2 Dealing with backlogs: Disruptions in non-COVID care during the pandemic

This chapter reviews the impact of the COVID-19 crisis in disrupting care for non-COVID patients, focusing on primary care, mental health care, cancer care, chronic care and elective surgery during the first year of the pandemic. While the rapid development of teleconsultations played an important role in maintaining continuity of care, disruptions in cancer screening programmes resulted in delays in diagnoses and led to increased number of cancer patients diagnosed at later stages. The pandemic also impacted the mental health of EU citizens, disproportionately affecting young people, women and the unemployed. One in five EU citizens reported unmet mental health care needs in 2021 and 2022. The suspension of activities during the first year of the pandemic resulted in one in six elective surgery being missed. Many countries provided additional funding to address the backlog of patients, but the biggest constraint to increasing surgical activities has been workforce availability. This chapter draws lessons from the pandemic to build more resilient health systems.

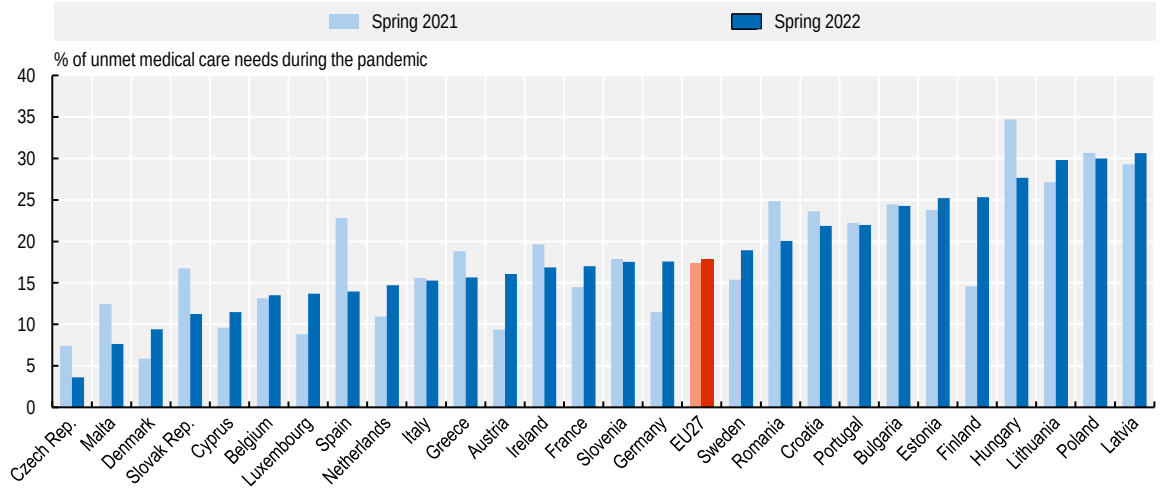
2.1. Introduction

The COVID-19 pandemic has had a dramatic impact on people's lives in Europe and around the world. It has led to a reduction of more than a year in life expectancy in the EU in 2021 compared with 2019. These were the largest reductions in life expectancy since World War II in most EU countries. By the end of October 2022, more than 1.1 million COVID-19 deaths (or 17.5% of world's total deaths) had been reported across the 27 EU countries, but data on excess mortality suggests this is an under-estimation and that an additional 300 000 people died from either the direct or indirect effect of the pandemic (see indicator "COVID-19 mortality and excess mortality" in Chapter 3).

The pandemic has had a huge impact on most people's lives also through the disruptions of educational, economic and social activities. In health, the pandemic led to major disruptions in many health services. The overall impact of these disruptions is hard to quantify precisely because they have affected most of the population and because several of these effects will last for many years to come. For example, disruptions in cancer screening and early detection programmes will result in increased number of cancer cases being diagnosed at a later stage, and with lower survival probabilities. Increased levels of psychological distress experienced during the pandemic are also expected to have a long-lasting impact on the mental health condition and trajectory of many EU citizens.

A large proportion of EU citizens reported high unmet health care needs from the start of the pandemic as countries mobilised health care resources to respond to the pandemic urgency and as the population was encouraged to reduce physical and social contacts to contain virus transmission. According to Eurofound's *Living, working and COVID-19 e-survey* (Eurofound, 2022[1]), more than one in five people across EU countries reported having forgone medical care (i.e. a medical examination or treatment) during the first 12 months of the pandemic, and nearly one in five people reported that they were still having current unmet medical care needs in spring 2021 and spring 2022 (Figure 2.1).

Figure 2.1. Unmet health care needs have remained high during the first two years of the pandemic

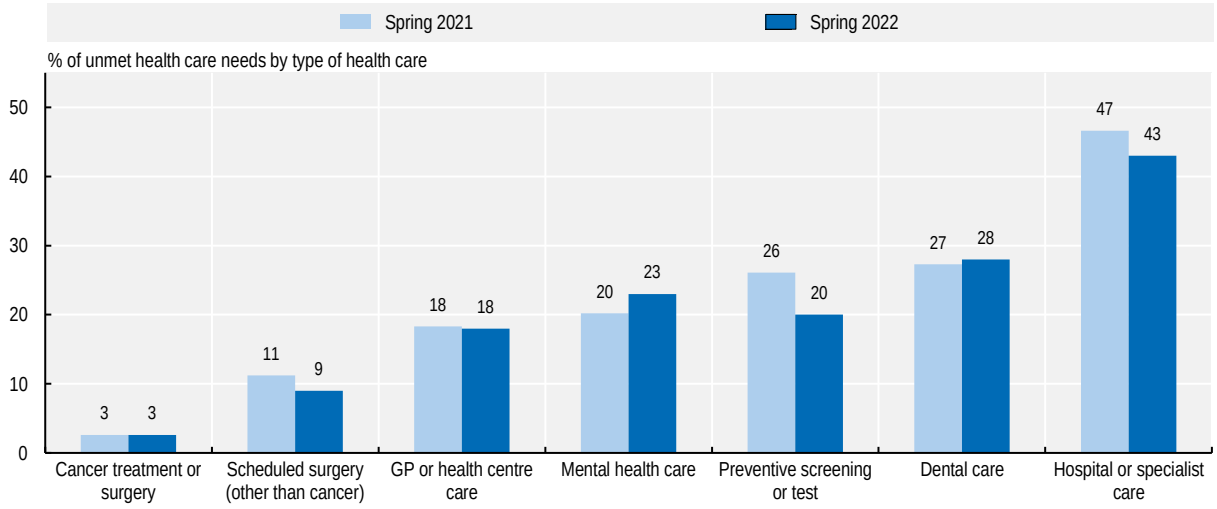


Note: The survey question refers to current unmet needs at the time of the survey. The EU average is weighted.
Source: Eurofound (2022[1]), *Living, working and COVID-19 e-survey*, http://eurofound.link/covid19data.

StatLink https://stat.link/6map3j

Unmet health care needs have varied for different types of care since the beginning of the pandemic but their extent has been dramatic. Overall problems with access to hospital or specialist care were reported by nearly half of the EU population in 2020 and more than two fifths in 2021. Unmet needs in the EU in 2020 and 2021 have also been high for dental care, screening, and mental health care. Compared to spring 2021, fewer unmet care needs were reported in spring 2022 for screening and for hospital and specialist care, but the situation remained unchanged for dental care and deteriorated for mental health care (Figure 2.2).

Figure 2.2. Unmet health care needs in the EU remained high in spring 2022 for most types of care and increased further for mental health care



Note: Data relate to all EU countries. The data relate to the population who reported current unmet healthcare needs.
Source: Eurofound (2022[1]), *Living, working and COVID-19 e-survey*, http://eurofound.link/covid19data.

StatLink https://stat.link/ekfpgw

This chapter reviews the impact of the pandemic in disrupting primary care services, mental health care, cancer care, chronic care and elective surgery in European countries, and some of the measures that countries have taken to minimise these disruptions and resume activities as quickly as possible.

Box 2.1 provides a general definition of health system resilience and illustrates the different stages of responses to a shock like the COVID-19 pandemic.

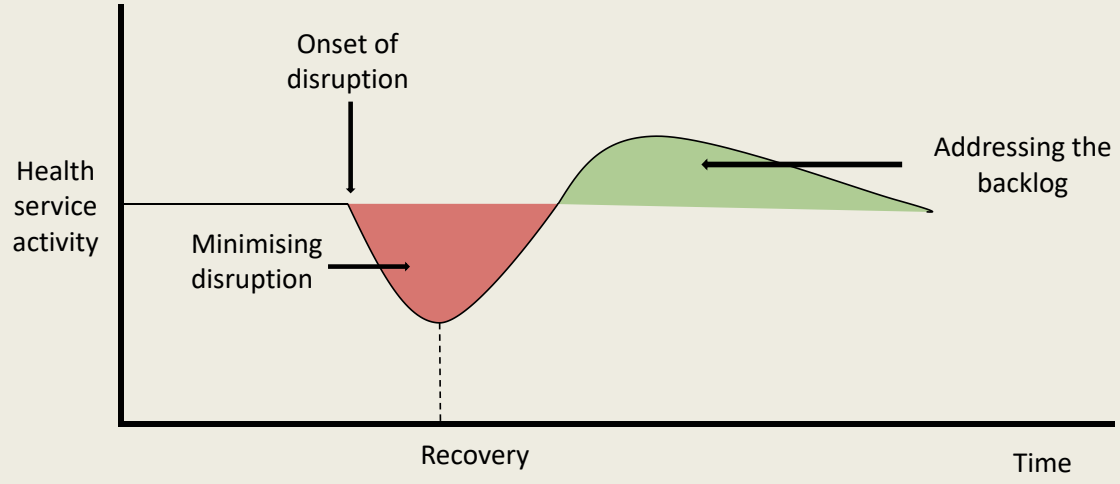
Box 2.2 summarises some of the key findings from reviewing the disruptions of different types of health services during the pandemic and the country responses to restore access to these services as quickly as possible. It also outlines some of the lessons learned from the crisis about how to strengthen the resilience of health systems to any future shocks and strains arising from population ageing.

Box 2.1. Health system resilience

Health system resilience has been defined by the EU Expert Group on Health Systems Performance Assessment as the ability to foresee, absorb and adapt to shocks and structural changes in a way that allows health system to (i) sustain required operations, (ii) resume optimal performance as quickly as possible, (iii) transform its structure and functions to strengthen the system, and (iv) (possibly) reduce its vulnerability to similar shocks and structural changes in the future (EU Expert Group on Health Systems Performance Assessment, 2020[2]). This definition is fully consistent with the OECD definition of health system resilience as the ability to prepare for shocks, absorb disruptions while maintaining performance, recover quickly, and adapt by learning lessons to improve and manage future risks (OECD, forthcoming[3]).

Figure 2.3 provides a basic illustration of the different stages of response to a shock. A shock like the pandemic results in the disruption of health services. The goal is to minimise these disruptions as much and as soon as possible to maintain adequate access to services, recover as quickly as possible to return to the pre-shock level and even exceed it to address any backlog of patients generated by the initial disruption.

Figure 2.3. Health system resilience to shocks: The stages of responses to disruptions



Source: Adapted from OECD (forthcoming[3]), *Ready for the Next Crisis? Investing in Resilient Health Systems*.

Box 2.2. Key findings and lessons learned from reviewing the disruptions of health services during the pandemic and country responses

- **Teleconsultations are useful to maintain continuity of care for many, but not all, types of consultations**: The rapid development of teleconsultations has been one of the most visible innovations in health service delivery during the pandemic and played a key role in maintaining access to care, particularly during lockdown periods. The number of teleconsultations between doctors and patients rose by 90% during the first year of the pandemic on average across EU countries, partly offsetting the reduction in in-person consultations. Some countries were better prepared to provide remote consultations because they already had put in place more advanced digital infrastructure. Many other countries moved quickly to overcome legislative, financial or technical barriers to using teleconsultations. While telemedicine undoubtedly contributed to maintaining access to care during the crisis, there is concern that some teleconsultations provide little benefits compared with in-person consultations. Access to teleconsultations and other telemedicine tools among older, poorer and people living in rural areas also remains a concern in some EU countries.
- **In addition to COVID-19 vaccination, notable progress has been achieved in increasing immunisation against influenza and maintaining childhood vaccination programmes:** The proportion of older people vaccinated against influenza increased greatly in many EU countries during the first year of the pandemic, reflecting greater confidence in the safety and importance of this vaccination. Flu vaccination rate among people aged 65+ rose from 37% in 2019 to 44% in 2020 on average across the EU, although nearly all countries still have a long way to go to achieve the target of vaccinating 75% of people in this age group. Most countries were also able to maintain high childhood vaccination rates during the first year of the pandemic, but some have faced at least some temporary challenge in implementing regular vaccination schedules in 2021. Public authorities in many countries have developed strategies to combat misinformation and disinformation about vaccines. The EU Vaccines Strategy continues to support national efforts to increase vaccination rates by accelerating the development and availability of vaccines while maintaining quality, safety and efficacy standards.
- **Disruptions in mental health care and new mental health care needs associated with the pandemic will have implications for years to come:** The pandemic had a major impact on the mental health of many EU citizens, and anxiety and depression doubled in a number of European countries. Young people, women and the unemployed were particularly affected. Many EU countries have stepped up their mental

health support to respond to growing needs, but more than one in five EU citizens reported unmet mental care needs in spring 2022. As noted in the 2022 State of the Union Address, providing appropriate, accessible and affordable support can make all the difference to the many EU citizens who feel anxious or mentally unwell.

- **Delays in cancer screening and new diagnoses have created backlogs of cancer patients diagnosed at a later stage**: Cancer screening rates fell sharply during the initial phase of the pandemic in 2020 as screening programmes were temporarily suspended and patients were hesitant to seek consultations with doctors for cancer suspicions. While many countries were able to offset at least partly the initial reductions by scaling up activities in the second half of the year, breast cancer and cervical cancer screenings fell by 6% on average in 2020. Delays in cancer screening and diagnoses have raised serious concerns as postponed diagnoses inevitably result in cancer being diagnosed at a later stage, making cancer treatment more complex and reducing survival probabilities. Strategies to prevent the accumulation of more advanced cancer patients involve minimising any disruption in screening programmes and early detection. Most EU countries still have a way to go to reach the ambitious goal set out in the Europe's Beating Cancer Plan of having 90% of the EU population who qualify for breast, cervical and colorectal cancer screenings offered screening by 2025.
- **Telemedicine, new professional roles and stronger co-ordination were needed to maintain care continuity for people with chronic conditions:** People with chronic conditions were 40% more likely to report either forgoing or postponing medical care during the first few months of the pandemic than those without a chronic condition on average across EU countries. Delayed or missing regular care for chronic conditions can have particularly detrimental effect, often resulting in greater complications for patients and putting additional pressure on hospitals. One of the strategies that countries adopted to maintain continuity of chronic care during the pandemic was to transition rapidly to remote care and monitoring. Many countries also assigned new roles to health workers: these range from increasing the role of nurses and other community health workers to provide home-based care, to allowing pharmacists to prescribe or extend prescriptions for chronic conditions. The pandemic emphasised the crucial role of better data sharing and stronger digital infrastructure to support care co-ordination. Long COVID (also known as "post COVID-19 condition") has emerged as a new chronic condition that will require further research to improve diagnosis and treatment, and will require care co-ordination between primary care providers and specialists.
- **Addressing the backlog of patients waiting for elective surgery requires funding but also more workforce**: Nearly 2 million fewer elective (non-urgent) surgical procedures were performed in 2020 compared to 2019 across the 23 EU countries for which data are available (equivalent to 16.5% of the total). On average, the number of hip replacements fell by 14% while the volume of knee replacements fell by 24%. These "missing volumes" of operations have led to longer waiting lists and waiting times, and the public dissatisfaction that goes with it. Many EU countries have taken actions to address the backlogs by providing additional funding to increase the supply of surgery. However, the main constraint in increasing rapidly the volume of activities has been the health workforce. Incentives are provided to current staff to work harder and longer hours, but this has limits and runs the risk of burnout and resignation.
- **Targeted investments, notably in health workforce, are needed to increase health system resilience**: EU countries recognised that more health system resources were required to respond to the pandemic. In 2020, health expenditure per capita increased by over 5% on average across EU countries, despite a large reduction in GDP in many countries. Some of the weaknesses and vulnerabilities identified during the pandemic, notably health workforce shortages, are high priorities in the COVID-19 recovery. According to recent OECD estimates, at least half of new investments required to make health system more resilient should be on workforce to increase both recruitment and retention by improving working conditions.
- **Health data gains during the pandemic and investments in health data infrastructures can be leveraged for evidence-based policy making:** Substantial additional investment is still needed in health data and information systems to provide more relevant support to decision-making and care co-ordination. EU countries have taken rapid actions at the beginning of the pandemic to mitigate data deficits to help them manage COVID-19 responses. In some countries, actions were also taken to monitor important "side-effects" of the pandemic, such as on mental health and the health workforce. However, many basic data gaps remain in countries' ability to provide timely data on regular health care activities, health care needs, waiting times and health outcomes. The pandemic also highlighted that further investment is needed in health data infrastructures to promote greater data linkage and data sharing across providers to enable greater care co-ordination, while at the same time protecting data privacy.

