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### **COVID-19 and Coronavirus evidence alerting**

# Rapid scan 5: Impact on health services of reducing non-covid related activity/access





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**The Strategy Unit** is working in collaboration with the Health Foundation, King's Fund, Nuffield Trust, and Imperial College Healthcare Partners to provide additional analytical support to the NHS nationally in its overall response to COVID-19. The organisations will use their expertise to focus on questions that the NHS may lack the immediate resources to look at, which may be more medium-term, cut across sectors, or benefit from independent analysis. They will be sharing their knowledge, information, multi-disciplinary analytical skills, and extensive links to support different parts of the health and care system, arms-length bodies and government departments working on the COVID-19 response.

For more information please email <u>mlcsu.covid.analytics@nhs.net</u>.

This rapid summary is part of an evidence alert service which has developed from requests for evidence to support recovery planning. Our first priority is to highlight key papers to inform decisions, policy and planning and our approach is pragmatic rather than exhaustive. More information on our methodology is provided in the Appendix.

### A short note about evidence analysis and COVID-19

The emerging evidence base on COVID-19 and Coronavirus is growing quickly. The research community has responded to the pandemic quickly and publishers are fast-tracking papers and providing open access. This inevitably leads to some trade-offs:

- Findings are shared quickly but there are implications for quality as the usual peer review is curtailed so we need to be mindful of bias in research methods and quality of reporting.
- The pace of learning is such that, at the moment, it is not feasible to conduct a traditional review which summarises and synthesises what we know. The evidence base is growing so quickly that our understanding is continually shifting.

Our approach is to trawl the rapidly growing knowledge base, to filter findings which are relevant to planning and policy and to highlight new and emerging learning:

- This rapid scan provides a snapshot of emerging evidence.
- A weekly alert will highlight new papers.
- We will also maintain an evidence tracker, providing a single point of access to the papers highlighted in this scan and in weekly alerts.

There are, of course, initiatives around the UK and internationally to scan and track evidence and we'll endeavour to avoid duplication as far as possible.

### Introduction

As we approach the easing of lockdown restrictions, there are understandably concerns about the broader impacts of the pandemic on health services and non-Covid care. Data shows us that activity has reduced, suggesting unmet needs, potential exacerbations of existing conditions and delays in diagnosis.

This rapid scan has been created to collate new and emerging evidence on the implications for delivery of healthcare services.

This is Part 1 of a two-part review. Part 2 will explore more key specialties such as Maternity Services and End of Life Services.

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### Summary

As the pandemic has progressed, there has been an increasing emphasis on research and analysis to inform the delivery of health and care beyond the first peak as well as the implications of social distancing and other measures to reduce spread. The recovery phase is likely to take time, not least because there is a mental health impact on and risk of burnout amongst health and care workers. There is also the impact in care homes and wider social care to consider in addition to preparedness for a future peak. Planning will need to address infection control; identifying and addressing unmet needs, particularly within vulnerable groups; engaging with the public; meeting workforce needs; and sustaining innovations made under pressure.

Many services have moved towards remote consultations as a means of delivering care whilst protecting staff and patients from infection. The urgency of the pandemic response has helped overcome some long-standing barriers, however there are potential risks of widening inequalities, as some people are disadvantaged by the "digital divide". As well as these general lessons, there are issues specific to different services and settings:

**Primary care**: the increase in virtual consultations is being explored in an ongoing study. Another model which has been tested is the use of Community Health Workers to conduct home visits. Primary care is also seen as having an important role in admission avoidance for non-Covid conditions during the recovery phase.

**Long Term Conditions (LTCs) Management**: there are multiple impacts on patients with LTCs, including diversion of health care resources; interrupted care; interrupted supply of medication; increased stress and lower activity. Usage of health services has decreased which may be due to restricted access or a fear of infection. There are implications for continuity of care and providing support remotely.

**Outpatient Care**: virtual consultations have been used to deliver outpatient care, however, there are considerations around sustaining the use of technology, including changes to workflows and practices. <sup>5</sup>

### Summary

**Elective Care**: the impact on waiting lists is significant and the need for increased infection control will affect the volume of patients scheduled, with implications for patients, clinicians and commissioners. It is suggested that a number of factors will need to be considered, including epidemiological conditions in the community, patients' health, the COVID-19 status of all members of the surgical team, the facilities and resources available.

**Emergency Care**: the decrease in emergency activity is raising concerns, particularly in relation to stroke and heart attacks, given the severity of consequences if not treated.

**Screening and Immunisations:** the response to the pandemic has also affected preventative services, including decreased screening and childhood vaccinations, which will have longer term implications.

**Mental Health Services**: the delivery of mental health care has predominantly shifted from face-to-face contact to virtual media (e.g. video, phone). There is guidance to help clinicians determine the suitability of consultations in a virtual format; however, there is a need to reduce home visits to minimise infection risk to staff and patients. There are specific concerns about the impact on children and young people and patients suffering substance abuse, who may be particularly vulnerable.

**Cancer Services**: guidance has been issued by professional bodies to help clinicians to prioritise patients for treatment during the pandemic. Analysis suggests adverse outcomes from disruptions to treatments such as chemotherapy, the impact of lockdown measures and a decrease in symptomatic diagnosis.

### **Commentary from the Collaboration**

14/05/20	The Health nuffieldtrust Foundation evidence for better health care	Jennifer Dixon Nigel Edwards Richard Murray	Delivering core NHS and care services during the Covid-19 pandemic and beyond: Letter to the Commons Health and Social Care Select Committee <sup>1</sup>
05/05/20	The Kings Fund>	Anna Charles	<u>Checking the system's blind spots: prioritising the</u> <u>community response to Covid-19</u> <sup>2</sup>
30/04/20	evidence for better health care	Charlotte Paddison	<u>Reducing avoidable harms to children during</u> <u>Covid-19: what actions are needed?</u> <sup>3</sup>
14/05/20	The Health Foundation	Tim Gardner	<u>Today's figures show a seismic shift in the way</u> people are using health services <sup>4</sup>
29/04/20	The Health Foundation	Ruth Thorlby Adam Tinson Joshua Kraindler	<u>COVID-19: Five dimensions of impact<sup>5</sup></u>
28/05/20	The Health Foundation	Anita Charlesworth	Shock to the system: COVID-19's long-term impact on the NHS <sup>6</sup>

