



**Covid-19**  
**Learning from**  
**international experience**

**Briefing Paper**

**March 2020**

## Covid-19 Learning from international experience

**Problem:** Few members of the current health and care workforce have lived through a pandemic. Learning from international experience has become an essential part of the response to Covid-19. Established ways of sharing health and care information cannot keep pace with rapid changes in knowledge. Standard approaches are being supplemented with informal routes of communication about Covid-19, between health organisations or direct from clinician to clinician. In this paper we consider a) how the health and care workforce (and the health and social care system), are learning from international experience on Covid-19, and b) what we know about the key lessons.

### a) How are the health & care workforce learning from international experience on Covid-19?

There are at least five key ways in which the health and care workforce are accessing information about Covid-19 outside the UK. (Main sources are listed in the appendix).

- Official information - websites of the World Health Organization, professional organisations and government bodies (from both UK and other countries).
- Research evidence emerging from outside the UK, published in journals and websites
- Clinical and care networks
- Social media, particularly Twitter
- General news sources

**Official information** underpins the healthcare workforce response to the pandemic. UK government and relevant professional body sites are commonly consulted. The World Health Organization is providing essential learning resources, and useful information for specialists on experimental therapies, not currently recommended outside of clinical trials.

**Emerging international research** is being published promptly, sometimes without going through the usual peer review process. A number of journals are fast tracking research and review pieces directly onto their websites. Much of this is being made open access and put together in special collections. Evidence is being collated, critiqued and synthesised by a number of organisations (see appendix to this briefing). The Oxford Evidence Based Medicine Centre is currently providing a particularly responsive service, with accessible and pragmatic responses

to clinical practice questions, posted online as they become available.

**Clinical and care networks** Clinician to clinician communication offers real time national and international information on Covid-19. In intensive care medicine, there is extensive collaboration between the UK, Italy, China and Spain, with definitive learning, for example, about the dangers associated with non-invasive ventilation when patients are viraemic, the need to stop use of high flow oxygen therapy to conserve oxygen and lessons around personal protective equipment (PPE).

The High Consequence Infectious Disease (HCID) teams provide a particularly good example of highly networked specialists. They have excellent Informal links with centres in countries of the European Union. They participate in several semi-formalised national working groups, and coordinate regional networks of all Trusts to support decision-making in less specialist centres, via WhatsApp. These groups are starting to produce decision support tools and position statements.

Professional bodies are an effective conduit for information from services outside of the UK. For example, the European Association of Palliative Care has translated and disseminated operational guidelines from Italy and elsewhere, including information on the level of protective equipment needed in particular situations, and tools for sharing care between hospital and palliative care.

The European Geriatric Medicine Society has produced a position statement on Covid-19, and a paper on ethical principles, including assessment and prioritisation of patients for treatment. Disease severity and health system capacity are

recommended as criteria for prioritisation, rather than advanced age. Assessment of levels of frailty is also proposed.

**Links with research** Evidence-based briefing notes covering topics such as anxiety and fear, resilience and post-traumatic stress disorder are about to be distributed to psychology teams within the NHS across the UK. These have been prepared by an international collaboration of researchers led from the UK. NIHR infrastructure is also responding, for example with Applied Research Collaboration virtual meetings sharing information across regions on clinical issues.

**Twitter** is being used extensively to disseminate data (e.g. infection rates, mortality statistics) and new research from outside the UK. Clinicians are sharing information on how patients are presenting to health services. For example, the high proportion of patients in Wuhan who reported digestive symptoms, and first presentation with a history of fatigue, loss of appetite, or sense of smell, rather than cough. Twitter is also a platform for care professionals to share personal experience of extremely challenging working conditions, and as such, has potential to generate anxiety amongst professionals and the wider public.

### **b) What do we know about the key lessons from international experience?**

- The main sources of key lessons for the care system are the World Health Organization and government guidance.
- The care workforce is learning from international experience in patient management.