2.2. Disruptions in primary care

Strong primary care is essential for a well-functioning health system and to reduce pressures on hospitals under normal circumstances. In crisis situations like the COVID-19 pandemic, primary care can play an important role in helping to cope with a surge in demand for diagnosis and to provide at least first-line treatment, but it is also essential for primary care providers to continue to respond to all the other care needs of the population.

During the pandemic, the provision of primary care was substantially affected by restrictions in mobility and contacts that disrupted traditional ways of accessing health services. Fortunately, teleconsultations picked-up quickly in many countries and replaced at least partly in-person consultations.

The pandemic also challenged the implementation of routine vaccination programmes for children, although most countries managed to keep high vaccination rates. Many countries have also been able to increase vaccination rates against seasonal influenza among older people as part of deliberate strategies to reduce other respiratory infections among at-risk groups and additional pressures on hospitals.

Many primary care workers were called upon to perform new tasks during the pandemic. The roles of community pharmacists and nurses were extended in many countries to support COVID-19 responses but also to provide other primary care services.

2.2.1. The development of teleconsultations offset at least partly the reduction in in-person consultations

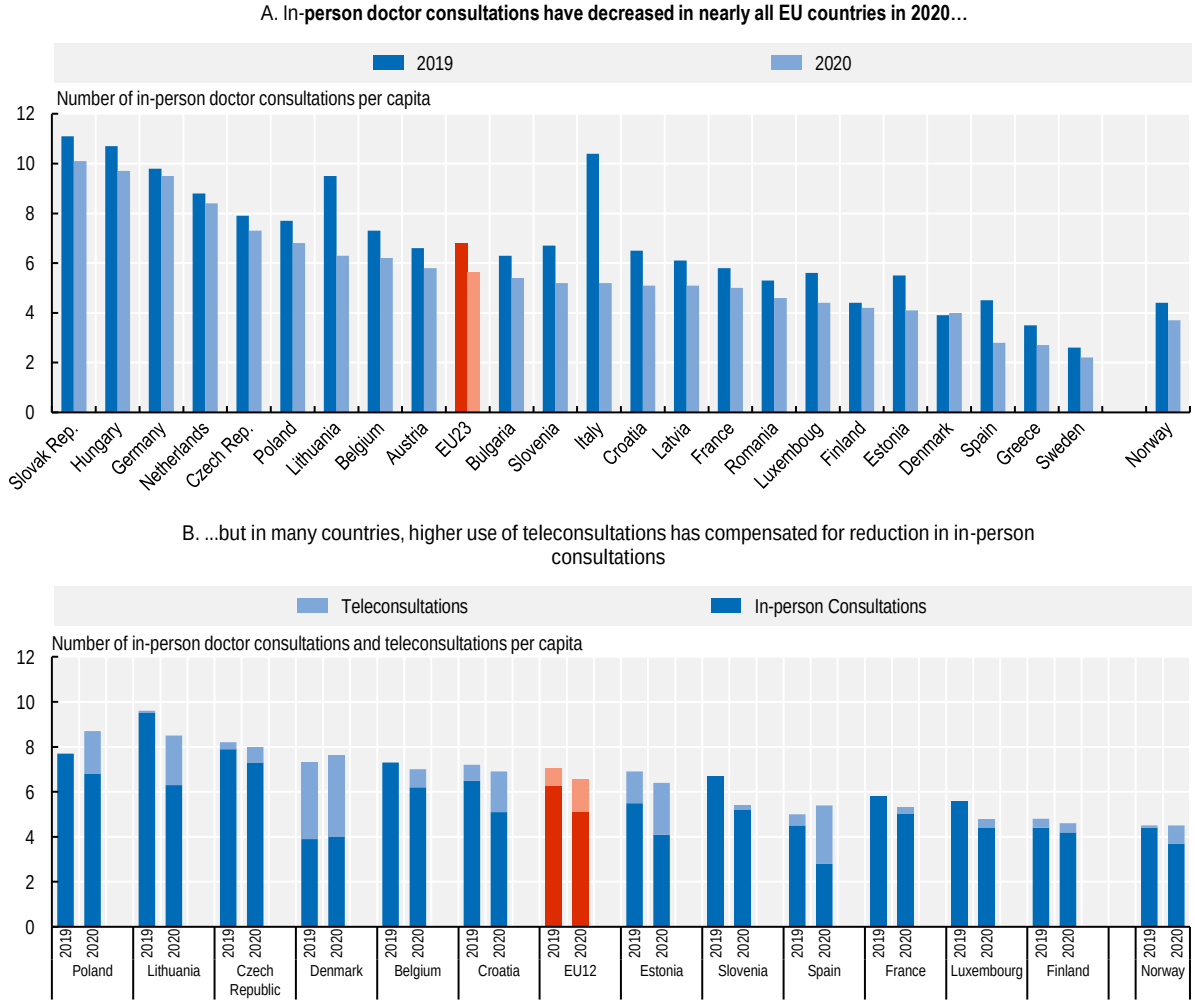
Nearly all EU countries have experienced substantial reductions in in-person consultations with doctors during the first year of the pandemic, in particular during lockdown periods. The rapid development of teleconsultations played a key role in maintaining needed patient-physician interactions and the ability to manage health problems at early stages in many countries (OECD, 2021[4]).

In-person consultations with doctors dropped in all EU countries but Denmark in 2020. For the most part, the reduction in in-person visits occurred during the first wave of the pandemic, with less pronounced disruptions in subsequent waves. Over the whole year, on average across 23 EU countries, in-person consultations decreased by 17% in 2020, ranging from a decrease of only 3% in Germany to up to 50% in Italy (Figure 2.4, Panel A).

At the same time, the number of teleconsultations increased rapidly in many countries in the early phase of the pandemic and at least partly offset the reduction in in-person consultations. On average across the 12 EU countries for which data on teleconsultations are available, the overall number of physician consultations (including both in-person and remote) decreased only by 7% in 2020 (Figure 2.4, Panel B). In some countries like Poland, Denmark and Spain, the overall number of teleconsultations and in-person consultations in 2020 in fact exceeded the number in 2019 because the increase in teleconsultations more than offset any reduction in in-person consultations.

Denmark was already far ahead all other countries before the pandemic in having a high number of teleconsultations with doctors, with an almost equal share between in-person and teleconsultations. This balance was maintained during the first year of the pandemic.

Figure 2.4. In many countries, teleconsultations compensated at least partly for the decrease in in-person doctor consultations during the pandemic



Note: Data cover consultations with all doctors (general practitioners and specialists). Data for Spain are underestimated as they only include consultations in primary health care centres of the National Health System.
Source: OECD Health Statistics 2022 (for in-person consultations) and national sources (for teleconsultations).

StatLink https://stat.link/0me97k

Data from Eurofound's COVID-19 e-survey also show a growing use of teleconsultations with general practitioners (GPs) during the first year of the pandemic in all 27 EU countries (see indicator "Use of teleconsultations" in Chapter 8 on Resilience) (Eurofound, 2022[1]).

Before the pandemic, teleconsultations represented only a small fraction of all consultations in most countries, and the financing and reimbursement of such teleconsultations were limited (Oliveira Hashiguchi, 2020[5]). In response to the mobility restrictions during the pandemic, governments and providers moved quickly to expand remote care services. New legislations were introduced or existing laws on telemedicine were revisited in many countries. For instance, Estonia, Hungary, Ireland and Luxembourg lifted the requisite that medical consultations can only be performed in the physical presence of the patient, and Austria relaxed the same requirement on prescriptions. A few more countries allowed teleconsultations even for patients who had not consulted the health care provider in-person before, but Estonia and Luxembourg went the opposite way and the Czech Republic kept the original provision intact (OECD, forthcoming[6]).

Table 2.1. Many countries have introduced new legislations to support teleconsultations during the pandemic

Country agreement with statements before and after the start of the COVID-19 pandemic

	Medical consultations can be performed without physical presence of the patient		Teleconsultations allowed also if the patient has not previously consulted the health care worker in-person		Real-time (synchronous) teleconsultations are covered by government or compulsory financing schemes	
	Before	After	Before	After	Before	After
Austria	✓	✓	✓	✓		
Belgium	✓	✓	✓	✓	x	✓
Czech Republic	✓	✓	x	x	x	✓
Estonia	x	✓	✓	x	x	✓
Finland	✓	✓	✓	✓	✓	✓
France	✓	✓	x	✓	✓	✓
Germany	✓	✓	✓	✓	✓	✓
Hungary	x	✓	✓	✓		✓
Ireland	x	✓	x	✓	✓	✓
Latvia	✓	✓	✓	✓	x	✓
Lithuania	✓	✓	x	✓	✓	✓
Luxembourg	x	✓	✓	x	x	✓
Poland	✓	✓	✓	✓	✓	✓
Portugal	✓	✓	✓	✓	✓	✓
Slovenia	✓	✓	✓	✓	✓	✓
Sweden	✓	✓	✓	✓	✓	✓

Note: Agreement with statements is shown for both before March 2020 (i.e. before the pandemic) and after March 2020 (i.e. during the first pandemic year).
Source: Adapted from OECD (forthcoming[6]), *The COVID-19 Pandemic and the Future of Telemedicine*.

After the start of the pandemic, another significant policy change in many countries has been to allow other health workers besides doctors (e.g. nurses) to perform teleconsultations. At least five EU countries (Estonia, Germany, Hungary, Luxembourg and Portugal) and Iceland have expanded the range of health care workers that can perform teleconsultations (OECD, forthcoming[6]).

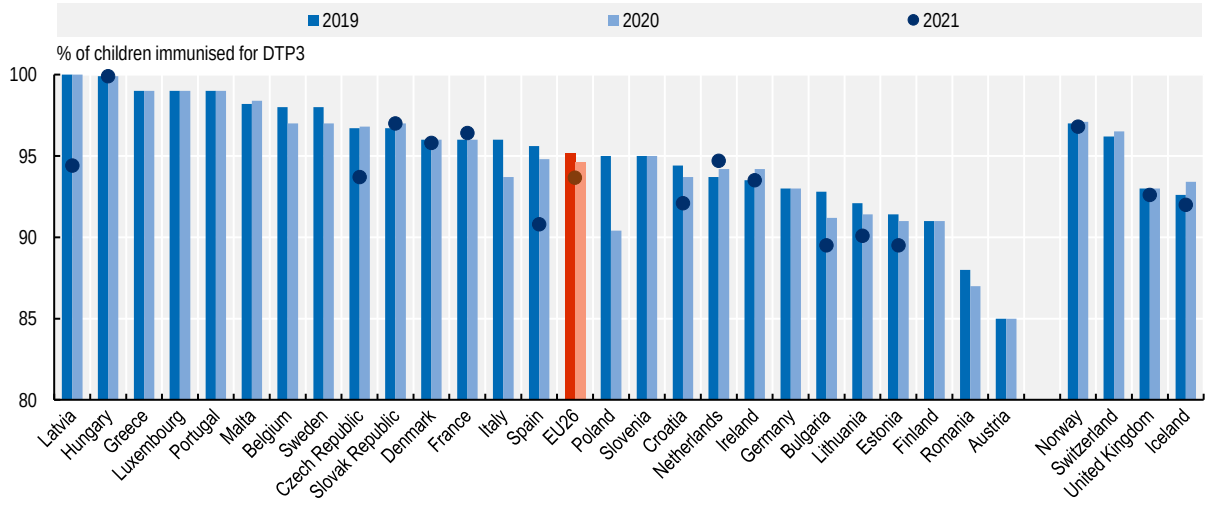
Available evaluations show that patients who used telemedicine services were overwhelmingly satisfied, and there was broad agreement on the value of remote care in maintaining access. However, physicians had more mixed views about the value and effectiveness of remote consultations and many expected to reduce or even stop providing such consultations after the pandemic (OECD, forthcoming[6]). The increased use of telemedicine has also uncovered certain limits of remote care and raised concerns that some teleconsultations constitute low value care. There is also concern that the rapid uptake of remote care during the pandemic may have exacerbated pre-pandemic inequalities in access to care. Access among older and poorer people, and people living in rural areas, remains of concern in some EU countries (OECD, forthcoming[6]). In some countries, some measures to ease telemedicine provision, for instance in reimbursements, were only temporary.

2.2.2. Most countries managed to maintain routine childhood vaccination programmes in 2020, but some countries experienced difficulties in 2021

For many years, all EU countries have had in place childhood vaccination programmes to reduce the spread of various infectious diseases, although the number and type of mandatory or recommended vaccines vary slightly across countries. Vaccination of children with three doses of the diphtheria-tetanus-pertussis vaccine (DTP3) is mandatory or recommended in all EU countries and is considered to be a robust indicator of the implementation of childhood immunisation programme. The vast majority of EU countries were able to maintain or increase the level of DTP3 immunisation among children in 2020 compared to 2019 (Figure 2.5). Two countries only – Italy and Poland – experienced a more pronounced disruption in DTP3 immunisation in 2020, with immunisation rates decreasing from 96% to 94% in Italy, and from 95% to 90% in Poland.

However, as the pandemic persisted, more countries struggled in 2021 to maintain the same high level of childhood immunisation. In over half of EU countries for which data are available, DTP3 immunisation rates dropped in 2021, with the most significant reductions in Latvia (6 percentage points reduction), Spain (4 percentage points reduction), and the Czech Republic (3 percentage points) (Figure 2.5).The reasons for the reduction in childhood vaccination in 2021 in these countries are not clear yet and may be related to temporary factors such as temporary inability to follow the childhood vaccination schedule due to COVID-19 infections, family quarantines or risky contacts. If that is the case, vaccination rates should return to pre-pandemic levels when acute phases of the pandemic are over.

Figure 2.5. Most EU countries experienced only minor disruptions to childhood immunisation rates in 2020, but some countries had difficulties maintaining high rates in 2021



Note: The rate for France in 2020 is an estimation.
Source: WHO Immunization Portal.

StatLink https://stat.link/cuomw3

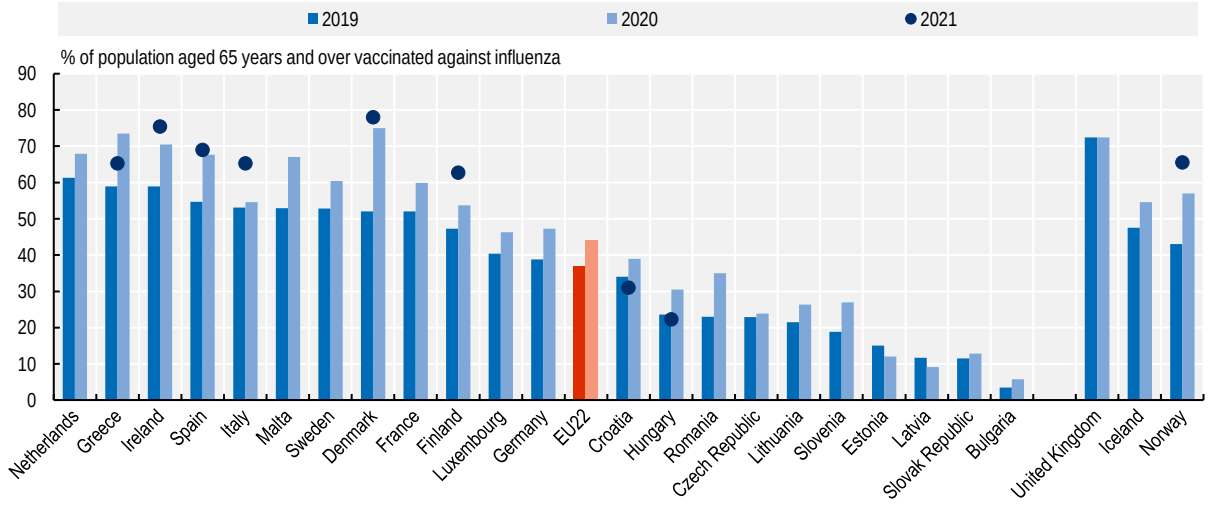
2.2.3. The pandemic has helped to increase vaccination uptake for influenza among senior people, but less so in countries that had below-average rates

One of the positive side-effects of the pandemic is that it has helped increase vaccination coverage against seasonal influenza (flu) among older people and other vulnerable groups. The overall aim of the flu vaccination campaigns in 2020 was to avoid having a flu epidemic on top of the COVID-19 pandemic. Across the 22 EU countries for which data are available, the share of older people vaccinated against flu rose from 37% in 2019 to 44% in 2020, but still varied greatly across countries (Figure 2.6).

Increased public confidence in the efficacy and safety of the flu vaccine contributed to greater vaccination coverage. The State of Vaccine Confidence in the EU 2020 survey showed that the share of respondents who strongly agreed that seasonal influenza vaccination was important rose by nearly 10 percentage points on average across EU countries between 2018 and 2020, and by over 10 percentage points for those who strongly agreed that seasonal influenza vaccination was safe. Overall, more than three-quarters (77%) of respondents considered that influenza vaccination was important and 80% that it was safe (Figueiredo et al., 2020[7]).

Countries that achieved the greatest progress in flu vaccination in 2020 were those that already had higher vaccination uptake before the pandemic. Denmark provides the most striking example: flu vaccination coverage among people aged over 65 increased by 23 percentage points in 2020 compared to 2019 to reach 75%. Greece, Ireland, Spain, Malta and Romania also managed to substantially increase flu vaccination rates among older people (by 12 to 15 percentage points). By contrast, the increase was more modest in countries that had below-average vaccination rates before the pandemic, thereby widening the gap across countries. In Estonia and Latvia, the proportion of older people vaccinated against influenza even decreased in 2020 compared to 2019 (Figure 2.6).