### **Commentary from other key organisations**

14/05/20	NHS Providers	Secondary care services	Spotlight on THE NEW NORMAL Balancing COVID- 19 and other healthcare needs <sup>7</sup>
14/05/20	SCIE	Social Care	Charting a post-COVID-19 future for social care <sup>8</sup>
14/05/20	National Voices	Health and Social Care	Submission to the Health and Social Care Select Committee Inquiry on 'Delivering core NHS and care services during the pandemic and beyond' <sup>9</sup>

### Guidance

WHO	<u>COVID-19:</u> <u>Operational guidance for maintaining essential</u> <u>health services during an outbreak</u> <sup>10</sup>
NHS England	Operating framework for urgent and planned services within hospitals <sup>11</sup>
NHS England	Coronavirus guidance for clinicians and NHS managers <sup>12</sup>
BMA / Royal College of General Practitioners	RCGP Guidance on workload prioritisation during COVID-19 <sup>13</sup>
Royal College of Emergency Medicine	Position Statement COVID-19: Resetting Emergency Department Care <sup>14</sup>
Royal College of Surgeons of England	Recovery of surgical services during and after COVID-19 <sup>15</sup>
COVIDSurg Collaborative	Global guidance for surgical care during the COVID-19 pandemic <sup>16</sup>





### **Primary Care - Overviews**

#### What conditions could we prioritise in the primary care setting to reduce non-COVID-related admissions to hospital?<sup>17</sup>

**Stavropoulou C et al. (2020) Centre for Evidence-Based Medicine, Nuffield Department of Primary Care Health Sciences** This rapid review examines the conditions that are manageable in primary care which could lead to potentially preventable unplanned hospital admission

- Targeted interventions for influenza, COPD, CHF, diabetes, UTI and cellulitis should be identified to support increased management in primary care settings.
- Influenza and pneumonia caused the highest number of preventable cases of ACSC hospitalisation (16% of the total) in the English NHS and resulted in the highest number of total days in hospital in Australia.
- Healthcare systems face a potential need to re-organise care for 12 to 24 months without a vaccine for Covid-19 being available. One public health measure that most of these countries are currently implementing is to ensure the appropriate uptake of current and future flu vaccinations to reduce avoidable admissions. Vaccine related interventions could see a reduction of over 800,000 hospital admissions in England and could free up 424,068 hospital bed days in Australia per year in a normal flu season.
- Prevention and management in the community setting may support hospitals cope with the excess demand due to COVID-19 and to ensure the safety and wellbeing of patients.

#### The demand for home visiting services since the COVID-19 lockdown<sup>18</sup>

#### Duncan P and Elwenspoek M (2020) NIHR Applied Research Collaboration West

This review aimed to find out how the demand for home visiting services have changes since COVID-19 lockdown was introduced. and primary care switched to a mostly remote model. It also aims to find out how primary care services have been reorganised for housebound patients during COVID- 19.

Community health workers (CHWs) will be recruited and trained to deliver health and social care to older housebound people. A similar model has been established in other countries, including Brazil, Pakistan, and Ethiopia, and has been found to be cost-effective

- CHWs will be young people, aged 18-30 years, chosen because: (i) they are unlikely to become severely unwell due to COVID-19; (ii) exposure amongst this group is high and so many are likely to be immune; (iii) unemployment is high in this group. CHWs could include the 30,000 medical and physician associate students in the UK, who have had some medical training.
- An innovative model of care for cancer patients in Italy required a home visit during the COVID pandemic. Cancer patients are at particular risk of becoming severely unwell from COVID and health care professionals are at risk of becoming infected with COVID. The authors site previous experience in delivering home visits to cancer patients during an earthquake in 2009. They refer to 2 key principles: (i) maintaining continuity of care; (ii) adapting existing procedures according to the circumstance.
- A double triage model is described: First triage: Phone interview by a nurse day before the home visit to find out if the patient or their relatives/cohabitants have had any symptoms of COVID in the last 48 hours. Second triage: Patients (and relatives/cohabitants) who have had any COVID symptoms are referred to their GP, who follows national health service procedures

### **Primary Care - Overviews**

Organising community primary care in the age of COVID-19: challenges in disadvantaged areas <sup>19</sup> Julia C et al. (2020) Lancet Public Health

This commentary discuss the reorganisation of the entire healthcare system in France in response to the pandemic.

The challenges of efficiently organising the response of multiple partners were heightened in deprived areas such as the northern suburbs of Paris due to pre-existing health-care shortages combined with the demands of a population often living in unstable and unsanitary housing.

The large push towards large-scale implementation of digital solutions such as teleconsultations was found to be inappropriate in deprived areas, where access to the internet is relatively scarce, patients have little digital literacy, and language barriers abound.

As hospital beds for other condition are drastically reduced, primary care providers are required to deal with emergency situations for chronic diseases.

Triage and prioritisation criteria for patients without COVID-19 were developed to ensure usual care of chronically ill patients to avoid further delays in follow-up visits.

### **Primary Care – Emerging evidence**

How might COVID-19 have affected people's ability to see their GP?<sup>20</sup>

#### Health Foundation (2020)

In response to the pandemic the NHS issued guidance to protect GP services and patients, bringing big changes to the way general practice operates.

Changes included assessing all patients via telephone initially, seeing patients face-to-face only when necessary and setting up dedicated 'hubs' to manage all suspected COVID-19 patients.

Data from NHS Digital shows a 30% fall in the overall number of GP appointments in England in March. Face-to-face appointments fell and were partially offset by a rise in telephone appointments.

Available data may not count other kinds of appointments taking place, such as in hubs, or telephone triage, but they may also reflect a drop in the number of patients contacting their GP.



