Literature Search Results

Research question or topic:

"What workforce do we need to effectively treat and support people with, and after, COVID-19?"

This question was split into two searches (this document answers part a)

a) Literature discussing the workforce implications
b) Incidence and prevalence of key symptoms (physical, cognitive and psychological) – clinical presentation and health outcomes of COVID-19 to help determine the likely skill mix, training and education needed"

Completed by: HEE Knowledge Management Team (Katie Nicholas)

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Please acknowledge this work in any resulting paper or presentation as:
Literature Search: COVID-19 and the workforce. Katie Nicholas. (18 May 2020). UK: Health Education England Knowledge Management Team

Contents

Search comments

To answer your question, I split the search into two parts - part a includes literature that discusses what the workforce implications of the virus might be, or anything that examines a post-COVID environment. Part b scopes the literature on symptoms, clinical presentation, and health outcomes to help think through the skill mix or training required. The results of part a are listed below. I have included articles from around the world.

The Health Foundation are publishing a series called “five dimensions of impact” looking at the different areas of impact as events unfold, the fifth dimension is on “NHS and social care capacity” and includes workforce, so this resource is worth keeping an eye on. A lot of the results are discussion pieces thinking through what some of the challenges may be and outlining workforce suggestions.

Please note that some of papers included may be preprints. Preprints are preliminary reports of work that have not been certified by peer review. They should not be relied on to guide clinical practice or health-related behaviour and should not be reported in news media as established information.

Search results

Workforce

COVID-19: Five dimensions of impact 29th April 2020, Health Foundation

The public health workforce and local government have reshaped their work in an effort to contain the infection and protect the most vulnerable. Yet this is against a backdrop of successive years of real-terms budget reductions. The NHS has been radically mobilised to respond to the acute needs of people infected with the virus, at the same time as delivering scaled-back non-COVID-19 health care. Social care, weakened by years of declining real-terms public funding and rising demand, has been reeling from the impact of the virus, with many users and staff unprotected, fatally vulnerable and poorly accounted for in the official data until now. […] Over the next few weeks the Health Foundation will be publishing a series of charts and brief commentaries, attempting to describe the different dimensions of the impact of COVID-19 as they unfold, from the health and care system through to people's daily lives. There are at least five dimensions of impact, with as yet unknown depth and distribution.

1. Direct impact of COVID-19
2. Impact on acute care
3. Non-acute care including general practice
4. The lockdown and social distancing
5. **NHS and social care capacity and resilience**

Confronting the Coronavirus in the NHS: The story so far 15th April 209, NHS Providers

"How has the NHS prepared"

Emergency training staff and expanding the workforce

Trusts have rapidly expanded the number of staff who can look after critically-ill coronavirus patients. They've ensured a much greater range of staff know how to support COVID-19 patients with breathing difficulties. They've trained staff to help patients with basic non-invasive breathing machines that help patients breathe. They've worked with anaesthetists and theatre recovery staff to grow the number of specialists who can operate complex, high-end, mechanical ventilators that do the breathing for the patients. They've also supported staff who are moving into new roles to bolster the support that can be provided to critically-ill adult coronavirus patients. At the same time, trusts have also been training and incorporating the 20,000 nurses and doctors who have volunteered to return to the NHS after recent retirement.

Ambulance services have been expanding their workforce, for example incorporating members of the fire service into their teams. They've also been doing the behind the scenes work that's easy to miss, like establishing rapid turnaround facilities to ensure ambulances are deep cleaned after carrying a COVID-19 or suspected COVID-19 patient.

What next – the future?

Workforce

Many in the health and care sector have been arguing for some time that the current workforce models in both the NHS and social care are unsustainable. Both sectors have been carrying significant long running vacancy rates, have become highly dependent on increasingly scarce overseas staff and have been trying to close an underlying demand/capacity gap by just working existing staff harder. The strains put on both sectors by coronavirus will highlight and exacerbate these problems. **Both sectors will need to consider how to move, as rapidly as possible, to more sustainable underlying models including ensuring support and reward packages reflect the critical role of key workers and provide the right size of workforce required. This will involve significant and far reaching change**

Responding to Covid-19: what challenges are health and care leaders facing? 13th May 2020, The King's Fund

"Adapting to the broad-ranging changes to ways of working, from remote working and consultations to changing substantive roles to respond to need. These changes bring emotional as well as practical challenges – concerns about impacts on patients and service users as well as how to rapidly upskill new staff and form new teams."