Figure 2.6. Senior influenza vaccination rates increased in nearly all countries in 2020, but the increase was more modest in countries that had low rates before the pandemic



Source: OECD Health Statistics 2022.

StatLink https://stat.link/m46jep

One of the factors that influence the take-up of flu vaccination is whether the vaccine is free of charge or whether people have to cover at least part of the cost. While most EU countries provide influenza vaccination free of charge for the target populations, people needed to pay at least part of the cost in seven countries before the pandemic (Austria, Belgium, Bulgaria, Estonia, Latvia, Poland and Slovenia) (Rechel, Richardson and McKee, 2018[8]). In most of these countries where co-payment is required, influenza vaccination rates were among the lowest in the EU before the pandemic and the positive effect of greater public confidence in vaccination in 2020 did not materialise.

In some countries, the number of available vaccines in stock limited flu vaccination coverage in autumn 2020. This is the because the purchase of influenza vaccine doses was made in pre- or early pandemic time, based on historical vaccination rates, hence some countries did not have enough doses.

2.2.4. Community pharmacists and nurses were called upon to perform new tasks during the pandemic

The roles of community pharmacists and nurses were expanded during the pandemic not only to address COVID-19 related needs like testing and vaccination, but also to respond to other non-COVID care needs (OECD, 2021[4]). In several countries, pharmacists were provided new or additional authorisations, including temporary or permanent permissions to renew or extend prescriptions (e.g. Austria, Ireland, Portugal, France, the Netherlands) and to order laboratory tests (e.g. certain areas in the Netherlands) (de Bienassis et al., 2022[9]). In many countries (e.g. Belgium, France, Germany, Ireland, Italy, Portugal), community pharmacists were also granted expanded roles in dispensing and administering seasonal flu vaccination, which contributed to increasing vaccination rates among older people and other target groups (PGEU, 2021[10]).

Several countries also expanded the role of community nurses, including in administering COVID-19 and flu vaccinations. Some countries took the opportunity to establish more firmly new advanced roles for nurses. For example, Italy formalised the role of "family and community nurses" in May 2020 as a new type of advanced practice nurse to strengthen home-based care and support the activity of new special units for continuity of care (*Unità Speciali di Continuità Assistenziale,* USCAs). The Italian Government allocated EUR 480 million to hire some 9 600 family and community nurses in 2021 (Government of Italy, 2020[11]).

The expanded roles of community pharmacists and nurses during the pandemic have helped counter the shortage of general practitioners in many countries or regions, and maintain care continuity.

2.3. Disruptions in mental health care

The pandemic has led to growing unmet needs for mental health care, as the needs for mental health services increased for both mild and more severe mental health issues while the supply of services remained limited and disrupted during the peak phases. The challenges with accessibility to mental health care are not new and previous OECD work found that a large proportion of people seeking mental health care reported difficulties obtaining it before the pandemic (OECD, 2021[12]). The pandemic has simply exacerbated these challenges.

The mental health of the population has been affected during the pandemic both by the fear of being infected and by the imposed confinement measures, social isolation and economic uncertainty, leading to increased prevalence of depression and anxiety in the population across all age groups. As the pandemic evolved, people's mental health fluctuated with the intensity of the infection surge and with the strictness of the confinement measures (see Chapter 1 for a discussion focusing in particular on mental health issues among adolescents and young adults).

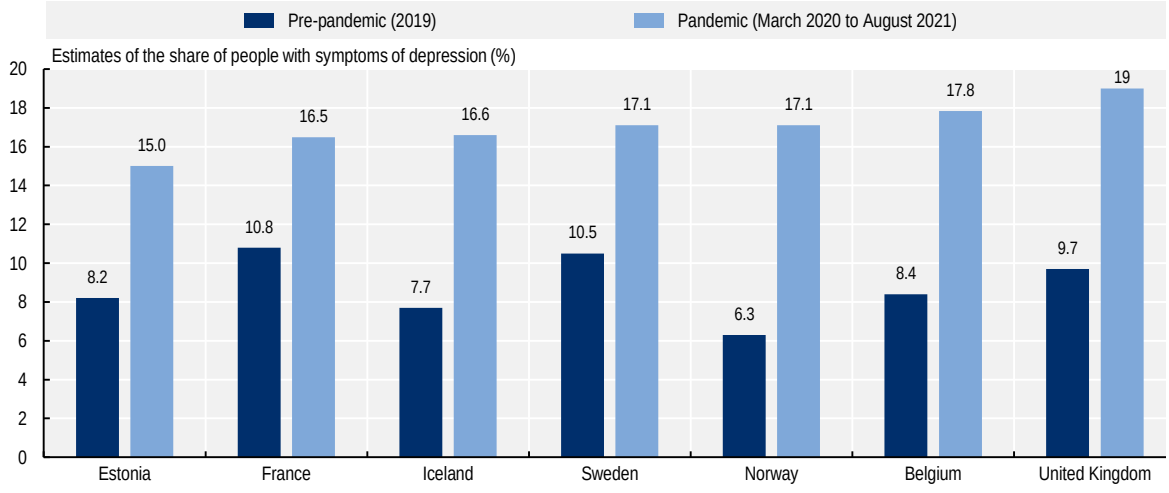
Mental health care services were disrupted at all levels, with hospitalisations decreasing and many in-person consultations cancelled or postponed, particularly during the early stages of the pandemic. Many countries swiftly moved to remote mental health care services to ensure care continuity, but disruptions were nonetheless significant.

Unmet needs for mental health care have been on the rise during the pandemic with 23% of adults reporting some unmet needs for mental care in the EU in spring 2022, up from 20% in spring 2021 (Eurofound, 2022[1]), albeit with wide variation across countries. In response, EU countries have taken actions to increase mental health support, such as developing new mental health information channels, increasing entitlement to mental health services, and providing more funding to support the availability and use of these services.

2.3.1. Population mental health worsened over the course of the pandemic

The pandemic has had an extraordinary impact on mental health across Europe. The direct and indirect impacts of the pandemic have heightened the risk factors for poor mental health and weakened many of the protective factors, leading to a significant worsening of population mental health (OECD, 2021[13]). While comparable data remains scarce, national estimates of the prevalence of depression show that prevalence of symptoms of depression during the pandemic was double the pre-pandemic levels in a number of European countries (Figure 2.7).

Figure 2.7. Symptoms of depression were double those of pre-pandemic levels in a number of European countries



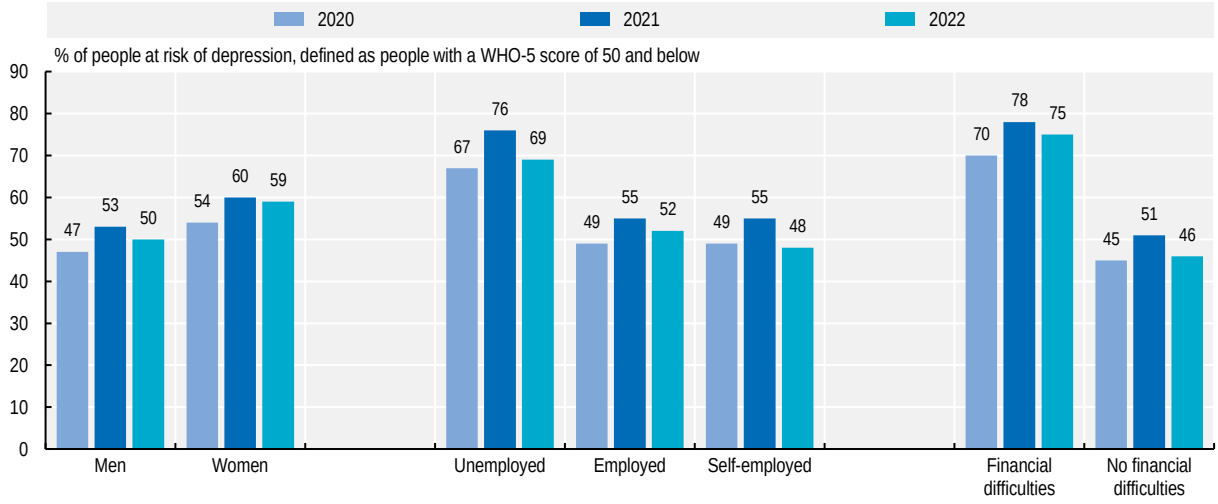
Note: Pandemic prevalence estimates are pooled averages from longitudinal or repeated national surveys up to August 2021. Cross-country comparability is limited due to the variation in number and timing of national surveys. Symptoms of depression are measured using PHQ-8 or PHQ-9, except for France and Estonia. Symptoms of depression in France during the pandemic are measured using HADS-D, leading to lower estimates compared to other countries. Some pre-pandemic and pandemic country data use different scoring methods, potentially underestimating the increase in symptoms. A full explanation of the survey methodology and scoring methods is contained in the Annex to Chapter 1.
Source: For 2019, Eurostat EHIS data (2021[14]) and Office for National Statistics (2022[15]) for the United Kingdom. For 2020/2021, Santé publique France (2022[16]) for France, Sciensano (2022[17]) for Belgium, Unnarsdóttir et al. (2021[18]) for Iceland, Norway and Sweden, and Office for National Statistics (2021[19]) for the United Kingdom.

StatLink https://stat.link/o96n13

Population mental health fluctuated with the intensity of the pandemic and with the measures to contain it. In European countries which conduct regular surveys on population mental health status such as Belgium and France, data show that the prevalence of depression has tended to be highest when COVID-19 infection and death rates were high and confinement measures were strictest (Sciensano, 2022[17]; Santé publique France, 2022[16]).

Inequalities in mental health and well-being have persisted – and in some cases widened – over the course of the pandemic. Data from Eurofound's *Living, working and COVID-19 e-survey* indicate that the risk of depression has generally been higher among young people (see Chapter 1), women, the unemployed and people facing financial difficulties (Figure 2.8).

Figure 2.8. The proportion of people at risk of depression during the pandemic was higher among women, the unemployed, and people facing financial difficulties



Source: Eurofound (2022[1]), *Living, working and COVID-19 e-survey*, http://eurofound.link/covid19data.

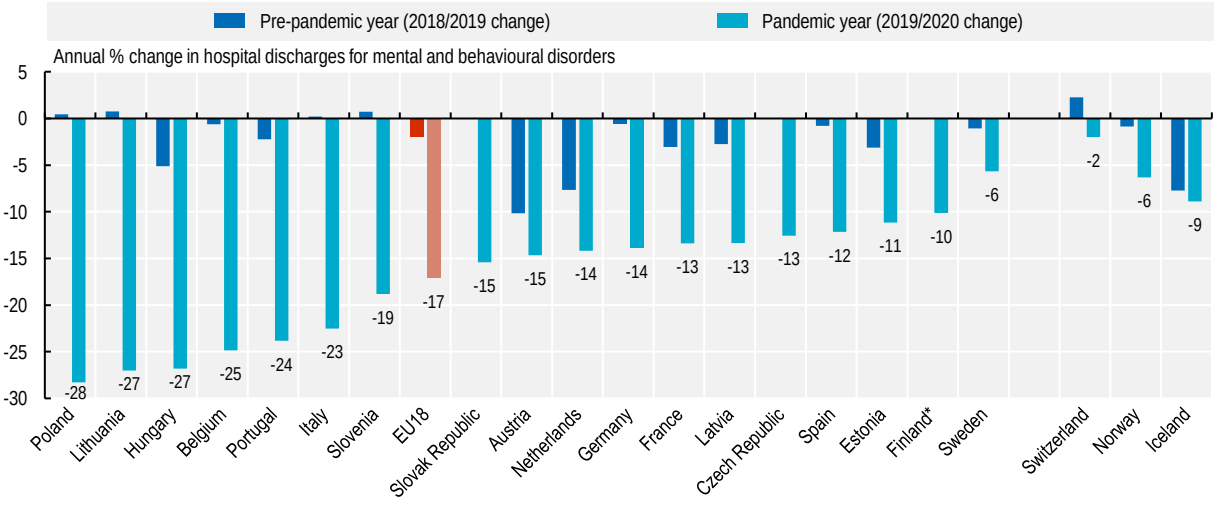
Growing mental distress led to an increase in the demand for mental health care in a number of countries. General practitioners in France reported more frequent requests for mental health care in the spring of 2020, along with a sharp increase in the use of antidepressants especially for first-time users (Bergeat et al., 2021[20]). Similarly in Finland, a 2020 survey indicated that higher psychological distress for some groups of population had transposed into higher use of mental health services (Finnish Institute for Health and Welfare, 2021[21]).

StatLink https://stat.link/jhbtsu

2.3.2. Mental health services were heavily disrupted, particularly at the beginning of the pandemic

Mental health services were disrupted during the pandemic, affecting service delivery in inpatient as well as outpatient settings. On average across EU countries, hospital admissions for mental and behavioural disorders fell by 17% in 2020 compared to pre-pandemic levels (Figure 2.9). In one-third of EU countries for which data are available, hospital stays for mental and behavioural disorders decreased by almost a quarter or more. Discharges for mental and behavioural disorders had already been decreasing in some countries prior to the pandemic due to efforts to de-institutionalise mental health care and shift service provision to the community, but the reduction in discharges in 2020 was much more pronounced than in preceding years.

Figure 2.9. Use of inpatient mental health services has been disrupted in most countries



Note: Data for the Netherlands include general and university hospitals only. * The pre-pandemic data for Finland relate to 2017/2018.
Source: OECD Health Statistics 2022.

StatLink https://stat.link/026ns9

The lower number of mental health-related inpatient stays created additional pressure on outpatient services as patients were kept away from hospitals. In normal times, decreasing mental health discharges may be seen as a favourable development if this is associated with greater community-based support and outpatient services. However, during the pandemic years, the large reduction in hospital stays was not compensated by greater community support, as reflected by high unmet mental health care needs and reductions in outpatient consultations. Based on a survey from the European Psychiatric Association (EPA), the number of patients treated by psychiatrists in outpatient settings halved in April 2020 compared to previous months (Rojnic Kuzman et al., 2021[22]). In the Netherlands, during the first wave of the pandemic, the number of referrals to mental health care fell by 25% to 80%, the demand for treatment dropped by 10% to 40%, and bed occupancy dropped by 9% (GGZ Nederland, 2020[23]).

Service disruptions appear to have eased following the first wave of the pandemic, to varying degrees and speed across countries. The WHO's second global pulse survey from early 2021 found that globally 47% of countries reported continued disruptions to mental health care services, down from 65% in the third quarter of 2020, and the third wave of this WHO survey in the last quarter of 2021 still noted continued disruptions to services for mental, neurological and substance use disorders (WHO, 2022[24]). Similarly, the second wave of the European Society for Child and Adolescent Psychiatry (ESCAP) survey of the heads of child and adolescent psychiatry in Europe (Revet et al., 2021[25]), conducted in February/March 2021, reported continued disruptions to mental health care services for children and adolescents, albeit to a lesser extent than during the first survey wave (see Chapter 1 on youth health).

2.3.3. The pandemic has accelerated the use of telemedicine in mental health care and spurred a flurry of new measures to improve mental health

Many countries swiftly moved to remote mental health care services (online and by telephone) to ensure care continuity. National psychiatric associations in Europe responded rapidly to the first COVID-19 wave and issued recommendations already in March 2020 to shift where possible towards remote psychiatric care (Rojnic Kuzman et al., 2021[22]). The use of telemedicine was not restricted to psychiatric care only but also involved psychotherapists. In mid-2020, worldwide, more than 80% of high-income countries reported to the WHO survey that they had used telemedicine and online therapy to replace in-person mental health consultations (WHO, 2020[26]).

The move towards higher use of remote consultations helped to maintain care continuity for those experiencing mental distress during the pandemic and holds real potential to increase accessibility. However, it may also represent a new barrier specifically for people with less means or competencies to access digital communication (Rojnic Kuzman et al., 2021[22]). Teleconsultations in mental health care also create new challenges, such as ensuring privacy, equity and efficiency of digital services.

Many EU countries have also taken other steps to increase mental health support. Most countries developed new mental health information and/or phone support lines giving tips on coping measures during the COVID-19 crisis, while many countries also scaled up prevention and promotion efforts and increased entitlement to mental health services and funding for these services (OECD, 2021[13]). For instance, Portugal set up a free phone line with 24-hour psychological support. France introduced free consultations with a psychologist or psychiatrist for university students. Ireland provided additional funding of EUR 50 million in 2021 to create new mental health services in response to the crisis and provide additional support for existing mental health needs (OECD, 2021[13]). Similarly, Latvia increased funding for mental health specialists and family doctors providing mental health support. In the Czech Republic, most statutory health insurance funds introduced partial reimbursement for psychotherapy opened to all their beneficiaries. In Lithuania, an action plan in response to COVID-19 was developed in 2020 to strengthen the provision of mental health care and mitigate potential negative consequences of the pandemic (Box 2.3).

Box 2.3. **Lithuania's COVID**-19 Mental Health Action Plan

The Action Plan to reduce the long-term negative consequences of the COVID-19 pandemic on mental health in Lithuania sets out a series of measures to expand and adapt existing services, introduce new services such as psychological community crisis teams, and increase the availability of mental health promotion services. The Plan contains a number of cross-sectoral measures to bolster the provision of mental health care across health, education and social services, around a number of key priorities, including: raising public awareness of mental health issues through communications; expanding access to support for those with mental ill-health, notably by increasing the number of psychologists and through the development of telehealth services; strengthening the competencies and support available to health professionals and specialists in mental health; supporting the population who suffered trauma or loss during the pandemic; strengthening mental health in schools and for older people; and bolstering the monitoring of public mental health.

