

# 9

## Managing elective care and waiting times

Luigi Siciliani (University of York), Gaétan Lafortune and Noémie Levy

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This chapter reviews the impact of the COVID-19 pandemic on access to elective (non-urgent) care and waiting times. In many OECD countries, waiting times for elective care were already on the rise before the pandemic, indicating that supply was not keeping-up with demand. The pandemic exacerbated the backlog for elective procedures as most OECD countries suspended non-urgent care to divert efforts towards COVID-19 patients and avoid other patients being infected. Recovery of these “missing” volumes and the impact on waiting times differed across OECD countries, reflecting differences in the effectiveness of containment measures, the speed at which elective care resumed, the pre-existing capacity of health workers and equipment, and the ability to mobilise additional resources to increase activity. Addressing the backlog in elective procedures calls for activity-based financing, boosting the supply of health workers, and better management and monitoring of waiting lists. The chapter concludes with policy recommendations to tackle waiting times for elective care.

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## Key findings

Most OECD countries suspended elective (non-urgent) care during the pandemic to divert efforts towards COVID-19 patients and avoid others being infected while seeking care.

Compared with 2019, nearly 4 million fewer elective surgical procedures from a set of 15 operations (an 18% reduction), and over 7 million fewer magnetic resonance imaging (MRI) and computerised tomography (CT) diagnostic exams (a 6% reduction), were performed in 31 OECD countries in 2020. These figures exclude the United States, where 33 million fewer MRI and CT scans were performed in 2020 (a reduction of 20% in CT exams and 35% in MRI exams). The suspension of elective care generated backlogs in many countries, leading to longer waiting lists and waiting times.

Even before the pandemic, waiting times for elective surgery had started to rise in several countries, indicating that supply was not keeping pace with demand. The disruption of services during the pandemic further increased this imbalance. Longer waiting times postpone health benefits and can reduce the effectiveness of health care, highlighting the need to address backlogs as quickly as possible.

Reductions in elective care volumes during the pandemic and the subsequent increases in waiting times in 2020 and 2021 differed significantly across OECD countries. Some countries recovered more quickly than others because they contained the number of COVID-19 cases and hospitalisations, and thereby minimised disruptions to other health services. Some had greater pre-existing capacity in terms of health workers and equipment, resumed elective treatment and diagnostic services rapidly, and/or mobilised additional resources to increase activity. Australia, Finland, Israel, Norway, Portugal and Switzerland were among the countries that achieved a swift recovery.

Following the increase in waiting times for elective procedures associated with lockdowns or prioritisation of medical facilities for treatment of COVID-19 patients, OECD countries adopted a range of strategies to manage waiting times:

- Many countries continued to set maximum waiting-time guarantees or targets that were common before COVID-19, although the gaps between the maximum waiting times and the actual waiting times were often exacerbated during the pandemic.
- Several OECD countries provided additional or earmarked funding for elective care in 2020 and 2021 to boost supply.
- Many countries are incentivising health workers to work longer hours, although this strategy is limited as staff may be or become exhausted. Some countries are relying on international recruitment of doctors and nurses to address immediate needs, but this can in turn exacerbate shortages in countries of origin.
- After some interruptions to offset declining revenues for providers of elective procedures during the pandemic, several countries have or are planning to reintroduce activity-based financing.
- Several OECD countries stimulated the supply of diagnostic tests, such as MRI or CT scans, following the first wave(s) of the pandemic. The policies adopted are similar to those for elective treatments, including performance monitoring and creating dedicated diagnostic hubs.
- On the demand side, the main criteria to prioritise patients on waiting lists have not changed. They include clinical need, urgency and long waiting time. Some countries have more tightly enforced existing prioritisation criteria.

The following **policy recommendations** are offered to improve the management of elective care and waiting times:

- Maximum waiting times should remain a key performance measure against which health systems can assess the progress of health care providers in recovery from the pandemic.
- Boosting supply through additional funding and activity-based financing is necessary to reduce backlogs and recover as quickly as possible. Properly designed activity-based financing should align financial incentives between providers and funders, and safeguard value for money by ensuring that reimbursement reflects costs.
- There is no “quick fix” to address current workforce shortages; better workforce planning is key. In the short term, OECD countries must balance the need to reduce the backlog of elective procedures without placing too much pressure on the current workforce. In the medium term, careful health workforce planning and greater training are needed to increase elective volumes and reduce waiting times. Planning needs to pay particular attention to critical shortages in different specialties (such as operating room nurses and anaesthesiologists in some countries), and training and other strategies should be developed to address such shortages.
- Improved access to diagnostic tests, such as MRI or CT scans, needs to be included in supply-side policies addressing backlogs, because diagnostic tests act as a bottleneck in patient pathways.
- Improving the management and monitoring of waiting lists is important to optimise the use of operating rooms and the match between patients and surgical teams. Improved information systems, including active communication with patients on appointments, is important to avoid “no shows”.
- Prioritisation policies are an opportunity to rationalise demand and reduce inappropriate referrals, but this should not come at the cost of widening inequalities in access.
- Countries should be ready to determine those procedures or patients for which or for whom maximum waiting times may be suspended temporarily, based on urgency and clinical needs. This can be achieved by developing clinical guidance criteria before the next shock to the health system.

## 9.1. The pandemic resulted in delayed care and increased backlogs and waiting times

The COVID-19 pandemic, particularly during the first waves in 2020, resulted in the cancellation of many elective (non-urgent) diagnostic services and surgical procedures to protect patients and health workers from the risks of infection, and to free up hospital capacity for COVID-19 patients (see chapter on critical care surge). However, the reduced volume of activities and the increased waiting times varied widely across countries and between patient groups within each country, reflecting differences in the management of waiting lists and responses to COVID-19.

Long waiting times matter for patients: they generate dissatisfaction because the health benefits from treatment are postponed; patients can experience pain and discomfort while waiting; and the wait may worsen health outcomes for patients before and after the intervention. The effect of waiting times on health outcomes depends on the duration of the wait, the health issue and the clinical prioritisation.

In the context of elective care, resilience can be thought of as the ability of health systems to minimise disruptions to the supply of non-urgent (or less urgent) diagnostic services and treatments, to resume supply and to catch up with the backlog of patients on waiting lists as quickly as possible. The catch-up takes place primarily in the recover stage of the disruption cycle (see the chapter on key findings and recommendations for a description of the disruption cycle).

This chapter addresses the following questions regarding the resilience of OECD health systems in the provision of elective care during the pandemic and recovery from it:

- To what extent was the volume of diagnostic exams and elective surgical procedures reduced in 2020 compared with pre-pandemic levels, and what has been the impact on waiting times?
- What policy actions did OECD countries take to resume elective care and address the backlogs as quickly as possible, and what have been the main constraints and enabling factors?
- What lessons learnt and recommendations can be drawn from country experiences in managing elective care and waiting times during the pandemic?

This chapter draws on the annual OECD data collection from 2022 on the volume of diagnostic and surgical procedures, as well as waiting times for elective surgery. It also draws on the results from the OECD Resilience of Health Systems Questionnaire administered in 2022.

Following the absorb stage of the pandemic, many OECD countries have implemented similar strategies to address the backlogs in elective care that resulted from the interruption to many services. In many cases, these strategies involve injecting new funds to increase the volume of activities. However, clearing the backlogs will take longer in some countries because of different degrees of disruption to elective care, variation in the additional resources mobilised, as well as differences concerning the extent to which patients who missed care still demand care. In England (United Kingdom), the National Audit Office estimated at the end of 2021 that many millions more people would be on waiting lists by March 2025 than there were before the pandemic. However, the increase would be lower if the supply of elective care was greater than initially planned, and if only half of the “missing” patients returned to seek care (NAO, 2021<sup>[1]</sup>).

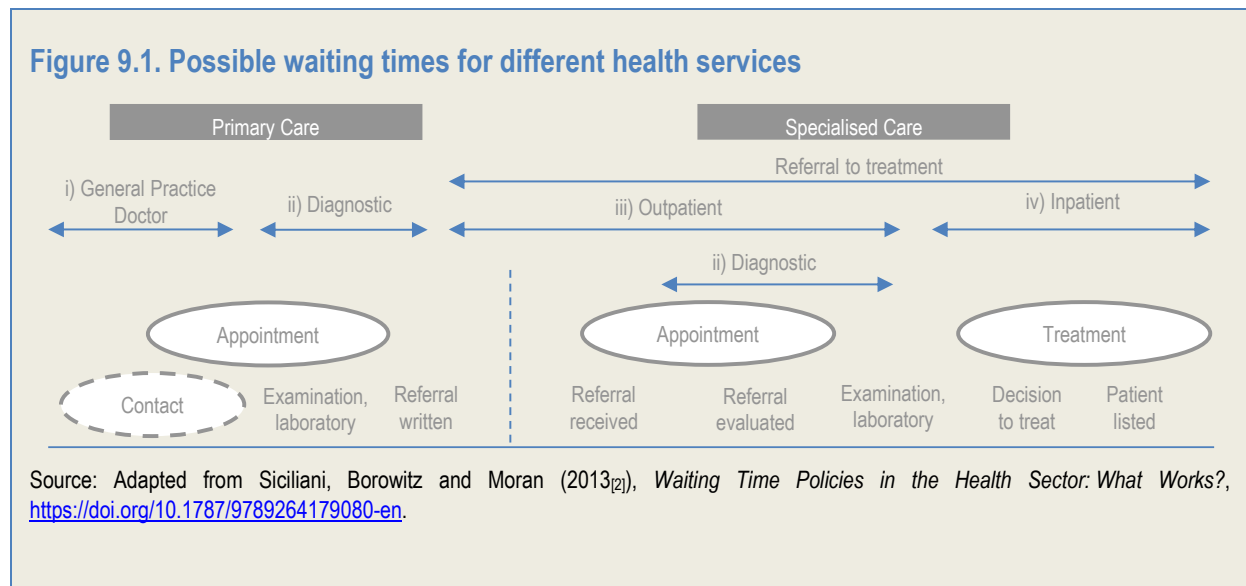
### **9.1.1. An analytical framework to assess the impact of the pandemic on waiting times and waiting lists**

Waiting lists and waiting times are the result of the imbalance arising from the demand for care being greater than the supply. A waiting list increases when the number of patients added to the list (the demand) is greater than those taken out of the waiting list following diagnostics or treatments (the supply). Waiting times can occur for a wide range of services from different providers (Box 9.1).

#### **Box 9.1. Different waiting times along the patient pathway**

Several possible waiting times may arise along the patient journey (Figure 9.1). For non-urgent care, patients typically seek first an appointment with a primary care physician/GP. Following a GP visit, they may be referred to a specialist and wait weeks or months for an appointment. Patients may also wait for a diagnostic test, if required, such as an MRI and CT scan, and for surgery or other treatment. Following the specialist assessment, patients may be added to a waiting list. Waits for elective surgical treatment are typically the longest.

**Figure 9.1. Possible waiting times for different health services**



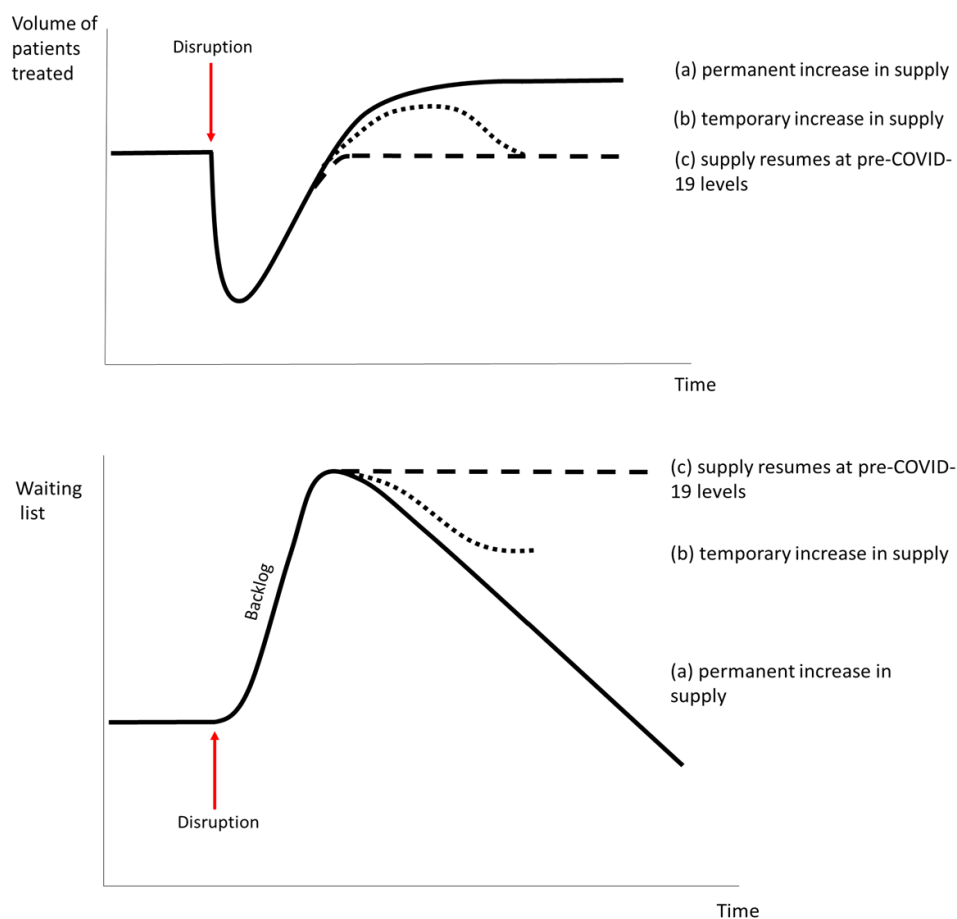
The COVID-19 pandemic disrupted health services and reduced the supply of elective care at least temporarily, generating a larger excess demand. The accumulated waiting list, sometimes referred to as the backlog, can be thought of as the combined excess waiting list between the beginning of COVID-19 and the time the supply was able to resume to a level when the number of patients treated started to exceed the number of patients added to the list.