### **Key lessons from international health and care services reported by UK workforce**

- If you think you have prepared for worst case scenario, think again as it will be even worse than you are expecting.
- PPE equipment supplies are essential to avoid loss of health and social care personnel.
- Testing in the community and of health and social care workers enables appropriate planning and decision making.
- Concern about the perceived lack of enforcement of social/physical distancing measures in Europe is shared across health and care workforces.
- Experiences in treatment and clinical trials are being shared, but there is some uncertainty and a lack of access to some therapies outside of trials.
- Palliative care and hospice services have played a key role in the Italian response to Covid-19, and should be included in training and preparation.
- Severity of illness and health system resources are more appropriate criteria for patient prioritisation than chronological age.
- Large inpatient treatment facilities were created in Europe to reduce the pressure on social care at discharge, this was invaluable.
- Some slowing of discharge to post-acute care is understandable, but efforts must be made to avoid long hospital stays, e.g. with more home care rehabilitation.

## Appendix 1

The European Centre for Disease Control has produced a document that pulls together key learning from Italy and China (<https://www.ecdc.europa.eu/sites/default/files/documents/Covid-19-guidance-health-systems-contingency-planning.pdf>) published March 2020.

### This supports the need to

- Learn from pandemic influenza planning, but adjusting to the differences of Covid-19, especially distribution of cases across age groups and the uncertainties surrounding treatment options.
- Prepare or adapt business continuity plans for healthcare facilities in line with the latest public health advice to ensure continuity of essential services.
- Non-essential services need to be reviewed regularly against other demands
- Acknowledge the role of support staff and ensure they are part of all plans
- Supply chain management systems should be established if not already in place.
- Discourage symptomatic patients from attending health facilities without prior instructions
- Designate treatment facilities for mild, sub-intensive and intensive care needs
- Activate hospital contingency plans to cancel elective activity & re-assign human resources.
- Create temporary treatment facilities for mild cases, or advise self-isolation
- Deny access to hospitals for family and friends of admitted patients
- Decrease the administrative workload for healthcare workers
- Clearly define the role of the primary care services in the overall management of Covid-19
- Primary care might support the Covid-19 effort by taking charge of subgroups of non-acute Covid-19- patients. Clear procedures have to be in place, for example on home visits versus patients visiting the health centre.
- Ensure staff are trained and informed on where to refer suspected cases and how to do so
- Establish a triage system at a facility's entrance to minimise the risk of exposure to Covid-19
- Provide information to patients on how, when and why to access the particular facility
- Establish dedicated teams for receiving and managing non-Covid-19-related patients. This could, for example, be done by designating a dedicated medical and administrative team
- Include roster/back-up teams in the event that staff members get sick
- Clear procedures must be established for staff members developing Covid-19 symptoms
- Ensure appropriate communication plans, internal and external.
- Dedicate or repurpose facilities to manage known or suspected Covid-19 cases
- Plan for optimising the use of PPE in case of shortages
  - Use of surgical masks if the supply of FFP2/3 respirators is limited
  - Reserve FFP2/FF3 respirators for airborne-generating procedures
  - Keep using the same FFP2/FFP3 respirator when performing the same activity (e.g. swabbing) (up to 4 hours if not damaged, soiled or contaminated) when managing or caring for multiple Covid-19 patients
- Appoint designated staff members to the care of Covid-19 patients
  - Appoint designated staff members to testing, care of cases
  - Include roster/back-up teams if staff members are getting sick
  - Enable rapid registering, appropriate training and reallocation of medical support staff to frontline roles (e.g. assistant nurses, physiotherapists)
  - Voluntary recruitment of inactive healthcare workers (retired personnel etc.)
- Triage patients based on ventilation capacity
- Reduce the moving of patients in the hospital
- Repurpose buildings such as military hospitals and hostels/hotels, build new facilities

## Appendix 2

### Key messages from Cochrane evidence collections:

- Most reviews were unable to identify clear messages because of the low quality of evidence.
- Most reviews are concerned with infection control for other diseases, including respiratory infections. They may highlight relevant principles.
- Evidence from one review about personal protective equipment (PPE) for healthcare staff concludes: “Breathable types of PPE may not lead to more contamination, but may have greater user satisfaction. Alterations to PPE, such as tabs to grab may decrease contamination. Double gloving, following Centre for Disease Control doffing guidance, and spoken instructions during doffing may reduce contamination and increase compliance. Face-to-face training in PPE use may reduce errors more than video or folder based training.”