Source: Wijker, Sillitti and Hewlett (2022[27]), "The provision of community-based mental health care in Lithuania", https://doi.org/10.1787/18de24d5-en.

The medium to long-term impacts of the pandemic on the need for mental health services remain to be seen. There are some indications that mental health and well-being improved in the first few months of 2022, but signs of poor mental health and well-being remain high, and the limited available national data show higher symptoms of depression and anxiety among adults than before the pandemic (Sciensano, 2022[17]; Santé publique France, 2022[16]). As pointed out in the 2022 State of the Union Address, providing appropriate, accessible and affordable support can make all the difference to the many EU citizens who feel anxious, depressed or mentally not well (European Commission, 2022[28]).

2.4. Disruptions in cancer care

The impact of COVID-19 on delays in cancer screening, diagnosis and treatment has been substantial in all EU countries, though to varying degrees. The timeliness of screening, early diagnosis, and adequate treatment is essential in fighting cancer, as stressed under the Europe's Beating Cancer Plan (European Commission, 2021[29]). The disruptions in cancer screenings and treatments in 2020 added another challenge for member countries in moving towards achieving the goals set by the plan (Box 2.4).

Box 2.4. Europe's Beating Cancer Plan

The Europe's Beating Cancer Plan, launched in February 2021, is structured around four key action areas with 10 flagship initiatives and multiple supporting actions:

1. **Prevention** through actions addressing key risk factors such as tobacco (with the aim to ensure that less than 5% of the population uses tobacco by 2040), harmful alcohol consumption, environmental pollution and hazardous substances, and to promote healthy diets and physical activity. To prevent cancers caused by infections, the Cancer Plan's objective is to vaccinate against HPV at least 90% of the EU target population of girls and to significantly increase the vaccination of boys by 2030.
2. **Early detection** of cancer by improving access, quality and diagnostics and support Member States ensuring that 90% of the EU population who qualify for breast, cervical and colorectal cancer screenings are offered screening by 2025.
3. **Diagnosis and treatment** through actions to ensure better integrated and comprehensive cancer care and addressing unequal access to quality care and medicines. By 2030, 90% of eligible patients should have access to National Comprehensive Cancer Centres linked through a new EU Network.
4. **Improving quality of life** of cancer patients and survivors, including rehabilitation, potential tumour recurrence, metastatic disease, and measures to support social integration and re-integration in the workplace.

Source: European Commission (2021[29]), Europe's Beating Cancer Plan, https://health.ec.europa.eu/system/files/2022-02/eu_cancer-plan_en_0.pdf.

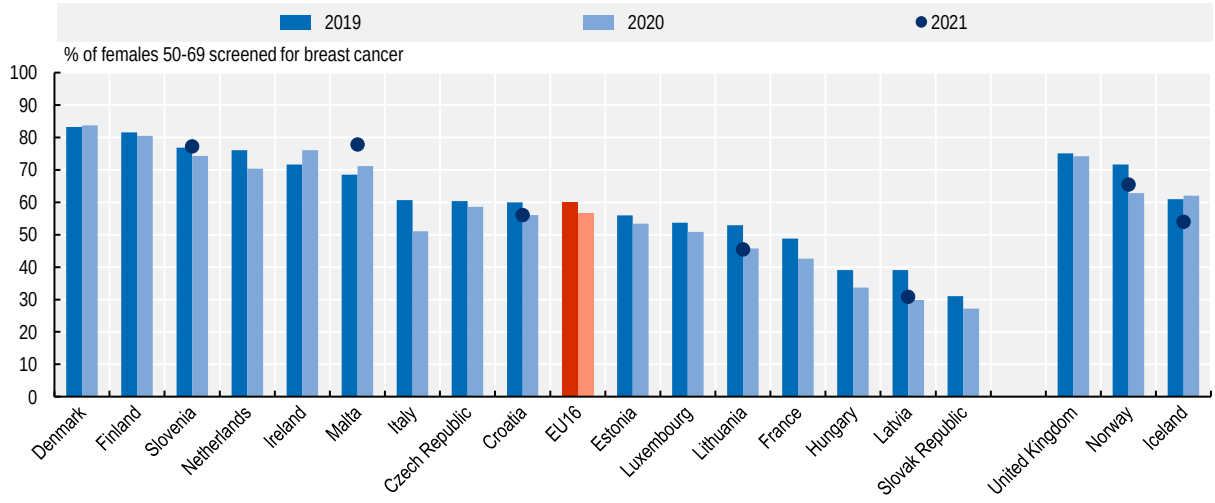
2.4.1. Disruptions in cancer screening programmes challenged early cancer detection, particularly during the first wave of the pandemic

Cancer screenings are crucial for early detection and timely start of treatment. Cancer screening programmes were stopped in 12 out of 15 EU countries in the initial phase of the pandemic, and many people were also hesitant to consult a doctor to avoid being infected. Fortunately, in most countries screening programmes were only suspended for a few weeks ((Webb et al., 2022[30])), and this was followed by increased uptakes during the rest of 2020 (Fujisawa, 2022[31]).

Breast cancer screening rates decreased in most EU countries in 2020, with an average reduction of 6% across 16 EU countries with available data (Figure 2.10). The reduction was generally greater in those countries that already had low rates before the pandemic. Denmark, Finland and Ireland are among the few countries that did not suspend their cancer screening programmes in 2020, and as a result did not experience significant drop in breast cancer screening. Indeed, Denmark and Ireland managed to increase at least slightly their breast cancer screening rates in 2020.

Data for 2021 are only available for a few countries and show a mixed picture: in some countries (Latvia, Lithuania and Croatia), breast cancer screening rates remained at the same level as in 2020 and lower than before the pandemic, while in Slovenia they returned to their pre-pandemic level. In Malta, screening rates continued to increase above the pre-pandemic level to reach nearly 80% in 2021.

Figure 2.10. Breast cancer screening rates dropped in most countries in 2020, but more in countries that had lower pre-pandemic screening rates

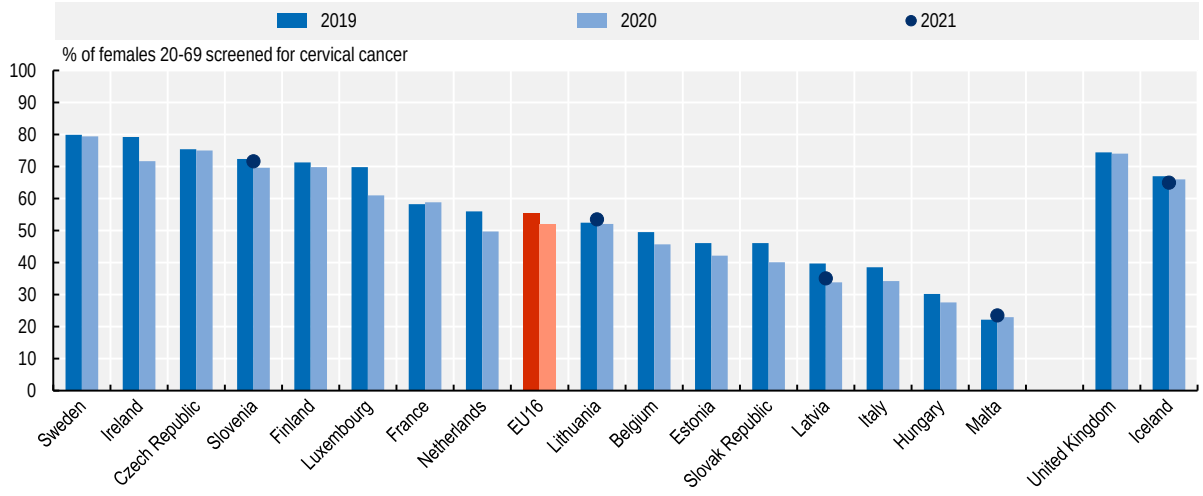


Note: The data generally refer to women aged 50-69 who have received a mammography screening over the past two years, although the specific age groups and frequency may vary across national programmes. Data for Denmark refer to 2018 instead of 2019.
Source: OECD Health Statistics 2022.

StatLink https://stat.link/5e0arb

Cervical cancer screening also went down in most EU countries in 2020, with an average reduction of 6% compared to 2019. Some countries such as Italy, Latvia, Luxembourg, the Netherlands and the Slovak Republic saw a reduction of over 10% in cervical cancer screenings in 2020 (Figure 2.11).

Figure 2.11. Cervical cancer screening rates decreased in most countries in 2020



Note: The data generally refer to women aged 20-69 who have been screened for cervical cancer over the past three years, although the specific age groups and frequency may vary across national programmes.
Source: OECD Health Statistics 2022.

StatLink https://stat.link/cr0ja5

The sharp reduction in cancer screening in many countries during the first half of 2020 was partly offset by a quick recovery in the later months of 2020. This signals the high policy priority given to cancer screenings in many countries. It also reflects the ability of providers to scale up screening activities to catch up with missed screenings during the first part of 2020. Some countries (e.g. the Netherlands) developed alternatives to office-based screening to reduce people's hesitancy by sending out self-sampling devices for cervical cancer screening that were previously found effective (Fujisawa, 2022[31]).

Nonetheless, the number of undiagnosed cancers during the first half of 2020 was substantial and has or will result in a greater number of people diagnosed at a later stage. Austria experienced a strong decline in newly diagnosed gynaecological tumours following the 2020 spring lockdown. The tumours not detected were those in early stages with the best potential clinical treatment outcome. Indeed, the share of newly diagnosed patients with more advanced tumours increased from less than half to two-thirds in mid-2020 (Tsibulak et al., 2020[32]).

In Italy also, the three national screening programmes were delayed in the period of January-May 2020 by over 2 ½ months, resulting in undiagnosed lesions estimated at 2 201 for breast cancers, 645 for colorectal carcinomas, 3 890 for advanced colorectal adenomas, and 1 497 for CIN2 or more serious lesions (Mantellini et al., 2020[33]). While all three screening programmes reduced their activities by more than 50% during the first wave of the pandemic, the overall reduction in breast cancer screening in 2020 was 16% (Figure 2.10) and 11% for cervical cancer screening (Figure 2.11). This shows that Italy was partly able to catch up with its screening backlogs in the second half of 2020, as observed in many other countries.

Similarly in Croatia, an 11% decrease in breast cancer screening in the first pandemic period (Vrdoljak et al., 2021[34]) was partly caught-up in the remaining of the year, resulting in a total decrease in breast cancer screenings by 6.7% in 2020 compared to 2019 (Figure 2.10). Newly detected cases in 2020 were 6% lower than in the previous three years, indicating that some of the foregone screenings may result in later diagnosis and less favourable treatment outcomes (Vrdoljak et al., 2021[34]).

Slovenia also paused cancer screenings in spring 2020, but resumed them in mid-May 2020 and expected that most cancer screening programmes would meet the usual targets by end of 2020 (Webb et al., 2022[30]). National authorities decided not to halt cancer screening programmes again during the second wave of the pandemic, a decision that was made possible due to better preparedness and availability of personal protective equipment (PPE) at that time (Ivanuš et al., 2021[35]). In the end, Slovenia registered only a slight reduction in breast cancer screening (-3%) and cervical cancer screening (-4%) in 2020 compared to 2019.

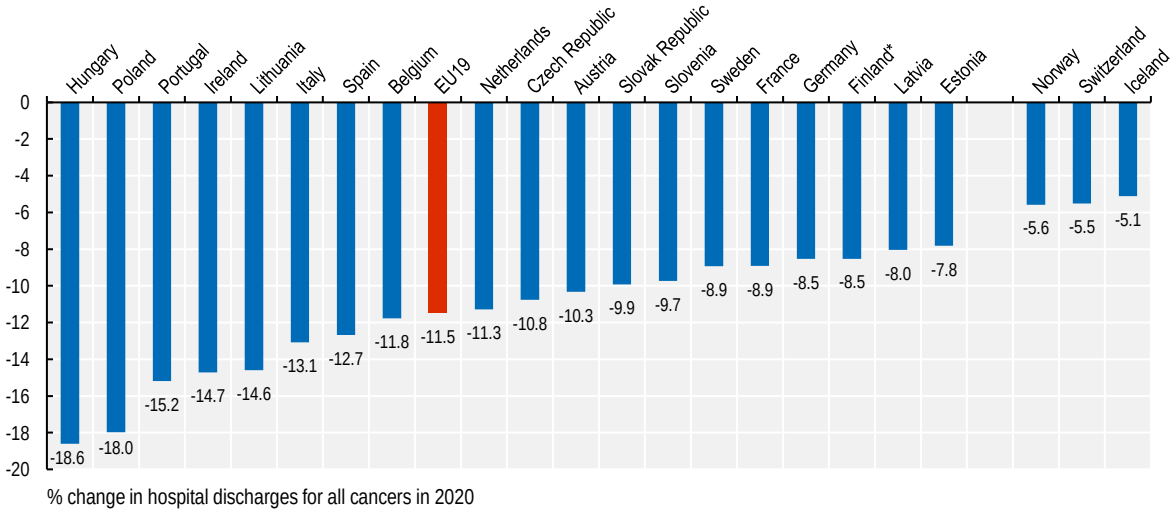
Ireland reports having screened the same number of women for cervical cancer in 2020 and 2021 as in any previous two-year period, with a 13% increase in screenings in 2021 making up for the screening decreases in 2020 (Population Health Screening Unit, 2022[36]).

2.4.2. Cancer care in hospital declined in 2020, raising concerns about timely treatment

Delayed cancer diagnoses and treatments come at high costs, both for patients and for health systems. Delaying surgical treatment for common cancers increases the risk of death by about 7%, while delaying chemotherapy or radiotherapy by four weeks increases the risk of death by up to 13% (Hanna et al., 2020[37]).

"Missing patients" for cancer care, as reflected by both lower number of hospital stays and fewer number of cancer-related operations, are in most cases related to fewer new patients entering the cancer patient pathway because of delayed diagnoses. The number of hospital stays for cancer care dropped in all EU countries for which 2020 data are available (Figure 2.12). On average, it decreased by 11.5% in 2020 compared to 2019.

Figure 2.12. Hospital discharges for all cancers dropped in 2020 compared to 2019

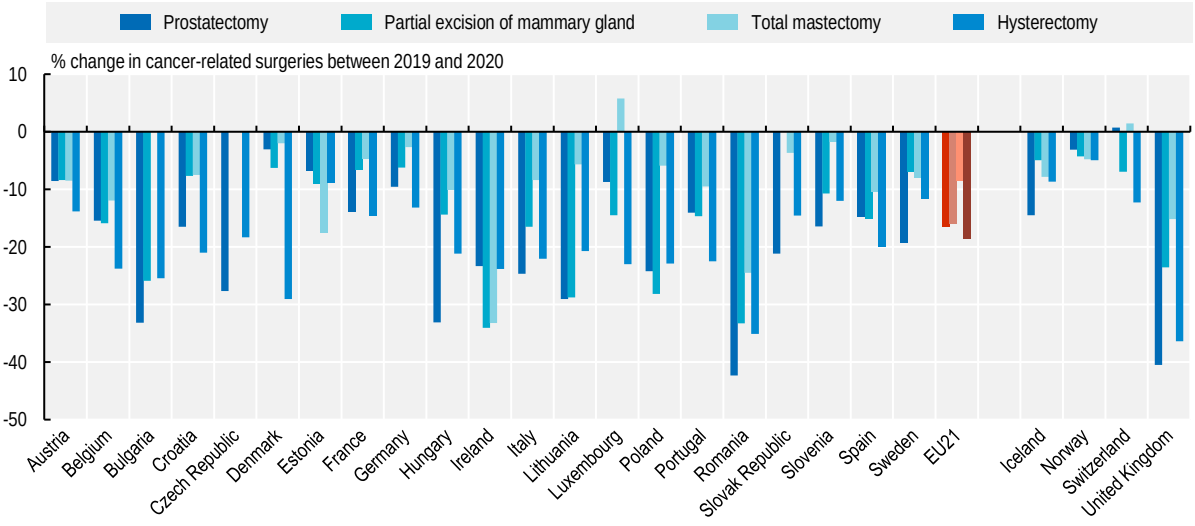


Note: For Ireland, data pertain only to publicly-funded hospitals; public patients treated in private hospitals are not included, which overestimates the decrease showed here. * 2018 data were used for 2019 for Finland.
Source: OECD Health Statistics 2022.

StatLink https://stat.link/s9u12a

The number of cancer-related operations also decreased substantially across EU countries in 2020, though to varying extent. Depending on the operation, it fell by 10% to 20% on average (Figure 2.13).

Figure 2.13. Cancer-related surgery dropped significantly in 2020 compared to 2019



Note: Countries are ranked by alphabetical order. For Ireland, data pertain only to publicly-funded hospitals; public patients treated in private hospitals are not included, which overestimates the decrease showed here.
Source: OECD Health Statistics 2022.