Figure 9.2 illustrates the relationship between supply, the waiting list and the accumulated backlog during COVID-19. Taking elective surgery as an example, the top panel plots the volume of surgeries over time (e.g. by month). The bottom panel plots the waiting list. The chart considers a scenario where before COVID-19 the number added to and taken out of the waiting list is the same, so that it is stable over time. Following COVID-19, the supply drops, but patients keep being added to the waiting list at the same rate. As a result, the waiting list builds up rapidly to reflect the accumulated additions to the list (net of the limited supply during COVID-19). It is only when the supply increases to a level that is higher than the additions to the list that the waiting list starts to gradually decrease. The speed of recovery will be determined by the excess supply – namely, the supply net of additions to the list.

Figure 9.2 also shows some possible post-pandemic scenarios. In the first scenario (a), the supply is higher post-COVID-19 due to investment in new staff and new equipment, or higher permanent funding for the health system. The waiting list initially grows rapidly owing to the disruptions in volume, and then gradually reduces in the long run. In the second scenario (b), the supply increases temporarily after a period of disruption, before levelling off to pre-pandemic levels. After a period of sharp growth, the waiting list gradually reduces, before levelling off to a higher level relative to pre-COVID-19. In the third scenario (c), the supply resumes at pre-pandemic levels, and the waiting list remains stable but at a higher level, following a period of sharp growth.

During COVID-19, the reduction in supply of elective care depicted in Figure 9.2 arose globally through different channels, although its extent varied by country. When health workers were redeployed to treat COVID-19 patients, this reduced the volume of available workers for elective care. Some health workers were also on sick leave due to COVID-19 infection or quarantining because of exposure. Working conditions and workload for other health workers deteriorated, leading to exhaustion and burnout, and in some cases to workers leaving the occupation. Moreover, as supply resumed, the cost of treating patients in a safe (COVID-19-free) environment or operating theatre increased, as stricter hygiene protocols were introduced during surgery or other treatment procedures. Reimbursement mechanisms also changed to cover COVID-19-related care, and to prevent providers from going bankrupt. For hospitals, this often involved a switch from activity-based payments to fixed budgets to keep providers solvent, which if unchanged can weaken incentives to boost supply.

Figure 9.2. Supply, waiting list and accumulated backlog



The determinants of the supply are discussed more systematically in Section 9.2 below. Policy makers need to ensure that possible bottlenecks in the production of services are identified; otherwise, there is a risk that higher spending will not translate into higher supply. This will impede a successful elective care recovery.

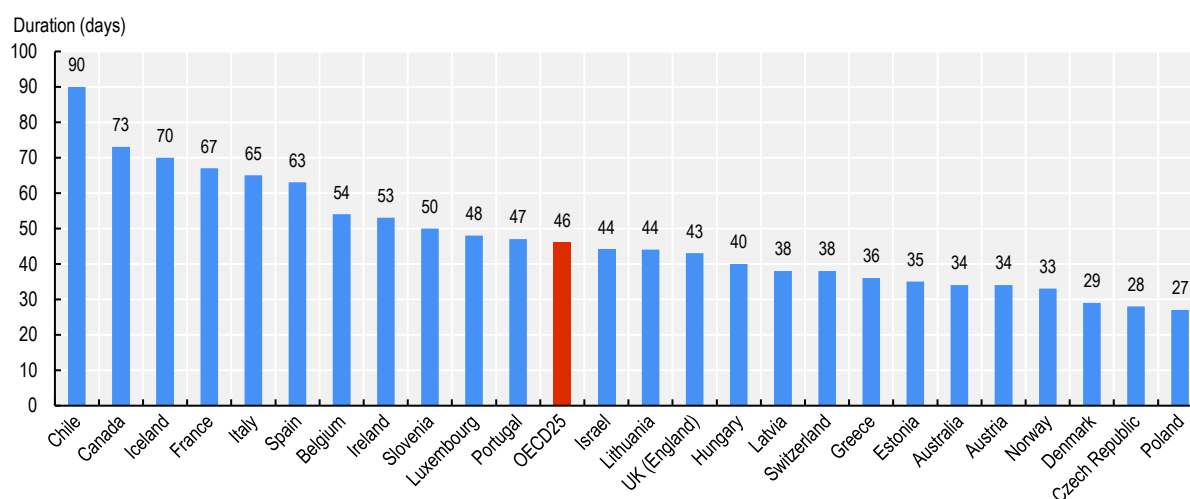
The degree to which waiting lists increased during the pandemic also depends on how many patients demanded treatment and were added to the list. Access to primary care was hindered during the absorb stage of the pandemic, even with new models of care delivery (see the chapter on care continuity). Consequently, referrals to specialists were delayed, and patients were only added to waiting lists later. This implies that the waiting lists for diagnostics and treatments would grow initially at a slower rate and later at a faster rate, thereby not changing in the longer term.

Another possibility is that additions to the list dropped during the pandemic because some patients did not seek health care due to fear of COVID-19 infection, leading to a temporary drop in demand. However, for most elective surgery, it seems unlikely that patients would give up treatment completely rather than postpone it. For example, a patient in need of a hip replacement will be in pain, have limited mobility, and would eventually want to receive surgery to improve this. Specialists, however, might decide to apply more stringent criteria to adding patients to the waiting list, and only add those with higher needs above a tighter severity threshold. The reduced additions to the waiting list would then translate into a shorter waiting list in the longer term. One concern with reduced demand is that it can lead to unmet needs if patients are not prioritised correctly, or if patients with lower socio-economic status are less able to engage with the health system when access becomes difficult, leading to an increase in health inequalities (see the chapter on care continuity).

### 9.1.2. Disruptions to health services led to reductions in diagnostic and surgical procedures in 2020

The volume of surgical procedures and diagnostic exams fell in nearly all OECD countries in 2020 compared with 2019. This reduction was due to disruptions of many health services, particularly during the initial months of the absorb stage of the pandemic. In many OECD countries, the suspension of elective care during the first wave of the pandemic lasted for 4-12 weeks, although there were regional variations in some countries in the interruption and reopening dates (Figure 9.3). While services resumed after this period, the reopening was often gradual, and some activities were again suspended in subsequent waves of the pandemic later in 2020 and in 2021.

**Figure 9.3. Duration of restrictions in non-urgent care and elective surgery between March and June 2020, OECD countries**



Note: Some countries had regional variations, so the summary table only captures the national guidance (except for Canada, where the information relates to Ontario – the biggest province).

Source: Health System Response Monitor for European countries; Reed et al. (2020) for Australia, <https://www.aihw.gov.au/reports/burden-of-disease/the-first-year-of-covid-19-in-australia/summary>; Wang et al. (2020) for Canada, <https://pubmed.ncbi.nlm.nih.gov/32873541/>; Ministry of Interior and Public Security (2020) for Chile, <https://www.minsal.cl/wp-content/uploads/2020/03/Diario-Oficial-30-de-marzo.pdf>.

These interruptions in elective care resulted in a sharp decline or temporary halt in these activities during the weeks of restrictions. In most countries, and for most procedures, this decline could not be offset by activities performed at a greater than usual volume in the remainder of the year. Hence, most countries saw a sharp drop in the volume of elective surgery in 2020 compared with the previous year. In many countries, the reduction in diagnostic procedures was less pronounced as a percentage of the total volume, but it was nonetheless significant. Overall, from a set of 15 operations, nearly 4 million fewer elective surgical procedures were performed across 31 OECD countries in 2020 compared with 2019 (equivalent to an 18% reduction). In addition, over 7 million fewer MRI and CT diagnostic exams were performed (a 6% reduction). These figures do not include the United States, where 33 million fewer MRI and CT scans were carried out in 2020 (a reduction of 20% in CT exams and 35% in MRI exams).

The reduction in diagnostic exams and selected elective procedures varied widely across countries. Looking at five common surgical procedures, the reduction in 2020 was much greater in Chile, Costa Rica, Mexico, Poland, Türkiye and the United Kingdom than in Australia, Denmark, Estonia, Finland, Korea, Israel, Norway and Switzerland (Table 9.1).



Table 9.1. Changes in diagnostic and surgical procedures between 2019 and 2020, OECD countries

Country	Diagnostic procedures		Surgical procedures				
	CT exams	MRI exams	Cataract surgery	Hip replacement	Knee replacement	Coronary bypass	Coronary angioplasty
Australia	3.9%	1.0%	-12.7%	-11.5%	-2.3%	1.1%	0.3%
Austria	-6.8%	-4.6%	-15.5%	-10.4%	-20.6%	-10.9%	-5.6%
Belgium	0.5%	-10.5%	-29.8%	-18.7%	-35.1%	-14.8%	-8.8%
Canada			-20.7%	-13.0%	-26.3%	-15.6%	-9.4%
Chile	-13.0%	-26.8%	-46.5%	-38.7%	-62.7%	-19.8%	-21.7%
Costa Rica	-7.0%		-52.8%	-38.7%	-64.0%	-30.4%	-4.0%
Czech Republic	-5.1%	-3.8%	-51.6%	-16.9%	-26.5%	-15.5%	-10.3%
Denmark	3.2%	0.3%	-8.9%	-2.8%	-3.9%	8.8%	-5.9%
Estonia	-6.1%	-0.4%	-7.1%	2.2%	-5.6%	-13.2%	-5.2%
Finland			-6.4%	-4.0%	-2.7%	17.0%	-6.2%
France			-18.9%	-12.0%	-21.5%	-14.0%	-5.7%
Germany	-0.7%	0.2%	-2.7%	-6.5%	-10.5%	-14.4%	-8.3%
Greece	-37.8%	-46.9%					
Hungary	-5.5%	-17.6%	-36.3%	-28.4%	-39.5%	-16.8%	-13.2%
Iceland	-5.7%	-2.5%	-3.9%	-17.7%		1.4%	-18.8%
Ireland			-36.6%	-19.3%	-28.9%	-19.8%	-21.2%
Israel	-4.0%	0.0%	2.9%	-3.5%	-9.7%	-7.7%	-1.1%
Italy	-10.5%	-14.6%	-33.3%	-16.6%	-24.6%	-24.5%	-14.9%
Korea	0.7%	-2.7%	1.8%	2.8%	-8.8%	0.0%	-2.8%
Latvia	3.2%	2.6%	-37.7%	-2.2%	-13.1%		
Lithuania	-16.4%	-19.0%	-22.9%	-14.2%	-48.3%	-27.5%	-18.6%
Luxembourg	-4.4%	4.0%	-12.2%	-17.8%	-21.9%	2.0%	-13.8%
Netherlands	3.3%	-0.9%					
Norway	-0.8%	1.4%	-9.4%	-9.9%	-7.6%	-4.6%	-7.3%
Poland	-10.8%	-4.1%	-35.9%	-21.9%	-27.2%	-32.8%	-18.0%
Portugal	-4.5%	-9.5%	-20.4%	-16.6%	-27.0%	-6.4%	-16.6%
Slovak Republic	-10.2%	-7.0%	-27.2%	-18.0%	-28.2%	-27.2%	
Slovenia	1.1%	0.0%	-10.2%	-16.7%	-23.2%	-15.1%	-9.8%
Spain	-8.4%	-14.2%	-20.0%	-16.0%	-30.9%	-16.0%	-10.9%
Sweden			-8.8%	-15.7%	-26.7%	-13.1%	-11.0%
Switzerland	1.7%	-2.8%	-8.7%	-1.5%	-0.9%	-10.9%	-5.8%
Türkiye			-40.7%	-16.0%	-47.2%	-23.6%	-11.5%
United Kingdom	-8.2%	-24.9%	-46.8%	-46.3%	-67.6%	-36.3%	-12.5%
United States	-20.1%	-34.8%					
OECD total	-13.3%	-21.4%	-21.6%	-15.5%	-25.5%	-18.0%	-9.6%
	≥ 0%						
	0 to -10%						
	< -10%						

