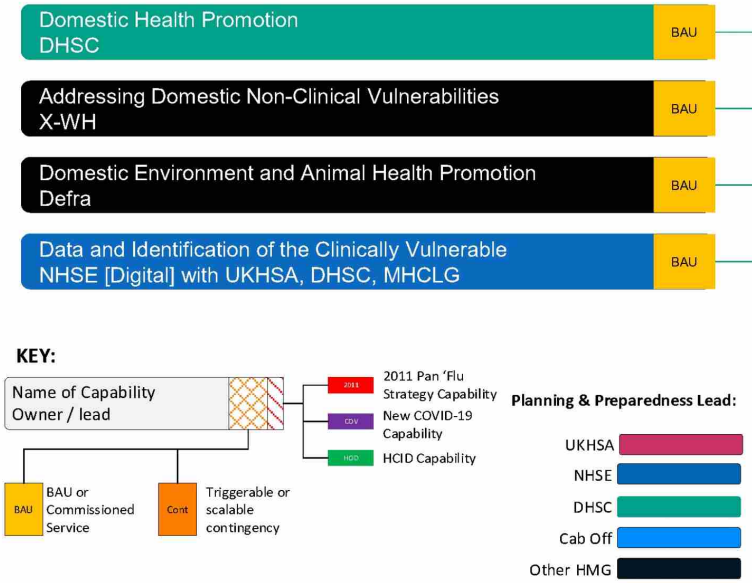
C13 [DEFRA]: Vector Control (Insecticides)

The ability to deploy insecticides in order to prevent or contain the spread of a vector-borne pathogen of concern. DEFRA are responsible for the policy and operational deployment of insecticides in a pandemic scenario.

Contain – Domestic Outbreak Prevention & Containment [Strategically Aligned]

Capabilities that help the UK to contain international infectious disease hazards at source and or contain their spread domestically before they reach outbreak or epidemic scale.

Ahead of any future pandemic or outbreak tackling systemic vulnerabilities in human or environmental health will be make a significant difference in ensuring the country is more resilient. As improving resilience of the country goes beyond just tackling pandemics, addressing these issues cannot be driven entirely by this strategy but the benefits of doing so should be clearly communicated and used to shape and inform solutions.



[DHSC]: Domestic Health Promotion

The ability to ensure that the population lives a healthy lifestyle. This capability ensures that the population of the UK has a high level of health as this alone provides a significant level of resilience against a pandemic. The new Office for Health Promotion will lead this work, drawing on expertise from NHSE as required.

[X-WH]: Addressing Domestic Non-Clinical Vulnerabilities

The ability to ensure that other non clinical vulnerabilities/inequalities are addressed to limit the impact of a pandemic. COVID-19 has highlighted the stark impact that socio-economic status and other vulnerabilities (such as poor housing, lack of trust in health services etc.) has had on health outcomes – therefore addressing these issues will increase the populations standing resilience to a pandemic or outbreak.

[DEFRA]: Domestic Environment and Animal Health Promotion

The ability to ensure the effective promotion of animal and environmental health. Ensuring that mitigations are used to limit the possibility of zoonotic transmission of pathogens and take action such as culling to stop further spread.

[NHS Digital/UKHSA]: Data and Identification of the Clinically Vulnerable

The ability to use digital services to swiftly identify clinically vulnerable individuals. By ensuring the UK has quick access to known clinical vulnerabilities, including up to date contact information, and that systems at local, regional and national levels are interoperable, the government will be able to provide tailored advice or trigger shielding arrangements if required.

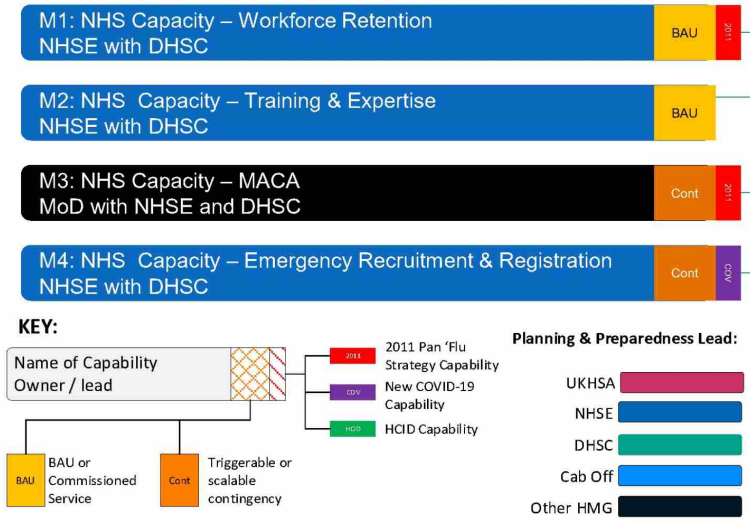
Mitigate – Workforce Capacity and Training

Capabilities that help to mitigate the public health impacts of a hazard once it has reached outbreak, epidemic or pandemic scale.

Sub Objective: Ensure sufficient workforce capacity and resilience to respond to the incident whilst continuing BAU service delivery to the best standard possible.

Within this thematic strand are BAU services to build necessary resilience for NHS workforce to handle a crisis, alongside contingency measures for rapidly increasing staff numbers. .

The workforce landscape is complex, but broadly speaking DHSC takes the lead on employee pay, terms and conditions, and professional regulation. NHS organisations (via NHSE/I and its Chief People Officer) lead on the deployment of staff and staff wellbeing. Health Education England (HEE) is responsible for deployment of students and their education and training.



M1 [NHSE with DHSC]: NHS Capacity – Workforce Retention and support

The ability to retain staff who may want to leave due to the severe pressure of pandemic HCID/response, by providing mental health support and other services, including; small changes to generate goodwill such as parking, life insurance schemes, changes to pension plans for returning staff, indemnity arrangements etc. This capability is also key in ASC, which is already seen by some as a less attractive place to work.