StatLink https://stat.link/mkdynf

The disruption in early diagnosis has created a backlog of patients that will eventually seek cancer care but often for cancer detected at a later stage requiring more complex treatment and with lower survival probabilities. Such a backlog of patients has been already reported in several EU countries, including Belgium (Peacock et al., 2021[38]), France (Bardet et al., 2021[39]), Spain (de la Portilla de Juan, Reyes Díaz and Ramallo Solía, 2021[40]), as well as in the United Kingdom (Wilkinson, 2021[41]). Strategies to prevent an accumulation of delayed cancer patients require minimising any disruptions in early diagnoses.

Promoting the primary prevention of cancer through vaccination and other means can also help reduce the incidence of some cancer in future years (Box 2.5).

Box 2.5. Most EU countries avoided any reduction in HPV vaccination during the pandemic

Human papillomavirus (HPV) vaccination is an effective means of cervical cancer prevention. Nearly all EU countries were able to maintain or even increase HPV vaccination coverage in 2020, with some countries achieving substantial progress (e.g. the Netherlands, Latvia, Ireland and Denmark increased by over 10% the vaccination rate of girls aged 15). The only exception was Italy which saw a drop of nearly half in its HPV vaccination rate in 2020 (European Commission, 2022[42]).

Nonetheless, many countries still have a long way to go to meet the Europe's Beating Cancer Plan's objective of vaccinating at least 90% of the EU target population of girls against HPV and to significantly increase the vaccination of boys by 2030.

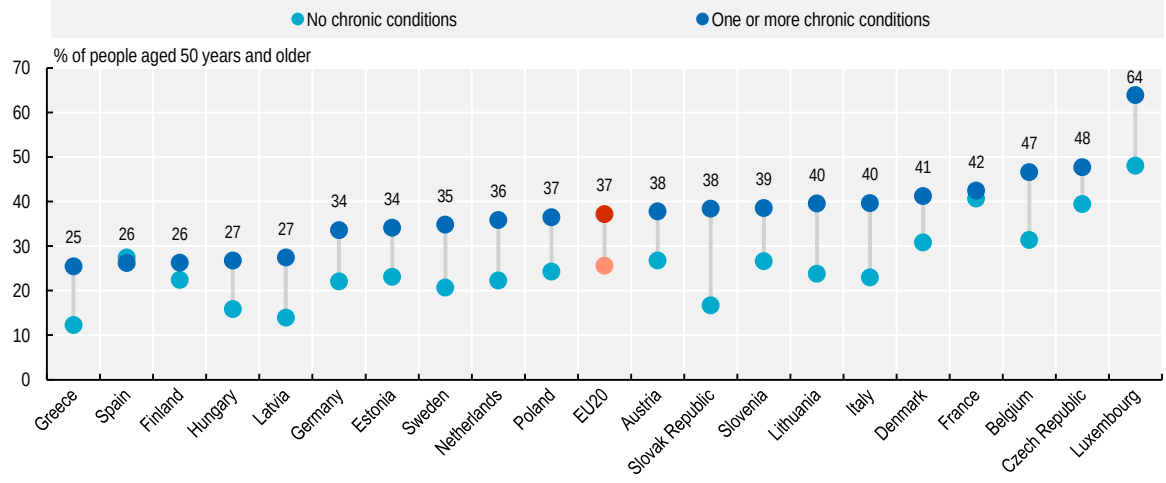
2.5. Disruptions in chronic care

People with chronic conditions faced a "double threat" during the pandemic: they were more vulnerable to complications and death from COVID-19, while they also experienced disruptions in care continuity during confinement periods and reported greater unmet needs. However, teleconsultations picked up rapidly in many countries and helped to at least partly ensure care continuity.

2.5.1. People with chronic conditions have been particularly impacted by disruption of services

Many health systems faced challenges in maintaining care for people with chronic conditions during acute phases of the pandemic. The Survey of Health, Ageing and Retirement in Europe (SHARE) found that people aged over 50 with a chronic condition were, on average, 40% more likely to report forgoing or postponing medical care during the first few months of the pandemic than those without a chronic condition (Börsch-Supan, 2022[43]). In Luxembourg, the Czech Republic, Belgium, France and Denmark, over 40% of people with a chronic condition reported that some care was cancelled by them or postponed by the health provider. On average, 37% of people with a chronic health condition had some care cancelled or postponed compared with 26% among those without a chronic condition (Figure 2.14).

Figure 2.14. People with chronic conditions were 40% more likely to have forgone or postponed care during the first months of the pandemic than those without chronic conditions

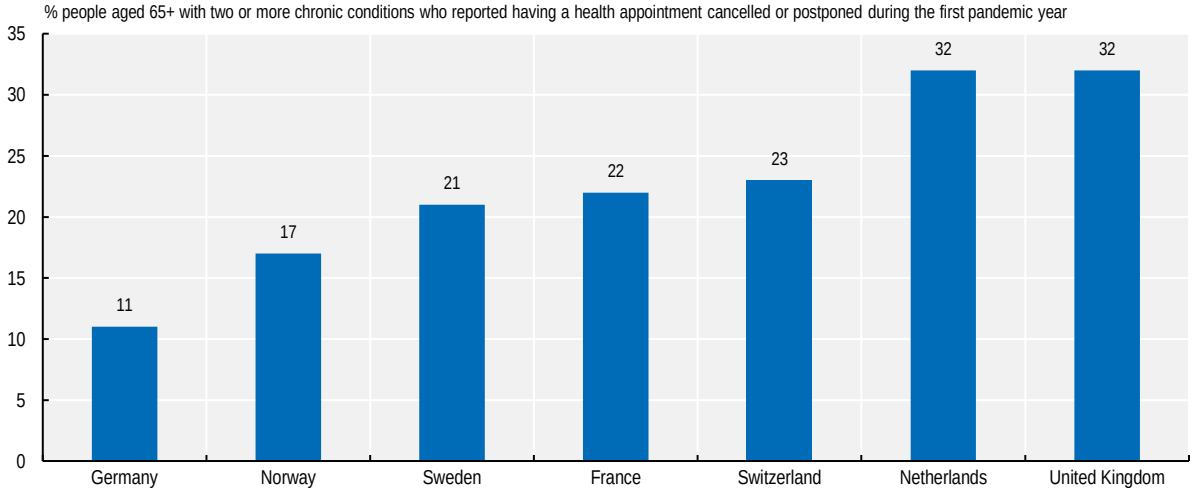


Note: Chronic conditions include AMI/heart failure, high blood pressure or hypertension, high cholesterol, stroke or vascular disease, diabetes or high blood sugar, chronic lung disease, Parkinson's disease, Alzheimer's disease, dementia, or other serious memory problems, rheumatoid arthritis, osteoarthritis or other rheumatism, or chronic kidney disease. Data collected between June and August 2020.
Source: Börsch-Supan (2022[43]), Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 8 COVID-19 Survey 1, https://doi.org/10.6103/SHARE.w8ca.800.

StatLink https://stat.link/y8vosk

The 2021 International Health Policy survey from the Commonwealth Fund found that over one in five people aged over 65 with two or more chronic conditions reported having missed or delayed care in 2020-21 in the group of seven countries surveyed in Europe (Williams II et al., 2021[44]). The share ranged from slightly over one in ten people in Germany to almost one in three people in the Netherlands and the United Kingdom (Figure 2.15).

Figure 2.15. In several countries, over one-in-five older people with chronic conditions had missed or delayed care due to the pandemic



Note: Data are based on responses to the following question: "In the past 12 months, did any appointment you had with a doctor or other health care professional get cancelled or postponed because of the coronavirus? Please think about all health care-related appointments including regular check-ups and routine screening tests." The data was collected in the second quarter of 2021.
Source: Williams II et al. 2021 (2021[44]), Commonwealth Fund International Health Policy Survey, https://doi.org/10.26099/mqsp-1695.

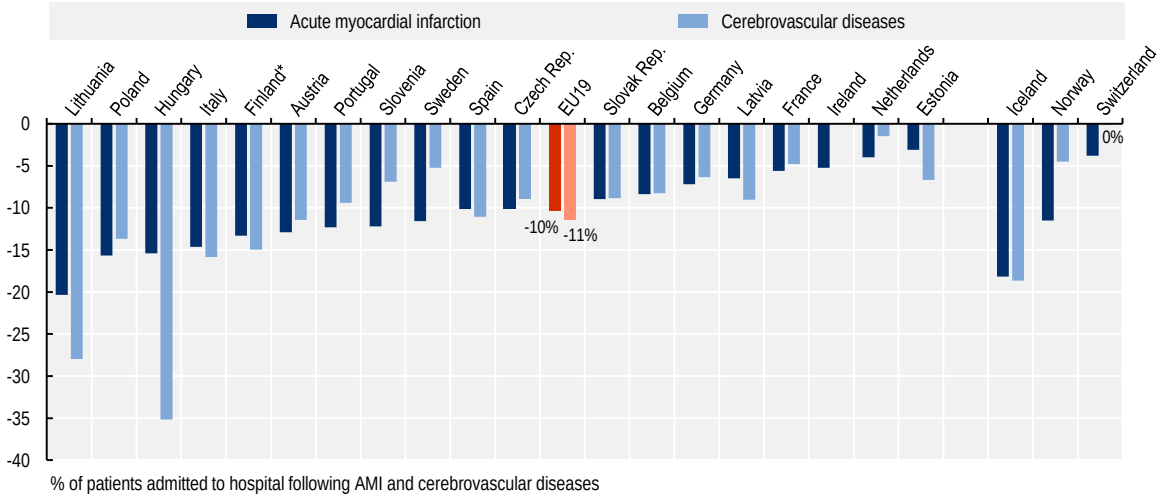
StatLink https://stat.link/dolm1y

People with chronic conditions are at high risk of complications if their conditions are not well managed. Rates of diabetes-related complications have increased in several countries during the pandemic due to reduced access to care. In the United Kingdom (England), only one in three people with diabetes received all their recommended checks in 2020-21 (The Guardian, 2022[45]). While rates of health checks among diabetic patients in the United Kingdom increased in the second half of 2020, they remained lower than before the pandemic at the end of the year (Carr et al., 2022[46]). In the Netherlands and Italy, studies on diabetic patients admitted to hospitals show a significant increase in the number of amputations in 2020 compared to 2019, likely due to delayed care for diabetic patients (Schuivens et al., 2020[47]; Caruso et al., 2020[48]). In the Italian study, the risk of amputation in 2020 was more than threefold than for diabetic patients admitted to a hospital in 2019 (Caruso et al., 2020[48]).

2.5.2. Timely access to acute care was not always assured

People with chronic conditions such as diabetes, high blood pressure and high cholesterol level have higher risk of cardiac events and cerebrovascular accidents. Growing evidence suggests that timely acute care was not always available during the pandemic for acute complications of these conditions. A lower number of patients was admitted to hospital following acute myocardial infarction (AMI) in all EU countries with available data in 2020. Lithuania and Hungary had large decreases in admissions for both AMI and cerebrovascular diseases (Figure 2.16).

Figure 2.16. The number of patients admitted to hospital following AMI and cerebrovascular diseases dropped in all countries in 2020 compared to 2019



Note: In Ireland, the data gap for cerebrovascular diseases is due to a break in the time series in 2020 caused by coding changes, preventing any direct comparison of 2020 data with data from earlier years. * In Finland, the pre-pandemic data relate to 2018.
Source: OECD Health Statistics 2022.

StatLink https://stat.link/jnzcqd

At the beginning of the pandemic, the severity of conditions among patients who were admitted to hospitals for AMI and cerebrovascular diseases was higher than before the pandemic. This was partly due to hesitancy in seeking health care and postponing regular checks because of fear of contracting COVID-19, but also due to delays in timely acute care due to disruptions in ambulance and emergency care. In Italy, the severity of myocardial infarction increased between February and April 2020, leading to worse prognosis for cardiac patients (Tomasoni et al., 2020[49]). Mortality rates following patient admissions to hospital for acute cardiac event increased in several countries in 2020 (e.g. Austria, Lithuania, Poland and Portugal), confirming that timely cardiac care was adversely affected during the pandemic (see indicator “Mortality following acute myocardial infarction” in Chapter 6).

2.5.3. Several EU countries took actions to improve care continuity for people with chronic conditions

To ensure continuity of care for people with chronic diseases, many European countries transitioned rapidly to remote care and monitoring. In parts of the United Kingdom, there was a rapid expansion of remote monitoring programmes to keep track of people with chronic conditions in their own home. Patients were asked to capture relevant clinical data according to an agreed management plan and to upload it on a web-based remote monitoring platform. The data allowed health professionals to spot trends in a patient’s condition and identify signs of deterioration before they require hospital admission. Over 725 patients with heart failure and COPD were supported between April 2020 and May 2021, and the programme evaluation shows that 288 hospital bed days were saved between January and April 2021 (NHS, 2021[50]).

While the widespread use of telehealth during the pandemic has been remarkable, more evidence is needed about the cost-effectiveness of telehealth in improving outcomes for people with chronic diseases (Bitar and Alismail, 2021[51]). A number of barriers to telehealth still exists, including equal access to technology and new digital tools, and appropriate digital health skills and literacy (Hinchman et al., 2020[52]).

Several countries expanded the roles of community nurses and pharmacists to ensure care continuity during the pandemic, as already noted. In some regions of Spain, community nurses, acting as case managers, have worked in close collaboration with geriatricians, family doctors, and other nurses to ensure continuity of care for fragile chronic patients (WHO, 2021[53]). Many countries also expanded the role of community pharmacists to maintain continuity of care for patients with chronic care needs. In Austria, France, Ireland and Portugal, community pharmacists have been allowed to extend prescriptions and prescribe medications for people with chronic diseases.

In Ireland, a Practitioner Chronic Disease Management Programme started in January 2020 and during the first year and a half of the pandemic managed to enrol 75% of eligible patients aged over 65. Patients with specific chronic health conditions are reviewed by a practice nurse and a GP twice a year (Health Service Executive, 2022[54]).

Many countries (e.g. Finland, Slovenia, Spain and the United Kingdom) have scaled up data sharing between primary health care and outpatient specialists and hospitals to enhance the capacity of primary care providers to achieve care co-ordination for people with chronic care needs.

2.5.4. Long COVID adds to the list of patients with continuous and often complex health care needs

The so-called "long COVID" (also known as "post COVID-19 condition") has emerged as a new long-lasting condition that will require better diagnosis and treatment in the coming years. There is not yet one commonly accepted definition of long COVID. According to the National Institute for Health and Care Excellence (NICE) in the United Kingdom, the term "long COVID" generally refers to patients who have signs and symptoms that develop during or after a COVID-19 infection, continue for more than 4 weeks (one month) and cannot be explained by an alternative diagnosis (NICE, (2022[55])). Long COVID can manifest itself in a wide range of symptoms, such as fatigue, brain fog, cardiovascular, neurological and cognitive problems, which can also affect people's mental health (Matsumoto et al., 2022[56]; Tabacof et al., 2022[57]).

Preliminary estimates indicate that at least 10% of people infected with COVID-19 experience some long COVID symptoms that last for more than one month (Expert Panel on effective ways of investing in health, 2022[58]), which means that long COVID has affected and possibly continues to affect over 25 million people across EU countries.

Long COVID impacts not only people's health and well-being, but also their employment and social activities. In Belgium, 60% of long COVID patients who responded to a survey in 2021 stated that they had limitations to work and 38% of them had not returned to work (Castanares-Zapatero et al., 2021[59]).

Some, but not all EU countries have established a long COVID patient pathway with dedicated treatments. Because the research on this new health condition is still ongoing, clinical guidelines are generally subject to continuous adjustments. Portugal, Austria, and Latvia have developed national clinical algorithms, patient pathways, and treatment recommendations for suspected and confirmed long COVID patients. In Germany, general practitioners work together with a network of specialists for less severe long COVID cases, while dedicated interdisciplinary outpatient clinics have been established for more severe and complex cases. Treating long COVID patients generally requires care co-ordination between primary care providers and specialists. It will add further challenges on health care systems in the coming years.

2.6. Disruptions in elective care and surgery

Most EU countries suspended elective (non-urgent) care during the pandemic to divert efforts towards COVID-19 patients and avoid people being infected while seeking care. In many countries, the suspension of elective care during the first wave of the pandemic in spring 2020 lasted 4 to 8 weeks (Webb et al., 2022[30]). While services resumed afterwards, the reopening was often gradual, and some activities were again suspended in subsequent waves of the pandemic later in 2020 and 2021.

Across the 23 EU countries for which data are available, nearly 2 million fewer elective surgical procedures were performed in 2020 compared with 2019 (equivalent to a 16.5% reduction across 15 procedures). The disruption also affected diagnostic activities, with over 5 million fewer MRI and CT diagnostic exams in 2020 compared with 2019 (a 6.8% reduction). The suspension of elective surgery and diagnostics generated backlogs, leading to longer waiting times and waiting lists.