### Summary of key messages to date from rapid reviews produced by the Centre for Evidence Based Medicine – Oxford Covid-19 Evidence Service

- Frequent handwashing will reduce the chances of contracting Covid-19.
- Social distancing is supported by the best available evidence as a means of reducing transmission and delaying spread.
- Current evidence does not support treatment with medicines to reduce fever in Covid-19.
- There is no evidence of a link between inhaled corticosteroids (used to treat asthma) and Covid-19 infection.
- Tears and eye secretions from patients with Covid-19 may be potentially infective and health care workers should wear eye protection.
- Quitting smoking may reduce risks of infection, serious outcomes and death from Covid-19, and reduce transmission to others. This is via direct effects – reducing hand to mouth transmission for example, and because smoking causes and exacerbates conditions such as heart disease that are linked with worse outcomes for Covid-19.
- Clinical examination of patients to diagnose pneumonia can be limited. Listening with a stethoscope not always needed, blood pressure should be measured only if it will influence the decision to admit to hospital.
- Older people are more likely to have infection with multiple organisms, bacteria as well as viruses. Rescue prescribing to start antibiotics early could reduce hospital admissions, and mortality.
- Strip like head thermometers are inaccurate.
- Non-steroidal anti-inflammatories (e.g. ibuprofen) should be used with caution in acute respiratory infections.

## Appendix 3

### List of sites and sources of information on Covid-19 that draw on international experience

Note that many of these overlap and link to each other:

- **National Institute for Health & Care Excellence** has published three Covid-19 guidelines for 1) the management of patients in critical care, 2) patients undergoing kidney dialysis, and 3) systemic anticancer treatments (<https://www.nice.org.uk/news/article/nice-publishes-first-rapid-Covid-19-guidelines>)
- **Cochrane** has two Covid-19 collections of evidence reviews: (1) infection control and prevention measures, and (2) evidence relevant to critical care (<https://www.cochranelibrary.com/collections/doi/SC000040/full>)
- **Public Health England** Find the Evidence Daily update (<https://phelibrary.koha-ptfs.co.uk/coronavirusinformation/>)
  - Daily updated summary of published guidance, reports and evidence briefings (including preliminary reports not yet peer reviewed)
- **The NHS Contact, Help, Advice, Information Network (CHAIN)** (<https://www.chain-network.org.uk/resources.html>)
  - Links to global and national guidance, care guidance from national colleges, and education and training resources
- **Royal College of General Practitioners** national hub (<https://www.rcgp.org.uk/policy/rcgp-policy-areas/Covid-19-coronavirus.aspx>)
  - Includes links to national guidance, area level guidance, frequently asked questions for various topics including clinical practice, practice management, staff wellbeing.
- **The Royal College of Pathologists** Covid-19 resource hub (<https://www.rcpath.org/coronavirus>)
  - Clinical guidance
- **The British Geriatrics Society** (<https://www.bgs.org.uk/resources/coronavirus-current-information-and-advice>)
  - National guidance, including guidance for all healthcare settings, hospital specific guidance, and community, residential and social care specific guidance. Links also to guidance from other professional bodies.
- **The Royal College of Nursing** (<https://www.rcn.org.uk/clinical-topics/infection-prevention-and-control/novel-coronavirus>)
  - Global and national guidance, clinical guidance and links to advice on self care
- **Health Education England** (<https://nshcs.hee.nhs.uk/coronavirus-Covid-19-information/useful-links/> and <https://kfh.libraryservices.nhs.uk/Covid-19-coronavirus/>)
  - Global and national guidelines, links to evidence briefings/published journal articles, link to GIDEON
- **The Academy of Royal Medical Colleges** (<https://www.aomrc.org.uk/Covid-19-clinical/>)
  - Clinical guidance
- **The Centre for Evidence Based Medicine – Oxford Covid-19 Evidence Service** (<https://www.cebm.net/oxford-Covid-19/>)
  - Rapid evidence reviews, links to emerging evidence