M2 [NHSE with DHSC]: NHS Capacity – Training & Expertise

The ability to provide and maintain specialist training to NHS staff to enable them to have the specific skills needed to respond to pandemic diseases and HCIDs. This capability covers the domestic education and training market for health professionals, ensuring a smooth flow of current pre-registration students in to employment, maximising uptake of pre-registration training, whilst seeking opportunities to embed more clinical practice, explore faster training routes and remote learning for Trusts. This includes training and fit-testing to enable staff to use the correct PPE for IPC. Another key aspect is maintaining emergency skills in current staff with regularly updated training. Further training is also key in the ASC sector, particularly for crisis response and IPC.

M3 [MoD, NHSE, DHSC]: NHS Capacity – MACA

The ability to provide Military Assistance to a Civil Authority (MACA) either via deployment of clinically trained staff or other military capabilities such as logistics, security and construction. Requests can be made when there are issues with human resource in the health and social care sectors due to very high levels of staff absences or a sudden and unexpected increase in demand. Once requests are granted by MOD, military staff will be made available to the required NHS service.

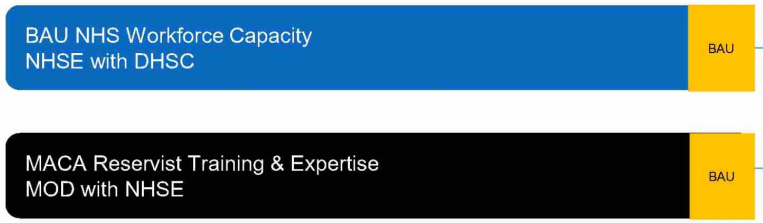
M4 [NHSE with DHSC]: Emergency Recruitment & Registration

The ability to rapidly recruit new healthcare staff to respond to an increase in demand from a pandemic/outbreak. For COVID-19, planning for short notice recruitment had already been done for EU exit staff migration. Potential recruits (including previously registered medical staff) are identified by DHSC Workforce, then there is an operational process between NHSE & DHSC to recruit workers to hand them over 'ready' to trusts and care facilities.

Mitigate – Workforce Capacity and Training [Strategically Aligned]

Capabilities that help to mitigate the public health impacts of a hazard once it has reached outbreak, epidemic or pandemic scale.

Ensuring a resilient and robustly staffed workforce is key to ensuring the health of the nation as well as when responding to crises. Several current workstreams including the manifesto commitments of 50k more nurses and 6k more GPs are underway and will contribute significantly to this aim. Monitoring and keeping informed of developments in this space will be important for a refreshed strategy.

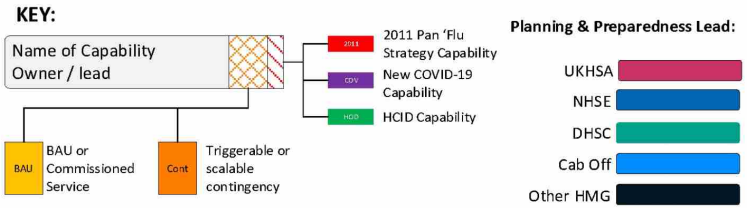


[NHSE with DHSC]: NHS Workforce Capacity

The ability to recruit and train healthcare professionals, alongside retaining current staff, to build a resilient workforce that can better respond to crisis. Short notice recruitment is very difficult and stakeholder feedback suggests should be seen as an option of last resort. More peacetime staff and more domestic supply ensures that NHS trusts can respond to crisis situations effectively. Current workstreams include 50k nurses, and 6k GP programmes. This also includes identifying non-clinical roles that may come under increased pressure e.g. administration, cleaning etc. Adult Social Care is covered separately on slide 26.

[MOD with NHSE]: MACA Reservist Training

The ability to provide and maintain specialist healthcare crisis training to military staff. This is to ensure there are enough military personnel with the appropriate skills to be available for MACA requests, described in M3.



Mitigate – Primary Care Capacity

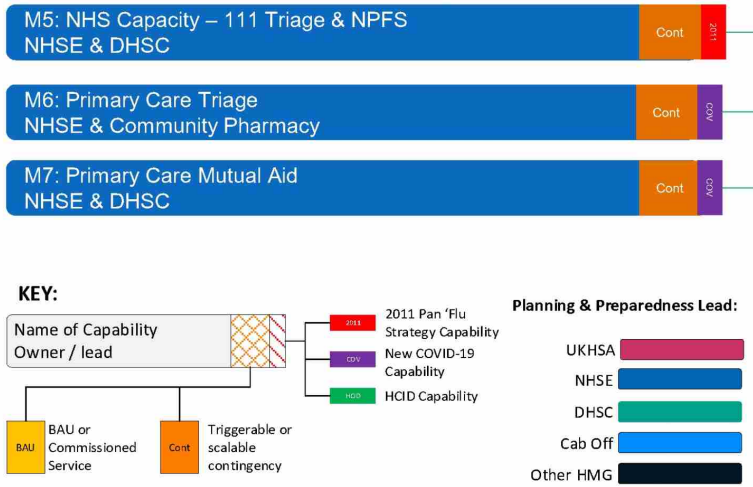
Capabilities that help to mitigate the public health impacts of a hazard once it has reached outbreak, epidemic or pandemic scale.

Sub Objective: To prevent primary care services from being overwhelmed with patients, and to further prevent the spread of the pathogen in primary care settings*.

This theme covers the triage of patients away from Primary care services. The NHS issues regular guidance encouraging individuals to pick the right service for their health needs – including advising people to use pharmacy services before attending their GP.

Additionally the use of online consultation and telephone triage, used throughout the COVID-19 pandemic has further reduced the number of face-to-face appointments reducing the risk to staff.

*Excl. clinical countermeasures which are covered separately.



M5 [NHSE with DHSC & UKHSA]: NHSE Capacity – 111 Triage & NPFS

The ability to set up and use digital services to triage patients and ensure patients are getting the necessary medical advice, whilst reducing the need for physical appointments. Specific algorithms to allow NHS111 to identify specific HCIDs based on symptoms and/or travel history can be included in the standard questionnaires to allow callers to be directed to or given an appropriate service. National Pandemic Flu Service (NFPS) can allow patients to triage themselves using online and telephone self-assessment services to determine whether they are eligible to collect an antiviral medicine from a community collection point, preventing the need for face-face consultation in primary or secondary care settings .

