3 The COVID-19 pandemic has made people-centredness even more urgent

This chapter applies the OECD Framework for People-Centred Health Systems to the COVID-19 response pursued by health systems and governments across OECD countries to consider the extent to which the policies put in place to fight the pandemic were people-centred. It finds that the policies pursued to contain and mitigate the pandemic largely did not prioritise – and in many cases conflicted with – the key principles of people-centredness. The response to the COVID-19 pandemic has underscored that many principles of people-centredness remain poorly institutionalised within health systems policy making. It further argues that while the urgency of the pandemic sometimes necessitated responses that deprioritised people-centredness, a more person-centred approach to certain challenges raised may in fact have helped to avert some of the difficulties countries continue to face nearly two years into the pandemic.

The rapid development of COVID-19 into a global pandemic over the past 15 months has dramatically tested health systems globally. In many countries, efforts to contain the spread of the virus have led to the implementation of bold and often extraordinary policies, many of which have turned usual medical and social practice on its head. Within this rapidly changing context, seeking people-centredness in the response may seem a secondary priority to the immense task of tackling the epidemic. However, this would take a myopic view of the crisis. A person-centred approach is essential to an effective COVID-19 response in OECD countries.

Scaling up a government response to the pressing needs of COVID-19 requires also attending to the regular needs of patients seeking care and support. In some cases, the policies adopted to address the COVID-19 outbreak have created serious challenges to high-quality care for several other conditions, such as diabetes (Chudasama et al., 2020[1]) and cancer care (The Lancet Oncology, 2021[2]). Reports from many countries have suggested that time-sensitive care is sometimes being delayed or forgone during the crisis (OECD/European Union, 2020[3]; OECD, 2021[4]). It is critical that responses balance attention to the current crisis without sacrificing the other needs of health systems users.

Despite the difficulties faced by health systems during the COVID-19 pandemic, a number of positive lessons can also be drawn from the speed at which health systems have been able to adapt their ways of working and introduce new policies, practices and flexibilities, often in the face of considerable pressures. Some longstanding barriers to people-centredness can be quickly addressed while others are much more unyielding. For example, telemedicine has been accelerated to an extent that was unthinkable before the pandemic.

The need for fast decisions often reduced patients' voice during the pandemic, and patient involvement and participation has been underutilised

Prior to the COVID-19 pandemic, policy commitments were made to broaden patient and public involvement and improve shared decision in health systems. However, the need to accelerate decision and implementation of policies to contain the spread of COVID-19 and prepare providers care for acute patients has often come at the expense of patient voice and shared decision-making (Richards and Scowcroft, 2020[5]; Köther, Siebenhaar and Alpers, 2021[6]).

As the response to the pandemic evolves, renewed appeals have been made to bring increases in public and patient involvement, as a way to achieve several important goals including: to increase public trust and confidence in health systems responses; facilitate public compliance with containment measures; identify better treatments and new approaches to care delivery, including those for vulnerable and underserved populations; and overcome vaccine hesitancy (Murphy et al., 2020[7]). The pandemic also made clear the need to better institutionalise mechanisms to include patient voice in more rapid policy responses, such as the COVID-19 pandemic, as a way of ensuring the quality of care, improving decisions, managing the politics of expert advice in times of uncertainty (Moore and MacKenzie, 2020[8]).

The institutionalisation of patient participation and involvement can serve as a platform for the interaction between patients and health care authorities, including during times of emergency or crisis (Dobiášová, Kotherová and Numerato, 2021[9]). However, meaningful examples of patient involvement and participation in the pandemic still seem to be limited. According to a survey conducted with 57 patient organisations in Europe, 63% of respondents indicated that there was no patient involvement in the management of the pandemic at all, and only 12% of responding organisations agreed that there was good patient involvement in their country's COVID-19 crisis taskforce (European Patients Forum, 2021[10]).

Digital access to primary health care consultations has partially mitigated the reduction of patient choice as in-person consultations fell dramatically

The growing use of digital tools in health systems offers the opportunity to overcome certain choice barriers, including access. The rapid expansion of telemedicine tools during the COVID-19 pandemic across the globe has demonstrated the enormous potential of virtual health services to overcome access-related barriers to care (Bhaskar et al., 2020[11]). Nowhere has this been more evident than in the rapid scale-up of digital tools for health care.

