

RESTARTING MORE ROUTINE HOSPITAL ACTIVITIES DURING COVID-19: APPROACHES FROM SIX COUNTRIES

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Summary: During the COVID-19 pandemic, hospitals face the concurrent challenges of maintaining routine services while attending to COVID-19 patients. This article shares approaches taken in six countries to resume hospital care after the first wave of the pandemic by surveying country experts and using data extracted from the [COVID-19 Health Systems Response Monitor \(HSRM\)](#). Four strategies were observed in all six countries: prioritisation or rationing of treatments, converting clinical spaces to separate patients, using virtual treatments, and implementing COVID-19 free hospitals or floors. Clear guidance about how to prioritise activities would support hospitals in the next phases of the pandemic.

Keywords: *Hospitals, Essential Services, Prioritisation of Care, COVID-19*

Introduction

As the COVID-19 pandemic unravelled, hospitals had to deal with the often overwhelming need to treat patients exposed to the virus. To minimise exposure and maximise health workforce capacity, many hospitals postponed elective procedures and non-essential services.¹ As a number of countries in Europe have begun to carefully resume services that were limited or suspended during the first wave of the pandemic, this article looks at how six countries ([England](#), [France](#), [Germany](#), [Italy](#), [Spain](#), [the Netherlands](#)) have restarted more routine hospital care services.

The decrease in hospital services during the first months of the pandemic was often substantial: data from five hospitals in Italy showed a 73–83% drop in paediatric emergency department visits,² while a study in Spain on the impact of the COVID-19 on interventional cardiology activity showed a 56% decrease in the number of diagnostic procedures and 81% reduction in structural interventions.³ The World Health Organization (WHO) has released operational guidance on maintaining essential health services, and highlighted the need to limit non-essential facility-based encounters at hospitals for safety and capacity reasons.⁴ In addition

Table 1: Changes in hospitals to resume routine hospital activities after the first wave of COVID-19

	Is this change expected in your country? (✓=yes)										
	Lower volume of activities in hospitals	Prioritization or rationing of treatments	Increase testing of staff	Convert clinical spaces to separate patients	Investment in facilities	Investment in PPE	Investment in staff	Use of private sector capacity	Emergency departments manage the inflow of patients differently	Use of digital or phone and non-face-to-face modes continue and grow	Use Covid-19-free hospitals or floors
France	-	✓	✓	✓	✓	✓	✓	-	-	✓	✓
Germany	✓	✓	✓	✓	✓	✓	-	-	✓	✓	✓
Italy	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spain	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
The Netherlands	✓	✓	-	✓	-	-	-	-	-	✓	✓
England	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Source: Authors' own

to the impact on patient access, the reduction in routine hospital activities also influenced hospital budgets in many countries, as the health financing system often relies on activity-based payments. Several countries in Europe have already adjusted their hospital payment mechanisms as a result of altered activity.⁵

We designed a survey based on initial findings from England on the necessary and expected changes in the hospital setting for them to resume normal activities. We collected responses from national experts in six countries within the COVID-19 Health System Response Monitor (HSRM initiative) as of 1st September 2020. An overview of the survey and responses is presented in **Table 1** below. Some shared approaches for resuming routine hospital activities among the selected countries is illustrated in **Figure 1**.

Health care systems expect a lower volume of hospital activities in the foreseeable future

It is expected that hospitals will run at a reduced rate of occupancy for a prolonged period of time, especially given the highly volatile epidemiological context. For example, in Germany, hospital rooms with multiple beds may not reach their occupancy due to physical distancing