M6 [NHSE with DHSC] Primary Care Triage

This ability to triage patients away from GP services, using online and telephone consultations to avoid physical appointments. Furthermore, through public guidance, those with less severe symptoms are encouraged to use community pharmacy expertise and facilities to treat minor issues.

M7 [NHSE with DHSC] Primary Care Mutual Aid

The ability for general practices to provide staff, medicinal resources or capacity to other primary care sites that are experiencing due an increase in demand due to acute pressures. The majority of general practices are working in primary care networks, and this has helped share staff and resources during the COVID-19 pandemic, including identifying 'hot and cold' sites to manage potentially infectious patients across their groups. Practices also have business continuity arrangements in place, and CCGs help ensure patients can access GP services in the local area if their own practice has to close due to an outbreak.

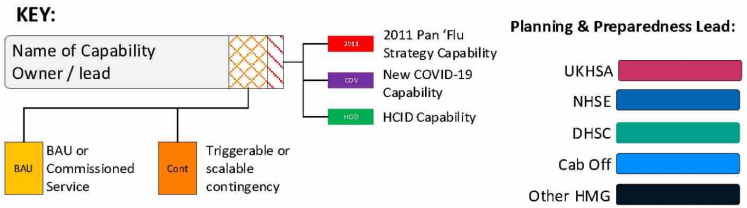
Mitigate – Primary Care Capacity [Strategically Aligned]

Capabilities that help to mitigate the public health impacts of a hazard once it has reached outbreak, epidemic or pandemic scale.

Whilst not directly related to a pandemic or outbreak response, the role that community pharmacy plays in delivering healthcare to the nation could play a considerable role in a response. Therefore it is important that the strategy keeps informed changes to capacity and contractual arrangements that could impact such a response.

[DHSC with NHSE] Community Pharmacy Contractual Capability & Capacity

The ability to use community pharmacies to deliver clinical services to patients when hospitals and GP clinics are at maximum capacity. This also includes the capacity to support other capabilities, such as home medication deliveries to those that a shielding/self-isolating, vaccination, testing and supply of pandemic treatments. Using triage services like NHS 111 to direct those with more minor symptoms to community pharmacies for medical advice or treatment helps reduce pressure on hospitals and GP services (already in place for BAU). In 2019, a Community Pharmacy Contractual Framework (CPCF) five-year deal was agreed which aims integrate pharmacies more into the NHS and Primary Care Network provide more clinical services and becoming the first port of call over the period of the deal.



Mitigate – Secondary Care Capacity

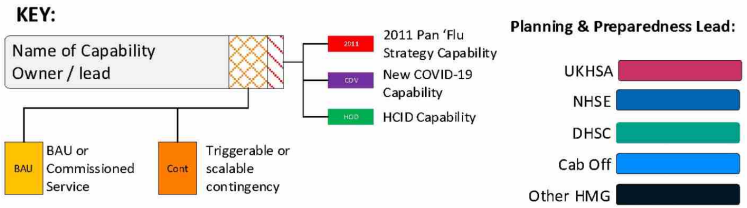
Capabilities that help to mitigate the public health impacts of a hazard once it has reached outbreak, epidemic or pandemic scale.

Sub Objective: To increase capacity on secondary care sites when a pandemic or outbreak has caused a surge.

This thematic stand outlines the operational 'levers' that can be pulled in order to create more capacity on NHS sites when there is a surge in patient admissions.

NHSE lead operationally on all secondary care capacity capabilities, with policy support from DHSC. Decisions regarding capacity, such as standing down elective care are normally made at regional/local level, with central trigger decisions made by NHSE.

Capabilities that enable us to "buy-back" system capacity are there as contingency measures.



M7 [NHSE]: NHSE Capacity – Mutual Aid

The ability for hospital trusts to provide staff, medicinal resources, ambulances or capacity to other hospital sites, NHS social care providers or trusts that are experiencing due an increase in demand due to acute pressures. Mutual aid is operated at a local/regional level between NHS sites.

M8 [NHSE]: NHSE Capacity – Cancellation of Elective Care

The ability to stand down elective care services in order to free up staffing and estates capacity due to increased demand from a pandemic/outbreak. Upon central guidance from NHSE to stand down elective care, individual trusts and practitioners will take the decisions on which care is cancelled or postponed depending on the risk to the patient. This could include the use of private healthcare facilities to assist with publicly funded elective care if BAU services are cancelled/postponed.

M9 [NHSE]: NHSE Capacity – Physical Estates Surge Capacity

The ability to create more physical estate capacity to accommodate a surge in patients suffering from the pathogen of concern and/or to provide alternative venues to treat elective care patients. This includes, but is not limited to; re-purposing existing estates with appropriate IPC measures, provision of increased oxygen supply, and if required, building field hospital sites such as Nightingales.

Mitigate – Secondary Care Capacity [Strategically Aligned]

Capabilities that help to mitigate the public health impacts of a hazard once it has reached outbreak, epidemic or pandemic scale.

As with workforce considerations, ensuring secondary care capacity is resilient and robust is key to ensuring the health of the nation as well as when responding to crisis. Several current workstreams including the manifesto commitments of 40 new hospitals are underway and will contribute significantly to this aim but it remains important for this this strategy to kept informed of developments in this space to ensure that considerations related to pandemic and outbreak response are reflected.