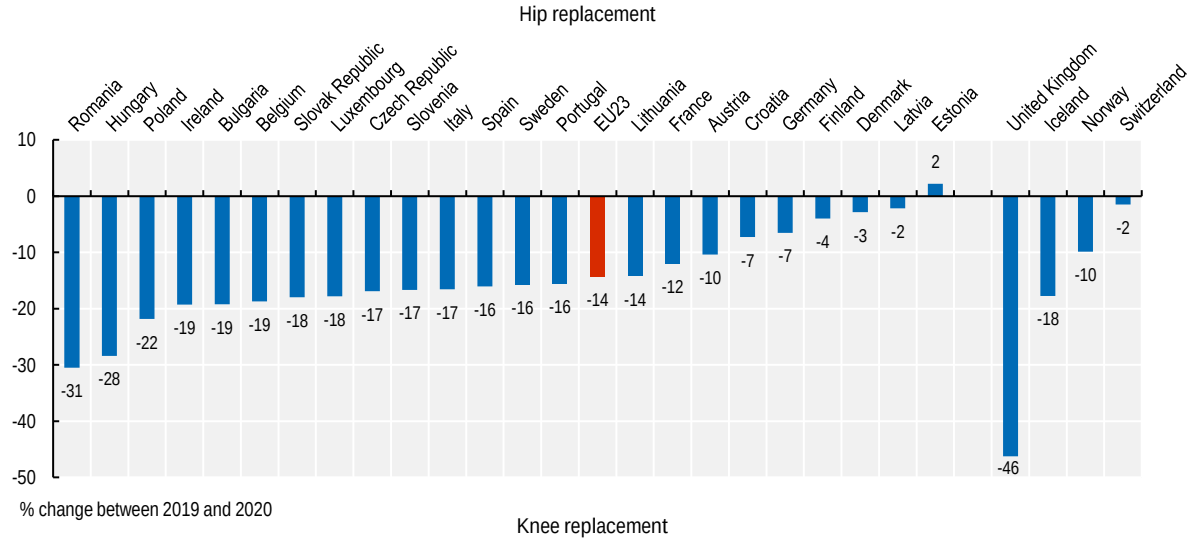
2.6.1. Reductions in the volume of surgical activities in 2020 resulted in a marked increase in the number of people on waiting lists in many countries

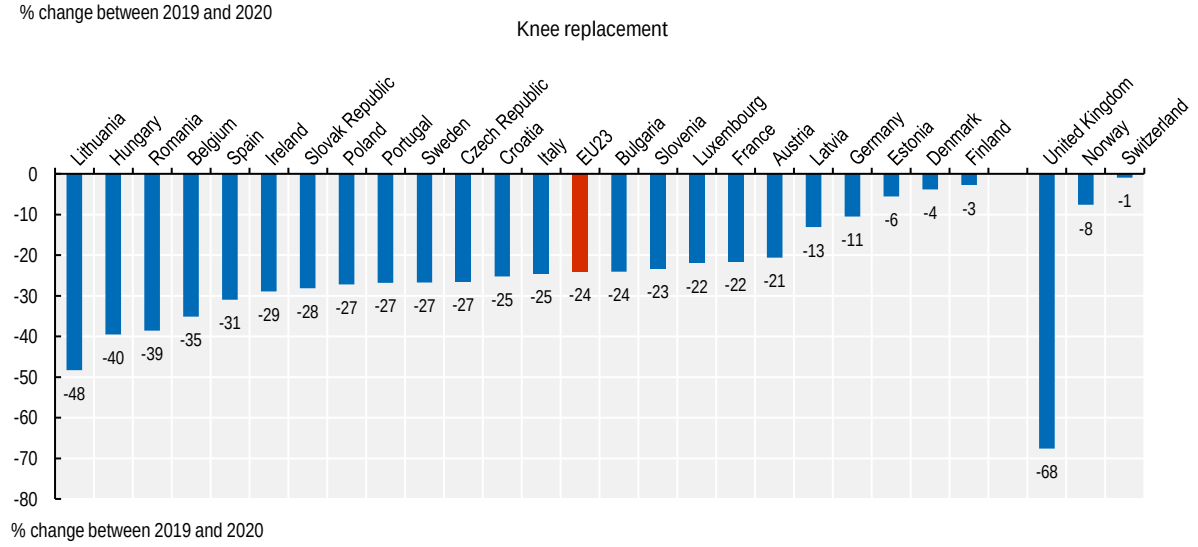
The number of hip replacements fell on average by 14% in 2020 compared with 2019 across the 23 EU countries with available data, but there was wide variation across countries (Figure 2.17). While there was no or very little reduction in Denmark, Estonia, Finland and Latvia, the volume of hip replacements fell by over 20% in 2020 in Poland, Hungary and Romania. Outside the EU, the reduction in hip replacements in the United Kingdom was very large (46% reduction), but negligible in Switzerland.

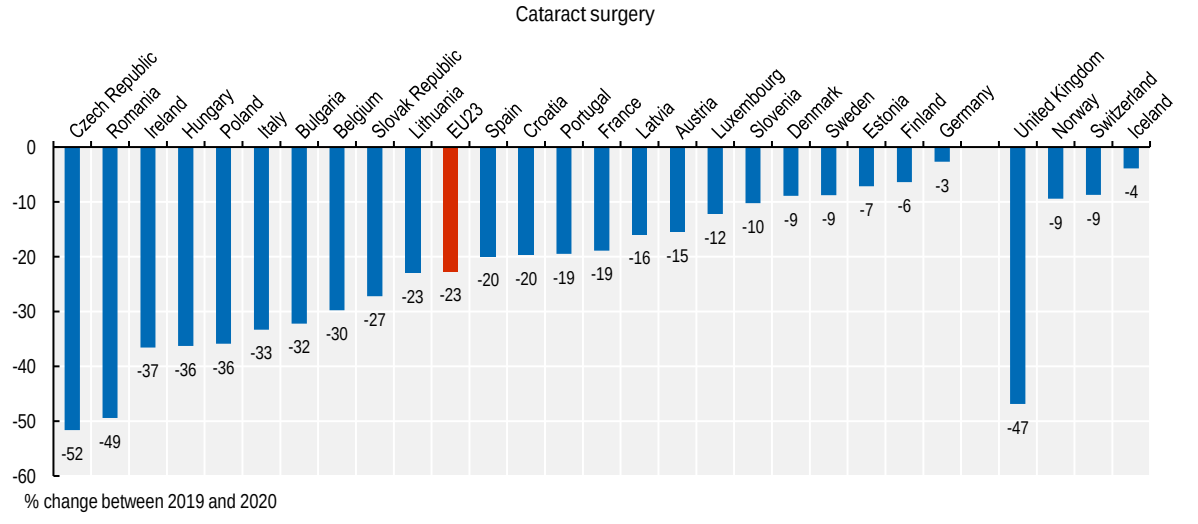
The reduction in knee replacements and cataract operations was even larger in most countries, falling by 24% and 23% respectively (Figure 2.17). At least five EU countries as well as the United Kingdom experienced a drop of at least 30% in the number of knee replacements and cataract operations in 2020. By contrast, the reductions in Denmark, Estonia, Finland, Germany and Switzerland were much smaller, therefore generating less of a backlog.

The reduction in surgical activities in 2020 was influenced by the duration of the suspension of elective surgery and how quickly hospitals were able to resume their activities once the suspension was lifted.

Figure 2.17. The number of hip and knee replacements and cataract surgery fell sharply in 2020







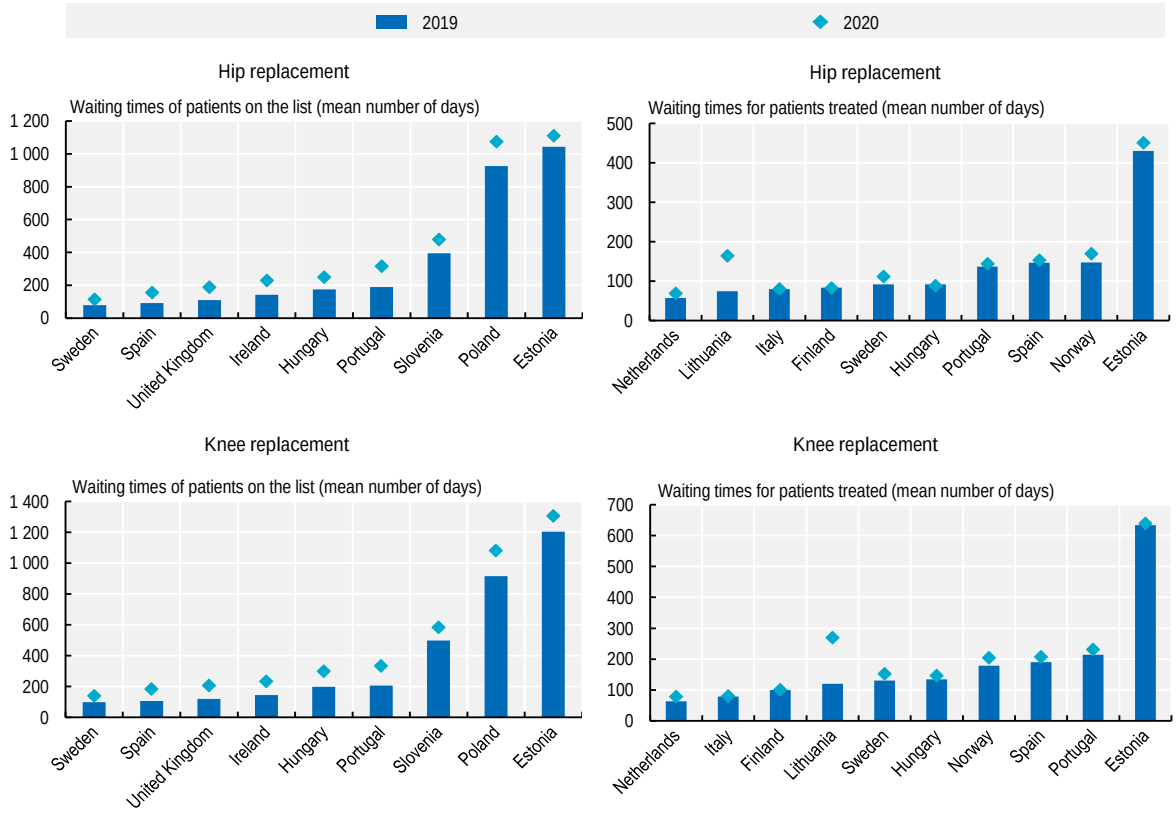
Note: The EU average is unweighted. For Ireland, data pertain only to publicly-funded hospitals; public patients treated in private hospitals are not included, which overestimates the decrease showed here. Iceland does not provide any data on knee replacement.
Source: OECD Health Statistics 2022.

StatLink https://stat.link/0d713o

The reductions in the volume of surgical activities in 2020 resulted in a marked increase in waiting times in several European countries. This was particularly the case for people who remained on the waiting lists, while the increase was less marked for those people who managed to get treatment in 2020. This can be explained by the fact that while the supply of elective surgery fell during the pandemic, the demand also fell as fewer patients were added to waiting lists, and many patients on the lists did not undergo surgery because of the fear of COVID-19 infection. As a result, the waiting times for patients on the lists increased, but those who were treated in 2020 often did not experience longer waiting times than before the pandemic.

While Estonia had the highest waiting times for patients on the list for hip and knee replacement, Poland and Portugal had the largest increases in 2020 (Figure 2.18). When looking at patients who were treated, the increase in waiting times for hip and knee replacements was much smaller or almost nil in Finland and Italy, but it more than doubled in Lithuania.

Figure 2.18. Waiting times for people on waiting lists for hip and knee replacements increased greatly in 2020



Note: For Norway, waiting times are over-estimated as they start from the moment a doctor refers a patient for specialist assessment up to treatment (while in other countries they only start when a specialist has assessed the patient and decided to add the person on the treatment waiting list).
Source: OECD Health Statistics 2022.

StatLink https://stat.link/8ywf7k

Clearing the elective surgery backlog created during the pandemic will depend mainly on how quickly countries are able first to catch-up to the pre-pandemic level of surgical activities and then to go beyond the pre-pandemic level to offset the reduction during the pandemic (Box 2.6).

Box 2.6. How long might it take to clear the backlogs in elective surgery?

The reduction in surgical activity rates described above can provide a first rough idea of the time that countries might need to recover from the cumulated backlog. Let's assume that the volume of hip replacement in a given country fell by 15% in 2020 (which is close to the EU average reduction). If the volume goes back to the pre-pandemic level in the following year (as has been the case in 2021 in Portugal – Figure 2.19), 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 replacement remains the same over time (i.e. if the "missing patients" who were expected to be treated during the pandemic continue to seek treatment and if the same number of new patients continue to be added to waiting lists as before the pandemic). 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 pandemic years would require a 5% increase over four consecutive years.

In the United Kingdom where the drop in elective surgery in 2020 was much more pronounced than in all EU countries for which data are available, the National Audit Office estimated at the end of December 2021 that the backlog of people on the waiting lists for elective and cancer care in England would continue to be much greater than before the pandemic up to at least March 2025, but the increase would be less if the supply of elective care was greater than initially planned and if only half of "missing patients" returned to get care (National Audit Office, 2021[60]). The Institute of Fiscal Studies reported that under a "middle" scenario where only half of patients returned, the waiting list for pre-planned NHS treatment would peak at 8.7 million in October 2023 before starting to decrease (Institute for Fiscal Studies, 2022[61]).

2.6.2. Many countries have taken actions to reduce backlogs and waiting times in elective surgery caused by the pandemic

Many EU countries have taken actions to address the backlogs and increases in waiting times for elective care that were generated by the disruption during the pandemic. Most of these policies focus on increasing the supply of diagnostic services and operations (Table 2.2). Fewer countries have tried to improve the management of the demand for elective surgery. Most of the actions on the demand-side have focused on implementing more strictly the prioritisation tools of patients on the list based on clinical needs, while several countries have also targeted patients with very long wait (e.g. over a year) as being unacceptable regardless of clinical needs (OECD, forthcoming[3]).

Table 2.2. Overview of approaches used to reduce backlogs following the pandemic

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

Source: OECD Health Systems Resilience Questionnaire 2022.

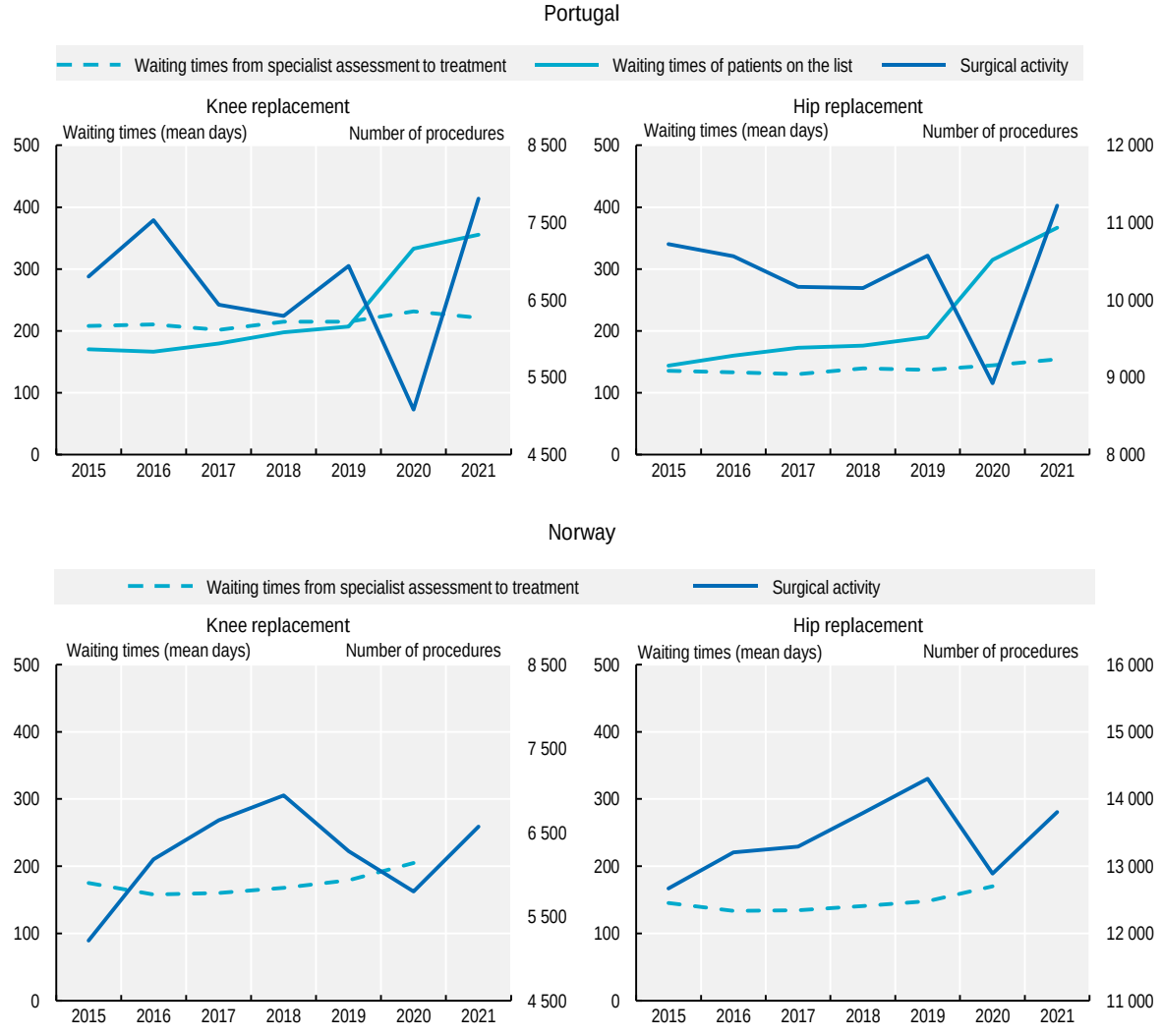
Several EU countries have provided additional or earmarked funding for elective care in the second half of 2020, and in 2021 and 2022 to boost supply and address the backlogs. In Ireland, the Waiting List Action Plan is supported by dedicated funding of EUR 350 million in 2022 to prevent a projected 40% increase in the waiting list (Government of Ireland, 2022[62]). In Italy, the national government provided additional funding to regions in 2020 to address long

waiting lists. The funds included EUR 112 million for hospital admissions and EUR 366 million for specialist visits and outpatient care, and were subject to each region developing its own regional plan to address the waiting lists and specify the delivery timeline and use of resources (Government of the Italy, 2020[63]). In Finland, the government announced in April 2022 that EUR 110 million of the EU's Recovery and Resilience Plan will be allocated in 2023 to reducing the backlog in treatment and rehabilitation services and speeding up 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[64]).