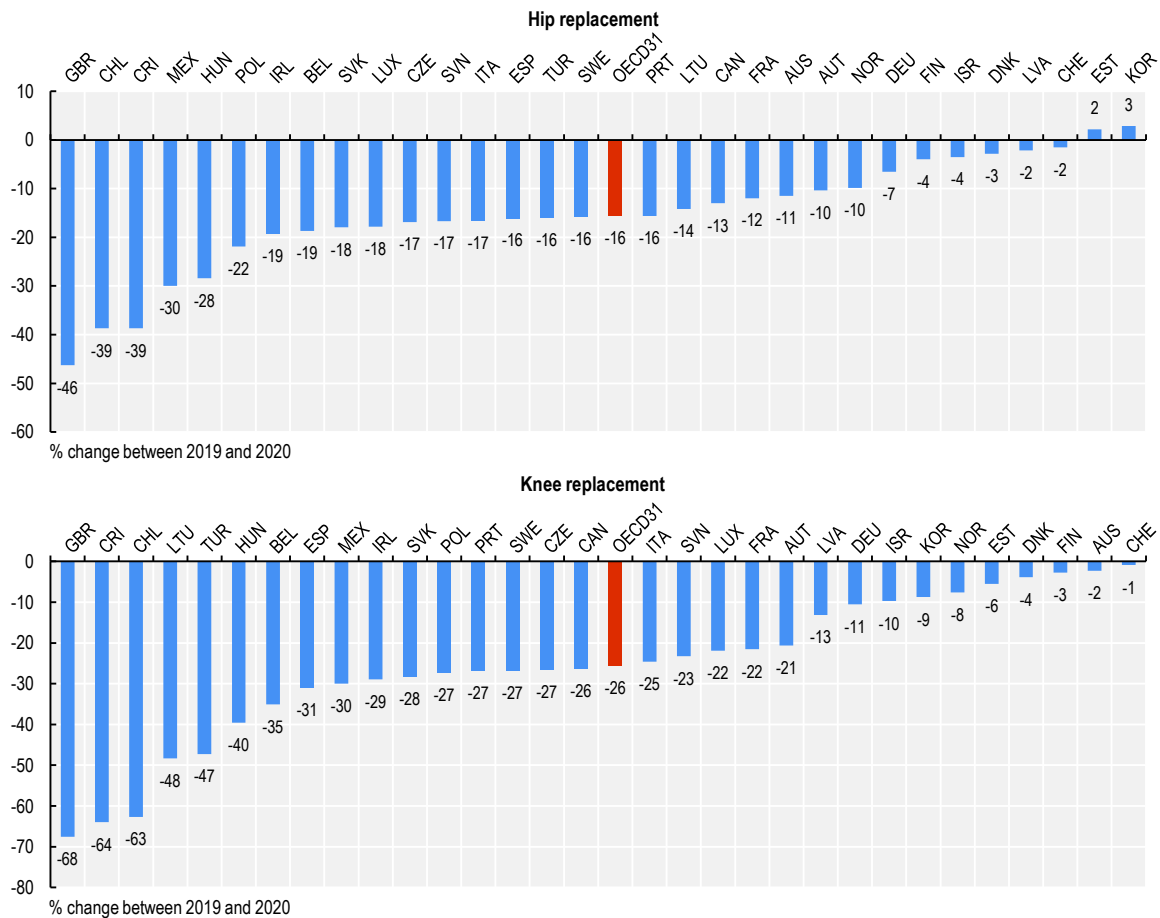
Note: For Ireland, data pertain only to publicly funded hospitals; public patients treated in private hospitals are not included, which overestimates the presented reduction. Japan does not report data on diagnostic or surgical procedures, and Colombia, Mexico and New Zealand did not report data for 2020 in the 2022 data collection.

Source: OECD Health Statistics 2022, <https://doi.org/10.1787/health-data-en>.



Figure 9.4 focuses on the reduction in hip and knee replacements in 2020. The number of hip replacements fell by 16% compared with 2019 across 31 OECD countries, but this ranged from a reduction of over 35% in Chile, Costa Rica and the United Kingdom to a reduction of less than 5% in Denmark, Finland, Israel, Latvia and Switzerland, and a small increase in Korea and Estonia. The fall in knee replacements was even larger in nearly all countries, at 26% across the same 31 OECD countries, but it ranged from a reduction of over 60% in Chile, Costa Rica and the United Kingdom to a reduction of less than 5% in Australia, Denmark, Finland and Switzerland.

**Figure 9.4. Reductions in hip and knee replacements in 2020 compared with 2019, OECD countries**



Note: The OECD average is the total reduction across all OECD countries for which data are available.

Source: OECD Health Statistics 2022, <https://doi.org/10.1787/health-data-en>.

In England (United Kingdom), the sharp reduction in elective care during the first year of the pandemic was followed by a partial recovery in the second year, although the activity level remained 16% lower between March 2021 and February 2022 than over the same 12-month period before the pandemic for a selected set of elective procedures (Table 9.2). There were substantial differences across procedures – in both the reduction during the first year of the pandemic and how quickly activity rates recovered during the second year. The reduction during the first year was generally sharper for diagnostic than for therapeutic procedures, and the recovery during the second year was slower for diagnostic procedures. For example, diagnostic cardiac procedure activity remained 30% below pre-pandemic levels in the second year. Cataract operations (which are performed as ambulatory surgery in almost all cases) almost fully recovered in 2021, while the recovery was more partial for procedures requiring hospitalisation, such as hip and knee replacements (Nuffield Trust, 2022<sup>[3]</sup>).

**Table 9.2. Reductions in selected elective procedures in the first two pandemic years, England (United Kingdom)**

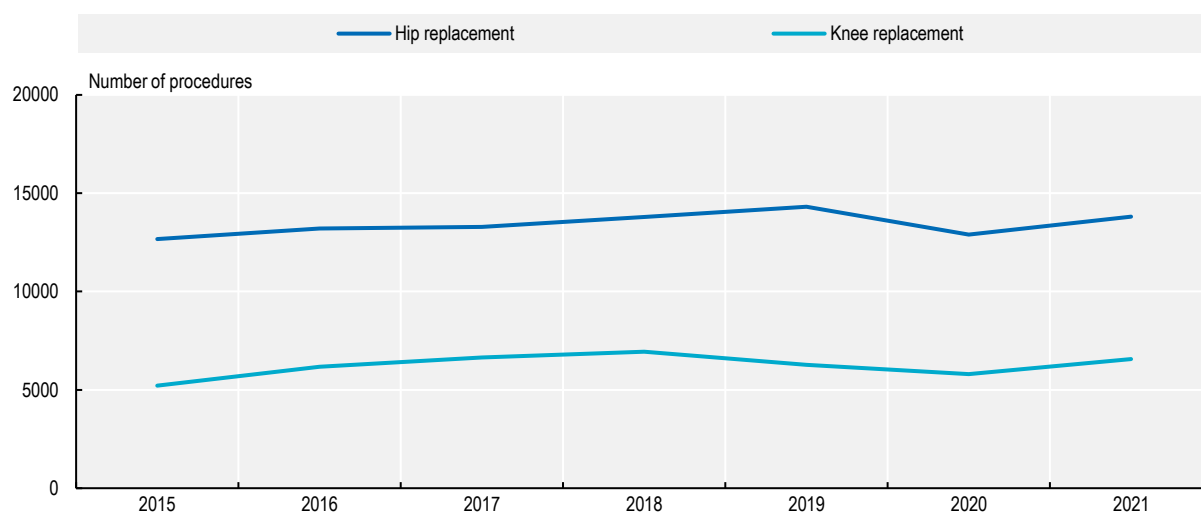
Procedure	Pre-COVID-19 year (March 2019 – February 2020)	First COVID-19 year (March 2020 – February 2021)		Second COVID-19 year (March 2021 – February 2022)	
		Counts of elective procedures	Fall in activity vs. pre-COVID-19 year (%)	Counts of elective procedures	Fall in activity vs. pre-COVID-19 year
Cardiac (diagnostic)	75 101	43 977	-41.4	52 614	-29.9
Cardiac (therapeutic)	86 997	61 907	-28.8	70 849	-18.6
Cataract	560 297	318 785	-43.1	555 930	-0.8
Dental	165 636	60 658	-63.4	107 047	-35.4
Gastrointestinal endoscopy (diagnostic)	1 297 919	701 909	-45.9	1 032 142	-20.5
Gastrointestinal endoscopy (therapeutic)	296 484	176 389	-40.5	274 536	-7.4
Hip and knee replacement	131 386	46 314	-64.7	96 289	-26.7
<b>Selected procedures (total)</b>	<b>2 613 820</b>	<b>1 409 939</b>	<b>-46.1</b>	<b>2 189 407</b>	<b>-16.2</b>

Source: Adapted from the Nuffield Trust (2022), based on Hospital Episode Statistics admitted patient care data.

In France, the reduction in elective surgery during the first year of the pandemic was much less pronounced than in the United Kingdom, and the recovery in surgical activity in 2021 was fairly strong, with rates almost returning to pre-pandemic levels. This was particularly the case for ambulatory surgery (such as cataract procedures), which saw a strong rise in 2021 (Assurance Maladie, 2022<sup>[41]</sup>).

In Norway (a country less affected by the pandemic and the disruption of services during the first and second year than most OECD countries), surgical activities usually requiring hospitalisation such as hip and knee replacements recovered in 2021 and almost returned to pre-pandemic levels (Figure 9.5).

**Figure 9.5. Recovery of hip and knee replacement activity in Norway in 2021**

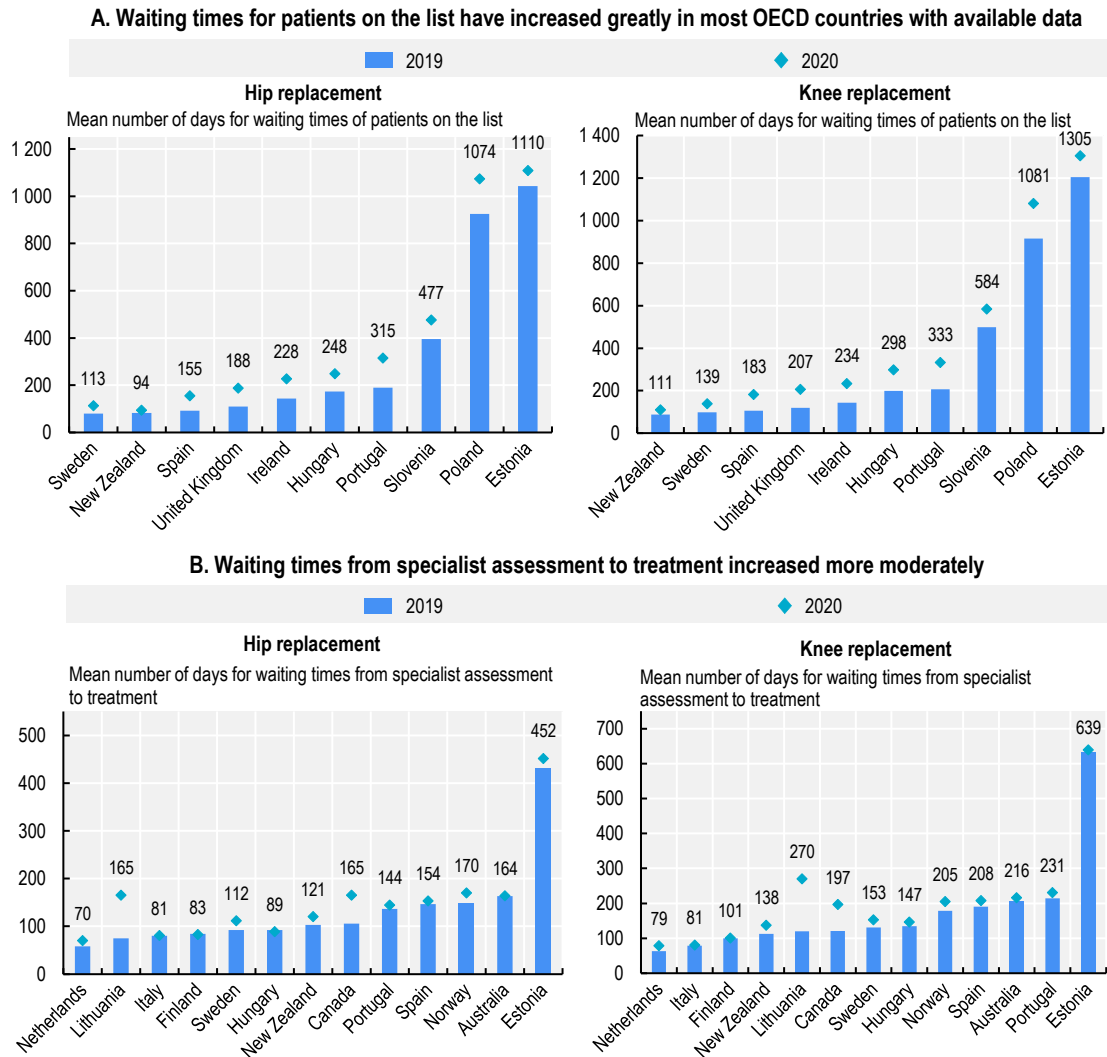


Source: OECD Health Statistics 2022, <https://doi.org/10.1787/health-data-en>.