BAU NHSE Estates and Vehicle Capacity & Design
NHSE with CQC, DHSC — BAU

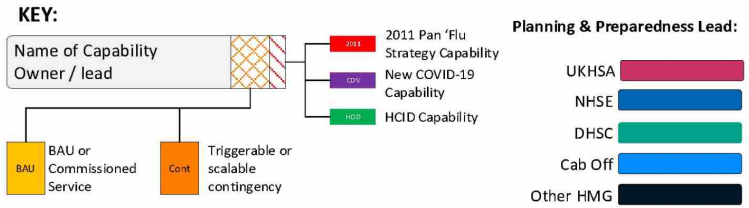
[NHSE/CQC/DHSC]: BAU NHSE Estates and Vehicle Capacity & Design

The ability to ensure that NHS estates can be used flexibly in the event of a pandemic or other infectious disease outbreak. This could include, the ability to repurpose existing estates to treat a surge in patients caused by the pandemic and/or continue elective care. This will include ensuring CQC IPC standards incorporate this potential need to flexibly use the secondary care estate.

BAU Primary, Secondary Infection Prevention Control
NHSE with CQC, DHSC — BAU

[NHSE/CQC/DHSC]: BAU Primary, Secondary Infection Prevention Control

The ability to limit the transmission of a pathogen by basic infection prevention control practices. In health & social care settings, such as hospitals and care homes, this includes standard hygiene practices (regularly cleaning equipment and shared surfaces, quarantining infected patients). In secondary care sites, IPC standards are upheld by NHS procedures with the CQC regulating IPC practice across all care sectors. To the wider public, IPC includes; standard public guidance and messaging e.g. 'Catch it, bin it, kill it', personal hygiene, regular cleaning of public and private facilities.



Mitigate – Adult Social and Community Care

Capabilities that help to mitigate the public health impacts of a hazard once it has reached outbreak, epidemic or pandemic scale.

Sub Objective: To mitigate health impacts of pathogen, both physical and mental, on those considered to be clinically vulnerable.

Capabilities in this thematic strand are intended to protect those who are most clinically vulnerable from the effects of a pathogen. This can be adults in a social or domiciliary care setting, the elderly, and those with underlying health conditions.

Stakeholder feedback suggests that there are a limited number of specific preparedness capabilities that are unique to social care, with the majority of ASC workstreams within the COVID response related to addressing wider issues with care provision.

M11: Community Shielding
DHSC with NHSE, MHCLG and DEFRA — Cont — COV

M12: Secondary Care Discharge for Infected Patients
NHSE with DHSC, MHCLG — Cont — COV

KEY:

Name of Capability
Owner / lead

- 2011 — 2011 Pan 'Flu Strategy Capability
- COV — New COVID-19 Capability
- HCID — HCID Capability
- BAU — BAU or Commissioned Service
- Cont — Triggerable or scalable contingency

Planning & Preparedness Lead:

- UKHSA
- NHSE
- DHSC
- Cab Off
- Other HMG

M10 [NHSE/DHSC]: Community Shielding

The ability to identify, contact and support to shield those that are most clinically vulnerable to effects of disease, and then to operationalise their shielding through communication and support. Following clinical advice from the CMO and UKHSA, NHS Digital alongside GPs are responsible for identifying individuals at national and local levels. The QCOVID risk stratification tool has also been built to identify further cohorts that may be susceptible to the disease. DHSC in conjunction with NHSE(NHSX & Primary Care) are responsible for reaching out to individuals at risk, providing support and advice to shield. For operationalisation of the shielding process, community pharmacy make sure the required medicines get to patients who are shielding. MHCLG coordinates wider support with food parcels organised by DEFRA in the event of supermarket shortages. ASC are responsible for operational shielding practice in care home, in line with IPC guidance from UKHSA.

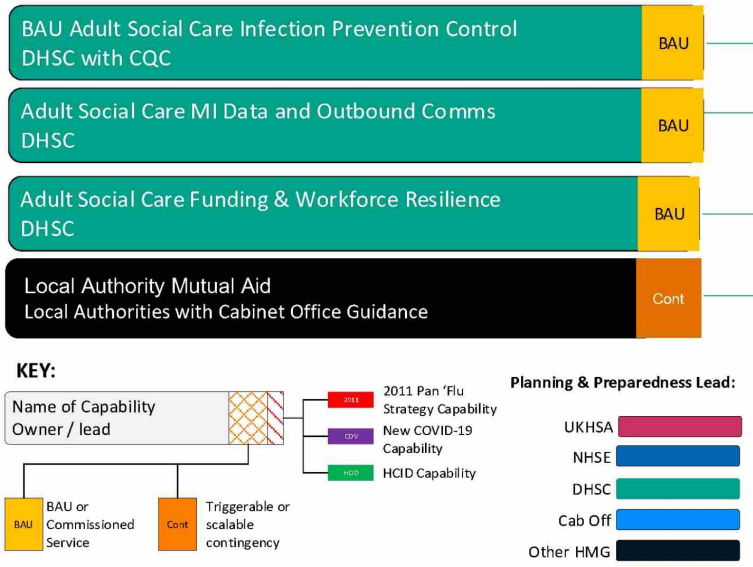
M11 [NHSE/DHSC/MHCLG]: Secondary Care Discharge for Infected Patients

The ability to discharge positive patients away from secondary care sites, and onto 'designated settings' on social care sites, or in some cases to their homes with appropriate support. As set out in the adult social care winter plan, DHSC committed to deliver a designation scheme with the Care Quality Commission (CQC) of settings for people leaving hospital who have tested positive for COVID-19 and are transferring to a care home (this includes working age adults who reside in a care home). Guidance has been co-produced with NHS England (NHSE), Public Health England (PHE) and CQC, in consultation with the Local Government Association (LGA), Association of Directors of Adult Social Services (ADASS), care provider associations and user groups. Consideration required via LRFs for how to support those who have been discharged to their own homes.

Mitigate – Adult Social and Community Care [Strategically Aligned]

Capabilities that help to mitigate the public health impacts of a hazard once it has reached outbreak, epidemic or pandemic scale.

COVID-19 showed that wider vulnerabilities in ASC were exacerbated by a crisis scenario. It is key that from a preparedness perspective, an understanding of the sector, its workforce and the measures they will take to protect the public in the event of such an event is maintained. Adult Social Care reform and monitoring clearly extends far beyond just preparing for a pandemic or outbreak, but this strategy should be used to contribute and inform discussion to ensure that these hazards are addressed in future thinking.