### Long Term Conditions Management - Overviews

#### Supporting people with long-term conditions (LTCs) during national emergencies <sup>21</sup>

### Hartmann-Boyce J and Mahtani KR (2020) Centre for Evidence-Based Medicine, Nuffield Department of Primary Care Health Sciences

Examples of suboptimal management of LTCs and disruption of care contributing to adverse health outcomes during and post- national emergencies could operate through direct routes (e.g. infection during a pandemic, injury during a natural disaster) as well as through indirect routes. This review focused on indirect drivers of suboptimal care covering:

- Diversion of health care resources
- Interruption to routine care
- Interruption to medication supply
- Increased stress
- Changes in food supply
- Changes in activity levels
- Disruptions in transport

All people with LTC could be at risk of neglect during national emergencies, however data particularly highlights people with cardiovascular disease, diabetes, older people and people in deprived areas as being at increased risk. Some LTCs may be further exacerbated by increased stress and changes in diet and activity patterns.

Suggestions for mitigation of indirect risks include coordination, communication, patient education, and continuity planning. Practitioners may consider ways of proactively identifying those patients with LTC most at risk of suboptimal management to ensure their necessary care is maintained.

Preventing non-COVID-19 hospital admissions during a pandemic: a rapid overview of the evidence for high-value medications<sup>22</sup>

Bobrovitz N et al (2020) Centre for Evidence-Based Medicine, Nuffield Department of Primary Care Health Sciences

The objective of this rapid review update was to identify a priority list of evidence-based medications for use in the community or emergency department that could prevent emergency hospital admissions among non-COVID patients.

- During pandemic lockdown, novel strategies are needed to support optimised use of the medications including telephone triage, video consultations, home delivery services, and prescribing practices (30 day refills) that aim to protect the supply chain.
- There may be value in generating evidence for interventions that may improve adherence to medication during lockdown.
- With regards to medication safety, practitioners should continue to closely monitor WBC and neutrophils in patients taking clozapine.
- For patients with suspected or confirmed COVID-19 there are recommendations for considering dose adjustments (ACEinhibitors, angiotensin-ii receptor blockers, antipsychotics) and stoppage (SGLT-2 inhibitors and antipsychotics) of some of the medications identified.

### **Long Term Conditions Management - Overviews**

#### The Burden of COVID-19 in People Living with HIV: A Syndemic Perspective<sup>23</sup>

#### Shiau S et al. (2020) Aids and Behavior

People living with HIV (PLWH) require regular engagement with the healthcare system to maintain viral suppression, which provides optimal clinical benefits and drastic reductions in HIV transmission.

"In the Wuhan region of China, reports indicate PLWH have struggled to access antiretroviral therapy (ART) during the COVID-19 outbreak due to the stigma and discrimination surrounding the HIV/AIDS epidemic in the country [54]. While this has not been reported to date in the United States, there are growing concerns around overall prescription drug shortages due to dropofs in production in China and India [55]. If PLWH cannot access ART, their viremia will likely increase [56], leading to lower CD4 T-cell counts [57], an increased risk of developing opportunistic infections [58], and an increased risk of HIV transmission to others. As such, it is imperative PLWH remain engaged with their primary and HIV healthcare providers amidst the COVID-19 pandemic to ensure consistent access to HIV-related care and treatment."

# Long Term Conditions Management – Emerging evidence

#### Early insight into the impacts of COVID-19 on care for people with long-term conditions<sup>24</sup>

#### Charlesworth et al. (2020) Health Foundation

To examine the impact of COVID-19 on access to and use of health care services for people with pre-existing health conditions, the Health Foundation supported an online YouGov survey\* of members of the public, designed by the Resolution Foundation. 6,005 UK citizens responded to the survey between 6 and 11 May.

Those with pre-existing conditions were asked about their use of health care between January 2020 and the end of February 2020: whether they, at any point, accessed any health services to manage their condition(s) (eg NHS 111, pharmacist, GP practice, etc). The same group were then asked if they had accessed any health services since the end of February 2020 and what it was for. Access to health services for people with pre-existing conditions was 20% lower (51% to 31%) during the COVID-19 peak period. Some of the largest falls in the use of health services are for mental health and cancer with falls of 25% (59% to 34%) and 22% (60% to 38%) respectively.

While many patients (47%) reported that they did not need access to health care, 10% said that they were unable to get an appointment and 22% cited concerns over contracting/transmitting the virus or worries about breaking the lockdown. Concerns about COVID-19 appear higher for women than men,

There is much more variation in the proportion of people who decided not to risk accessing care on account of the disease than could not get an appointment. Patients with diabetes (27%), heart disease (28%) and mental health illness (30%) were particularly concerned.



# **Outpatient Care**

### **Outpatient Care – Emerging evidence**

<u>Guidance on the introduction and use of video consultations during COVID-19: important lessons from qualitative research</u><sup>25</sup> Wherton J et al. (2020) BMJ

This article provides lessons for video consultations based on qualitative research that has been conducted primarily within hospital outpatient care settings across a range of clinical conditions, including diabetes, cancer and heart failure. The research highlights that video consultations are not merely about installing and using new technology. It involves introducing and sustaining major changes to a complex system with multiple interacting components. Guidance focuses on three key areas:

- 1. Health IT infrastructure,
- 2. Organisational routines and workflows
- 3. Interactional work of a video consultation

The article signposts guidance on setting up and running video consultations during the COVID-19 pandemic and beyond ((<u>https://bjgplife.com/2020/03/18/video-consultations-guide-for-practice/</u>) that has been developed using the findings from the gualitative research, and in collaboration with practitioners and patients.

#### The Impact of the COVID-19 Pandemic on Outpatient Visits: A Rebound Emerges<sup>26</sup>

#### Mehrotra A et al. (2020) The Commonwealth Fund

Data from the US shows that although visits to ambulatory care practices have rebounded since early April after a decline of nearly 60 percent, visits are still roughly a third lower than they were before the pandemic. The rebound in provider visits is due to more in-person appointments rather than more telemedicine visits.