### 9.1.3. Reductions in volumes of surgical activity in 2020 led to marked increases in waiting times

The reductions in the volume of surgical activities in 2020 resulted in a marked increase in waiting times in those countries that monitor these on an ongoing basis – particularly for patients who remained on waiting lists during the pandemic. The increase was generally lower for patients who managed to get treatment in 2020 (Figure 9.6; Box 9.2). The increase in waiting times for patients on the list was particularly large in Poland and Portugal, although the increase in waiting times for patients who were treated was much smaller (almost nil) in Portugal.

Figure 9.6. Increases in waiting times for hip and knee replacements in 2020, OECD countries



Source: OECD Health Statistics 2022, <https://doi.org/10.1787/health-data-en>.

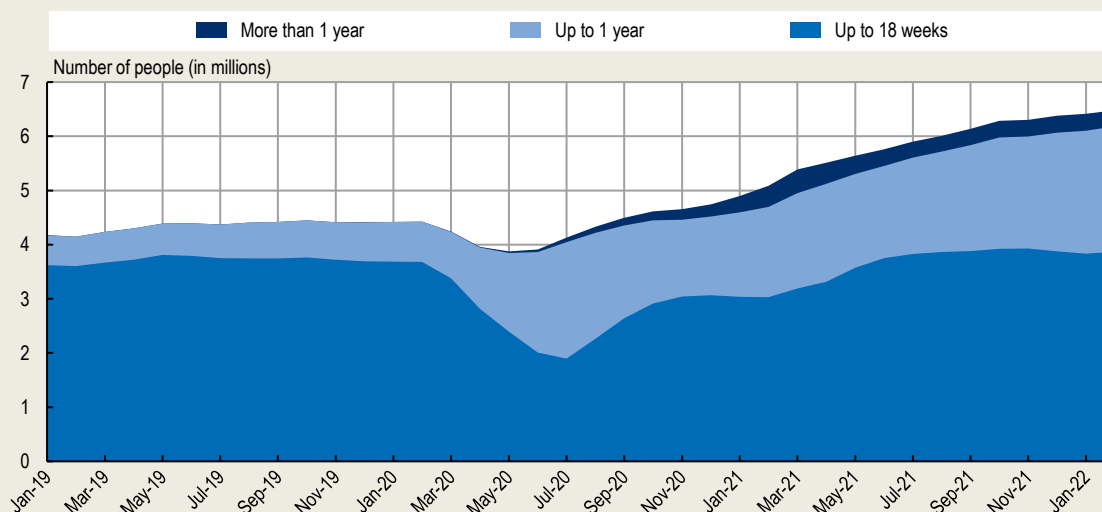
### Box 9.2. Higher increases of waiting times for patients on lists than for those who got treatment

Waiting times can be measured in different ways, including by the distribution of waiting times of patients treated in a given period (e.g. a year) and the distribution of waiting times of patients still on the list at a point in time (e.g. a census date such as 31 December). The first measure provides the full duration of the patient's waiting time experience (from entering to exiting the list). The second relates to an "incomplete" waiting-time measure, since the patient's wait has yet to come to an end (they are still on the waiting list), and oversamples patients with long waiting times.

In several OECD countries, the increase in waiting times of patients still on the waiting list was much more pronounced in 2020 and 2021 than for those who managed to get treatment. This pattern can be explained by a composition effect of the patients treated. During COVID-19, many surgical procedures were cancelled, and some patients became reluctant to undergo surgery because of the risk of being infected. Therefore, both supply of and demand for surgery fell. In turn, this meant that some patients were treated as scheduled – or even more quickly – leading to a waiting-time reduction, while others' treatment was postponed, leading to a sharp increase in the waiting times of patients on the list.

This composition effect was observed in England (United Kingdom), based on the broader measure of referral-to-treatment waiting time. Following the start of the pandemic, fewer patients were initially waiting less than 18 weeks to start treatment – one of the key waiting-time targets for elective care – and this remained below pre-pandemic levels, while the proportion of patients waiting more than 18 weeks and more than one year increased over time (Figure 9.7).

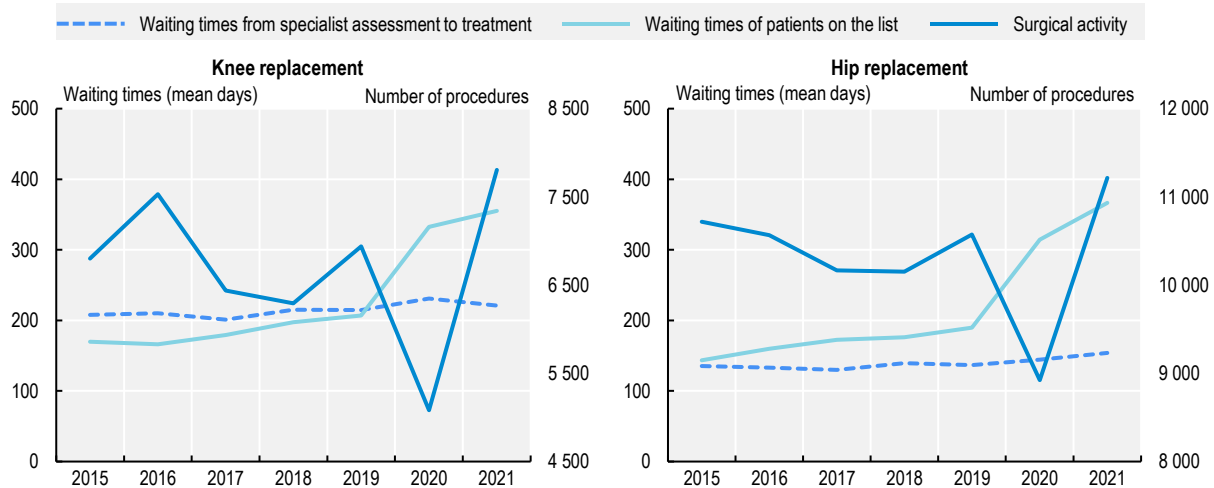
**Figure 9.7. Number of patients waiting more than 18 weeks to start treatment, England (United Kingdom), 2019 to early 2022**



Source: NHS England and NHS Improvement, monthly referral-to-treatment data collection, <https://www.england.nhs.uk/statistics/statistical-work-areas/rtt-waiting-times/>.

In Portugal, the volume of hip and knee replacements recovered quickly in 2021, and the number exceeded the pre-pandemic level. The mean waiting times for people who were treated in 2021 remained stable for hip replacements and declined slightly for knee replacements, but the mean waiting times for those still on waiting lists continued to increase (Figure 9.8).

**Figure 9.8. Surgical activities rebounded in Portugal in 2021, but did not prevent an increase in waiting times for patients on waiting lists**



Source: OECD Health Statistics 2022, <https://doi.org/10.1787/health-data-en>.

#### 9.1.4. Estimates of how long it might take to clear backlogs are available for some countries

The reduction in surgical activity rates described above can provide a first rough idea of the time countries might need to recover the accumulated backlog. For example, let's assume that the volume of hip replacements in a given country fell by 15% in 2020 (which is close to the OECD average). If the volume returned to pre-pandemic levels in the following year – as was the case in 2021 in countries like Portugal – the volume would subsequently have to be at least 5% higher for three consecutive years to catch up with the initial drop, if the demand for hip replacements remains the same over time. The increase would have to be even higher if the drop in volume extended over two years (2020 and 2021). A reduction in volume of 10% in two consecutive years would require a 5% increase for four consecutive years.

Estimates of the time it might take to clear the backlog are available for a few countries:

- In the United Kingdom, where the drop in elective surgery in 2020 was much more pronounced than in most OECD countries, the National Audit Office estimated at the end of December 2021 that the backlog of people on waiting lists in England (United Kingdom) would continue to be much greater than before the pandemic up to at least March 2025, but the increase would be lower if the supply of elective care was greater than initially planned and if only half of the “missing” patients returned to seek care (NAO, 2021<sup>[11]</sup>). The Institute for Fiscal Studies reported in 2022 that under a “middle” scenario where only half of “missing” patients return, the waiting list would peak at 8.7 million in October 2023 (Institute for Fiscal Studies, 2022<sup>[5]</sup>).
- In Canada, where the reduction in health care activities in 2020 was less pronounced than in the United Kingdom, an early estimate from September 2020 was that it could take 84 weeks (over 1.5 years) to clear the backlog in elective surgery following the first disruption in March-May 2020 in the province of Ontario. This estimate assumed an increase in supply of procedures above the pre-pandemic level (20% higher) and assumed that there would be no further interruption of services (Wang et al., 2020<sup>[6]</sup>). Both assumptions proved to be too optimistic. Up to March 2022, there were a few periods of time when surgical activity levels in Ontario came close to reaching pre-pandemic levels. However, the capacity to surge above pre-pandemic level was not achieved, primarily due to health workforce constraints (particularly nurse shortages). Furthermore, health

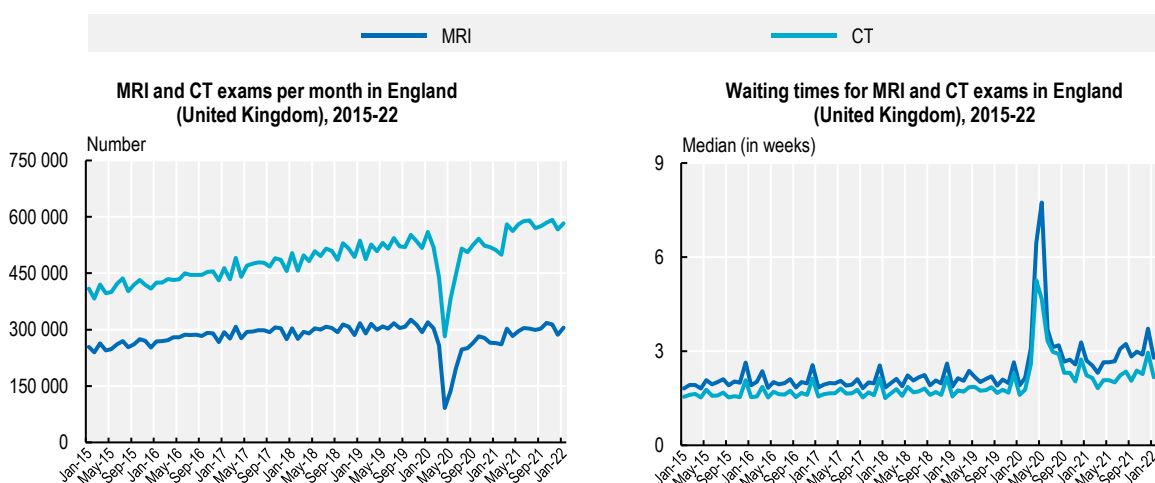
care activities were disrupted again because of peaks in the pandemic later in 2020, during 2021 and in early 2022. In June 2021, the Government of Quebec launched a strategy to clear the backlog of surgeries and reduce backlogs to pre-pandemic levels by 2024, supported by a substantial financial commitment of over CAD 800 million (Government of Quebec, 2021<sup>[7]</sup>).

- In Slovenia, no precise estimate or commitment has been made about how long it might take to address the backlog, but the expectation is that the increase in waiting times for elective treatments since the pandemic will be prolonged over the next few years. Besides the postponement of many elective surgical procedures due to COVID-19 in 2020 and 2021, demographic changes will also result in higher demand for health services, and consequently in longer waiting times.

### 9.1.5. Waiting times increased for diagnostic tests also in 2020

The reduction in diagnostic tests, at least during the early stage of the pandemic in 2020, was accompanied by an increase in waiting times in some countries. In the United Kingdom, the number of CT scans dropped by 30% and the number of MRI scans dropped by 50% in March-May 2020 compared with the same period in 2019. The waiting times for these diagnostic tests went up sharply during that period from about 2 weeks to 5 weeks for CT exams and nearly 8 weeks for MRI exams (Figure 9.9).