[DHSC/CQC/NHSE]: BAU Adult Social Care Infection Prevention Control

The ability to carry out measures that prevent and/or limit the spread of a pathogen in a social care setting. During a pandemic, extra measures will be put in place to provide further protection to residents. UKHSA lead on the provision of guidance to sectors with DHSC leading on distribution of enhanced funding (via the Infection Control Fund) and logistical support to distribute relevant IPC measures. CQC lead on assurance, with regular inspections. IPC regulation is also supported by Local Authorities and Local Health Protection teams. DHSC's ASC team in conjunction with CQC are now looking to incorporate enhanced IPC measures as a baseline post-COVID. For domiciliary care(DC), IPC would mainly be through staff guidance and training. DC is also regulated by the CQC. Individuals in ASC will likely have regular contact NHS services, and therefore important to align with NHSE IPC measures.

[DHSC]: Adult Social Care MI Data & Outbound Comms

The ability to collect data on Management Information(MI) and patients in social care, and communicate it back to DHSC. During the pandemic, key data, such as case numbers, were fed into the ASC dashboard. Through-out COVID-19, social care settings were also instructed to update a 'capacity tracker', which monitored PPE & testing to give a RAG rating, enabling support to the areas that needed it. This additional admin burden was supported by funding from DHSC. Regional assurance(RAs) teams are also key for policy feedback, as they are effectively the voice of the care providers. RAs provide information and data to DHSC policy teams.

[DHSC]: Adult Social Care Funding & Workforce Resilience

The ability to provide the Adult Social Care sector with sufficient funding to maintain and build care quality and IPC, whilst also creating and maintaining a resilient workforce that can cope with a pandemic or outbreak. As part of the ASC reform agenda, DHSC are considering greater incentives for workers in order to retain and recruit staff. ASC has historically been under-funded, and the COVID-19 pandemic exposed the need for reform and increased funding. For domiciliary care, funding will come though both ASC and the NHS depending on the specific service.

[LAs with CO Guidance]: Local Authority Mutual Aid

The ability to provide mutual aid to local authorities in emergencies where there is acute pressure in local services. As LAs don't normally keep clinical resources, this would mainly be in the form of staff support. In emergency situations, LA staff can support ASC sites. Decisions to agree LA mutual aid are made at local level and the Cabinet Office have a short guide published on the UK GOV website.

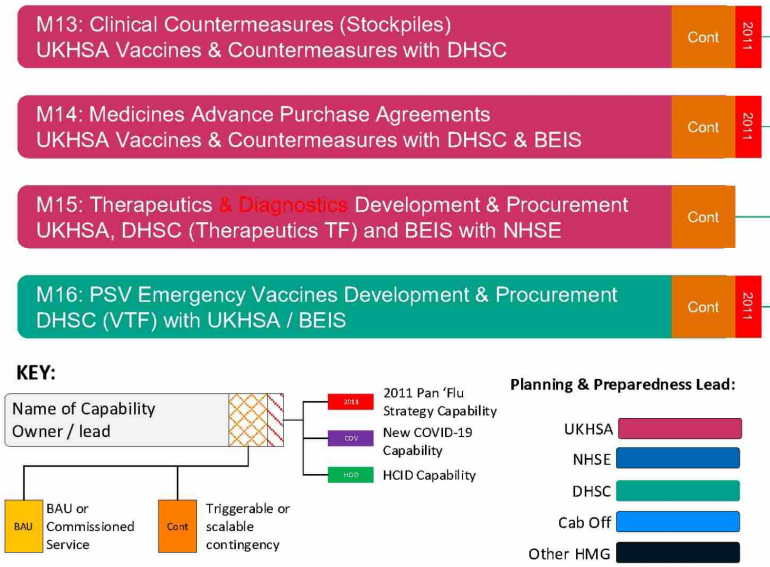
Mitigate – Clinical Countermeasures Procurement & Stockpiling

Capabilities that help to mitigate the public health impacts of a hazard once it has reached outbreak, epidemic or pandemic scale.

Sub Objective: To possess and deploy the required medicines and equipment to either manage, treat and/or vaccinate patients against a pathogen.

This theme details capability to stockpile, or procure at short-notice, clinical countermeasures for a pathogen including: vaccines, therapeutics, PPE and other clinical consumables.

Most capabilities rely on research through SRE, NICE, PHE and external sources. Procurement is mainly handled by BEIS & DHSC, and then finally frontline delivery will be through NHSE. UKHSA will be provide oversight and support through all stages. Clinical countermeasures are currently being reviewed via DHSC's Clinical Countermeasures Review.



M13 [UKHSA, DHSC): Clinical Countermeasures (Stockpiles)

The ability to stockpile relevant medical supplies in order to rapidly deploy them in the event of an incident. The Government maintains national stocks of clinical countermeasures for a future influenza pandemic with arrangements in place for how these would be distributed in an emergency. These clinical countermeasures include – but are not limited to – antivirals, antibiotics, vaccines, clinical consumables such as needles and disinfectants, and Personal Protective Equipment (PPE), e.g. facemasks and respirators.

M14 [UKHSA, DHSC, BEIS]: Medicines Advance Purchase Agreements

The ability to reserve access to a pandemic specific vaccine in order to ensure rapid manufacturing and distribution in the event of a pandemic. DHSC has an Advance Purchase Agreement (APA) to secure UK access to a Pandemic Specific Vaccine (PSV), should an influenza pandemic occur.

M15 [UKHSA, DHSC, BEIS]: Therapeutics and Diagnostics Development & Procurement

The ability to research, identify and deploy therapeutics for novel diseases. For a known disease (e.g. 'flu) this is a matter of procurement, stockpiling and deployment. For new diseases, use of therapeutics requires research to identify existing effective therapeutics or develop new ones. For COVID-19 a specific Therapeutics Taskforce has been established in DHSC, however, the assumption is that smaller-scale incidents would rely on established structures between UKHSA and SRE to commission research. NHSE lead on the operational distribution and deployment of therapeutics. Screening and diagnostics technologies are not currently stockpiled, however there is a new UK diagnostics strategy in development, with the aim to deliver an integrated approach to diagnostics across the health care system and life sciences sector. This includes coordinating and aligning the diagnostics work of the NHS, UKHSA, OLS, OHP, and other bodies.