**Elective Care** 

### **Elective Care – Overviews**

#### **Returning NHS waiting times to 18 weeks for routine treatment**<sup>27</sup>

#### Charlesworth A et al. (2020) Health Foundation

This long read from the Health Foundation explores the challenge of returning NHS waiting times to 18 weeks for routine treatment. Key points include:

- In January 2020, before large numbers of COVID-19 hospitalisations, a total of 4.4 million patients were on the waiting list around 730,000 of whom had waited more than 18 weeks. Before the COVID-19 pandemic, to meet the 18-week standard for newly referred patients and clear the backlog of patients who will have already waited longer than 18 weeks, the NHS would have needed to treat an additional 500,000 patients a year for the next 4 years. The pandemic is likely to make waiting lists grow further and the challenge will be even greater.
- Returning the NHS to 'normal' is hugely important but poses significant challenges. For example, treating patients with enhanced infection control arrangements will reduce the volume of patients that can be treated relative to normal.
- The rates of spending growth, set out in the NHS Funding Bill in February 2020, will not be sufficient to cover the cost of meeting the 18-week standard by March 2024, even before any additional costs and demand arising from COVID-19. The Health Foundation estimates that spending growth would need to increase by a further £560m a year assuming the NHS can prioritise patients to make the most effective use of available capacity.
- Without a radical intervention to increase capacity, it is unrealistic to expect the 18-week standard can be achieved by 2024 with current infrastructure and staffing levels. Meeting the 18-week standard would require hospitals to increase the number of patients they admit by an amount equivalent to 12% of all the patients admitted for planned care in 2017/18. This would be an unprecedented increase in activity.
- COVID-19 makes the challenge even greater. Over the coming years there will need to be long-term changes to how routine care
  is delivered, considerable effort at the front line and potentially an important role for the independent sector if the NHS is to return
  to a position of meeting the 18-week standard. But even with huge efforts, the reality is that longer waiting times for planned care
  are likely to be a feature of the NHS in England for several years at least.

#### Elective surgery after the pandemic: waves beyond the horizon<sup>28</sup>

#### Mayol J and Fernández Pérez C (2020) British Journal of Surgery

Given the potential life-threatening risk for patients, the gradual reintroduction of postponed elective surgical procedures during the pandemic should follow rigorous measures to: avoid a greater perioperative complication rate in patients who develop COVID-19 in the perioperative period; decrease viral spread within the hospital; and decrease spread of virus beyond the hospital.

It is reasonable to take into account epidemiological conditions in the community, patients' health, the COVID-19 status of all members of the surgical team, the facilities and resources available when making decisions about the delivery of surgical care, and provision of information to patients to obtain consent after the peak of the outbreak.

### **Elective Care – Overviews**

Surgical wait list management in Canada during a pandemic: many challenges ahead <sup>29</sup> Wiseman SM et al (2020) Canadian Journal of Surgery

This commentary discuss the likelihood that Provincial governments in Canada will target new funding to address the backlog of elective cases.

"The surgical cost models used in the past won't be useful to governments and hospital managers. New models based on hospitals' marginal costs, associated with running on weekends or off-hours and social distancing parameters, will be needed. Surgeon input, collaboration and leadership during the strategy development, implementation and management of surgical wait lists postpandemic will be imperative, as these decisions will significantly affect the health and lives of many Canadians."

### **Elective Care – Emerging evidence**

<u>Elective surgery cancellations due to the COVID-19 pandemic: global predictive modelling to inform surgical recovery plans</u><sup>30</sup> COVIDSurg Collaborative (2020) Br J Surg.

The COVID-19 pandemic has disrupted routine hospital services globally. This study estimated the total number of adult elective operations that would be cancelled worldwide during the 12 weeks of peak disruption due to COVID-19. A Bayesian beta-regression model was used to estimate 12-week cancellation rates for 190 countries. Elective surgical case-mix data, stratified by specialty and indication (cancer versus benign surgery), was determined. This case-mix was applied to country-level surgical volumes. The 12-week cancellation rates for calculate total cancelled operations.

The best estimate was that 28,404,603 operations would be cancelled or postponed during the peak 12 weeks of disruption due to COVID-19 (2,367,050 operations per week). Most would be operations for benign disease (90.2%, 25,638,922/28,404,603). The overall 12-week cancellation rate would be 72.3%. Globally, 81.7% (25,638,921/31,378,062) of benign surgery, 37.7% (2,324,069/6,162,311) of cancer surgery, and 25.4% (441,611/1,735,483) of elective Caesarean sections would be cancelled or postponed. If countries increase their normal surgical volume by 20% post-pandemic, it would take a median 45 weeks to clear the backlog of operations resulting from COVID-19 disruption.

Proposal for the return to routine endoscopy during the COVID-19 pandemic<sup>31</sup>

Gupta S et al (2020) Gastrointestinal Endoscopy

This paper presents an algorithm that proposes a return to elective endoscopy in a safe and timely manner through a multifaceted approach to risk stratification. This requires an assessment of epidemiologic and clinical risk factors, rapid POC testing, and evaluation of a predefined false-negative threshold based on the prevalence of asymptomatic disease in the community and the sensitivity of the POC test used.

The authors conclude "this maximizes safety for patients and healthcare workers, while rationalizing the use of valuable resources such as PPE. Ultimately, herd immunity or vaccination may be required to reduce risk of community transmission and enable endoscopy units to reach full capacity once again."



## **Emergency Care**

### **Emergency Care – Emerging evidence**

#### How is COVID-19 changing the use of emergency care? <sup>32</sup>

#### Kelly E and Firth Z (2020)Health Foundation

In this blog from the Health Foundation the authors discuss the changing pattern of emergency care during the pandemic. Key findings include:

- A&E visits across all unit types dropped by 57% in April, but the percentage fall was larger in minor A&E units (71%) than in major A&E units (48%).
- Emergency admissions through A&E have fallen by less than A&E visits, dropping 37% in April 2020 relative to the same month the year before. This is likely to reflect both a change in the types of patients arriving at A&E, and efforts to reduce the risk of non-COVID patients being infected and to protect capacity.
- There were relatively small changes in ambulance incidents, with a rise of 5% in March and a fall of 4% in April, relative to the same months the year before. However, there have been substantial changes in how ambulance crew treat patients. The number of patients transported to A&E by ambulance in April 2020 was 29% lower than in April 2019. This is a reduction of 4,000 patients per day or 120,000 across the whole month, equivalent to 19% of the overall drop in A&E visits at major units in April 2020 relative to April 2019. There has been a corresponding increase in the number of people who are treated at the scene.
- The reduction in visits for acute conditions such as stroke and heart attack remain a concern.