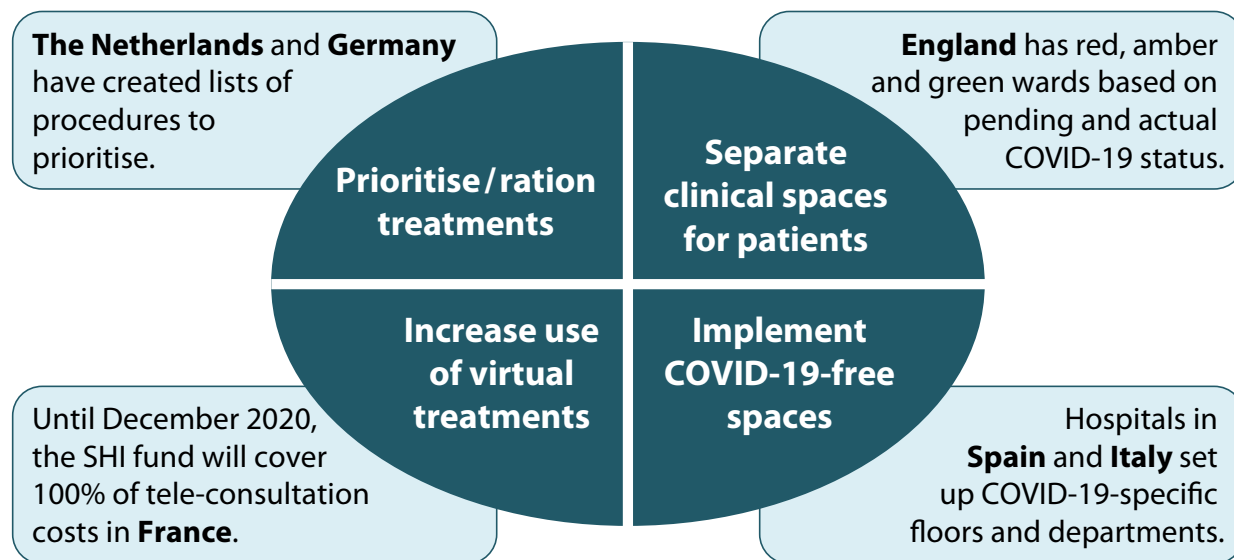
requirements. The German Hospital Federation does not expect a return to routine activities until late 2021.⁶ The Netherlands reported an increase in waiting times for some non-acute and planned care such as in orthopaedics, dermatology, gynaecology, ENT, and ophthalmology; however, the waiting times in other specialties, including cardiology, paediatrics and internal medicine, appear to have fallen. As of July 1, the number of referrals from general practitioners (GPs) to hospital care has resumed to 80% of the pre-pandemic volume in that country. In England, targets have been set for the NHS to return to near-normal levels activity in the period before winter, including restoring full operation of cancer services, and 80%–100% of elective capacity (depending on the procedure).⁷ However, there are concerns from doctors on the feasibility of these targets and how well they can be sustained. A survey from the Royal College of Physicians suggests that it will take up to two years to recover the backlog from COVID-19.⁸ In Spain, the number of organ transplants has plummeted by 87% from 16.1 per day to 2.1 per day.⁹ In Italy, the situation became critical after the two-month lockdown (which ended on May 4): the demand for health care was high and the waiting lists were very long,¹⁰ even for ambulatory services. However, since August, waiting lists have shortened

also supported by the new Decree of the Ministry of Health named “August Decree”.¹¹

Several countries have prioritised or rationed treatments, often using a phased approach

In most countries, health systems are prioritising not only emergency care but also urgent care for which timeliness of intervention is crucial such as cancer services. In France, this is the key criteria for resuming care, with a focus on vulnerable individuals including those living with a chronic disorder. Further, hospitals are cautious to ensure intensive care unit (ICU) beds and rehabilitation capacities remain available in case of another COVID-19 wave. By the end of August 2020, the number of available resuscitation beds was about twice the bed capacity before the first wave (12,000 against 5,000). This caution is also observed in other countries. Elective procedures in England are expected to resume to 80% of last year's activity with full restoration of cancer services by September. In Germany, at the end of April, hospitals were asked to keep 25% of all ICU beds available for COVID-19 patients, down from a previous target of 50%. Due to the federal structure of the hospital system in Germany, the federal states (*Länder*) developed their

Figure 1: Common approaches to resuming routine hospital activities with country examples



Source: Authors' own

Note: SHI = Statutory Health Insurance

own regional concepts, which allow the individual state to ensure 25% ICU capacity throughout the whole state instead of in each hospital. In other words, a state can choose to have all these ICU beds in one hospital for COVID-19 patients and other hospitals without COVID-19 wards, as long as they meet the 25% ICU capacity overall. From early May, hospitals were able to conduct elective surgeries again, following a reopening phase based on a stepwise approach, coupled with a frequent re-evaluation of ICU bed capacity.