The role of the future physician: building on shifting sands April 2020, Clinical Medicine

Medicine is changing at an unprecedented pace, driven by social, technological and scientific changes. How will this healthcare revolution change the role of the physician in the UK in the coming decades? Health Education England last year called for evidence on the expectations of patients and the public of 21st century doctors, which will bring to light a range of views on how medicine will need to adapt to meet the population needs.[1] At the time of the concept of this article, the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) epidemic, known as COVID-19, had not emerged and yet in just a few short months, healthcare systems in the UK and the world have had to significantly alter their delivery of healthcare to limit the human cost of this pandemic. What legacy will the SARS-CoV-2 pandemic leave on the physician role? In this article, we identify common themes that physician trainees perceive as the key drivers for change in the future medical workforce, and consider how best to imbue the physicians of the future with the knowledge, skills, and expertise they will need to thrive in medicine in the mid-21st century (see Fig 1).

Augmenting the Disaster Healthcare Workforce (US example) April 2020, The western journal of emergency medicine

In disasters such as the COVID-19 pandemic, we need to use all available resources to bolster our healthcare workforce. Many factors go into this process, including selecting the groups of professionals we will need, streamlining their licensing and credentialing processes, identifying appropriate roles for them, and supporting their health and well-being. The questions we must answer are these: How many staff will we need? How do we provide them with emergency licenses and credentials to practice? What interstate licensing compacts and registration systems exist to facilitate the process? What caveats are there to using retired healthcare professionals and healthcare students? How can we best avoid attrition among and increase

the numbers of international medical graduates? Which non-clinical volunteers can we use and in what capacities? The answers to these questions will change as the crisis develops, although the earlier we address them, the smoother will be the process of using augmentees for the healthcare system.

Commentary: The Ward Round: The NHS shuffles its workforce pack for covid phase 2 1st May 2020, HSJ

In further updated staffing guidance this week NHS England said community health, primary care and mental health services were all likely to be significantly affected by the second phase of the NHS' response to coronavirus. With an increasing number of patients, especially older people, leaving hospital but needing often extensive intensive rehabilitation, could we see, for example, acute geriatricians being asked to support community services? Eileen Burns, past president of the British Geriatrics Society, said geriatricians working in integrated neighbourhood community teams had in recent weeks been using their specific community time to work in acute settings instead.

Restarting health and care services will take many months, leading charities warn 14th May 2002, Nuffield Trust; Health Foundation and the King's Fund

"Looking after and growing the workforce – staff caring for Covid-19 patients in the NHS and social care have experienced high levels of stress and exhaustion. They will need time to recover and access to support services. Staff will need reassurance that adequate protection against the virus is in place before restarting services."

Blog post – COVID-19: Implications for the Australian Healthcare Workforce (Australian example) 2nd April, PWC

The heightened challenges in the current environment will eventually subside. However, the decisions we make now may have lasting implications. As such, these decisions must have an acute focus on today, with an eye on tomorrow to ensure system sustainability. There are several key workforce considerations following the COVID-19 outbreak that our healthcare system should consider.

Community and Primary Care

COVID-19 rapid guideline: managing symptoms (including at the end of life) in the community 30th April 2020, NICE

The purpose of this guideline is to provide recommendations for managing COVID-19 symptoms for patients in the community, including at the end of life. It also includes recommendations about managing medicines for these patients, and protecting staff from infection.

COVID-19 rapid guideline: managing suspected or confirmed pneumonia in adults in the community 23rd April 2020, NICE

The purpose of this guideline is to ensure the best treatment for adults with suspected or confirmed pneumonia in the community during the COVID-19 pandemic and best use of NHS resources. We have withdrawn our guideline on diagnosing and managing pneumonia in adults until further notice. For general advice on managing COVID-19 symptoms, see the NICE COVID-19 rapid guideline on managing symptoms (including at the end of life) in the community.

COVID-19 rapid guideline: community-based care for patients with chronic obstructive pulmonary disease 9th April 2020, NICE

The purpose of this guideline is to maximise the safety of patients with chronic obstructive pulmonary disease (COPD) during the COVID-19 pandemic, while protecting staff from infection. It will also enable services to make the best use of NHS resources.