In most countries, the additional funding allocated to address the backlogs has been used to pay overtime for additional sessions and increase the use of operating theatres, contract private providers (where a private system co-exist with a public system), create dedicated elective facilities or hubs, and incentivise initiatives that reduce cancellations and length of stay to optimise capacity use. However, additional funding is not a guarantee that the supply will increase and translate into shorter waiting lists and waiting times.

In the few countries for which surgical activity data are available for 2021, the number of hip and knee replacements bounced back in 2021 and nearly or fully returned to their pre-pandemic level of 2019. This was the case in Portugal where the volume of hip and knee replacements in 2021 went back to at least their 2019 level, although this increase in surgical activities in 2021 did not prevent waiting times to increase for patients on waiting lists (Figure 2.19).

Figure 2.19. Surgical activities rebounded in 2021 in Portugal and Norway



Source: OECD Health Statistics 2022.

StatLink https://stat.link/12gv58

Policy responses to increase the supply of surgical procedures can be grouped into three main categories: increasing productivity, engaging private providers, and managing the health workforce.

Increasing productivity: Contracting additional sessions, extending working hours, reducing cancellations

Some EU countries have tried or are planning to increase productivity through efficiency gains 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 increasing rehabilitation services leading to shorter length of stay. Better use of operating theatres can be achieved through additional sessions on the weekend and paying overtime or recruiting additional staff.

In Ireland, the National Treatment Purchase Fund provides extra funding to public hospitals to fund additional staff and overtime to treat more patients during weekends and to shift patients to outpatient clinics for minor treatments. Plans also include an improvement of waiting list management by validating patients for being ready for treatment and improving data accuracy to avoid duplications and missed appointments. Reductions in missed appointments (currently at around 11%) will be obtained through new patient-centred booking arrangements with more agile scheduling. The target is to reduce missed appointments to 8% by December 2023 (Government of Ireland, 2022[62]).

In Portugal, a law adopted in November 2021 provides further incentives to develop extra capacity for surgical activity. Additional financial payments target in particular those surgery with longer waiting lists and waiting times going beyond the waiting time guarantees (Ministry of Health, 2021[65]).

In the United Kingdom (England), a number of initiatives are planned to improve efficiency in the delivery of elective surgery, including increasing the proportion of surgical procedures performed in outpatient departments rather than in inpatient settings. 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 extra shifts, and providing greater support to temporary staff by offering them more permanent employment or development opportunities (NHS England & NHS Improvement, 2022[66]).

However, increasing productivity presents some challenges. In several EU countries, the health workforce is already overstretched, making staff reluctant to work more overtime or exposing them to higher risk of burnout and resignation. Increasing volumes of activities therefore require careful planning and avoiding putting excessive pressures. Contracting beyond normal volumes is also challenged by the difficulty to distinguish between regular volumes and the additional volumes that go beyond what would have been provided without additional funding.

Contracting with private providers to treat publicly-funded patients

Several EU countries have involved private providers in the past to reduce waiting times, and plan to do so following the backlog caused by COVID-19. Contracting with private providers can increase supply quickly by relying on existing capacity in the private sector. Such contracts generally relate to high-volume procedures, with a focus on achieving maximum waiting time guarantees and people who have waited for a long time. In some countries, patients who have waited above the maximum can choose a provider in the private sector.

In Denmark, before the pandemic, patients were guaranteed a maximum waiting time from a GP or specialist referral to treatment of one month, and these maximum waiting times have been maintained during the pandemic. If the region cannot ensure that treatment will be initiated within one 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[67]).

In Ireland, the Health Service Executive and National Treatment Purchase Fund plans to commission extra public and private activity under the 2022 Waiting List Fund to provide an additional 100 000 outpatient appointments, 30 000 diagnostics and 28 000 inpatient or day case procedures. A partnership framework for procurement of services from the private sector will be established (Government of Ireland, 2022[62]).

In Italy, several regions have a mix of public and private providers treating publicly-funded patients, and private providers are expected to play a more prominent role to treat patients especially in specialties such as orthopaedics (e.g. hip and knee replacements) and ophthalmology (e.g. cataract). One region (Valle D’Aosta) plans to direct more patients to accredited private hospitals for orthopaedic surgery (Valle D’Aosta Region, 2022[68]).

In the United Kingdom (England), there are plans to create additional capacity by increasing the involvement of private providers (known as the independent sector) to treat publicly-funded patients. Integrated care systems will be responsible for planning and locally co-ordinating the provision of services between public and private providers.

Private providers will focus mostly on high-volume and low-complexity cases, with the objective of freeing up capacity of public providers to focus on more complex work. Depending on local needs and capacity, there may be scope for private providers to contribute selectively to diagnostics or more complex cases. Access to private providers will be integrated within the framework of patients' rights to choose for first outpatient appointment and if a patient is waiting too long (NHS England & NHS Improvement, 2022[66]).

In Slovenia, a system of electronic referrals monitoring was already in place before the pandemic, and it was used to monitor the number of postponed treatments and waiting times in real time throughout the pandemic. To deal with care backlogs, national authorities published a call for tender to contract extra capacity for defined treatments and volumes, open also to private providers that otherwise do not have contracts with the statutory health system.

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 increasing supply by private providers can be offset by reductions in volume by public providers. Another concern relates to the payment of private providers, whether and to what extent it should be aligned with public providers' payments.

Expanding and retaining health workforce

In many countries, the available health workforce has been the biggest constraint in increasing rapidly the volume of activities to deal with backlogs. This is because such policies imply either the current workforce working longer hours (with the risk of burnout and resignation) or expanding the workforce. However, training new nurses and new doctors takes time, hence the main options to address the backlogs in the short-term are either to retrain and redeploy existing staff who may not be over-loaded or recruit new staff from abroad. Recruiting skilled health workers from other countries can provide a quick solution, but it can exacerbate the "brain drain" from lower income to higher-income countries and shortages in countries where workers are recruited from.

Both Ireland and the United Kingdom have relied on the international recruitment of doctors and nurses to address immediate health workforce shortages. In Ireland, while there are plans to develop strategic workforce planning to enhance capacity and to invest in education and training as a long-term solution, the strategy to address current shortages in the short-term relies on the recruitment of staff from abroad (Government of Ireland, 2022[62]). The recruitment of foreign-trained nurses in Ireland reached an all-time high in 2021, driven mainly by a large increase in the recruitment of nurses from India and the Philippines but also from Zimbabwe and Nigeria (Irish Nursing and Midwifery Board).

In the United Kingdom (England), the NHS England Plan to tackle the COVID-19 backlog included the international recruitment of more than 10 000 nurses in fiscal year 2021/22, and in particular those with experience in critical care and operating theatres (NHS England & NHS Improvement, 2022[66]). The international recruitment of nurses in England and the rest of the United Kingdom reached an all-time high in 2021/22, with a strong growth in nurses recruited from the Philippines and India, but also from African countries like Zimbabwe and Nigeria (Shembavnekar N and Buchan J, 2022[69]). NHS England also plans to develop new roles for nurses, such as anaesthetic associates, to help address the shortage of anaesthetists. To increase the retention of nurses and other health workers, a Retention Programme supports NHS Trusts to improve flexible working conditions and workplace well-being, and support staff at the start and end of their careers. There are also efforts to support employers to manage staff absence 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[66]).

According to recent OECD estimates, at least half of the new investments required to support health system recovery and make them more resilient should be on the health workforce to increase recruitment and retention rates by improving working conditions (Morgan and James, 2022[70]).

2.7. Summary of the pandemic's impact in disrupting health services

The COVID-19 pandemic has led to unprecedented disruptions in the delivery of many health services as resources were diverted to contain and manage the pandemic and the population was encouraged to avoid physical and social contacts during the initial stage and peak phases. This chapter has reviewed the degree of disruptions in different types of care, focusing mainly on the first year of the pandemic because of limited availability of more recent data in most countries. Table 2.3 provides an overview of the degree of disruptions for selected services in primary care (vaccination), mental health care, cancer care, chronic care and elective surgery in 2020. These services have been selected mainly based on data availability in most countries, not necessarily because they are the most important ones to assess the availability of needed care in these different care areas. This is particularly the case in the areas of

mental health care and chronic care where indicators related to reductions in hospital stays in 2020 are used to assess the degree of disruptions, but indicators related to disruptions in outpatient care would have been at least equally if not more relevant. Countries are classified in three groups based on whether there was a small or no disruption in services in 2020, moderate disruption or large disruption. For a few indicators (vaccination), the level of service provision in 2020 is also taken into account, so that a small increase in 2020 is not rated positively if the vaccination coverage remained low in 2020, and vice versa (a small decrease in 2020 is not rated negatively if the vaccination rate remained high).

Some countries, like Denmark, Estonia, the Netherlands, Norway and Switzerland, have done generally better in minimising disruptions across most health services considered in Table 2.3. Norway and Denmark had lower COVID-19 cases during most of 2020, which helped to minimise disruptions for other health services. Other countries had greater disruptions across most health services, including three Southern European countries (Italy, Portugal and Spain) and a number of Central and Eastern European countries (the Czech Republic, Hungary, Lithuania, Poland and the Slovak Republic).

On the positive side, most countries have been able to maintain high childhood vaccination rates during the first year of the pandemic, and many countries have achieved notable progress in the vaccination of older people against seasonal influenza. Generally, those countries that had higher vaccination coverage against influenza before the pandemic were able to increase it even more in 2020. Moving forward, the challenge will be to continue to achieve high vaccination rates to protect the population against various infectious diseases and avoid additional pressures on health care systems.

The disruption in cancer screening, along with other early detection services, during the first few months of the pandemic has raised serious concerns about long-term consequences, as postponed diagnoses inevitably result in cancer being diagnosed at a later stage, making cancer treatment more complex and costly, and reducing survival probabilities. Most countries were able to offset at least partly the initial reduction in cancer screening in the first half of 2020 by scaling up activities in the second half, thereby lessening the drop over the course of the year. The disruption in screening and new cancer diagnoses has been one of the main factors behind the reduction in cancer treatment as reflected by the drop in cancer-related operations in all countries in 2020. Most EU countries still have a way to go to reach the ambitious goal set out in the Europe's Beating Cancer Plan of having 90% of the EU population who qualify for breast, cervical and colorectal cancer screenings offered screening by 2025.

There was a sharp reduction in elective surgery such as hip and knee replacements in all countries in 2020, as non-urgent surgical procedures were the first ones to be suspended and postponed when there was a need to free up resources to handle the crisis. The number of hip replacements fell on average by 14% in 2020 compared with 2019 across the 23 EU countries with available data, and the number of knee replacement fell even more (by 24%), but the reduction was much smaller in some countries (e.g. Denmark, Estonia and Finland). The "missed volumes" of surgical activities in 2020 led to a sharp increase in the number of people on waiting lists and waiting for a long time in several countries. Many European countries have taken actions in 2021 and 2022 to address the backlog of patients waiting for elective surgery by providing additional funding to increase surgical activities. In the few countries for which data are available for 2021, the data show that surgical activities have recovered or almost recovered from their pre-pandemic level. In most countries, the main constraint in rapidly increasing the volume of surgical activities has been the health workforce. Incentives are provided to current staff to work harder and longer hours, but this strategy has limits and runs the risk of burnout and resignation.

Table 2.3 also shows that more than two years after the onset of the pandemic, there are still many data gaps to assess the impact of the pandemic on different health services during the first year (2020), and data availability is even much more limited for 2021. The limited availability of timely data on health care activities and waiting times restricts the possibility to monitor the speed of the recovery and the backlogs of patients waiting for treatments. Most EU countries took rapid actions at the beginning of the pandemic to mitigate data deficits to help them manage COVID-19 responses, and there have been remarkable progress in gathering real time (or almost real time) data to do so. Similar progress would be needed in the collection and reporting of more timely data on regular health care activities, (unmet) health care needs, waiting times and health outcomes for patients, to monitor progress in the recovery from the pandemic.

Table 2.3. **Overview of the pandemic's impact in disrupting selected health services in 2020**

	Primary care		Mental care	Cancer care		Chronic care	Elective care	
	DTP3 childhood vaccination (percentage point change from 2019)	Senior influenza vaccination (percentage point change from 2019)	Hospital stays for mental disorders (excess reduction compared to 2019)	Breast cancer screening (% change from 2019)	Cancer-related surgery* (% change from 2019)	Hospital stays for AMI (% change from 2019)	Diagnostic CT and MRI exams (% change from 2019)	Hip and knee replacement surgery (% change from 2019)
Austria	85.0% (0)		-4.5%		-8.3%	-12.9%	-5.9%	-14.8%
Belgium	97.0% (-1)		-24.2%		-14.2%	-8.4%	-3.1%	-25.7%
Bulgaria	91.2% (-2)	5.8% (+2.3)			-18.1%		-8.3%	-20.3%
Croatia	93.7% (-1)	39.0% (+5)		-6.7%	-4.5%		-7.8%	-13.4%
Czech Republic	96.8% (+0.1)	23.9% (+1)	-13.0%	-3.0%	-17.8%	-10.1%	-4.6%	-20.9%
Denmark	96.0% (0)	75.0% (+23)		0.6%	-10.1%		2.2%	-3.3%
Estonia	91.0% (-0.4)	12.0% (-3)	-8.0%	-4.5%	-5.4%	-3.1%	-4.6%	-0.9%
Finland	91.0% (0)	53.7% (+6.4)	-10.1%	-1.3%		-13.3%		-3.4%
France	96.0% (0)	59.9% (+7.9)	-10.3%	-12.7%	-8.6%	-5.6%		-16.0%
Germany	93.0% (0)	47.3% (+8.5)	-13.3%		-6.5%	-7.2%	-0.3%	-8.2%
Greece	99.0% (0)	73.5% (+14.6)					-40.6%	
Hungary	99.9% (0)	30.5% (+6.9)	-21.7%	-13.8%	-17.3%	-15.4%	-8.3%	-32.7%
Ireland	94.2% (+0.7)	70.5% (+11.6)		6.3%	-24.0%	-5.2%		-22.0%
Italy	93.7% (-2.4)	54.6% (+1.5)	-22.7%	-16.0%	-14.9%	-14.6%	-12.3%	-19.9%
Latvia	100.0% (0)	9.1% (-2.6)	-10.6%	-23.5%		-6.5%	3.1%	-6.4%
Lithuania	91.4% (-0.8)	26.3% (+4.8)	-27.7%	-13.6%	-17.8%	-20.3%	-17.3%	-27.9%
Luxembourg	99.0% (0)	46.3% (+5.9)		-5.4%	-10.1%		-2.0%	-19.7%
Malta	98.4% (+0.2)	67% (+14.1)		3.9%				
Netherlands	94.2% (+0.5)	67.9% (+6.6)	-6.5%	-7.5%		-4.0%	1.8%	
Poland	90.4% (-4.8)		-28.7%		-17.0%	-15.7%	-8.8%	-23.4%
Portugal	99.0% (0)		-21.6%		-21.0%	-12.3%	-5.5%	-20.0%
Romania	87.0% (-1.1)	35% (+12)			-29.8%		5.0%	-32.6%
Slovak Republic	97.0% (+0.3)	12.8% (+1.3)	-15.4%	-12.3%	-10.5%	-9.0%	-9.2%	-22.5%
Slovenia	95.0% (0)	27% (+8.2)	-19.5%	-3.3%	-8.2%	-12.2%	0.5%	-19.3%
Spain	94.8% (-0.8)	67.7% (+13)	-11.4%		-12.5%	-10.1%	-10.9%	-23.8%
Sweden	97.0% (-1.0)	60.4% (+7.6)	-4.6%		-10.4%	-11.6%		-19.6%
Iceland	93.4% (+0.9)	54.6% (+7.1)	-8.9%	1.6%	-9.0%	-18.2%	-4.7%	-17.7%
Norway	97.1% (0.1)	57.0% (+14)	-5.5%	-12.3%	-4.3%	-11.5%	0.5%	-9.2%
Switzerland	96.5% (0.3)		-4.2%		-4.2%	-3.8%		-1.2%
United Kingdom	93.0% (0)	72.4% (0)		-1.2%	-25.7%		-14.8%	-55.6%
Small or no disruption	> 90% and vaccination increased or maintained	> 50% and vaccination increased	≤ 5% excess decrease or increase in hospital stays	≤ 5% decrease or increase in screenings	≤ 5% decrease in surgery	≤ 5% decrease in discharges	≤ 5% decrease or increase in exams	≤ 5% decrease in surgery
Moderate disruption	> 90% but vaccination decreased	< 50% and vaccination increased	5-10% excess decrease in hospital stays	5-10% decrease in screenings	5-10% decrease in surgery	5-10% decrease in discharges	5-10% decrease in exams	5-10% decrease in surgery
Large disruption	< 90% and vaccination decreased or maintained	< 20% or vaccination decreased	> 10% excess decrease in hospital stays	> 10% decrease in screenings	> 10% decrease in surgery	> 10% decrease in discharges	> 10% decrease in exams	> 10% decrease in surgery

Note: *This includes five cancer-related surgery: stem cell transplantation, prostatectomy, partial excision of mammary gland, total mastectomy and hysterectomy. Cyprus is not shown because data was not submitted to the 2022 Joint Questionnaire. For Iceland, the reduction in "hip and knee replacement" only relates to hip replacement. DTP3: diphtheria-tetanus-pertussis vaccine, 3rd dose. AMI: acute myocardial infarction.
Source: OECD Health Statistics 2022 (based on OECD/Eurostat/WHO-Europe Joint Questionnaire on Non-Monetary Health Care Statistics).