- **The Lancet Covid-19 Resource Centre** (<https://www.thelancet.com/coronavirus>)
  - The Lancet hub provides commentary and correspondence, with some summaries of health policies. These might suggest this is one way UK clinicians are learning from international experience. For example, there are commentaries and modelling on Covid-19 health policy in other countries, such as Canada, Italy and Spain  
([https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)30670-X/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30670-X/fulltext));  
([https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)30627-9/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30627-9/fulltext));  
([https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667\(20\)30060-8/fulltext](https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(20)30060-8/fulltext)).
- **The European Association of Palliative Care** (<https://www.eapcnet.eu/publications/coronavirus-and-the-palliative-care-response>)
  - Direct links to tools and guidelines on palliative care and Covid-19 from around the world, relevant collections of research articles.
- **The British Thoracic Society** (<https://www.brit-thoracic.org.uk/about-us/Covid-19-information-for-the-respiratory-community/>)
  - Collection of operational and clinical guidance, including management of critical care patients.
- **European Centre for Disease Control**  
(<https://www.ecdc.europa.eu/sites/default/files/documents/Covid-19-guidance-health-systems-contingency-planning.pdf>)
  - Guidance for contingency planning for Covid-19 based on expert opinion
- **European Geriatric Medicine Society** <https://www.eugms.org/news/read/article/490.html>
  - Covid-19 task force position statement, paper on ethical principles and discussion forum

## Appendix 4

**Table – Sources of information on Covid-19**

Source of information	Sources linked to on website						
	Global advice and guidance	UK government advice and guidance	Clinical/ practice guidance (e.g. from royal colleges)	Health setting specific guidance	Includes population specific guidance	Evidence briefings, or links to published evidence	Other
Public Health England Find the Evidence Daily update ( <a href="https://phelibrary.koha-ptfs.co.uk/coronavirusinformation/">https://phelibrary.koha-ptfs.co.uk/coronavirusinformation/</a> )	YES	YES	YES	YES	NO	YES	Training resources, legal guidance
The NHS Contact, Help, Advice, Information Network (CHAIN) ( <a href="https://www.chain-network.org.uk/resources.html">https://www.chain-network.org.uk/resources.html</a> )	NO	YES	YES	YES	Homeless, adult social care users	YES	Emergency support network
The Centre for Evidence Based Medicine – Oxford Covid-19 Evidence Service ( <a href="https://www.cebm.net/oxford-Covid-19/">https://www.cebm.net/oxford-Covid-19/</a> )	NO	NO	YES	YES	Older people, adults	YES	-
The Academy of Royal Medical Colleges ( <a href="https://www.aomrc.org.uk/Covid-19-clinical/">https://www.aomrc.org.uk/Covid-19-clinical/</a> )	NO	YES	YES	YES	NO	NO	-
Health Education England ( <a href="https://nshcs.hee.nhs.uk/coronavirus-Covid-19-information/useful-links/">https://nshcs.hee.nhs.uk/coronavirus-Covid-19-information/useful-links/</a> and <a href="https://kfh.libraryservices.nhs.uk/Covid-19-coronavirus/">https://kfh.libraryservices.nhs.uk/Covid-19-coronavirus/</a> )	YES	YES	YES	NO	NO	YES	Global Infectious Diseases and Epidemiology Online Network, <u>E-Learning courses for health and</u>