#### One Train May Hide Another: Acute Cardiovascular Diseases Could Be Neglected Because of the COVID-19 Pandemic <sup>33</sup> Huet F, et al. (2020) Arch Cardiovasc Dis

During the pandemic most resources are dedicated to the struggle against COVID-19, and this unprecedented situation may compromise the management of patients admitted with cardiovascular conditions. This study aims to assess the effect of COVID-19 containment measures on cardiovascular admissions in France. Nine major cardiology centres provided an overview of admissions to their nine intensive cardiac care units for acute myocardial infarction or acute heart failure, before and after containment measures.

Before containment (02-16 March 2020), the nine participating intensive cardiac care units admitted 4.8±1.6 patients per day, versus 2.6±1.5 after containment (17-22 March 2020) (rank-sum test P=0.0006). The drop in the number of cardiovascular admissions after the establishment of containment is cause for concern as patients presenting with acute cardiovascular disease, who may suffer from lack of attention, are likely to lead to severe consequences (an increase in the number of ambulatory myocardial infarctions, mechanical complications of myocardial infarction leading to an increase in the number of cardiac arrests, unexplained deaths, heart failure, etc.).

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# **Screening and Immunisations**

### **Screening and Immunisations - Overviews**

#### Diabetic retinopathy screening during the COVID-19 pandemic <sup>34</sup>

Ahmad E et al (2020) Centre for Evidence-Based Medicine, Nuffield Department of Primary Care Health Sciences This review explores options for diabetic retinopathy screening during the COVID-19 pandemic and the associated risk factors for development or progression of diabetic retinopathy during COVID-19. Key findings are below:

- Diabetics who have stable diabetic retinopathy with no urgent or referable indication can have retinal screening at 18-24 months interval during the COVID-19 pandemic. There is a possibility that this may become a routine practice post-pandemic in near future based on the current evidence available and with the rise in prevalence of diabetes.
- Teleophthalmology, although not widely practiced, may offer an alternate option where available during the COVID-19 pandemic.
- The main stay of treatment during the pandemic to halt or slow the progression of diabetic retinopathy should be optimisation of diabetes control albeit gradually, BP control, use of statins to control hyperlipidaemia and ACE inhibitors/ARB for albuminuria. Smoking cessation is also important. This optimisation of diabetes care will likely continue to happen remotely via virtual clinics in most instances during the current pandemic.
- Although hydroxychloroquine is prescribed for various indications e.g. rheumatoid arthritis and treatment of malaria and occasionally in PWD, caution must be taken when using high doses of hydroxycholoroquine for treatment of COVID-19 in those with pre-existing advanced retinal disease including when recruiting PWD for trials like RECOVERY, where hydroxycholoroquine is included in one of the active arms.

### **Screening and Immunisations - Emerging evidence**

Early impact of the coronavirus disease (COVID-19) pandemic and physical distancing measures on routine childhood vaccinations in England, January to April 2020<sup>35</sup>

#### McDonald HI et al. (2020) Euro Surveillance. 25(19)

This analysis uses electronic health records to assess the early impact of coronavirus disease (COVID-19) on routine childhood vaccination in England by 26 April 2020. Key findings include:

- Measles-mumps-rubella vaccination counts fell from February 2020, and in the 3 weeks after introduction of physical distancing measures were 19.8% lower (95% confidence interval: -20.7 to -18.9) than the same period in 2019, before improving in mid-April.
- A gradual decline in hexavalent vaccination counts throughout 2020 was not accentuated by physical distancing.



## **Mental Health Services**

### **Mental Health - Overviews**

<u>Challenges and burden of the Coronavirus 2019 (COVID-19) pandemic for child and adolescent mental health: a narrative review</u> to highlight clinical and research needs in the acute phase and the long return to normality <sup>36</sup>

#### Fegert, J.M., et al (2020), Child Adolesc Psychiatry Ment Health Journal

This narrative review highlights the challenges and necessity in maintaining regular and emergency child and adolescent psychiatric treatment during the pandemic.

The review describes Pandemic-related mental health risks of children and adolescents during the three phases of the pandemic; 1) preparation phase, 2) the punctum maximum phase and 3) the return to normality phase.

It describes urgent research questions to understand the mental health effects of social distancing and economic pressure, identifying risk and resilience factors, and preventing long-term consequences, including—but not restricted to—child maltreatment. It also recommends evaluating the efficacy of telepsychiatry in child and adolescent psychiatry.

#### Challenges in maintaining treatment services for people who use drugs during the COVID-19 pandemic <sup>37</sup>

#### Dunlop, A., et al (2020) Harm Reduction Journal

The impact of COVID19 on treatment services for people who use drugs is like to be high. Staff availability might be impacted and patients may require home isolation and quarantine periods. Ensuring ongoing supply of opiate treatment during these periods will require significant changes to how treatment is provided.

People who use drugs are likely to be more vulnerable during the COVID-19 epidemic, due to poorer health literacy and stigma and discrimination towards this group.

Treatment for people who use drugs is provided in a wide range of settings worldwide including community-based settings (clinics, health care centres, primary care, community pharmacies, ambulatory withdrawal), inpatient settings (hospital consultation-liaison services and inpatient withdrawal) and residential settings (withdrawal and rehabilitation). This paper presents considerations for service reconfigurations, harm reduction and workplace safety.

### **Mental Health – Emerging evidence**

#### The COVID-19 Crisis: A Mental Health Perspective and Response Using Telemedicine <sup>38</sup>

#### Sullivan, A.B, et al (2020), Journal of Patient Experience

With the outbreak of COVID-19, patients and providers were forced to isolate and become innovative in ways to continue exceptional patient care. The Cleveland Clinic went from mostly in-person medical appointments to all virtual/telemedicine care in about 2 weeks' time.

A mental health crisis is occurring along with and in response to COVID-19. Uncertainty about health, wellness, and the economy leads to fear and anxiety. Social distancing and isolation can lead to and exacerbate existing symptoms of depression. Suicidal ideation, intent, plan, and completion may increase.