StatLink https://stat.link/xs5gan

References

Bardet, A. et al. (2021), "Impact of COVID-19 on healthcare organisation and cancer outcomes", *European Journal of Cancer*, Vol. 153, https://doi.org/10.1016/j.ejca.2021.05.012. [39]

Bergeat, M. et al. (2021), *Les demandes de soins liés à la santé mentale restent plus fréquentes au printemps 2021*, Direction de la recherche, des études, de l' évaluation et des statistiques, pp. 1-6, https://drees.solidarites-sante.gouv.fr/sites/default/files/2021-10/ER%201209_1.pdf. [20]

Bitar, H. and S. Alismail (2021), "The role of eHealth, telehealth, and telemedicine for chronic disease patients during COVID-19 pandemic: A rapid systematic review", *Digital health*, Vol. 7, https://doi.org/10.1177/20552076211009396. [51]

Börsch-Supan, A. (2022), *Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 8. COVID-19 Survey 1*, https://doi.org/10.6103/SHARE.w8ca.800. [43]

Carr, M. et al. (2022), "Impact of COVID-19 restrictions on diabetes health checks and prescribing for people with type 2 diabetes: a UK-wide cohort study involving 618 161 people in primary care", *BMJ Quality & Safety*, Vol. 0, https://doi.org/10.1136/BMJQS-2021-013613. [46]

Caruso, P. et al. (2020), "Diabetic Foot Problems During the COVID-19 Pandemic in a Tertiary Care Center: The Emergency Among the Emergencies", *Diabetes Care*, Vol. 43/10, pp. e123-e124, https://doi.org/10.2337/dc20-1347. [48]

Castanares-Zapatero, D. et al. (2021), *Long COVID: Pathophysiology – epidemiology and patient needs*, https://www.kce.fgov.be/en/publications/all-reports/long-covid-pathophysiology-epidemiology-and-patient-needs. [59]

de Bienassis, K. et al. (2022), "The economics of medication safety: Improving medication safety through collective, real-time learning"*, OECD Health Working Papers*, No. 147, OECD Publishing, Paris, https://doi.org/10.1787/9a933261-en. [9]

de la Portilla de Juan, F., M. Reyes Díaz and I. Ramallo Solía (2021), "Impacto de la pandemia sobre la actividad quirúrgica en cáncer colorrectal en España. Resultados de una encuesta nacional", *Cirugía Española*, https://doi.org/10.1016/j.ciresp.2020.07.011. [40]

EU Expert Group on Health Systems Performance Assessment (2020), *Assessing the resilience of health systems in Europe: an overview of the theory, current practice and strategies for improvement*, https://health.ec.europa.eu/system/files/2021-10/2020_resilience_en_0.pdf. [2]

Eurofound (2022), *Fifth round of the Living, working and COVID-19 e-survey: Living in a new era of uncertainty*, Publications Office of the European Union, https://doi.org/10.2806/190361. [1]

European Commission (2022), *European Cancer Inequalities Registry*, https://cancer-inequalities.jrc.ec.europa.eu/explore-indicators-by-country?ind=HPVVAX&ft=TOTAL. [42]

European Commission (2022), *State of the Union Address by President von der Leyen*, https://ec.europa.eu/commission/presscorner/detail/ov/speech_22_5493. [28]

European Commission (2021), *Europe's Beating Cancer Plan*, Communication from the commission to the European Parliament and the Council, https://health.ec.europa.eu/system/files/2022-02/eu_cancer-plan_en_0.pdf. [29]

Eurostat (2021), *Current depressive symptoms by sex, age and educational attainment level*, https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_mh1e&lang=en. [14]

Expert Panel on effective ways of investing in health (2022), *Draft opinion: Facing the impact of post-COVID-19 condition on health systems*. [58]

Figueiredo, A. et al. (2020), *State of vaccine confidence in the EU + UK : a report for the European Commission*, Publications Office of the European Union, https://doi.org/10.2875/06196. [7]

Finnish Institute for Health and Welfare (2021), *Coronavirus epidemic has caused psychological distress especially among highly educated women*, https://thl.fi/en/web/thlfi-en/-/coronavirus-epidemic-has-caused-psychological-distress-especially-among-highly-educated-women. [21]

Fujisawa, R. (2022), "Impact of the COVID-19 pandemic on cancer care in OECD countries", *OECD Health Working Papers*, No. 141, OECD Publishing, Paris, https://doi.org/10.1787/c74a5899-en. [31]

GGZ Nederland (2020), *Parliamentary Consultation on Cornonavirus - GZZ Netherlands[Internetconsultatie gevolgen coronamaatregelen]*, https://www.tweedekamer.nl/sites/default/files/atoms/files/reader_internetconsultatie_coronamaatregelen.pdf1j0j7&sourceid=chrome&ie=UTF-8. [23]

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*, https://vnk.fi/en/-/general-government-fiscal-plan-for-2023-2026-policies-to-safeguard-finland-s-future-sustainable-growth-and-security. [64]

Government of Ireland (2022), *Waiting List Action Plan 2022*, https://www.gov.ie/en/publication/323b5-the-2022-waiting-list-action-plan/. [62]

Government of Italy (2020), *Relaunch decree, 13 May 2020*, https://www.fnopi.it/wp-content/uploads/2020/05/Decreto-Rilancio-ore-17.30-13-maggio-2020-1.pdf. [11]

Government of the Italy (2020), *Disposizioni urgenti in materia di liste di attesa. Decreto Legge 14 agosto 2020, n. 104, articolo 29. [Urgent interventions related to waiting lists. Decree law 14 August 2020, No.104, article 29]*. [63]

Hanna, T. et al. (2020), "Mortality due to cancer treatment delay: systematic review and meta-analysis", *BMJ*, Vol. 371/m4087, https://doi.org/10.1136/bmj.m4087. [37]

Health Service Executive (2022), *First report of the Structured Chronic Disease Management Programme in General Practice*, Health Service Executive, Ireland, https://www.hse.ie/eng/services/publications/first-report-of-the-structured-chronic-disease-management-programme-in-general-practice.pdf. [54]

Hinchman, A. et al. (2020), "Global health is local health: A multidisciplinary perspective of COVID-19", *Ochsner Journal*, Vol. 20/2, pp. 123-133, https://doi.org/10.31486/TOJ.20.0059. [52]

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. [61]

Ivanuš, U. et al. (2021), "The impact of the COVID-19 pandemic on organised cervical cancer screening: The first results of the Slovenian cervical screening programme and registry", *The Lancet Regional Health - Europe*, https://doi.org/10.1016/j.lanepe.2021.100101. [35]

Mantellini, P. et al. (2020), "Oncological organized screening programmes in the COVID-19 era: an Italian survey on accrued", *Epidemiol Prev*, https://doi.org/10.19191/EP20.5-6.S2.136. [33]

Matsumoto, K. et al. (2022), "Impact of post-COVID conditions on mental health: a cross-sectional study in Japan and Sweden", *BMC Psychiatry*, https://doi.org/10.1186/s12888-022-03874-7. [56]

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. [65]

Morgan, D. and C. James (2022), "Investing in health systems to protect society and boost the economy: Priority investments and order-of-magnitude cost estimates", *OECD Health Working Papers*, No. 144, OECD Publishing, Paris, https://doi.org/10.1787/d0aa9188-en. [70]

National Audit Office (2021), "NHS backlogs and", https://www.nao.org.uk/reports/nhs-backlogs-and-waiting-times-in-england/. [60]

NHS (2021), *Remote monitoring for patients with chronic conditions in the Midlands*, https://www.nhsx.nhs.uk/covid-19-response/technology-nhs/remote-monitoring-for-patients-with-chronic-conditions-in-the-midlands/. [50]

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. [66]

NICE (2022), *COVID-19 rapid guideline: managing the long-term effects of COVID-19*, https://www.nice.org.uk/guidance/ng188. [55]

OECD (2021), *A New Benchmark for Mental Health Systems: Tackling the Social and Economic Costs of Mental Ill-Health*, OECD Health Policy Studies, OECD Publishing, Paris, https://doi.org/10.1787/4ed890f6-en. [12]

OECD (2021), "Strengthening the frontline: How primary health care helps health systems adapt during the COVID 19 pandemic", *OECD Policy Responses to Coronavirus (COVID-19)*, OECD Publishing, Paris, https://doi.org/10.1787/9a5ae6da-en. [4]

OECD (2021), "Tackling the mental health impact of the COVID-19 crisis: An integrated, whole-of-society response", *OECD Policy Responses to Coronavirus (COVID-19)*, OECD Publishing, Paris, https://doi.org/10.1787/0ccafa0b-en. [13]

OECD (2020), *Waiting Times for Health Services: Next in Line*, OECD Health Policy Studies, OECD Publishing, Paris, https://doi.org/10.1787/242e3c8c-en. [67]

OECD (forthcoming), *Ready for the Next Crisis? Investing in Resilient Health Systems*, OECD Health Policy Series, OECD publishing, Paris. [3]

OECD (forthcoming), *The COVID-19 Pandemic and the Future of Telemedicine*, OECD Health Policy Series, OECD Publishing, Paris. [6]

Office for National Statistics (2022), *Coronavirus and depression in adults, Great Britain: June 2020*, https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/coronavirusanddepressioninadultsgreatbritain/june2020. [15]

Office for National Statistics (2021), *Coronavirus and depression in adults, Great Britain: July to August 2021*, https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/coronavirusanddepressioninadultsgreatbritain/julytoaugust2021. [19]

Oliveira Hashiguchi, T. (2020), "Bringing health care to the patient: An overview of the use of telemedicine in OECD countries", *OECD Health Working Papers*, No. 116, OECD Publishing, Paris, https://doi.org/10.1787/8e56ede7-en. [5]

Peacock, H. et al. (2021), "Decline and incomplete recovery in cancer diagnoses during the COVID-19 pandemic in Belgium: a year-long, population-level analysis", *ESMO Open*, Vol. 6/4, p. 100197, https://doi.org/10.1016/j.esmoop.2021.100197. [38]

PGEU (2021), *Position Paper on the Role of Community Pharmacists in COVID-19-Lessons Learned from the Pandemic*. [10]

Population Health Screening Unit (2022), *Screening programmes in Ireland*. [36]

Rechel, B., E. Richardson and M. McKee (2018), *The organization and delivery of vaccination services in the European Union: Prepared for the European Commission*, World Health Organization, http://www.healthobservatory.eu. [8]

Revet, A. et al. (2021), "Perceived impact of the COVID-19 pandemic on child and adolescent psychiatric services after 1 year (February/March 2021): ESCAP CovCAP survey", *European Child & Adolescent Psychiatry*, https://doi.org/10.1007/s00787-021-01851-1. [25]

Rojnic Kuzman, M. et al. (2021), "Mental health services during the first wave of the COVID-19 pandemic in Europe: Results from the EPA Ambassadors Survey and implications for clinical practice", *European Psychiatry*, Vol. 64/1, https://doi.org/10.1192/j.eurpsy.2021.2215. [22]

Santé publique France (2022), *CoviPrev: a survey to monitor changes in behaviour and mental health during the COVID-19 outbreak*, https://www.santepubliquefrance.fr/etudes-et-enquetes/coviprev-une-enquete-pour-suivre-l-evolution-des-comportements-et-de-la-sante-mentale-pendant-l-epidemie-de-covid-19#block-249162. [16]

Schuivens, P. et al. (2020), "Impact of the COVID-19 Lockdown Strategy on Vascular Surgery Practice: More Major Amputations than Usual", *Annals of Vascular Surgery*, Vol. 69, pp. 74-79, https://doi.org/10.1016/j.avsg.2020.07.025. [47]

Sciensano (2022), *Belgium COVID-19 Epidemiological Situation: Mental Health Studies*, https://datastudio.google.com/embed/reporting/7e11980c-3350-4ee3-8291-3065cc4e90c2/page/ykUGC. [17]

Shembavnekar N and Buchan J (2022), *How reliant is the NHS in England on international nurse recruitment?*, https://www.health.org.uk/news-and-comment/charts-and-infographics/how-reliant-is-the-nhs-in-england-on-international-nurse-recruitment. [69]

Tabacof, L. et al. (2022), "Post-acute COVID-19 Syndrome Negatively Impacts Physical Function, Cognitive Function, Health-Related Quality of Life, and Participation", *American Journal of Physical Medicine and Rehabilitation*, https://doi.org/10.1097/phm.0000000000001910. [57]

The Guardian (2022), "Disruption to diabetes care during Covid threatens thousands, charity warns | Diabetes |", https://www.theguardian.com/society/2022/apr/20/disruption-to-diabetes-care-during-covid-threatens-thousands-charity-warns. [45]

Tomasoni, D. et al. (2020), "Impact of COVID-2019 outbreak on prevalence, clinical presentation and outcomes of ST-elevation myocardial infarction", *Journal of Cardiovascular Medicine*, Vol. 21/11, pp. 874-881, https://doi.org/10.2459/jcm.0000000000001098. [49]

Tsibulak, I. et al. (2020), "Decrease in gynecological cancer diagnoses during the COVID-19 pandemic: an Austrian perspective", *International Journal of Gynecologic Cancer*, Vol. 30/11, pp. 1667-1671, https://doi.org/10.1136/ijgc-2020-001975. [32]

Unnarsdóttir, A. et al. (2021), "Cohort Profile: COVIDMENT: COVID-19 cohorts on mental health across six nations", *International Journal of Epidemiology*, https://doi.org/10.1093/ije/dyab234. [18]

Valle D'Aosta Region (2022), *Approvazione del Piano operativo regionale per il recupero delle liste di attesa per l'anno 2022, Deliberazione della Giunta Regionale No. 91/2022 [Approval of Regional Plan to reduce waiting lists in 2022, Deliberation of Regional Committee No. 91/2022]*. [68]

Vrdoljak, E. et al. (2021), "COVID-19 Pandemic Effects on Breast Cancer Diagnosis in Croatia: A Population- and Registry-Based Study", *The Oncologist*, https://doi.org/10.1002/onco.13791. [34]

Webb, E. et al. (2022), "Providing health services effectively during the first wave of COVID-19: A cross-country comparison on planning services, managing cases, and maintaining essential services", *Health Policy*, https://doi.org/10.1016/j.healthpol.2021.04.016. [30]

WHO (2022), *Third round of the global pulse survey on continuity of essential health services during the COVID-19 pandemic: November–December 2021*, World Health Organisation, https://www.who.int/publications/i/item/WHO-2019-nCoV-EHS_continuity-survey-2022.1. [24]

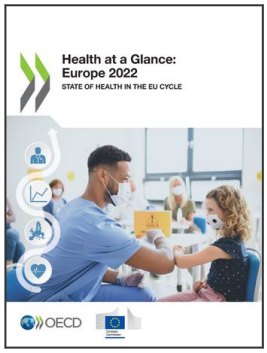
WHO (2021), *Spain: Transforming primary health care during the pandemic*, https://www.who.int/europe/publications/m/item/spain-accelerating-multidisciplinary-teamwork-to-address-emerging-primary-care-needs-in-three-spanish-regions-(2021). [53]

WHO (2020), *The impact of COVID-19 on mental, neurological and substance use services: results of a rapid assessment*, World Health Organization, https://www.who.int/publications/i/item/978924012455. [26]

Wijker, D., P. Sillitti and E. Hewlett (2022), "The provision of community-based mental health care in Lithuania", *OECD Health Working Papers*, No. 143, OECD Publishing, Paris, https://doi.org/10.1787/18de24d5-en. [27]

Wilkinson, E. (2021), "UK Government urged to recognise post-COVID-19 cancer backlog", *The Lancet Oncology*, Vol. 22/7, p. 910, https://doi.org/10.1016/s1470-2045(21)00330-2. [41]

Williams II, R. et al. (2021), *The Impact of COVID-19 on Older Adults: Findings from the 2021 International Health Policy Survey of Older Adults*, https://doi.org/10.26099/mqsp-1695. [44]



From:

Health at a Glance: Europe 2022

State of Health in the EU Cycle

Access the complete publication at:
https://doi.org/10.1787/507433b0-en

Please cite this chapter as:

OECD/European Union (2022), "Dealing with backlogs: Disruptions in non-COVID care during the pandemic", in *Health at a Glance: Europe 2022: State of Health in the EU Cycle*, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/2c161b2a-en