**Figure 9.9. Sharp reductions in diagnostic tests increased waiting times during the first wave of the pandemic in England (United Kingdom)**



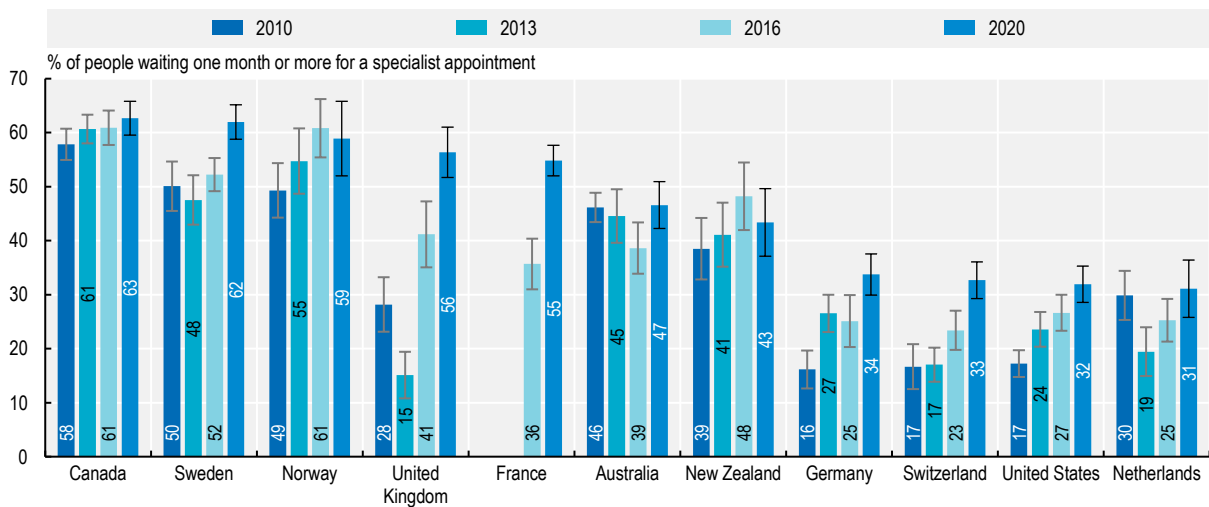
Source: NHS Monthly Diagnostics Data 2021-22, <https://www.england.nhs.uk/statistics/statistical-work-areas/diagnostics-waiting-times-and-activity/monthly-diagnostics-waiting-times-and-activity/monthly-diagnostics-data-2021-22/>.

In Canada, the volume of MRI and CT exams fell sharply in 2020 compared with 2019 (by over 25% for MRI scans and nearly 20% for CT scans). Most of the increase was concentrated during the first lockdown in March-April 2020, when radiology services experienced a 50-70% reduction in volume (CADTH, 2021<sup>[8]</sup>). However, waiting times for MRI exams did not increase significantly between April and September 2020 compared with the previous year (only a slight increase from 42 days to 45 days), while there was a slight reduction in waiting times for CT exams (from 13 days to 11 days) (CIHI, 2021<sup>[9]</sup>). This relative stability in waiting times can be explained by the fact that fewer patients were added to the waiting lists for these diagnostic scans during the initial phase of the pandemic, and many people were also reluctant to attend these exams due to the risk of infection. Thus, both supply and demand fell.

### 9.1.6. Waiting times for specialist consultations also increased in most countries

Waiting times for a specialist appointment, which is often the first step towards referral for further diagnostic tests and treatments, also increased during the first stage of the pandemic in 2020 compared with 2016 in all countries participating in the Commonwealth Fund survey, except New Zealand and Norway (Figure 9.10). The increase in the proportion of people reporting that they had waited one month or more for a specialist appointment was particularly large in France and the United Kingdom. It was lower or not significant in other countries.

**Figure 9.10. The share of people waiting one month or more for a specialist appointment increased in most countries in 2020**



Note: The H symbols represent the 95% confidence interval.

Source: OECD calculations based on the Commonwealth Fund International Health Policy Survey. The survey in 2020 was conducted in the early part of the pandemic, from February to May 2020.

## 9.2. Several policies may address the backlog of elective care and promote health system recovery

Even before the pandemic, waiting times for health services were a high or at least a medium-high priority issue in most OECD countries (OECD, 2020<sub>[10]</sub>). In several countries (including Canada, Ireland, the Netherlands, New Zealand, Portugal and the United Kingdom), waiting times for elective surgery had already started to rise before the pandemic, indicating that the supply was not keeping up with the growing demand. Policies to reduce the backlog of patients on waiting lists can increase supply, reduce or better manage demand, or both (Box 9.3).



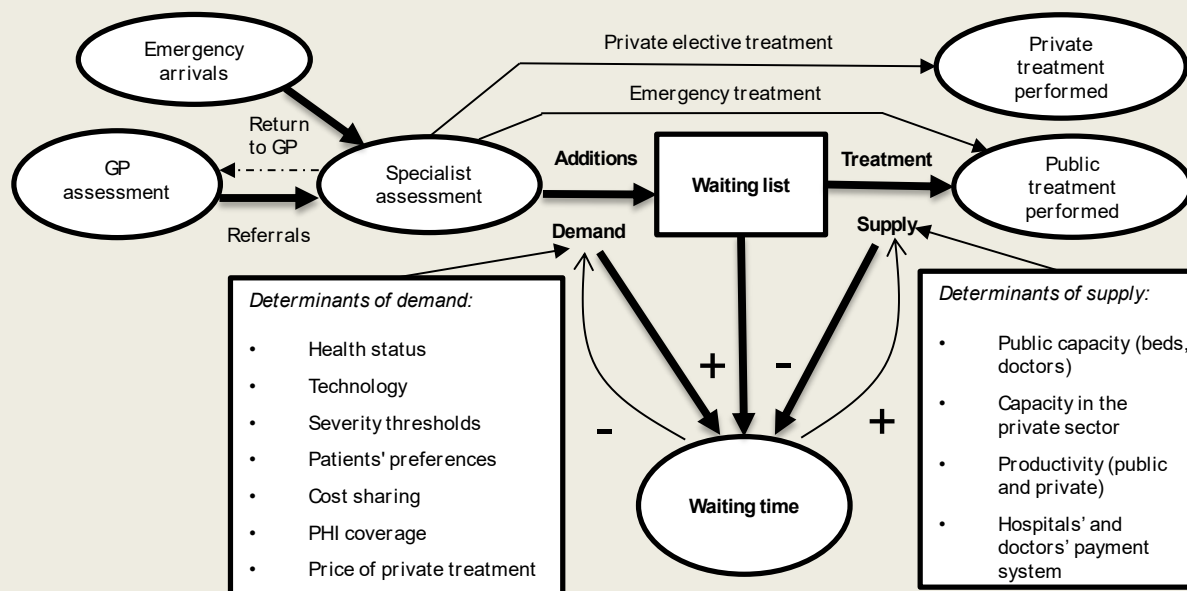
### Box 9.3. Demand and supply determinants of waiting lists and waiting times

Waiting lists and waiting times are dynamic phenomena with complex interactions (Figure 9.11). A waiting list increases over time if demand exceeds supply, and reduces if supply exceeds demand. Both demand and supply of health care are likely to grow over time. Demand increases over time because of population ageing, which increases needs; or through technological development, which increases the range of conditions that are treatable. Supply may also increase over time due to technological development – for example, allowing patients to be treated as day cases, freeing up hospital capacity.

Demand for treatments in public systems is also determined by other factors – such as patient preferences for surgery, patient cost-sharing, the extent to which the population holds (duplicative) private health insurance, and the price and accessibility of private care. When patients face longer waiting times, some may choose not to wait and opt for private treatment, provided they can afford to pay out of pocket or hold private health insurance. This may contribute to inequities in access.

Supply of treatments is determined by the overall capacity, which depends on the health workforce and its composition, and infrastructure and equipment (such as the number of clinics and hospitals, and volumes of diagnostic and surgical equipment). Supply also depends on the productivity with which the labour and equipment are used. Productivity depends on contractual arrangements with health workers (hours, number of sessions), payment systems for providers and efficiency in care delivery. Incentives to increase supply are stronger when health workers are paid by fees for service as opposed to salaries or capitation fees, and provider payments are based on activity, although this might also generate some supply-induced demand. Stringent maximum waiting-time targets can also stimulate increases in supply, although they may also stimulate providers to reduce demand by applying more stringent criteria for adding patients on the list (OECD, 2020<sup>[10]</sup>).

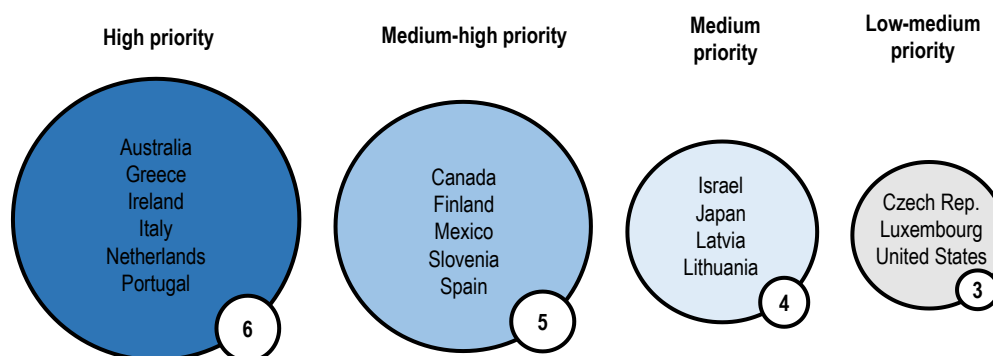
Figure 9.11. Demand-side and supply-side factors that affect waiting times



Source: Adapted from Hurst and Siciliani (2003<sup>[11]</sup>), "Tackling Excessive Waiting Times for Elective Surgery: A Comparison of Policies in Twelve OECD Countries", <https://doi.org/10.1787/108471127058>.

Most countries that responded to the OECD Resilience of Health Systems Questionnaire 2022 reported that addressing waiting times for elective care was a high or medium-high priority following the pandemic (Figure 9.12). On the other hand, waiting times were considered a low-medium priority in the Czech Republic, Luxembourg and the United States. These three countries, however, do not report any statistics on waiting times for elective care.

**Figure 9.12. Priority given to waiting times for elective care following the pandemic, OECD countries**



Source: OECD Health Systems Resilience Questionnaire 2022 (18 country responses).

Many OECD countries have implemented measures to address the backlog and to reduce waiting times for elective care created by the disruption of services during the pandemic. Most of these policies focus on increasing the supply of services and surgery (Table 9.3). Fewer countries have tried to improve management of the demand for elective care and surgery (see discussion in Section 9.2.10 below). The next sections review the supply-side policies.

**Table 9.3. Supply-side measures to increase the volume of elective care, selected OECD countries**

Country	Additional funding for health care providers	Expanding health workforce (doctors, nurses, etc.)	Extending working hours of health workforce	Better use of capacity or operating theatres	Involvement of additional providers (e.g., private providers)	Digital consultations
Australia	✓			✓	✓	
Canada	✓	✓	✓	✓	✓	✓
Costa Rica	✓	✓	✓	✓		✓
Czech Republic	✓			✓		
England (United Kingdom)	✓	✓	✓	✓	✓	✓
Finland	✓	✓		✓	✓	✓
France	✓	✓	✓	✓	✓	✓
Greece		✓		✓	✓	✓
Ireland	✓	✓		✓	✓	✓
Israel		✓	✓	✓	✓	✓
Italy	✓	✓	✓	✓	✓	✓
Lithuania		✓		✓	✓	✓
Mexico	✓	✓		✓		
Netherlands				✓	✓	✓
Portugal	✓	✓		✓	✓	✓
Slovenia	✓		✓	✓	✓	✓

Source: OECD Health Systems Resilience Questionnaire, 2022.

### **9.2.1. Additional or earmarked funding can be provided to increase the supply of elective care, but this may not necessarily result in shorter waiting lists**

Some OECD countries have allocated additional or earmarked funding specifically to address the backlog.

- In Canada, the federal government provided CAD 4 billion of additional funding support to provinces and territories to work through the surgical and diagnostic backlogs caused by the COVID-19 pandemic in 2021, and added another CAD 2 billion in March 2022 (Government of Canada, 2022<sup>[12]</sup>). Health care delivery is the responsibility of provinces in Canada, and several provinces launched strategies in 2021 to respond to the surgical delays caused by the pandemic.
- Finland announced in April 2022 that EUR 110 million of the EU's Recovery and Resilience Plan would be allocated in 2023 to reduce the backlog in treatment and rehabilitation services, and to increase access to care. Additional funding of EUR 90 million in 2024 and EUR 30 million in 2025 will be allocated for the same purposes (Government of Finland, 2022<sup>[13]</sup>).
- In Ireland, the Waiting List Action Plan was supported by dedicated funding of EUR 350 million for 2022, which was intended to prevent a continued increase of 40% in waiting lists due to pent up demand arising from the pandemic (Government of Ireland, 2022<sup>[14]</sup>).
- In Italy, the national government provided additional funding to regions, which are responsible for delivery of health care, to address long waiting lists in 2020. Funds comprised EUR 112 million for hospital admissions and EUR 366 million for specialist visits and outpatient care (Government of Italy, 2020<sup>[15]</sup>). The funding was subject to each region developing a plan to absorb the increase in waiting lists, specifying the organisational models and policy interventions, the timeline for delivery and use of the resources. In 2021 and 2022, the regions were given more time to make use of the additional funding, and the regional recovery plans were adapted to take into account the surge in waiting lists. In September 2021, a working group was created to evaluate the reductions in health services during the pandemic, to assess the regional plans to reduce the waiting lists and to monitor quarterly progress at the regional level.