Spain has adopted different criteria to prioritise surgery in five potential scenarios, ranging from a quasi-normal situation (1st scenario, COVID-19 patients < 5% of admissions) to an emergency situation (5th scenario, COVID-19 patients > 75% of admissions), depending on the epidemiological situation.¹² In the Netherlands, a multi-stakeholder process drafted, commented on and validated (as advice) an 'urgency list' of procedures to prioritise when scaling up regular hospital care.¹³ The German Association for General and Visceral Surgery created a list of prioritised elective interventions, with surgeries of patients with rapidly progressing diseases and manageable comorbidities preferred, however the individual physician still makes the treatment decisions. The association also

created a list of diseases that may always require urgent surgery, such as hernias with incarceration, gastrointestinal bleeding, organ transplants, and more.

Testing health care personnel will continue towards supporting the safe provision of care

In the absence of a vaccine, regular testing of health care personnel is a key measure implemented by countries to contain the spread of the virus and protect staff and patients, which has implications in terms of cost and time. France reported systematically testing all health workers after the end of the lockdown in the country. In Germany, to avoid or stop outbreaks of the virus, the testing strategy of the Robert Koch Institute foresees an increase in testing patients and staff in hospitals and other residential facilities. In Spain, testing of healthcare personnel is prioritised and regular testing is recommended for personnel of nursing homes and assisted-living facilities (at least once each 15 days), as well as testing employees returning from leave or vacation and new employees before joining. In England, staff who are experiencing symptoms (or have been exposed to someone who has) are tested. Asymptomatic staff are tested routinely in places with high prevalence or a known

outbreak, and preparations are being made to test all staff routinely in the event of a second wave.

Clinical spaces that do not allow patients to be physically separated may require reorganisation

All countries surveyed reported the need to create additional capacity and cohort patients by repurposing other clinical spaces. German hospitals are advised to have separate units for new patients with suspected COVID-19 infection, as well as quarantine and isolation rooms for patients who tested positive for COVID-19. In Spain, surgical recovery units were adapted to function as secondary ICU, and specific minor procedure rooms were set as COVID-19-specific. In England there are red, amber and green wards based on pending and actual COVID-19 patients' status to try and separate patients effectively. Wherever possible, patients with confirmed or suspected COVID-19 are placed in cohorts with designated staff in self-contained areas to prevent transmission.

Some countries have introduced 'COVID-19 free' hospitals or floors to further reduce the rate of infection. In England, urgent and emergency surgery was performed in 'COVID-19-free' private hospitals. In the Netherlands,

some hospitals with multiple buildings created COVID-19 hospitals and non-COVID-19 hospitals, and some have separate spaces for those with and without symptoms. Similarly, hospitals in Spain set up COVID-19-specific floors and departments. In Italy, COVID-19 dedicated hospitals and wards were selected, and different intra-hospital patient flows were designed to separate COVID-19 hospital admissions and also diagnostic and therapeutic activities from other patients. In France patients are isolated, as much as possible, in dedicated wards.

Emergency departments in some countries have changed their triage systems to adapt to the challenges of the pandemic

Even before COVID-19, many emergency departments were operating at capacity, with a configuration that did not necessarily allow for physical distancing. Several countries have changed the way that patients interact with the emergency department as a result of the COVID-19 pandemic.

Generally, patients with COVID-19 symptoms are advised not to go to emergency departments (e.g. France), while other countries separate the inflow of patients with suspected COVID-19 infections or respiratory symptoms from all other patients (e.g. in Germany), or conduct triage in the emergency department to identify patients with respiratory symptoms who will be isolated (e.g. Spain and England). COVID-19 patients in Italy followed a different pathway for COVID-19 hospital admission after GP/helpline indications. In England and Spain, patients attending accident and emergency (A&E) departments are similarly triaged into separate pathways, and are tested and assessed for severity and managed accordingly. Patients are instructed to contact designated hotlines with suspected symptoms before attending the hospital to help determine severity and the appropriate care pathway, which also occurs in Germany. In the Netherlands, emergency departments are only accessible by ambulance or by GP/helpline referral, which was already the case before COVID-19.

Continuing investments in facilities, PPE and staff will be required

In most cases, additional waiting rooms and space to maintain physical distancing and keep infected and non-infected patients separate are paramount to prepare hospitals for a potential increase of COVID-19 cases, along with an adequate supply of personal protective equipment (PPE). Further, the pandemic exacerbated the health workforce shortage in some countries, which will need to be addressed (for example, in England, by retaining staff who returned to work during the pandemic). Italy reported substantial investments to increase the number of contracts for physicians and nurses. Other support services, such as mental health support services available in Spain, France and England, will continue while the COVID-19 pandemic persists.