Implications of COVID-19 for Primary Care (US example) May 2020, Primary Care Reports

Primary care physicians often are the first to communicate with potential COVID-19 patients. Without definitive testing, it is challenging to reliably provide an accurate differential diagnosis, but there is a developing list of signs and symptoms associated with COVID-19.

Letter: Train and deploy a community level public health workforce to combat covid-19 May 2020, BMJ

We strongly support Pollock and colleagues' views.1 We do not understand why the government did not follow World Health Organization guidelines regarding basic infection controlpractice2 on contact tracing in the early days of the pandemic. We welcome the plan to train 18 000 contact tracers but, in the government's current proposal, the public are in danger of being seen as passive disaster victims; a network of community based responders could become a significant resource to find, isolate, and test each index case and trace contacts to break the chain of covid-19 transmission.

Note - National UK programme of community health workers for COVID-19 response April 2020, The Lancet

We propose a largescale emergency programme to train community health workers (CHWs) to support people in their homes, initially the most vulnerable but with potential to provide a long-term model of care in the UK. Experience from Brazil, Pakistan, Ethiopia, and other nations shows how a coordinated community workforce can provide effective health and social care support at scale.2–4 To respond to the COVID19 pandemic, we suggest that CHWs would be young people, aged 18–30 years, in whom the likelihood of serious consequences from COVID-

19 is currently deemed low.1 This demographic is increasingly likely to have been exposed to COVID19 and therefore have acquired immunity. Largescale unemployment as a consequence of the economic impact of this pandemic makes this a group potentially in need of employment opportunities. Despite the UK Government's enormous package of benefits designed to retain people in employment, substantial job losses are likely. Furthermore, up to 30000 medical and physician associate students could be involved who cannot participate in usual clinical placements, possibly until September, 2020, because clinical attachments are being suspended.

Readying for a Post-COVID-19 World: The Case for Concurrent Pandemic Disaster Response and Recovery Efforts in Public Health (US example) April 2020, Journal of Public Health Management and Practice *Abstract only**

Governments around the world are focused on mitigating the effects of the COVID-19 pandemic to save lives. Less attention is being paid to planning for recovery and building a "new normal" in a post-COVID-19 world – a process that comprises the recovery domain of the disaster lifecycle. Amidst this evolving public health crisis, it may seem premature or even counterintuitive to being actively planning for post pandemic recovery in public health services and systems, but now is the time (Table).

Speech and Language Therapy

COVID-19: Maximising the contribution of the speech and language therapy workforce 24th April 2020, Royal College of Speech & Language Therapists

See section 5 "Rehabilitation in the Community for COVID-19 patients"

"The input of speech and language therapy in the rehabilitation of swallowing and communication difficulties is critical in managing and supporting patients to facilitate earlier discharge as part of managing patient flow and minimising length of stay. Due to this, acuity in community settings is much higher than it was before. Patients may be discharged whilst still tube fed or ventilated, meaning there is an increased role for SLTs with these patients in the community."

"6.1. Redeploying SLTs who work with adults in community settings to support acute SLT services

To prevent secondary/acute care being overwhelmed, it will be vital to adopt a whole pathway approach for the redeployment of staff. SLTs will be pivotal in creating additional capacity within our acute hospitals by rapidly identifying, moving, and managing patients into step down and community settings, by supporting the community management of patients previously managed within hospital pathways and by increasing the capacity of admission avoidance services. SLT adaptability within professional boundaries will facilitate rapid and safe patient discharges and will include providing flexible access to equipment provision."

Cancer workforce

COVID-19: impact on cancer workforce and delivery of care May 2020, The Lancet Oncology

Balancing the risk of coronavirus disease 2019 (COVID-19) for patients with cancer and health-care workers with the need to continue to provide effective treatment and care is changing how oncology teams work worldwide. “The pandemic has meant a transformation of every aspect of cancer care, irrespective of treatment, inpatient or outpatient, and radical or palliative intent,” said James Spicer (Guy’s and St Thomas’ Hospital NHS Foundation Trust, London, UK).High rates of sickness among health workers due to COVID-19 are dramatically reducing the numbers of available staff. A survey done by the Royal College of Physicians in April, 2020, found that about 20% (21·5% in London and 18·3% in the rest of England) of the 2513 members responding were taking time off work. The main reason was suspected COVID-19 followed by self-isolating because another household member had symptoms. “These absences would have had an impact on care delivery were it not for the knock-on effect on workload of deferral and modification of treatment driven by safety considerations and redeployment of staff,” explained Spicer. Academic staff are now working in the NHS full-time, and research fellows have returned to work in clinics and wards because research laboratories have closed. On-call rotas have been increased