#### Mental Health in the Coronavirus Disease 2019 Emergency—The Italian Response<sup>39</sup>

#### de Girolamo G, et al. (2020). JAMA Psychiatry

This special communication reflects on the experience of mental health services and the lessons learned during the coronavirus disease 2019 (COVID-19) crisis. In particular, this report offers opportunities to build on experience gained in managing the COVID-19 emergency in the Departments of Mental Health and Addiction (DMHAs) in Lombardy.

Most day facilities for patients with psychiatric needs have been temporarily closed, whereas in residential facilities, patients who usually are free to come and go during the day have had to be confined in the facilities with very limited or no leave. These changes have produced considerable stresses on people with severe mental disorders. Many outpatient clinics have limited appointments to those with the most urgent cases, and home visits, a common practice in most DMHAs, have been drastically reduced with potentially detrimental consequences for patients' well-being. Another potential detrimental consequence of being forced to stay at home has been an increase in the hours spent face to face with families with high amounts of conflict.

Departments of Mental Health need to be equipped with appropriate e-health technologies and procedures to cope with situations such as the COVID-19 pandemic. Additionally, interventions are needed to mitigate the potentially harmful consequences of quarantine. Departments of Mental Health should be able to assume a leadership position in the psychosocial management of disaster like situations, and this requires the acquisition of new skills, notably how to correctly inform the population about risk, train and disseminate effective preventive and management procedures for disasters, support health personnel and rescuers, and support those experiencing bereavement.



# **Cancer Services**

### **Cancer Services - Overviews**

#### Cancer and COVID-19: between a rock and a hard place 40

#### Soliman R (2020) Centre for Evidence-Based Medicine, Nuffield Department of Primary Care Health Sciences

This brief overview of the problems faced by Cancer and COVID-19 highlights work by a global <u>COVID-19 and Cancer Taskforce</u> that suggest COVID-19 could have negative effects on cancer from three different dimensions (3 research themes);

- direct impact on cancer outcomes (morbidities and mortalities) and treatment disruptions;
- adverse impact on cancer diagnosis due to lockdown measures, and on screening due to shifting focus from cancer control programmes to COVID-19; and
- long-term impacts of COVID-19, on increased cancer risk and lower prevention measures.

#### Impact of the COVID-19 pandemic on the symptomatic diagnosis of cancer: the view from primary care <sup>41</sup>

#### Jones D et al. (2020) The Lancet Oncology

This commentary discusses the impact of the pandemic on the symptomatic diagnosis of cancer.

"Screening, case identification, and referral in symptomatic cancer diagnosis have all been affected by the COVID-19 pandemic. UK national cancer screening programmes—accounting for approximately 5% of all cancer diagnoses each year—have been suspended.2 Consequently, early diagnoses from screening will be delayed and symptom-based diagnosis of cancer will become more important.3" The authors highlight the shift to telephone triage and video consultations might result in missed cues, reduced examination findings, and loss of the clinician's gut feeling. Remote consulting might also be less suited to vulnerable patients and individuals

from low socioeconomic backgrounds than to patients from high socioeconomic settings potentially compounding inequalities that already exist in early cancer diagnosis.

The authors conclude when normal service resumes at a population and health-service level, there will be a huge backlog of

patients with potential cancer symptoms needing urgent assessment. Planning for recovery should commence as soon as possible. Managing Cancer Care during the COVID-19 Pandemic and Beyond 42

#### Alhalabi O and Subbiah V (2020) Trends in Cancer

Although the current emphasis is on managing COVD19, the focus in the near future centres on the recovery plan and restoration of the balance of cancer care in the era of COVID-19 and beyond.

Expanded testing, social distancing, vaccine programs and new therapies for COVID19, telemedicine, and prioritizing certain cancer therapies are suggested modalities to restore the balance of care.

### **Cancer Services - Overviews**

Cancer, COVID-19 and the precautionary principle: prioritizing treatment during a global pandemic 43

#### **Nature Reviews Clinical Oncology**

This commentary presents a conceptual framework for prioritizing the use of radiotherapy and systemic treatments during the COVID-19 pandemic.



### **Cancer Services - Overviews**

#### **COVID-19 and Cancer: a Comprehensive Review** 44

#### Gosain, R. et al. (2020) Current Oncology Reports. 22 (53)

This review on COVID-19 and Cancer includes a section on the approach to diagnosis and treatment of cancer patients. Cancer patients require timely diagnosis, evaluation, and treatment even during a pandemic. However, it is important to consider that cancer patients are immunocompromised and are at increased risk of COVID-19-related serious events (intensive care admission, requirement for mechanical ventilation, or death) in comparison to the general population

The review highlights that many oncology societies around the world have developed guidelines to mitigate the negative effects of the COVID-19 pandemic on the diagnosis and treatment of cancer patients. The common theme of these proposed guidelines is to categorize patients into high, medium, or low priority based on the Ontario Health Cancer Care Ontario criteria in order to plan their management course accordingly. The review proposes a framework for prioritizing clinical management of cancer patients in COVID-19 pandemic adapted from the Ontario Health Cancer Care Ontario. The framework states a patient with the lowest priority (priority C) could wait for further management until the pandemic resolves, while higher priority (specifically priority A) warrants immediate management as the benefits of the management outweigh the risks from the pandemic. Patients falling in priority B can often be slightly delayed, but usually a thorough discussion among the physician and patient further determines the course.

The review also explores surgery specifically. While evidence suggests that patients who received surgery and concomitantly contracted COVID-19 were at much higher risk of severe clinical events than those who did not have surgery, it is important for clinicians and patients to have risk assessment discussions prior to making treatment decisions. The review suggests part of the discussion should also entail resource availability, as surgeries often require post-operative care in the intensive care unit (ICU). The review suggests in early stage cancers where surgery is often the first step in management, patients could be offered neoadjuvant therapy, and surgery could be delayed without compromising patient outcomes. Evidence suggests that 60-day delays in surgical intervention of early stage breast cancer has been documented without worsening oncological outcomes.

### **Cancer Services - Emerging evidence**

Estimating excess mortality in people with cancer and multimorbidity in the COVID-19 emergency <sup>45</sup>

#### Alvina G. Lai; Laura Pasea; Amitava Banerjee et al (2020)

This study reports on multi-center weekly cancer diagnostic referrals and chemotherapy until April 2020 in England and Northern Ireland. Data for this analysis were derived from population-based health records of 3,862,012 adults, used to estimate 1-year mortality at 24 cancer sites and 15 non-cancer comorbidity clusters.