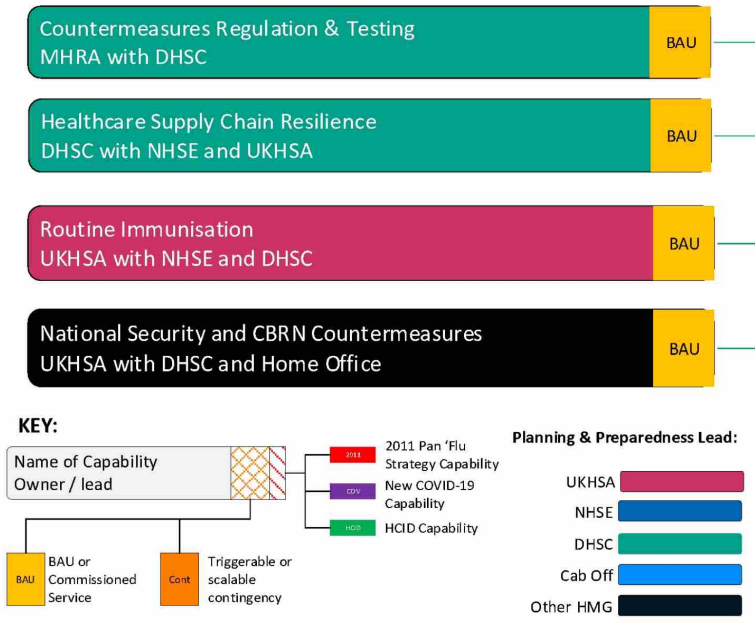
M16 [DHSC, UKHSA, BEIS]: PSV Emergency Vaccines Development & Procurement

The ability to develop and procure a vaccine for a pandemic pathogen that is not covered by an existing APA. For COVID-19, this work was overseen by the BEIS vaccines taskforce, in conjunction with DHSC, PHE and MHRA.

Mitigate – Clinical Countermeasures Procurement & Stockpiling [Strategically Aligned]

Capabilities that help to mitigate the public health impacts of a hazard once it has reached outbreak, epidemic or pandemic scale.

The use of clinical countermeasures will likely contribute to any pandemic or HCID response. Therefore ensuring that the necessary support structures need for effective deployment of such countermeasures are resilient for use in a crisis is critical. As these capabilities are routinely utilised in peace time and therefore not the direct responsibility of this strategy refresh, contributing to their development and staying informed of changes remains important.



(MHRA, HSA, DHSC): Countermeasures Regulation & Testing

The ability to rapidly regulate and test countermeasures to ensure they align to the required legal standards and can be used to treat or prevent the effects of a pathogen. Regulation of pharmaceuticals is the responsibility of the MHRA. During a pandemic or outbreak, the MRHA will have to prioritise treatments for the pathogen, and expediate their process of testing and regulation to make sure the drugs safe, and available to the public as soon as possible. PPE is often subject to standards and regulation under the Health and Safety Act delivered by the Health and Safety Executive. The Secretary of State for Health has the power to grant a temporary licence absorbing risk to HMG.

[DHSC, NHSE, UKHSA] Healthcare Supply Chain Resilience

The ability to build and maintain resilient supply chains to procure and deliver therapeutics and medical devices for primary, secondary, community and social care. This includes the streamlining and onshoring of critical supply chains to reduce disruption in the event of a global incident.

[UKHSA, NHSE, DHSC]: Routine Immunisation

The ability to deliver business as usual vaccination to the population. This included the delivery of vaccination to healthcare workers and those with a higher risk of being exposed to pathogens and the deliver of precautionary vaccination in individual cases of exposure to a immunisable pathogen.

[UKHSA, DHSC, HO]: National Security & Clinical Countermeasures

The ability to ensure that clinical countermeasures needed to respond to national security and CBRN threats are stockpiled. Whilst a level of overlap will exist here – some countermeasures will be specific for these situations. In an HCID scenario, these countermeasures would form part of a 'containment' rather than 'mitigation' response.

Mitigate – Vaccination Delivery

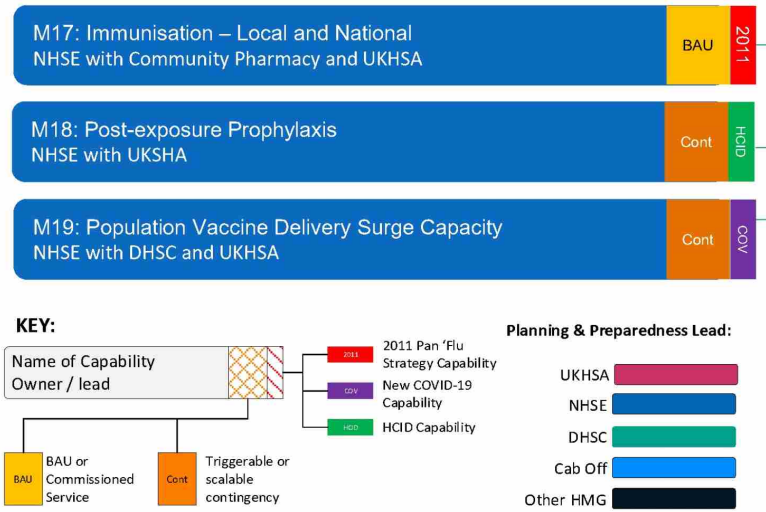
Capabilities that help to mitigate the public health impacts of a hazard once it has reached outbreak, epidemic or pandemic scale

Sub Objective: To enable the effective vaccination of the population in the event of a pandemic or HCID outbreak

Pandemic or outbreak driven vaccination is a scalable capability predominantly led by NHSE.