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Mental Health workforce

As MH workforce evolves during COVID-19, telehealth seen as new normal (US example) 8th May 2020, Mental Health Weekly

The landscape for the mental health workforce has changed considerably over the past decade with parity and health care reform. And with COVID-19, it continues to evolve, with program closures, cancelled appointments and lost jobs. […] Stay-at-home orders have forced the workforce to rely on telehealth services within a very short time frame, he said. Previously, the Centers for Medicare & Medicaid Services and private insurers didn't allow for the flexibility that telehealth platforms provided, but of course they have increased that flexibility with this crisis, Hepburn noted. An important change is the availability of audio-only telephone service to reach people in need, said Hepburn. For providers and consumers, access to telehealth has been very important,” he said. It's also critical for providers to keep people away from hospitals, the ER and where large groups of people are living together, like in a jail, said Hepburn.

Letter: Psychiatrist in post COVID-19 era – are we prepared? (Indian example) June 2020, Asian Journal of Psychiatry

- First communication from India with psychiatry residents’ perspective.
- Authors had first-hand experience of working in the COVID designated areas.
- Highlights the need of the hour.
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Fear and anxiety are common psychological response during disastrous situations like this (Dong and Bouey, 2020). But undue prolonged stress with social isolation can act as a Table 1 niche for developing a pathological mental state (Goyal et al., 2020). While higher income countries already apprehending worse recession and socio-economic setbacks, low-and-middle income countries like India is high likely to face the worse. Many already proven social factors

like: *being sick, prolonged hospitalization, death of loved ones, loss of job, months of forced quarantine, lack of supply, stigma* – is likely to hit us all, especially those who are more vulnerable to stress and already suffering from mental illness (Mak et al., 2009; Brooks et al., 2020) (Table 1).

General Practice

Letter: As the profession soldiers on, all members hear the call to arms May 2020, British Journal of General Practice

Maximising workforce capacity is essential in the COVID-19 effort continues, new sources of medical expertise to maintain service output will be needed. Meanwhile, COVID-19 has forced primary care into a digital revolution overnight. Routine and triage work is moving online with unprecedented speed. An unintended consequence of this may allow a previously untapped sector of the workforce to be mobilised, UK-trained GPs overseas.

Nursing

New WHO resource on enhancing competencies of primary care nurses 12th May 2020, World Health Organisation

For International Nurses Day on 12 May, WHO/Europe has published a set of resources to support countries to invest in and strengthen their primary health-care nursing workforce. The publication "Competencies for nurses working in primary health care" provides guidance and inspiration for policy-makers, instructors, managers and clinicians to develop needed competencies in primary health care for nurses. Nurses working in primary health care provide safe and effective care in disease prevention, diagnosis, treatment, management and rehabilitation. The "State of the world's nursing 2020" report recommends the expansion of effective nurse-led models of care to improve access to primary health care, and explains why investing in strengthening nurses' competencies is essential. The competencies addressed in the new publication fall into 5 clusters:

- patient advocacy and education;
- effective communication;
- teamwork and leadership;
- people-centred care and clinical practice; and
- continuous learning and research

Community nursing will 'blow' as discharge threshold is reduced 12th April 2020, HSJ

Families, social care workers and volunteers may be forced to step in to help provide nursing care, as community nursing capacity threatens to "blow" due to coronavirus. Both the Royal College of Nursing and the Queen's Nursing Institute — the charity for community nursing — told HSJ that district nurses were now having to prioritise patients more than normal, as staffing numbers have become "extremely stretched".

Outlook for nurse supply and demand shifting amid COVID-19 (US example) April 2020, Modern Healthcare *You may have access to this resource through NHS Athens**

The article reports on the state of supply and demand for nurse staffing in the U.S. amidst the COVID-19 pandemic as of April 2020. Topics discussed include shortage of nurses and the quality of care amidst the COVID-19 crisis, views of Sophia Thomas, president of the American of Nurse Practitioners, on the issue, and the lack of hospital supplies such as personal protective equipment, face masks and gloves which causes nurse-staffing shortage.