Additional funding is not a guarantee that supply will increase and translate into a shorter waiting list. For additional funding to be successful in reducing waiting times, it needs to be linked to clear and verifiable objectives at the provider level in terms of increases in volume, and ideally also linked to reductions in waiting times.

### **9.2.2. Maximum waiting-time targets or guarantees can be maintained or set**

Maximum waiting-time targets or guarantees remain common across OECD countries. These are mostly used to set ambitions and objectives at the health system level against which to monitor performance. They can also be used as a management tool to set targets for health care providers or can take the form of maximum waiting-time guarantees to enhance patient entitlement to access. Maximum waiting-time targets or guarantees were lifted temporarily during the pandemic in several countries, while they were maintained in others but not necessarily met (Table 9.4).

**Table 9.4. Predefined waiting-time targets or guarantees were maintained in some countries during the pandemic but suspended in others**

Country	Waiting times maintained	Waiting times suspended	Waiting-time targets or guarantees
Australia	✓		Australia has adopted elective surgery waiting-time targets for many years, based on three clinical urgency categories: Category 1: 30 days (patient's health has the potential to deteriorate quickly) Category 2: 90 days (patient's health not likely to deteriorate quickly) Category 3: 365 days (patient's health unlikely to deteriorate quickly).
Canada		✓	Any targets related to waiting times are established and maintained by individual provinces/territories. No sanction is applied for not meeting the targets for most jurisdictions. Emergency surgeries and cancer surgeries were maintained during the various waves of the pandemic, while all other elective surgeries were postponed temporarily to preserve hospital resources.
Costa Rica	✓		National goals were generally maintained, although certain surgical cases had to be prioritised, in compliance with sanitary measures.
Czech Republic	✓		Maximum waiting times are established by government decree, but only for a limited number of elective procedures (13). Even though these maximum waiting times were not changed or suspended during the pandemic, they are generally not enforced and attempts to improve their measurement have only been made recently.
Finland		✓	During March-May 2020, waiting times were suspended temporarily for all health care, and during March-May 2021 they were suspended for specialised care (not including psychiatry) in the Helsinki-Uusimaa hospital district.
Germany	✓		The associations of statutory health insurance physicians are required by law to arrange appointments for insured persons for ambulatory care within a certain period. The federal government has no information that these deadlines were not met during the pandemic.
Ireland	✓		Maximum waiting-time targets were recommended in the 2017 Sláintecare Report (12 weeks inpatient/10 weeks outpatient/10 days diagnostics) to be achieved over a gradual period on a phased basis. Interim waiting-time targets were put in place for 2022 in the Health Service Executive (HSE) National Service Plan and Waiting List Action Plan (18 months outpatient/12 months inpatient) as part of the first step of multi-annual reforms to bring waiting times gradually in line with the Sláintecare targets.
Italy		✓	During the pandemic, the National Health Service guaranteed elective hospitalisations for cancer, and elective non-cancer hospitalisations with priority category (30 days). All diagnostic tests and hospitalisations were delivered based on clinical severity.
Lithuania		✓	After the strict lockdown in March 2020, provision of scheduled health services was suspended. Later, measures were taken to restore provision of these services.
Latvia	✓		Waiting times for health services for patient groups, such as patients with cancer, were maintained.
Portugal	✓		During the pandemic, waiting-time guarantees were maintained, and waiting times were monitored to mitigate and achieve pre-COVID-19 levels.
Spain		✓	During the pandemic, less urgent interventions were suspended or delayed. The clinical areas most affected were assessment, monitoring and treatment of chronic conditions in primary care, and elective surgery.
Slovenia		✓	Waiting-time guarantees were not maintained for patients in the "regular" (180-day guarantee) and "fast" (90-day guarantee) urgency categories during the pandemic. However, waiting-time guarantees were maintained for cancer care and patients in the "very fast" (14-day guarantee) and "urgent" (24-hour guarantee) categories.

Source: OECD Health Systems Resilience Questionnaire, 2022.

- In Canada, waiting-time benchmarks have been developed since 2005 through federal, provincial and territorial collaboration, with support from the health service research community (Watson et al., 2007<sup>[16]</sup>). The benchmark for hip or knee replacements is that the waiting time should not exceed 26 weeks; for cataract surgery it should not exceed 16 weeks; and for cancer radiation therapy it should be within 4 weeks for patients ready to be treated. However, no financial sanction is applied against a jurisdiction or provider if any such pan-Canadian waiting-time standard is not

met. During the first waves of the pandemic, cancer surgeries were maintained in most jurisdictions, while all other elective surgeries were postponed temporarily as health systems preserved hospital resources to respond to the pandemic. As a result, only half of patients receiving hip and knee replacements were treated within the recommended time frames between April and September 2020. This proportion increased to about 62% between October 2020 and September 2021, compared with 71% before the pandemic (CIHI, 2022<sup>[17]</sup>).

- In Ireland, the 2017 Sláintecare Report put forward ambitious waiting-time recommendations to be achieved in the long term, which have been adopted as government targets (e.g. no patient should wait longer than 10 weeks for outpatient care or assessment, longer than 12 weeks for inpatient or day cases or longer than 10 days for diagnostics) (Committee on the Future of Healthcare, 2017<sup>[18]</sup>). As a phased approach to eventually reach the recommendations of the Sláintecare Report, intermediate objectives such as maximum waiting times of 18 months for an initial assessment and 12 months for any hospital procedure were introduced. Other intermediate targets to be met by the end of 2022 aim that 98% of patients waiting for their first outpatient appointment should be seen within 18 months, and 100% of patients within 36 months. Similarly, 98% of patients waiting for an inpatient or day case procedure should be treated within 12 months, and 100% of patients within 24 months (Government of Ireland, 2022<sup>[14]</sup>).
- In one region in Italy (Lombardy), a system of penalties and rewards was scheduled in April 2022 to incentivise providers to treat patients within the maximum waiting times for hospital admissions related to cancer surgery (Lombardy Region, 2022<sup>[19]</sup>).
- In Portugal, the percentage of patients waiting for elective surgery within the waiting-time guarantee of 180 days fell from 41% in 2019 to 36% in 2020, but it returned to its pre-pandemic level in 2021 (Ministry of Health, 2021<sup>[20]</sup>).
- In England (United Kingdom), the ambition is to eliminate the longest waits of over 2 years by July 2022, and to reduce the number of people waiting for more than 62 days to start their cancer treatment. In the longer term, the ambition is to eliminate waits of over 18 months by April 2023 and waits of over one year by March 2025 (NHS England & NHS Improvement, 2022<sup>[21]</sup>).

### **9.2.3. Policies aimed at increasing productivity**

Some OECD countries plan to increase productivity through gains in efficiency and better use of capacity and operating theatres. Policy makers have targeted reductions in cancellations and missed appointments, better use of operating theatres, and reducing bed blocking through better rehabilitation services leading to shorter length of stay and thus freeing up capacity. Better use of operating theatres can be achieved through additional sessions during the weekend and by paying overtime or recruiting additional staff.

- In one province in Canada (Ontario), measures to increase productivity include extending operating room hours (with the consent of staff to work during evenings and weekends), and creating centralised provincial surgical waiting lists to reduce scheduling delays and match patients to surgeons (Government of Ontario, 2021<sup>[22]</sup>).
- In Ireland, the action plan included providing additional funding to public hospitals for extra staff and overtime to treat more inpatients at weekends and providing outpatient appointments out of hours. The plan also included improvements in waiting-list management by validating patients ready to be treated, thereby reducing the proportion who “do not attend” and improving data accuracy, avoiding duplications and lapsed appointments. Reductions in missed appointments (typically at around 11%) are expected to be obtained through new patient-centred booking arrangements with more agile scheduling. The target is to reduce the proportion of missed appointments to 8% by December 2023 (Government of Ireland, 2022<sup>[14]</sup>).
- In one region in Italy (Lombardy), a regional policy was developed in April 2022 to extend the working hours in which hospitals offer appointments during evenings and weekends. The initial

focus was on diagnostic services (e.g. MRI and CT scans); it was then extended to specialist visits (Lombardy Region, 2022<sup>[23]</sup>).

- In Portugal, a law adopted in November 2021 extended the use of a previous law from July 2020 to incentivise extra capacity for surgical activity and primary health care. For surgical activity, financial payments are defined as a maximum additional payment of 75% for extra elective surgery activity using the diagnosis-related group fees established in 2015. These extraordinary incentives apply to all forgone surgeries, targeting those with longer waiting lists, and with waiting times beyond the waiting-time guarantees (Ministry of Health, 2021<sup>[20]</sup>).
- In England (United Kingdom), initiatives to improve efficiency in delivery include plans to increase the proportion of procedures performed in outpatient departments rather than in inpatient surgical theatres. To boost supply, there are also plans to make temporary staffing banks more attractive by making it as easy as possible for staff to take on extra shifts; paying them promptly for working these; and proactively supporting temporary staff, including offering more permanent employment or development opportunities. Efforts are also under way to ensure that providers agree on more consistent rates for waiting-list initiatives, as they have done with rates for collaborative staff banks, and to support local discussions with the private sector about pay rates (NHS England & NHS Improvement, 2022<sup>[21]</sup>).

Increasing productivity, however, presents possible challenges. In some OECD countries, the health workforce is already overstretched, making staff reluctant to work more overtime or exposing them to higher risk of burnout. Increasing volumes will require careful planning – for example, by identifying personnel who were less affected by COVID-19 and are therefore less at risk of burnout. Contracting beyond normal volumes can also be challenging, as it is difficult to distinguish between regular volumes and the extra volume that goes beyond what would be provided without additional funding. Moreover, while most OECD countries paid hospitals using activity-based financing, during the pandemic these payments were replaced by fixed budgets, to ensure that providers did not face financial difficulties and go bankrupt. A change to fixed budgets may, however, hamper productivity, as the incentive to increase activity is diminished. Therefore, the ambition of stimulating additional activity needs to be aligned with financial incentives, which is likely to involve resuming activity-based financing.

#### **9.2.4. Private providers can be contracted to treat publicly funded patients**

Several OECD countries have involved private providers in the past to reduce waiting times, and plan to do so once more to address the backlog caused by COVID-19. The rationale is that contracting private providers increases supply quickly by relying on existing capacity in the private sector. Such contracting generally relates to high-volume elective procedures, with a focus on maximum waiting-time guarantees and patients with long waits. In some countries, patients who have waited above the maximum time can choose a provider in the private sector.

- In Australia, the National Partnership was established to help the states and territories to access the private health care sector to deliver services to public patients (Federal Financial Relations, 2021<sup>[24]</sup>).
- In Canada, the province of Alberta was planning to involve private clinics to perform hip and knee surgeries, and Saskatchewan was planning to build on existing contracts with private surgical providers (Government of Alberta, 2021<sup>[25]</sup>; Government of Saskatchewan, 2021<sup>[26]</sup>).
- In Denmark, patients are guaranteed a maximum waiting time from a GP or specialist referral to treatment, which has been set to 1 month since 2007. If the region cannot ensure that treatment will be initiated within 1 month, patients have the right to an “extended free choice of hospital”. This means that patients may choose to go to a private hospital (OECD, 2020<sup>[10]</sup>).
- In Ireland, the Health Service Executive and the National Treatment Purchase Fund has commissioned extra public and private activity to be delivered through the 2022 Waiting List Fund



to provide an additional 100 000 outpatient appointments, 28 000 inpatient/day case procedures and 30 000 diagnostics. A partnership framework for procurement of services from the private sector will also be established (Government of Ireland, 2022<sup>[14]</sup>).

- In Italy, several regions have a mix of public and private providers that treat publicly funded patients, and the latter are expected to play a more prominent role to treat elective patients – especially in specialties such as orthopaedics and ophthalmology. One region (Valle D’Aosta) plans to direct more patients to accredited private hospitals for orthopaedic surgery (Valle D’Aosta Region, 2022<sup>[27]</sup>).
- In England (United Kingdom), there are plans to create additional capacity by increasing the involvement of private providers to treat publicly funded patients. Integrated care systems will be responsible for planning and co-ordinating provision of services locally between public and private providers. Private providers will focus mostly on high-volume and low-complexity conditions, with the aim that this will free up capacity of public providers to focus on more complex work such as cardiac, vascular and neurosurgery for clinically urgent patients. Depending on local needs and capacity, there may be scope for private providers to contribute selectively to cancer pathways and diagnostics or more complex cases. Under the plans, the patient will have the right to choose a first appointment with a private provider if the public waiting list is too long (NHS England & NHS Improvement, 2022<sup>[21]</sup>).