In the event of the standing vaccination capacity being exceed or vaccines needed to be delivered at pace to large number, additional resources can be deployed, as seen during COVID-19.

Decisions on routine or small scale vaccinations will be taken locally, coordinated by regional or local health protection team, with DHSC providing oversight support of larger scale vaccination programmes.



M17 [NHSE et al]: National and Local Immunisation

The ability to operationally deliver a vaccine to relevant members of the population. NHSE, in partnership with GPs and community pharmacies, have a standing capability to deliver Flu and age specific vaccinations to those that require them. In the event of a pandemic, or a HCID outbreak, this standing capability can be used to deliver stockpiled or APA supplied vaccination as required.

M18 [NHSE with UKSHA]: Post-exposure Prophylaxis

The ability to deliver post-exposure preventative vaccination for known HCIDs. Post exposure vaccination for HCIDs such as Ebola or Monkeypox on a national scale would be not be possible and may be inappropriate, given the negative side effects of some of these vaccines. UKHSA in partnership with JCVI would advise on the appropriate administration and priority groups for these vaccinations.

M19 [DHSC, NHSE, UKHSA]: Population Vaccine Delivery Surge Capacity

The ability to surge or scale-up vaccine delivery operations to vaccinate a large proportion of the population at pace. In the event that a vaccination needs to be administered to large percentages of the population, additional personal and resources will be needed to conduct vaccination at pace. In this case, DHSC and the health sector could leverage MACA support, cross-government support, or the voluntary sector in order to provide additional resources or estate to support the administration of vaccination.

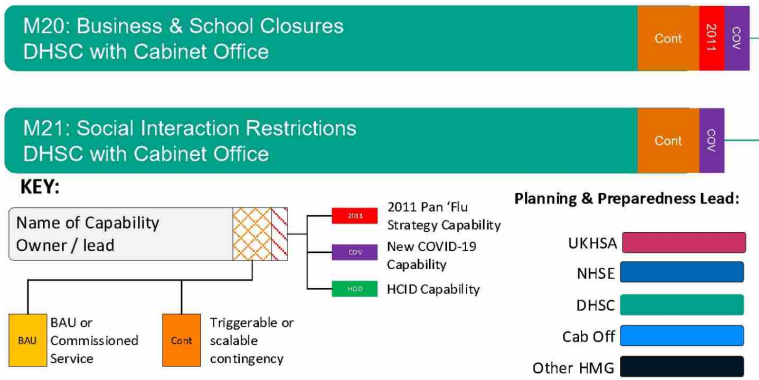
Mitigate – Non-Pharmaceutical Interventions

Capabilities that help to mitigate the public health impacts of a hazard once it has reached outbreak, epidemic or pandemic scale.

Sub Objective: To prevent/slow the spread of a pathogen between the population once it has reached widespread transmission.

This theme covers interventions outside of medicine which can slow the spread of a pathogen, mainly through reducing opportunities for transmission by reducing social contact. Capabilities regarding restrictions and closures to ensure reduced social contact and social distancing have always been available, but not specifically prepared for prior to COVID-19.

The DHSC social distancing directorate developed policy around NPIs in response to Covid-19, using research and evidence from SAGE, JBC and the Behavioural Insights Team, and in consultation with CMO/DCMO. Due to the cross government impacts of restrictions and closures, Cabinet Office make final decisions. Regulations in England and Wales were made under the Public Health Act 1984 and under the Coronavirus Act 2020 (CVA) in Scotland and Northern Ireland. The CVA formed the foundation of the Government's approach to the pandemic, supporting public services, including the NHS, as well as providing support to individuals and businesses. For COVID-19, non-pharmaceutical interventions were packaged into local restrictions, the tiering system, lockdowns and the Roadmap steps, recommended through the Local Action Committee Bronze/Silver/Gold structure, with a final decision taken at COVID-O.



M20 [DHSC, CO] : Business & School Closures

The ability to activate legislation forcing the closure of businesses and venues in order to limit social contact in these settings. Decisions on closures are a balance of impact on transmission and the inevitable secondary impacts against other HMG priorities. The 2011 Pan 'Flu strategy makes limited reference to business and school closures, suggesting in particular that school closures would be unlikely and handled at the discretion of individual headteachers. During the COVID-19 pandemic these NPIs were deployed at a national level and in regional settings as part of the tiering system and Education Contingency Framework. Individual departments across Whitehall will own the relationships with the relevant business sectors but overall policy development will be the responsibility of DHSC, working closely with CO.

M21 [DHSC, CO]: Social Interaction Restrictions

The ability to set legal limits or public guidance to restrict social contact. These include but not limited to: stay at home orders, mask wearing, discouraging travel, inter-household mixing and encouraging people to meet outside. When applied as legal limits, these restrictions can be enforced by fines for non-compliance. As with M18, restrictions were part of government's tiering system and other packages of non-pharmaceutical interventions used during COVID-19. Responsibility for enforcing these restrictions again sits across Whitehall, with significant roles for MHCLG and Home Office, although again, policy developed is owned jointly by DHSC and CO.

Mitigate – Wider Health Sector Impacts Management

Capabilities that help to mitigate the public health impacts of a hazard once it has reached outbreak, epidemic or pandemic scale.

Sub Objective: To mitigate the impacts of the pandemic from impacting other sectors of which healthcare is delivered to ensure that health services do not become overwhelmed.

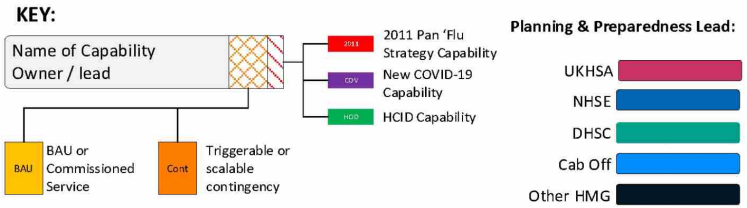
Provision of pandemic specific healthcare within the government's secure estate requires specialist considerations. As such, DHSC and UKHSA work closely with MoJ and Home Office to respond to these unique settings and ensure that mitigations are in place to prevent these settings disproportionally impacting the wider health system.