What does coronavirus mean for community nurses? April 2002, Journal of Community Nursing *You may have access to this resource through NHS Athens**

Britain has not seen anything quite like it since the end of the second world war. At the time of writing, the country is in lockdown. Infection and death rates are rising inexorably, and millions of people are staying at home, many struggling to provide childcare following the closure of schools and others unable to earn a living. Coronavirus is testing the very fabric of society, at least for the short term, and resources are being stretched to breaking point.

Potential impacts of COVID-19 pandemic: What will happen to nursing after the pandemic? It is likely to involve new technologies and new ways of working (New Zealand example) April 2020, Kai Tiaki Nursing New Zealand *You may have access to this resource through NHS Athens**

The COVID-19 pandemic has challenged health systems world-wide, putting nurses at the forefront of efforts to slow the spread of the virus, and care for those with serious complications. The challenge for the future will be to manage the changes the experience of nursing during this pandemic will bring for both individual nurses and the profession. While the impact of COVID-19 is still unfolding in New Zealand, the talk among nurses already indicates concern for themselves, their families, and their relationships with the patients and communities they serve. At the same time, significant numbers of nurses have chosen to return to practice in response to a call to action from the Ministry of Health,1 just as they did during the 1918 flu epidemic.2

2020 - the year of the nurse and midwife: a call for action to scale up and strengthen the nursing and midwifery workforce in the Eastern Mediterranean Region April 2020, Eastern Mediterranean Health Journal

The World Health Organization (WHO) has declared 2020 as the Year of the Nurse and the Midwife. World Health Day on 7 April is dedicated to supporting nurses and midwives and highlights the central role of these professions in advancing universal health coverage, achieving health-related sustainable development goals, and the Eastern Mediterranean Region Vision 2023: Health for All by All.This year, we sadly mark World Health Day in the face of the devastating COVID-19 pandemic, which has brought to attention more than ever the crucial and invaluable role of health workers, who are working tirelessly day and night to care for patients and save lives. In fighting COVID-19, not only might they become infected and put their own lives at risk, but they also face distress and burnout because of long working hours. In addition, many health workers have to be away from their homes for prolonged periods, for fear of putting their own families at risk of acquiring the infection. Even before the pandemic, the safety and security of health workers in the Eastern Mediterranean Region has been a significant concern,

as more than half of the countries of the Region face acute and protracted crises, and 70- 80% of total recorded attacks on health facilities globally occur in the Eastern Mediterranean Region.

Dermatologists

Dermatologists and SARS-CoV-2: The impact of the pandemic on daily practice (Italian example) April 2020, Journal of the European Academy of Dermatology and Venerology

Since the first case of "pneumonia of unknown aetiology" was diagnosed at the Wuhan Jinyintan Hospital in China on 30 December 2019, what was recognised thereafter as "severe acute respiratory syndrome coronavirus 2" (SARS-CoV-2) has spread over the four continents, causing the respiratory manifestations of Coronavirus disease-19 (COVID- 19) and satisfying the epidemiological criteria for a label of "pandemic." The ongoing SARS-CoV-2 pandemic is having a huge impact on dermatological practice including the marked reduction of face-to-face consultations in favour of teledermatology, the uncertainties concerning the outcome of COVID-19 infection in patients with common inflammatory disorders such as psoriasis or atopic dermatitis receiving immunosuppressive/immunomodulating systemic therapies; the direct involvement of dermatologists in COVID-19 care for patients assistance and new research needs to be addressed. It is not known yet, if skin lesions and derangement of the skin barrier could make it easier for SARS-CoV-2 to transmit via indirect contact; it remains to be defined if specific mucosal or skin lesions are associated with SARS-CoV-2 infection, although some unpublished observations indicate the occurrence of a transient varicelliform exanthema during the early phase of the infection. SARS-CoV-2 is a new pathogen for humans that is highly contagious, can spread quickly, and is capable of causing enormous health, economic and societal impacts in any setting. The consequences may continue long after the pandemic resolves, and new management modalities for dermatology may originate from the COVID-19 disaster. Learning from experience may help to cope with future major societal changes.