One possible concern when contracting with private providers is that they often draw from the same pool of doctors employed by public hospitals. Therefore, there is a risk that increased supply by private providers can be offset by reductions in volume by public providers.

A key question is whether private providers should be subject to the same payment system as public providers and, if so, whether they should be reimbursed at the same rate as public providers or a lower one to reflect specialisation in less complex patients. Private providers in many countries tend to treat patients with lower-severity conditions, which are associated with lower costs. If this is the case, a lower payment is appropriate to ensure value for money, in line with most activity-based funding that sets tariffs to reflect the (average) cost of treatment. In some contexts, private providers may also lack equipment to treat patients with more complex needs, and patients may also be transferred back to public providers in case of complications, adding to the cost for public providers. This suggests the need for effective procurement and regulatory frameworks.

### **9.2.5. Dedicated facilities for elective treatment can be created to avoid disruption**

Some OECD countries are planning to create dedicated facilities to treat elective patients exclusively. This is to avoid elective care being disrupted by emergency care, and to maintain these facilities as COVID-19 free with enhanced protocols (for example, ensuring that patients do not have COVID-19 before admission). A second rationale is that these dedicated facilities will be able to achieve economies of scale through learning-by-doing effects, and will have the ability to specialise, leading to quicker discharges and shorter length of stay.

- In Ireland, plans are in place to construct new elective-only hospitals, providing protected capacity for elective care for Cork, Dublin and Galway. Preliminary business cases for each location are at an advanced stage of development. They will be subject to technical review by the Department of Health and the Department of Public Expenditure and Reform, pending favourable reviews under the Public Spending Code (Government of Ireland, 2022<sup>[14]</sup>).
- In England (United Kingdom), plans are in place to develop elective surgical hubs, which are surgical units that conduct planned procedures only. These can be part of an existing hospital, as a distinct unit or a ring-fenced operating theatre, or can be established on a separate site. Several of these hubs will focus on high-volume low-complexity surgery, following a recommendation by the Royal College of Surgeons. This will allow hubs to exploit economies of scale and streamline



processes, and will lead to earlier discharge of patients, reducing length of stay. These hubs have been piloted in several locations, including London, with a focus on fast-tracking common procedures such as cataract removals, hysterectomies and hip and knee replacements. Additional capital funding has been approved to create new hubs across all regions and expand existing hub sites (NHS England & NHS Improvement, 2022<sup>[21]</sup>).

One possible concern with the creation of dedicated facilities for elective treatment is that synergies on costs or health benefits between emergency and elective care may be lost. The current rationale for providing elective and emergency care within the same hospital is that specialists can move easily between the two settings (for example, an orthopaedic surgeon can provide an elective hip replacement or an emergency hip replacement following an emergency admission). A dedicated elective hub may have consequences for emergency patients if these remain understaffed as a result.

### **9.2.6. Diagnostic activity can be boosted**

Diagnostic activity acts as a bottleneck on the patient pathway because some patients need test results for doctors to complete their diagnosis and suggest appropriate treatment. Some countries have introduced initiatives to boost the supply of diagnostic services and set maximum waiting times for diagnostic tests.

- In Ireland, additional funding was made available in 2021 to increase diagnostic activity through the GP Structured Access to Diagnostics Programme (EUR 25 million). This saw around 138 000 scans of various modalities delivered in 2021. The scheme enables GPs to refer directly, reducing referrals to the diagnostics waiting list or inappropriate hospital emergency attendances, thereby easing pressure on hospitals (Government of Ireland, 2022<sup>[14]</sup>).
- In England (United Kingdom), creation of 66 dedicated community diagnostic centres was planned by the end of 2021/2022 to boost diagnostic capacity, with the aim of reaching a network of more than 160 centres and increasing testing capacity by one-quarter relative to pre-pandemic levels. These diagnostic centres will deliver a range of services including imaging, physiological measurement, pathology and (in larger centres) endoscopy services. The objective is to deliver bundles of tests in a single appointment, improving the patient experience and the efficiency of provision by faster diagnosis, and reducing pressure on hospitals. Digital infrastructure investments are also planned to ensure that test results and digital records can be shared swiftly with clinicians (NHS England & NHS Improvement, 2022<sup>[21]</sup>).

### **9.2.7. Policies can be applied to expand and retain the health workforce**

The health workforce plays a critical role for the success of several policies mentioned above that aim to expand the supply of elective care and diagnostic services rapidly. This is because such policies imply either the current workforce working longer hours or an expanded workforce, in particular nurses. However, it takes time to train new nurses and even more time to train new doctors, so the main options to address the backlog in the short term are either to retrain and redeploy existing staff, or to recruit new staff from abroad. It is also crucial to retain the existing workforce by improving working conditions and pay rates where required.

- In Canada, the plan to expand workforce capacity also includes a mix of greater domestic education and training, and international recruitment – particularly of nurses. International recruitment of nurses reached an all-time high in 2020, and numbers are expected to continue to rise in 2021 and 2022 as the federal and provincial governments are encouraging more foreign nurses to come to work in Canada. The Government of Ontario (the largest province) announced a plan in early 2022 to hire more than 1 000 foreign-trained nurses quickly (Government of Ontario, 2022<sup>[28]</sup>). Later in 2022, it increased the target to hire up to 6 000 health workers (Government of Ontario, 2022<sup>[29]</sup>). Similarly, the Government of Quebec (the second largest province) is investing

CAD 65 million to recruit and train nearly 1 000 nurses from francophone countries (Government of Quebec, 2022<sup>[30]</sup>). Most foreign-trained nurses in Canada come from the Philippines and India, although a growing number of francophone nurses are recruited in France.

- In Ireland, plans are in place to develop strategic workforce planning to enhance capacity by investing in staff, and to recruit staff from abroad to fill gaps in the interim (Government of Ireland, 2022<sup>[14]</sup>). Recruitment of foreign-trained nurses in Ireland reached an all-time high in 2021, driven mainly by a big increase in recruitment of nurses from India and an increase in recruitment from African countries including Ghana, Nigeria and Zimbabwe (see the chapter on health workforce).
- In England (United Kingdom), plans are in place to recruit new staff, including international recruitment of more than 10 000 nurses in the 2021/22 financial year – particularly those with experience in critical care and operating theatres. This will contribute to the 2019 government commitment to increase the number of nurses in NHS England by 50 000 by 2024. As in Ireland, international recruitment of nurses in the United Kingdom reached an all-time high in 2021/22, driven by strong growth in recruitment of nurses from the Philippines and India, but also from Ghana, Nigeria and Zimbabwe. There are plans to develop new roles for nurses, such as anaesthetic associates. Nurses will also be encouraged to take up training grants to become cancer nurse specialists. To address retention, the Retention Programme supports NHS trusts by focusing on improving flexible working conditions, workplace health and well-being, and by supporting staff at the start and end of their careers. The NHS England will organise regional pension seminars to explain how the schemes work and enable staff to make informed choices, with a view to supporting them to remain in NHS employment. Efforts are also under way to support providers to manage staff absences more consistently, as it is estimated that improving attendance nationally by around 1% could amount to as many as 12 000 full-time equivalent staff (NHS England & NHS Improvement, 2022<sup>[21]</sup>).

The ambition of several countries to increase the volume of activity rapidly to address the backlog creates a tension, however, between a quicker elective recovery and the additional workload for current health workers. To reduce pressure on the existing workforce, countries need to expand recruitment and investment in education and training. Most OECD countries have increased the number of students in medical and nursing education programmes in recent years (see the chapter on health workforce), but such policies are long term, as the education and training period takes several years. Recruiting health workers from other countries may provide a quicker solution, but it may exacerbate shortages in countries of origin and the “brain drain” from low- to higher-income countries.

### **9.2.8. Links between primary care and secondary care can be strengthened**

In many OECD countries, primary care is the first point of contact for patients seeking specialist services, and some countries have a gatekeeping system that requires a GP referral to access specialist care. Active involvement of primary care providers has the potential to reduce the number of inappropriate referrals and to treat some patients in the less expensive primary care setting rather than within the more expensive specialist and hospital setting. The COVID-19 pandemic has provided an opportunity to facilitate transformation within primary care (see the chapter on care continuity).

- In Ireland, the Enhanced Community Care Programme aims to expand capacity in primary care and reorientate service delivery towards general practice and community-based services, thus supporting the shift from acute hospitals and provision of services closer to home. Innovative pathway designs are founded on the principle of transitioning care closer to home through primary care and/or community services, including an emphasis on self-management and streamlining of acute hospital services. GPs will be provided with structured advice and support, enabling more patients to stay in primary care for management of their condition. The pathways will be supported by a series of capacity-building initiatives, including community-based hubs for management of

chronic diseases, obesity, sensory services, gastroenterology and musculoskeletal issues (Government of Ireland, 2022<sup>[14]</sup>).

- In Italy, some regional plans that aim to reduce the backlog of elective services have emphasised the role of managing demand by improving the appropriateness of specialist services via better prioritisation and co-ordination between primary and secondary care. This is to be achieved with more systematic use of the management tool known as “Homogenous Waiting Time Groups” (AGENAS, 2020<sup>[31]</sup>), which was developed by the National Agency for Regional Health Services before the pandemic. It is a priority classification system to be used by GPs based on five categories of maximum waiting times: A (maximum waiting time of 3 days), B (not more than 10 days), C (not more than 30 days), D (planned follow-up examinations), E or no letter (no maximum wait). The policy aims to improve the degree of agreement between GPs and specialists on the urgency of the referral, the concern being that GPs tend to categorise patients in need of a specialist referral as more urgent relative to the assessment of the specialist (Mariotti et al., 2022<sup>[32]</sup>).
- In England (United Kingdom), plans are in place to ease primary care access to specialist advice – for example, enabling sharing of images to support clinical teams to undertake more effective triage, while improving the patient experience. One example is teledermatology services to increase access to specialist advice for suspected skin cancers. In 2021/22, GBP 2 million was invested in new dermatoscopes so that GPs can take high-quality photos of suspicious moles and lesions and seek specialist cancer advice, helping to speed up referrals and reducing the number of unnecessary specialist visits (NHS England & NHS Improvement, 2022<sup>[21]</sup>).

These examples highlight that moving care from secondary to primary care settings requires transformation of health service configuration. GPs and other primary care providers need to be supported with prioritisation tools, infrastructure and resources, if they are to assume more responsibilities.

### **9.2.9. Investment can be made in digital solutions**

COVID-19 has also induced health systems to invest further in digital technologies – notably, to facilitate digital consultations (see chapters on care continuity and digital foundation). Digital technologies can play a role along the patient pathway for routine follow-up appointments or rehabilitation following surgery, which do not require a physical examination by the doctor.

- In Canada, the province of Ontario is creating a centralised provincial surgical waiting-list information system to reduce scheduling delays and improve the match of patients to surgeons (Government of Ontario, 2022<sup>[28]</sup>).
- In Ireland, the Health Service Executive is implementing a Health Performance Visualisation Platform to provide real-time health data and trends across emergency departments, outpatient services, operating theatres, diagnostic services and bed management to support scheduled care planning and delivery. This is designed to allow clinicians and managers to see where activity is happening across the public health system, to identify bottlenecks and to enable visibility of where urgent real-time interventions are required. The HSE was also planning to develop technology enablers for enhanced information and data to better manage, process and report on waiting lists/times to facilitate improvements in hospital productivity and patient experiences (Government of Ireland, 2022<sup>[14]</sup>).
- In England (United Kingdom), plans are in place to encourage use of follow-up outpatient appointments with digital tools (via phone or video) to support access to clinical teams, which some patients may find more convenient from home. Technology-supported virtual wards that enable recovery at home for those with COVID-19 have also been extended to a range of other conditions.

These examples show the potential important role of digital solutions in supporting patients in need of elective care and improving communication between providers across different settings.

### 9.2.10. Carefully designed demand-side measures can be implemented

The policy initiatives outlined so far focus mostly on the supply side. Over the years, several OECD countries have developed a range of prioritisation tools to manage demand for elective care better, with recommended waiting times based on clinical need both across and within treatments. For example, patients in need of hip replacements who are less mobile or have more pain tend to have shorter waits than patients who are relatively more mobile or have less pain (Gutacker, Siciliani and Cookson, 2016<sup>[33]</sup>). Maximum waiting times for more urgent treatments are usually shorter, which is reflected in shorter waiting times for cardiac care or cancer than for joint replacement, for example.

This prioritisation was maintained during the pandemic. In nearly all OECD countries for which data are available, waiting times for more urgent conditions such as elective cardiac care (coronary bypass or coronary angioplasty) did not increase in 2020 compared with 2019 for patients treated (Table 9.5).