- Compared to pre-emergency levels, there was a: 45-66% reduction in admissions for chemotherapy; 70-89% reduction in urgent referrals for early cancer diagnosis
- "Across a range of model assumptions, and across incident and prevalent cancer cases, 78% of excess deaths occur in cancer patients with ≥1 comorbidity"
- "cancer patients with multimorbidity are a particularly at-risk group during the current pandemic. In order to ensure effective cancer policy and avoid excess deaths, both during and after the COVID-19 emergency, it is critical to ensure near-real time reporting of cause-specific excess mortality, urgent cancer referrals and treatment statistics, so as to inform the most optimal delivery of care in this extremely vulnerable group of patients."

### **Ongoing studies – Health services**

Study title	Study type	Country	Link
A rapid appraisal ofhealthcare workers'perceptions of care delivery inthe context of the COVID-19 pandemic	Qualitative	UK	https://www.hra.nhs.uk/covid-19- research/approved-covid-19- research/282069/ <sup>46</sup>
Rapid COVID-19 Intelligenceto improve primary careresponse	Mixed methods	UK	https://www.hra.nhs.uk/covid-19- research/approved-covid-19- research/282541/ 47
Remote-by-Default Care in the COVID-19 Pandemic:addressing the micro-,meso-,and macro- level challenges ofa radical new service model	_	UK	Contact via <u>https://www.phc.ox.ac.uk/team/trish</u> <u>-greenhalgh</u> <sup>48</sup>
Activating Resilience:Mobilising Responses toCOVID-19 within NightingaleHospitals	Qualitative	UK	https://www.hra.nhs.uk/covid-19- research/approved-covid-19- research/282761/ <sup>49</sup>

### **Ongoing studies – Health services**

Study title	Study type	Country	Link
Paramedic Experiences ofproviding Care during the 2020 COVID-19 Pandemic(PECC-19): A qualitative study using Grounded Theory	Qualitative	UK	https://www.hra.nhs.uk/covid-19- research/approved-covid-19- research/282623/ <sup>50</sup>
The COVID-19 AmbulanceResponse Assessment Study(CARA)	Mixed methods	UK	https://www.hra.nhs.uk/covid-19- research/approved-covid-19- research/282314/ <sup>51</sup>
Sustaining the resilience andwellbeing of frontlinecommunity based care and support workers tovulnerable older peopleduring a time of crisis	_	UK	Contact via https://www.stir.ac.uk/people/25722 3 <sup>52</sup>
Minimising impact onvulnerable patients: data-driven design, monitoringand adaptation of COVID and non-COVID clinical carepathways	-	UK	Contact via <u>https://www.abdn.ac.uk/people/corr</u> <u>i.black</u> <sup>53</sup>

### **Ongoing studies – Specialties**

Study title	Study type	Country	Link
How to Support cHildrenwith cAncer an d theiRparents during the COVID-19 outbreak?:understandingExperi ences, information and support needs, and decision-making – the SHARE study	Mixed methods	UK	https://www.hra.nhs.uk/covid-19- research/approved-covid-19- research/282176/ <sup>54</sup>
The COVID-19 VascularsERvice Study	Data-driven analysis	UK	https://www.hra.nhs.uk/covid-19- research/approved-covid-19- research/282224/ 55
An observational cohort study to explore patient outcome from heart surgery during the Covid- 19pandemic (CardiacCovid)	Mixed methods	UK	https://www.hra.nhs.uk/covid-19- research/approved-covid-19- research/282411/ <sup>56</sup>
The Royal College of Surgeons also maintains a list of relevant studiesexploring the impact of Covid-19 on surgical services	Various	Various	https://www.rcseng.ac.uk/coronavirus/rcs- covid-research-group/ 57

### **Ongoing studies – Specialties**

Study title	Study type	Country	Link
Child Protection and socialdistancing: Improving the capacity of social workers to keep children safe during the COVID-19pandemic	_	UK	https://research.birmingham.ac.uk/portal/e n/projects/social-work-and-social- distancing-learning-from-the-impact-of- the-covid19-pandemic-on-child- protection-service-users-and-the-capacity- to-keep-children-safe(77911a83-2421- 4a34-b6d2-7a9cf355a994).html <sup>58</sup>
Adapting Palliative Care under aPandemic (APCuP)	Qualitative	UK	https://www.hra.nhs.uk/covid-19- research/approved-covid-19- research/282846/ <sup>59</sup>
Rapid evaluation of the COVID- 19pandemic response in palliative and end of life care: nationaldelivery, workforce and symptommanagement (CovPall)	Mixed methods	UK	https://www.kcl.ac.uk/cicelysaunders/resear ch/evaluating/covpall-study <sup>60</sup>
COVID-19: Safety andpersonalisation for UK maternity care provision during and after apandemic	-	UK	Contact via: https://www.uclan.ac.uk/staff_profiles/profe ssor_soo_downe.php <sup>61</sup>

### **Other useful resources**

Title	Country	Link
COVID-19 chart series	UK	https://www.health.org.uk/covid-19-chart-series 62

### Keep up to date

Keep up with new and emerging evidence via our web page, where you will find: <u>https://www.strategyunitwm.nhs.uk/COVID-19-and-coronavirus</u>

A link to our collection of curated sources on COVID-19 relevant to policy and planning

Links to database searches on Pubmed and Google Scholar on key topics

#### Copies of our rapid summaries

Evidence trackers for key topics providing information about the latest evidence in one place

Updated alerts including the option to sign up for email alerts

A special edition of Evidence Insights on COVID-19

### Links

1. https://www.kingsfund.org.uk/publications/letter-to-health-and-social-care-select-committee-covid-19

2.https://www.kingsfund.org.uk/blog/2020/05/prioritising-community-response-covid-19

3. https://www.nuffieldtrust.org.uk/news-item/reducing-avoidable-harms-to-children-during-covid-19-what-actions-are-needed

4. https://www.health.org.uk/news-and-comment/news/todays-figures-show-a-seismic-shift-in-the-way-people-use-services