Surgery

Orthopaedic surgery post COVID-19: an opportunity for innovation and transformation April 2020, Journal of Shoulder and Elbow Surgery

From the Codman Shoulder Society

As the scale of the coronavirus pandemic continues to grow, so does the amount of uncertainty. This virus has upended life as we know it. And we, as surgeons, are not particularly good at dealing with uncertainty.11Although uncertainty is the norm in areas such as business fore-casting and stock price valuations, we feel uneasy when grappling with tough questions, such as whether to cancel elective surgeries that are not immediately life-threatening but could result in more serious complications down the line. Take, for instance, cholecystectomy to remove symptomatic gallstones: failure to provide timely definitive treatment may increase the risk of potentially life-threatening pancreatitis.12How about delaying timely repair of an acute rotator cuff tear in a young patient, which likely could impact the outcome? It can be hard to draw the line for what is critical, urgent, or nonurgent surgical care. Many questions remain unanswered.

But this crisis also presents value-maximizing opportunities for innovation in the delivery of health care, with orthopaedic surgery as a particular segment presenting opportunity for value creation.

The Surge after the Surge: Cardiac Surgery post-COVID-19 (US example) May 2020, The Annals of Thoracic Surgery

BACKGROUNDThe COVID-19 pandemic has dramatically reduced adult cardiac surgery case volumes as institutions and surgeons curtail non-urgent operations. There will be a progressive increase in deferred cases during the pandemic that will require completion within a limited time frame once restrictions ease. We investigated the impact of various levels of increased post-pandemic hospital operating capacity on the time to clear the backlog of deferred cases.METHODSWe collected data from four cardiac surgery programs across two health systems. We recorded case rates at baseline and during the COVID-19 pandemic. We created a mathematical model to quantify the cumulative surgical backlog based on the projected pandemic duration. We then used our model to predict the time required to clear the backlog depending on the level of increased operating capacity.RESULTSCardiac surgery volumes fell to 54% of baseline after restrictions were implemented. Assuming a service restoration date of either June 1 or July 1, we calculated the need to perform 216% or 263% of monthly baseline volume, respectively, to clear the backlog in one month. The actual duration required to clear the backlog is highly dependent on hospital capacity in the post-COVID time period, and ranges from one to eight months depending on when services are restored and degree of increased capacity.CONCLUSIONSCardiac surgical operating capacity during the COVID-19 recovery period will have a dramatic impact on the time to clear the deferred cases backlog. Inadequate operating capacity may cause substantial delays and increase morbidity and mortality. If only pre-pandemic capacity is available, the backlog will never clear.

Urologic surgery and COVID-19: How the pandemic is changing the way we operate (US example) April 2020, Journal of Endourology *Abstract only**

The coronavirus disease 2019 (COVID-19) pandemic has had a global impact on all aspects of healthcare, including surgical procedures. For urologists, it has affected and will continue to influence how we approach the care of patients pre-operatively, intra-operatively, and post-operatively. A risk-benefit assessment of each patient undergoing surgery should be performed during the COVID-19 pandemic based on the urgency of the surgery and the risk of viral illness and transmission. Patients with advanced age and comorbidities have a higher incidence of mortality. Routine preoperative testing and symptom screening is recommended to identify those with COVID-19. Adequate personal protective equipment (PPE) for the surgical team is essential to protect healthcare workers and ensure an adequate workforce. For COVID-19 positive or suspected patients, the use of N95 respirators is recommended if available. The anesthesia method chosen should attempt to minimize aerosolization of the virus. Negative pressure rooms are strongly preferred for intubation/extubation and other aerosolizing procedures. Although transmission has not yet been shown during laparoscopic and robotic procedures, efforts should be made to minimize the risk of aerosolization. Ultra low particulate air filters are recommended for use during minimally invasive procedures to decrease the risk of viral transmission. Thorough cleaning and sterilization should be performed post-operatively with adequate time allowed for the operating room air to be cycled after procedures. COVID-19 patients should be separated from non-infected patients at all levels of care including recovery to decrease the risk of infection. Future directions will be guided by outcomes and infection

rates as social distancing guidelines are relaxed and more surgical procedures are reintroduced. Recommendations should be adapted to the local environment and will continue to evolve as more data becomes available, the shortage of testing and PPE is resolved, and a vaccine and therapeutics for COVID-19 are developed.