The private sector can provide additional capacity in some countries

In those health systems with both public and private provision of health care, increased utilisation of private health care providers can support overflowing demand in the public system. This was the case in some Italian regions (red zones in the northern part of Italy) and in towns with high-density populations. Spain expects an increase in public-private partnerships to reduce waiting lists, and England plans to continue the use of private hospitals to support NHS services into 2021.

As countries grapple with how to keep patients and staff safe, the use of phone or video consultations is projected to increase

The use of non-face-to-face consultation modes has substantially increased, and is expected to grow further in all six countries. In the case of France, 100% of teleconsultation costs are covered by the social health insurance (SHI) fund until December 2020, and teleconsultations are strongly encouraged in all areas, including psychiatric care. However, the use of teleconsultation in hospitals remains rare. Not only do these digital tools reduce potential infections, they also allow for at-risk health workers to still provide care safely. In England, digital consultations are to be maintained

where safe and appropriate to do so, building from efforts started before the pandemic to make digitally-enabled care the mainstream across the NHS. Care models like ‘virtual wards’ – where patients who had been admitted and treated for COVID-19 in hospitals are sent home for ongoing management remotely – may become the norm to free up capacity and avoid further transmission. In Italy, there was an important increase of health care providers initiatives concerning telemedicine, especially teleconsultation. Among these, 29% were for COVID-19 patients and 71% for non-COVID patients (i.e. diabetology, cardiology, oncology).¹⁴ In Spain, consultations before and after surgery are recommended to be conducted via telephone.

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Conclusions and Policy Implications

Returning to providing routine services after they were suspended or postponed is a challenging task for many hospitals. As a result of the necessary conversion of clinical spaces in response to the COVID-19 emergency, hospitals will have less capacity for routine activities. Hence, waiting times are expected to further increase. Also, some patients may choose to forgo elective treatments, at least until the COVID-19 pandemic subsides. While this might reduce unnecessary treatments or minimise induced health system demand, many patients could experience unmet need for medical care with potentially negative impacts on their health. In addition, there may be additional ongoing treatment needs for COVID-19 patients that will require rehabilitation and long-term follow up. For example, the Netherlands will reimburse rehabilitative care for COVID-19 patients, even though

the care has not been scientifically proven as effective, due to the extraordinary situation.¹⁵

The impact of the COVID-19 pandemic on health professionals also affects the ability of hospitals to return to more routine activities. Health workforce shortages will have an impact on overall productivity, and at-risk health professionals may have to be moved to providing remote consultations. Even when care is provided in person, health care professionals may find it more difficult to establish relationships with their patients due to the additional barrier of PPE.

Despite these challenges, there are some common policy lessons from the reviewed experiences, as seen in **Figure 1**. In particular, specific COVID-19 care zones may be considered, either by using separate buildings or having dedicated rooms for COVID-19 patients, including separate areas for those patients awaiting test results. Although splitting up patients may reduce the risk of infection, the possibility of asymptomatic transmission suggests that even 'COVID-19 free' spaces should require the use of PPE, ensure physical distancing and follow suggested hygiene rules.

Systematically and regularly testing health care personnel, especially in areas with outbreaks, facilitates the face-to-face relationship between the patient and provider.¹⁶ However, the growing momentum to continue the shift from in-person to phone or video consultations presents the lowest risk of infection, even for care that is normally provided in hospitals, and health systems should ensure the reimbursement mechanisms and care pathways incentivise remote interactions when possible and appropriate.¹⁷ In these situations, patients who do not have access to video conferencing and other remote services may face digital exclusion, which has important consequences regarding the equity of care provision. In any case, the new context in some countries where a high proportion of patients are asymptomatic or develop mild symptoms shows that many patients with the virus could be treated and recover outside of the hospital. Hence, strengthening primary

care services, especially for testing, is key to reduce waiting lists within hospitals as well as restructuring emergency services to avoid unnecessary collapse from COVID-19 patients.¹⁸

Nonetheless, countries may have to reassess how they evaluate the performance of hospitals in this new context, which now operates with dual goals of limiting the spread of the coronavirus while maintaining routine services. Clear guidelines on how to prioritise routine care with various COVID-19 scenarios should be available, and ideally conducted in consultation with the medical community, with patient engagement in the decision-making process, and informed by a review of activity now that more routine care in hospitals has restarted. These guidelines can support the complex decision-making process and delicate balance of both reducing COVID-19 transmission and providing effective care.

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