**Table 9.5. Waiting times have generally been shorter for more urgent treatments before and during the pandemic**

Mean waiting times from addition to list to treatment for selected elective surgery (days), 2020 (2019)

Country	Cataract surgery	Hip replacement	Knee replacement	Hysterectomy	Prostatectomy	Coronary bypass	Coronary angioplasty
Australia	154 (138)	164 (163)	216 (207)	103 (95)	71 (70)	32 (31)	
Canada*	133 (67)	165 (106)	197 (121)		41 (41)	5 (6)	
Finland	121 (113)	83 (84)	101 (100)	73 (81)	84 (71)	25 (23)	32 (37)
Hungary	49 (41)	89 (92)	134 (147)	10 (9)	14 (13)	51 (48)	7 (8)
Italy	58 (62)	81 (80)	81 (79)	63 (62)	82 (88)	25 (23)	25 (24)
Netherlands	58 (52)	70 (58)	79 (63)	47 (43)	38 (39)	27 (24)	11 (12)
New Zealand	85 (73)	121 (103)	134 (113)	115 (96)	84 (76)	44 (54)	55 (52)
Norway	178 (160)	170 (148)	205 (179)	167 (152)	158 (157)	100 (98)	54 (60)
Portugal	133 (129)	144 (137)	231 (215)	115 (116)	152 (124)	62 (50)	
Spain	118 (101)	154 (147)	208 (191)	99 (97)	141 (117)	39 (38)	1 (2)
Sweden	78 (75)	112 (92)	153 (131)	73 (63)	94 (94)	28 (19)	
<b>OECD average</b>	106 (92)	123 (110)	159 (139)	87 (81)	87 (81)	40 (38)	26 (28)

Note: The main value in the cell refers to 2020, while the value in parentheses refers to 2019 (pre-pandemic). \* Canada is reporting median waiting time (not the mean); the median waiting time is generally shorter than the mean. The data for Australia for 2019 refer to 1 July 2018 to 30 June 2019; for 2020 they refer to 1 July 2019 to 30 June 2020. The data for Norway are overestimated because they start from the date when a doctor refers a patient for specialist assessment.

Source: OECD Health Statistics 2022, <https://doi.org/10.1787/health-data-en>.

Most countries maintained prioritisation tools during the pandemic, and in some countries these tools have been implemented more stringently. Several countries also use long or excess waiting times as a criterion to be prioritised on the waiting list, with the idea that if the wait is very long (e.g. over 1 year), the long wait is unacceptable regardless of the clinical need.

- In Ireland, patients with a waiting time of more than 6 months were prioritised in 2022 by the National Treatment Purchase Fund, initially for a subset of 15 high-volume procedures (including cataracts, hip and knee replacements, varicose veins, hernia repair and angiograms). As part of the Advanced Clinical Prioritisation Programme, patients waiting over 18 months will be contacted by a consultant, who will place them on the appropriate pathway of care. There are also plans to

modernise patient care pathways – for example through an agreed series of health care touchpoints that will progress care from first presentation until completion of the episode of care. Working groups produced 75 high-level pathways in 2021, and 37 of these were expected to commence in 2022 as part of the Waiting List Action Plan 2022 (Government of Ireland, 2022<sup>[14]</sup>).

- In Italy, maximum waiting times have been maintained. For hospital admissions, there are four urgency categories: A (within 30 days: health can deteriorate quickly); B (within 60 days: high level of pain and disability with potential to become emergency patients); C (within 180 days: minimal pain or disability with no or limited potential of health status to worsen); and D (within 12 months: no pain, reduced functioning or disability) (Mariotti et al., 2022<sup>[32]</sup>).
- In the England (United Kingdom), the Clinical Prioritisation Programme published prioritisation frameworks for surgery, diagnostics and endoscopy to support waiting-list management, ensure the accuracy of waiting lists and prioritise patients based on clinical need. The frameworks outline the steps for clinicians to check a patient's condition, establish additional risk factors and understand treatment options. A national Health Inequalities Improvement Dashboard will support local systems to pinpoint disparities in waiting times based on ethnicity and deprivation. In addition to clinical need, there is also a focus on patients with long waits: a new national network is under development, and more support is being provided. Patients who have been waiting longer than 18 months will be re-reviewed at least every 3 months. The general approach will build on the duty to offer an alternative provider, including in the private sector, with the process managed by the NHS team (NHS England & NHS Improvement, 2022<sup>[21]</sup>).

Waiting-time prioritisation policies redistribute the wait towards those who have more to lose, because they are in more pain, less mobile, or because their health can deteriorate more quickly. Explicit criteria for adding a patient to the list can also be useful to rationalise demand and make sure that referrals are appropriate. In turn, this can improve the efficiency of the health system by avoiding referral of unnecessary treatments or those with very low value. However, policies that aim to contain demand could affect inequalities if individuals with higher socio-economic status are better able to navigate the health system and gain access to health care more easily. This is particularly important given that demand was restricted and volumes dropped significantly during the earlier stages of the pandemic.

## References

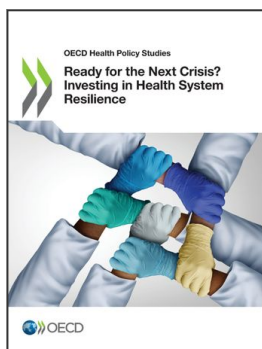
- AGENAS (2020), *Manuale RAO*, [31]  
[https://www.agenas.gov.it/images/agenas/In%20primo%20piano/RAO/Manuale\\_RAO\\_13\\_ge n.pdf](https://www.agenas.gov.it/images/agenas/In%20primo%20piano/RAO/Manuale_RAO_13_ge n.pdf).
- Assurance Maladie (2022), *Les propositions de l'Assurance Maladie pour 2023*, Assurance Maladie, [4]  
<https://assurance-maladie.ameli.fr/etudes-et-donnees/2022-rapport-propositions-pour-2023-charges-produits>.
- CADTH (2021), *The Canadian Medical Imaging Inventory 2019–2020*, [8]  
<https://canjhealthtechnol.ca/index.php/cjht/article/view/op0546/op0546>.
- CIHI (2022), *Wait times for priority procedures in Canada*, Canadian Institute for Health Information, [17]  
<https://www.cihi.ca/en/wait-times-for-priority-procedures-in-canada>.
- CIHI (2021), *Wait Times for Priority Procedures in Canada, 2021 Focus on the First 6 Months of the COVID-19 Pandemic Chartbook*, Canadian Institute for Health Information, [9]  
<https://www.cihi.ca/sites/default/files/document/wait-times-chartbook-priority-procedures-in-canada-2016-2020-en.pdf>.

- Committee on the Future of Healthcare (2017), *Sláintecare Report*, [18]  
<https://assets.gov.ie/22609/e68786c13e1b4d7daca89b495c506bb8.pdf>.
- Federal Financial Relations (2021), *National Partnership on COVID-19 Response*, [24]  
[https://federalfinancialrelations.gov.au/sites/federalfinancialrelations.gov.au/files/2021-04/covid-19\\_response\\_vaccine\\_amendment\\_schedule.pdf](https://federalfinancialrelations.gov.au/sites/federalfinancialrelations.gov.au/files/2021-04/covid-19_response_vaccine_amendment_schedule.pdf).
- Government of Alberta (2021), *Budget 2021: More funding to reduce surgical wait times* | GovtMonitor, [25]  
<https://www.govtmonitor.com/page.php?type=document&id=12014>.
- Government of Canada (2022), *Canada commits \$2 billion in additional health care funding to clear backlogs and support hundreds of thousands of additional surgeries - Canada.ca*, [12]  
<https://www.canada.ca/en/departement-finance/news/2022/03/canada-commits-2-billion-in-additional-health-care-funding-to-clear-surgery-and-diagnostics-backlogs.html>.
- Government of Finland (2022), *General Government Fiscal Plan for 2023–2026: Policies to safeguard Finland’s future, sustainable growth and security - Prime Minister’s Office*, [13]  
<https://vnk.fi/en/-/general-government-fiscal-plan-for-2023-2026-policies-to-safeguard-finland-s-future-sustainable-growth-and-security>.
- Government of Ireland (2022), *Waiting List Action Plan 2022*, [14]  
<https://www.gov.ie/en/publication/323b5-the-2022-waiting-list-action-plan/>.
- Government of Italy (2020), *Urgent interventions related to waiting lists*, Decree law 104, 14 August 2020, article 29. [15]
- Government of Ontario (2022), *Ontario Continues to Add Hospital Beds and Build Up Health Workforce* | Ontario Newsroom, [28]  
<https://news.ontario.ca/en/release/1001411/ontario-continues-to-add-hospital-beds-and-build-up-health-workforce>.
- Government of Ontario (2022), *Plan to Stay Open: Health System Stability and Recovery*, [29]  
<https://news.ontario.ca/en/release/1002246/ontario-introduces-a-plan-to-stay-open-health-system-stability-and-recovery>.
- Government of Ontario (2021), “Ontario’s Action Plan: Protecting People’s Health and Our Economy – 2021 Ontario Budget”, [22]  
<http://www.ontario.ca/budget>.
- Government of Quebec (2022), *Programme d’aide à la reconnaissance des compétences (PARC) — Skill recognition assistance program (SRAP)*, [30]  
<https://www.immigration-quebec.gouv.qc.ca/en/partners/integration-programs/acces-ordres/index.html>.
- Government of Quebec (2021), *Update on Québec’s Economic and Financial Situation*, [7]  
[http://www.finances.gouv.qc.ca/MAJ2021/index\\_en.asp](http://www.finances.gouv.qc.ca/MAJ2021/index_en.asp).
- Government of Saskatchewan (2021), *Province Announces Plans To Eliminate Covid Surgical Backlog And Expand ICU* | News and Media | Government of Saskatchewan, [26]  
<https://www.saskatchewan.ca/government/news-and-media/2021/december/09/province-announces-plans-to-eliminate-covid-surgical-backlog-and-expand-icu>.
- Gutacker, N., L. Siciliani and R. Cookson (2016), “Waiting time prioritisation: Evidence from England”, *Social science & medicine* (1982), Vol. 159, pp. 140-151, [33]  
<https://doi.org/10.1016/J.SOCSCIMED.2016.05.007>.



- Hurst, J. and L. Siciliani (2003), “Tackling Excessive Waiting Times for Elective Surgery: A Comparison of Policies in Twelve OECD Countries”, *OECD Health Working Papers*, No. 6, OECD Publishing, Paris, <https://doi.org/10.1787/108471127058>. [11]
- Institute for Fiscal Studies (2022), *The NHS backlog recovery plan and the outlook for waiting lists - Institute For Fiscal Studies*, <https://ifs.org.uk/publications/15941>. [5]
- Lombardy Region (2022), *Intervention to increase the supply of ambulatory services during weekends, in the afternoon of days preceding the weekend, and in the evening of working days*, Deliberation n. XI / 6279, held on 11/04/2022. [23]
- Lombardy Region (2022), *Measures to reduce waiting times - Approval of new model of remuneration for health services*, Deliberation n. XI / 5883, held on 24/01/2022. [19]
- Mariotti, G. et al. (2022), “Consensus among clinicians on referrals’ priority and use of digital decision-making support systems”, *Health Policy*, Vol. 126/9, pp. 906-914, <https://doi.org/10.1016/J.HEALTHPOL.2022.07.003>. [32]
- Ministry of Health (2021), “Law establishing exceptional incentive schemes applicable in 2022 for the recovery of care activity in hospital and primary health care and NHS establishments”, <http://www.dre.pt>. [20]
- NAO (2021), *NHS backlogs and waiting times in England*, National Audit Office, <https://www.nao.org.uk/reports/nhs-backlogs-and-waiting-times-in-england/>. [1]
- NHS England & NHS Improvement (2022), *Delivery plan for tackling the COVID-19 backlog of elective care*, <https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2022/02/C1466-delivery-plan-for-tackling-the-covid-19-backlog-of-elective-care.pdf>. [21]
- Nuffield Trust (2022), “The elective care backlog and ethnicity”, <http://www.nuffieldtrust.org.uk/>. [3]
- OECD (2020), *Waiting Times for Health Services: Next in Line*, OECD Health Policy Studies, OECD Publishing, Paris, <https://doi.org/10.1787/242e3c8c-en>. [10]
- Siciliani, L., M. Borowitz and V. Moran (eds.) (2013), *Waiting Time Policies in the Health Sector: What Works?*, OECD Health Policy Studies, OECD Publishing, Paris, <https://doi.org/10.1787/9789264179080-en>. [2]
- Valle D’Aosta Region (2022), *Approval of Regional Plan to reduce waiting lists in 2022*, Deliberation of Regional Committee (DGR) n. 91/2022. [27]
- Wang, J. et al. (2020), “Clearing the surgical backlog caused by COVID-19 in Ontario: A time series modelling study”, *CMAJ*, Vol. 192/44, pp. E1347-E1356, <https://doi.org/10.1503/CMAJ.201521/TAB-RELATED-CONTENT>. [6]
- Watson, D. et al. (2007), “Wait Time Benchmarks, Research Evidence and the Knowledge Translation Process”, *Healthcare Policy*, Vol. 2/3, p. 56, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2585448/>. [16]





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