Other

A Blueprint for Recovery For The Postcoronavirus (COVID-19) World (US example) May 2020, Oral diseases

Novel coronavirus (COVID-19) is changing society. In the last several weeks, infections and deaths have accumulated, even as we attempt to 'shelter in place' and stay 'healthy at home'. This unprecedented time has influenced behavior and permitted much contemplation, gratitude and prayer. Our thoughts during this time have focused on our emergence from the pandemic and what reopening may look like in the post-coronavirus world. Reopening will benefit from the acronym "RPM", an acronym I (CSM) teach my students for management of dental patients who suffer from a variety of illnesses and infections. Here, the 'R" stands for risk assessment and reduction, the first step in the sequence. The 'P' stands for prevention, and 'M' stands for manage the problem. If 'R' and 'P' are well conceived and implemented, often there is no need to apply 'M'.

Patient safety and litigation in the NHS post-COVID-19 April 2020, British Journal of Nursing

We aren’t living in normal times and all sorts of new and essential measures are taking place in the NHS to make sure that we can handle the COVID-19 crisis properly. The NHS is facing enormous challenges and staff are making heroic efforts. Patient safety issues, however, must never be forgotten and underestimated even in a crisis. When the pandemic dust eventually settles people will start to reflect on what has happened, this is basic human nature. Some people may feel that they or their loved ones were treated improperly during the crisis and seek redress, raising the spectre of litigation. Patient safety and the spectre of litigation will not go away. Patients who have suffered negligent harm have a moral and legal right to sue for compensation. This right should never be compromised. However, a key issue remains of what happens when the patient’s harm did not occur in normal times, but in the COVID-19 crisis? That the harm has occurred in a crisis is likened to a war zone.

Safeguarding cancer care in a post-COVID-19 world May 2020, The Lancet Oncology

As the world comes to grips with the coronavirus disease 2019 (COVID-19) pandemic, reports are emerging on how cancer care is being deprioritised, delayed, and discontinued. These decisions made under the duress of the pandemic will have grave consequences for cancer mortality for years to come. Those recently diagnosed with cancer, or in the midst of cancer treatment, are facing disruption for all but the most urgent procedures because of concerns about their susceptibility to the serious risks of COVID-19, and the redeployment of personnel, beds, and equipment to COVID-19 wards. Hospital capacity has also been depleted due to COVID-19 cases in health-care workers themselves, and oncologists have not been spared. Official advice is that urgent cancer care can continue, but other treatments should be rationed

and adapted. These decisions, however, are inconsistent, and not evidence-based—multidisciplinary teams are being put in the unenviable position of making best guesses for each patient. However, treatment delays and adaptations can risk, for example, operable or curable cancers developing into inoperable disease with a far worse prognosis. In many cases, and especially in resource-constrained settings, balancing the risks of undertreatment with those of COVID-19 infection will lead to situations where there is no obvious best course of action. As societies and governments scramble to provide guidelines for patients with cancer, frontline medical staff are being forced to make on-the-fly treatment decisions, and, unfortunately, many patients will receive suboptimal care.

Appendix

Sources and Databases Searched

NHS Evidence, NHS Employers, Nuffield Trust, the Health Foundation, the King's Fund, CIPD, HEE "Workforce Times" bulletin; NHS Providers; HSJ; Skills for Care and HEE Knowledge Management Royal College guidance list were searched. Healthcare Databases Advanced Search (HDAS) was used to search the following databases: Medline; Embase; PsycINFO; CINAHL; AMED and HMIC.

Search Strategy

Key words and phrases included "health workforce"; workforce; "health manpower"; "new role*"; "new way* of working"; upskill*; "skill mix"; coronavirus; covid-19; "sarvs-cov-2".

This is not an exhaustive list – for full detail please see the strategy embedded below.

HDAS

228a.%20HDAS%20
Strategy%20COVID%

Google

"health workforce" AND future AND coronavirus (14/5/20)

Searching the literature retrieved the information provided. We recommend checking the relevance and critically appraising the information contained within when applying to your own decisions, as we cannot accept responsibility for actions taken based on it. Every effort has been made to ensure that the information supplied is accurate, current and complete, however for various reasons it may not represent the entire body of information available.

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