5.https://www.health.org.uk/news-and-comment/blogs/covid-19-five-dimensions-of-impact

6.<u>https://www.health.org.uk/news-and-comment/blogs/shock-to-the-system-covid-19s-long-term-impact-on-the-nhs</u>

7.https://nhsproviders.org/media/689531/spotlight-on-non-covid-care.pdf

8.https://www.scie.org.uk/care-providers/coronavirus-covid-19/beyond/blogs/post-covid-future

9.https://www.nationalvoices.org.uk/sites/default/files/public/publications/hssc\_submission\_140520.pdf

10. https://www.who.int/publications-detail/covid-19-operational-guidance-for-maintaining-essential-health-services-during-an-outbreak

11. https://www.england.nhs.uk/coronavirus/publication/operating-framework-for-urgent-and-planned-services-within-hospitals/

12.https://www.england.nhs.uk/coronavirus/

13.<u>https://www.rcgp.org.uk/-/media/Files/Policy/A-Z-</u> policy/2020/covid19/RCGP%20guidance/202003233RCGPGuidanceprioritisationroutineworkduringCovidFINAL

14.https://www.rcem.ac.uk/docs/Policy/RCEM\_Position\_statement\_Resetting\_Emergency\_Care\_20200506.pdf

15.https://www.rcseng.ac.uk/coronavirus/recovery-of-surgical-services/

16.<u>https://bjssjournals.onlinelibrary.wiley.com/doi/full/10.1002/bjs.11646</u>

<u>17. https://www.cebm.net/covid-19/what-conditions-could-we-prioritise-in-the-primary-care-setting-to-reduce-non-covid-related-admissions-to-hospital/</u>

18. https://arc-w.nihr.ac.uk/research-and-implementation/covid-19-response/reports/demand-for-home-visiting-services-since-the-covid-19-lockdown/

<u>19. https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(20)30115-8/fulltext</u>

20. https://www.health.org.uk/news-and-comment/charts-and-infographics/how-might-covid-19-have-affected-peoples-ability-to-see-GP

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21. https://www.cebm.net/covid-19/supporting-people-with-long-term-conditions-ltcs-during-national-emergencies/

22. https://www.cebm.net/covid-19/preventing-non-covid-19-hospital-admissions-during-a-pandemic-a-rapid-overview-of-the-evidence-for-high-value-medications/

23. https://link.springer.com/content/pdf/10.1007/s10461-020-02871-9.pdf

24. https://www.health.org.uk/news-and-comment/blogs/early-insight-into-the-impacts-of-covid-19-on-care-for-people-with-long-term

25. https://bmjleader.bmj.com/content/early/2020/05/17/leader-2020-000262

26. https://www.commonwealthfund.org/publications/2020/apr/impact-covid-19-outpatient-visits

27. https://www.health.org.uk/publications/long-reads/returning-nhs-waiting-times-to-18-weeks

28. https://bjssjournals.onlinelibrary.wiley.com/doi/full/10.1002/bjs.11688

29. http://canjsurg.ca/wp-content/uploads/2020/05/63-3-E226.pdf

30. https://bjssjournals.onlinelibrary.wiley.com/doi/abs/10.1002/bjs.11746

31. https://www.giejournal.org/article/S0016-5107(20)34249-8/pdf

32. https://www.health.org.uk/news-and-comment/charts-and-infographics/how-is-covid-19-changing-the-use-of-emergency-care

33. https://pubmed.ncbi.nlm.nih.gov/32362433/

34. https://www.cebm.net/covid-19/rapid-review-diabetic-retinopathy-screening-during-the-covid-19-pandemic/

35. https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2020.25.19.2000848

36. https://capmh.biomedcentral.com/articles/10.1186/s13034-020-00329-3#Sec14

37. <u>https://harmreductionjournal.biomedcentral.com/articles/10.1186/s12954-020-00370-7</u>

38. https://journals.sagepub.com/doi/pdf/10.1177/2374373520922747

39. https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2765557

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- 42. https://www.sciencedirect.com/science/article/pii/S2405803320301357
- 43. https://www.nature.com/articles/s41571-020-0362-6
- 44. https://link.springer.com/article/10.1007/s11912-020-00934-7
- 45. <u>https://www.researchgate.net/publication/340984562\_Estimating\_excess\_mortality\_in\_people\_with\_cancer\_and\_multimorbidity\_in\_the\_COVID-19\_emergency/link/5ea8b957a6fdcc7050976a3e/download</u>
- 46. https://www.hra.nhs.uk/covid-19-research/approved-covid-19-research/282069/
- 47. https://www.hra.nhs.uk/covid-19-research/approved-covid-19-research/282541/
- 48. https://www.phc.ox.ac.uk/team/trish-greenhalgh
- 49. https://www.hra.nhs.uk/covid-19-research/approved-covid-19-research/282761/
- 50. https://www.hra.nhs.uk/covid-19-research/approved-covid-19-research/282623/
- 51. https://www.hra.nhs.uk/covid-19-research/approved-covid-19-research/282314/
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- 54. https://www.hra.nhs.uk/covid-19-research/approved-covid-19-research/282176/
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- 59. https://www.hra.nhs.uk/covid-19-research/approved-covid-19-research/282846/
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### **Appendix - Methodology**

#### Formulate focused questions Prepare live searches Database and manual searches Prepare a high level summary Create an evidence tracker Regular alert to share new and emerging evidence

#### Scoping the review

Geography	International
Settings	All care settings – secondary, primary, community, independent – unless specified
Language/s	No language restrictions but please note there is no budget for translation. Therefore, we will prioritise
	translated materials where available and will source translations within existing resource.
Dates	We may limit evidence relating to earlier pandemics/major incidents to the last 10 years, should the volume of results be high, to focus on contemporary literature.

#### Search sources and locations

#### **Bibliographic**

#### databases:

 $\bullet$ 

• Cochrane

 $\bullet$ 

Library

CINAHL

- Pubmed
- Google Scholar

#### Aggregators and search engines:

- NHS Evidence
- TRIP (using Covid filters)

#### Grey literature:

via our curated collection of resources on COVID-19 and Coronavirus <sup>28</sup>

- Global Health
- Disaster Lit