M22: [UKHSA H&J, MOJ, HO, DHSC, NHS] : Secure Estate Containment & Management

The ability to prevent or contain disease outbreaks in secure estates, whilst still providing the normal provisions and healthcare to inmates and staff. DHSC and UKHSA, working in close conjunction with MoJ, have a specific team that considers public health risks in the secure estate. Outbreaks and IPC issues within immigration detention centres would be handled by Home Office in conjunction with DHSC and UKHSA.

M23: [NHSE, UKHSA, X-WH Support] Specialist Death Management

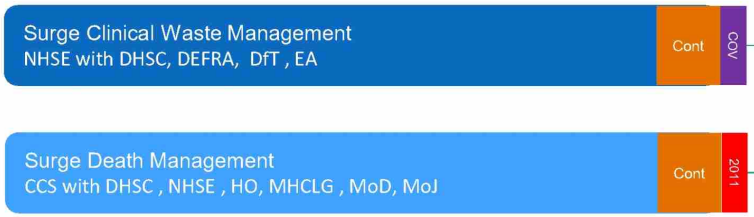
The ability to securely manage the death arrangements for individuals who have contracted an infectious disease that poses an ongoing public health risk after death. This is most likely to occur following death from an HCID where specialist pathology and secure burial arrangements will be required. NHSE would be the operational leads in such occurrence, with specialist support from UKHSA and cross-Whitehall security and defence partners as required.



Mitigate – Wider Health Sector Impacts Management [Strategically Aligned]

Capabilities that help to mitigate the public health impacts of a hazard once it has reached outbreak, epidemic or pandemic scale.

A major pandemic has the possibility of causing a high death-toll and significantly expanding the use of clinical consumables. Therefore a need exists to ensure that capabilities that handle excess deaths and clinical waste products are able to surge in the event of such a crisis.

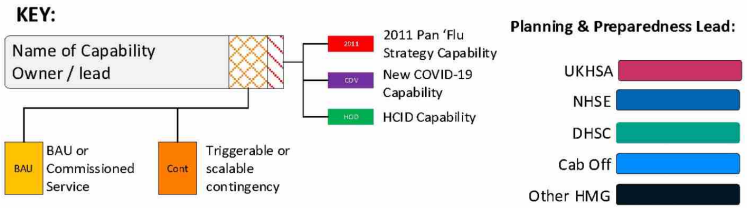


[NHSE/DHSC/DEFRA/EA]: Surge Clinical Waste Management

The ability to process a surge in clinical waste resulting from an increase in the usage of PPE by health and social care workers and an increase in the number of patients being treated. This includes the usage of specific regulations such as Regulatory Position Statement 23, which allows waste to be incinerated using energy from waste operators. Others include using normal dust carts to transport yellow and orange waste to local processing sites.

[CCS]: Surge Death Management

The ability to increase mortuary capacity and streamline administrative processing of deaths in order to respond to a surge in mortality due to a pandemic or outbreak. Surge deaths management arrangements are in place for a range of national security risks with local levels plans being owned and operated by Local Resilience Forums.



Communicate

Capabilities that help the UK public to understand the scale and nature of the pandemic and to take appropriate precautions to stay safe.

Sub Objective: N/A All capabilities in this strand have a common purpose

UK's current emergency communication capabilities are business as usual, commissioned services.

Communication capabilities appear in the 2011 Pandemic Influenza Preparedness Strategy, with a specific guidance document for how to communicate in the event of such a pandemic.

DHSC are the Lead Government Department responsible for communications during a health crisis, with support from Cabinet Office. PHE, NHSE & NICE engage the academic community to develop and distribute guidance. 'UKHSA Communications' will provide oversight and support.

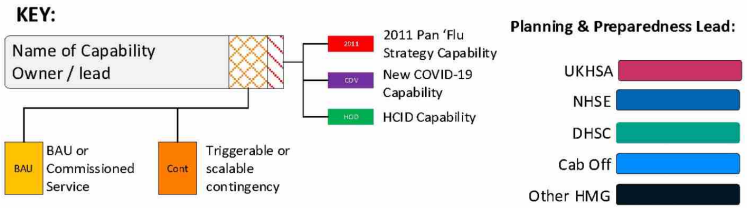
CM1 [CCS & UKHSA Comms with DHSC and NHSE] :Emergency Communications & Guidance

The ability to provide public and health-sector communications and guidance in relation to the pandemic or outbreak.

Communications and guidance is twofold;

1 – Provide guidance to the public on what to in the lead up to a pandemic, during the period and following it. This will include wider messaging on NPIs, therapeutic and vaccination as well as reiterating standard public health guidance (e.g. hands, face, space).

2 – Provide guidance to the health and social care community on the management of the pandemic. This will be via official channels such as NICE and also through the academic community.



Communicate [Strategically Aligned]

Capabilities that help the UK public to understand the scale and nature of the pandemic and to take appropriate precautions to stay safe.

Sub Objective: N/A All capabilities in this strand have a common purpose

Government departments also have a responsibility to ensure that scientific advice is accessible to all communities, and that any misinformation being shared is promptly removed and discredited.

COVID-19 has shown the harmful effects of counter-productive communication and guidance, that has been particularly present in ethnic minority groups. Therefore, a cross-government effort is needed to tackle this both online and within communities.

[DCMS et al] Health Misinformation/Disinformation Response

The ability to tackle harmful health disinformation or misinformation, both online and within communities. DCMS lead on removing and debunking incorrect information that is being shared online and through other media. Home Office will support where there is a nefarious origin to disinformation. Within communities, cultural factors can affect how certain groups interpret official government guidance, therefore it is important for health departments (DHSC, NHSE, FCDO) to effectively engage clearly with these groups. Work done by NHSE's Health Inequalities team can support this, particularly issues such as the disproportionate uptake of vaccines within minority and under-represented groups seen during the COVID-19 pandemic.