							care workforce, other educational resources
The Royal College of Nursing ( <a href="https://www.rcn.org.uk/clinical-topics/infection-prevention-and-control/novel-coronavirus">https://www.rcn.org.uk/clinical-topics/infection-prevention-and-control/novel-coronavirus</a> )	YES	YES	YES	YES	People in social care settings	NO	Self-care
The British Geriatrics Society ( <a href="https://www.bgs.org.uk/resources/coronavirus-current-information-and-advice">https://www.bgs.org.uk/resources/coronavirus-current-information-and-advice</a> )	YES	YES	YES	YES	Older people	NO	-
The Royal College of Pathologies Covid-19 resource hub ( <a href="https://www.rcpath.org/coronavirus">https://www.rcpath.org/coronavirus</a> )	NO	YES	YES	NO	NO	NO	Workforce redeployment
Royal College of General Practitioners national hub ( <a href="https://www.rcgp.org.uk/policy/rcgp-policy-areas/Covid-19-coronavirus.aspx">https://www.rcgp.org.uk/policy/rcgp-policy-areas/Covid-19-coronavirus.aspx</a> )	NO	YES	YES	YES	NO	NO	FAQs on for various topics including clinical practice, practice management, staff wellbeing.
Cochrane has two Covid-19 collections of evidence reviews: (1) infection control and prevention measures, and (2) evidence relevant to critical care ( <a href="https://www.cochranelibrary.com/collections/doi/SC000040/full">https://www.cochranelibrary.com/collections/doi/SC000040/full</a> )	NO	NO	NO	NO	NO	YES	-
The Lancet Covid-19 Resource Centre ( <a href="https://www.thelancet.com/coronavirus">https://www.thelancet.com/coronavirus</a> )	YES	NO	NO	NO	NO	YES	-
National Institute of Health and Care Excellence has published guidelines for three groups of patients: those in critical care, those undergoing kidney dialysis, and those undergoing systemic	NO	NO	YES	NO	Critical care, kidney dialysis,	NO	-

anticancer treatment ( <a href="https://www.nice.org.uk/news/article/nice-publishes-first-rapid-Covid-19-guidelines">https://www.nice.org.uk/news/article/nice-publishes-first-rapid-Covid-19-guidelines</a> )					systemic anti cancer treatment		
European Centre for Disease Control has published guidance for contingency planning for Covid-19 based on expert opinion ( <a href="https://www.ecdc.europa.eu/sites/default/files/documents/Covid-19-guidance-health-systems-contingency-planning.pdf">https://www.ecdc.europa.eu/sites/default/files/documents/Covid-19-guidance-health-systems-contingency-planning.pdf</a> )	NO	NO	YES	YES	YES	NO	-
The European Association of Palliative Care ( <a href="https://www.eapcnet.eu/publications/coronavirus-and-the-palliative-care-response">https://www.eapcnet.eu/publications/coronavirus-and-the-palliative-care-response</a> ) Direct links to tools and guidelines on palliative care and Covid-19 from around the world, relevant collections of research articles.	YES	YES	YES	YES	Palliative care	YES	-
The European Geriatric Medicine Society ( <a href="https://www.eugms.org/news/read/article/490.html">https://www.eugms.org/news/read/article/490.html</a> ) Covid-19 task force position statement, paper on ethical principles and discussion forum used by clinicians from Europe and North America in particular.	YES	NO	YES	YES	Older adults	YES	
The British Thoracic Society ( <a href="https://www.brit-thoracic.org.uk/about-us/Covid-19-information-for-the-respiratory-community/">https://www.brit-thoracic.org.uk/about-us/Covid-19-information-for-the-respiratory-community/</a> ). Collection of operational and clinical guidance, including management of critical care patients	YES	YES	YES	NO	People with respiratory conditions	NO	-

**This document is available in large print.**

**Please contact the NIHR Older People and Frailty PRU for assistance.**

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