In many countries, timelines for the roll out of telemedicine services and other digital approaches that were previously counted in years were shortened into a span of mere months (Marin, 2020[12]). Many countries such as Austria, Belgium, the Czech Republic, Estonia and Korea introduced or hastened the scale-up of remote consultations during the pandemic, while other countries that already allowed telemedicine services, such as France, Luxembourg, Poland, and the United States, rapidly expanded reimbursement for these services (OECD/European Union, 2020[3]). Some of the changes put in place to facilitate digital health delivery were initially temporary, such as the addition of telehealth services to the Medicare Benefits Scheme in Australia, but underpin broader plans to transition towards a more comprehensive policy of virtual care. In Portugal, a collaboration between the health care call centre SNS24 and a telehealth platform developed during the pandemic (Trace-COVID-19) created a system of triage and referral to identify the most appropriate setting for patients.

Nonetheless, not all barriers that impact patient choice can be overcome with digital solutions alone, and there is some evidence that the rise of telemedicine was not sufficient to compensate for the dramatic reduction of in-person consultations. A large study of insured populations in the United States covering over 36 million people found that total in-person ambulatory contacts decreased from 1.63 contacts per person in March-June 2019 to 1.02 contacts per person in March-June 2020, while telehealth ambulatory contacts per person rose from 0.01 to 0.32 in the same period (Weiner et al., 2021[13]). Furthermore, populations living in least socially advantages areas were less likely to have access to telemedicine when compared to wealthier populations (Figure 3.1). Given that the study data refer to insured populations only, the results may be even less favourable to uninsured people. Data for the second semester of 2020 indicate a rebound in the levels of in-person consultations (Mehrotra et al., 2021[14]).

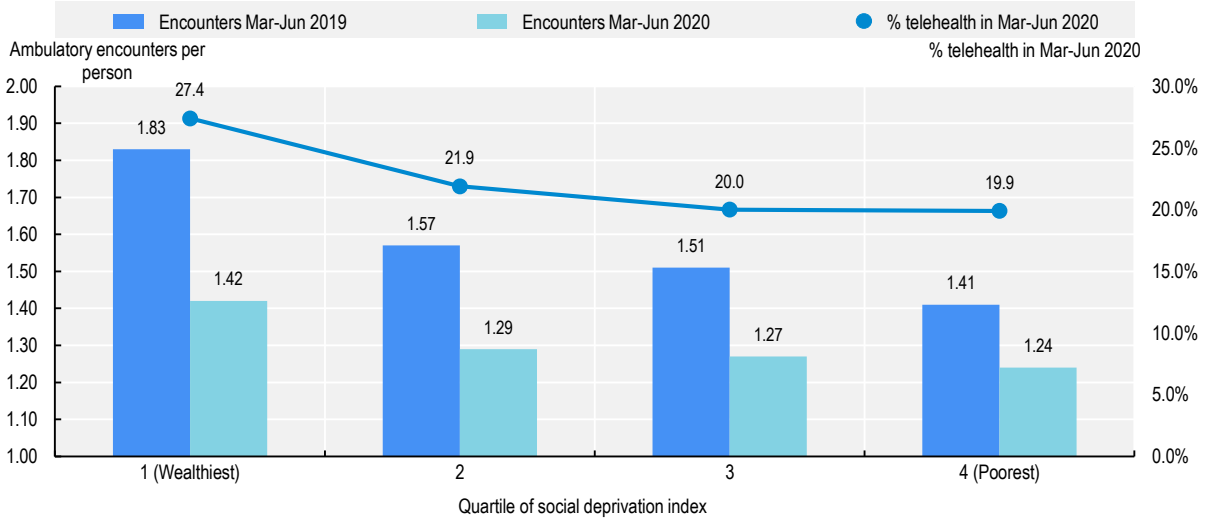
Similar patterns of expansion of telemedicine were observed in other countries. In France, for example, teleconsultations reached 27% of total consultations at the height of the lockdown in 2020 (Richardson et al., 2020[15]). In Norway, the proportion of general practitioner consultations that were performed remotely reached a peak of 60% between 16 and 22 March 2020, then declined to 25% in the last week of March 2020, a level which was maintained for several months (Johnsen et al., 2021[16]).

Telemedical services were not the only digital tools expanded by health systems during the pandemic. In Korea, vaccine availability was monitored using online and app-based reporting systems to keep track of the number of remaining doses across hospitals, and promote equity and up-take of the vaccine. Mobile apps were also developed to keep track of the public distribution of face masks.

The expansion of telemedicine however, affected specialties in a different manner, and digital technology is not able to replace services that require physicial interventions, such as surgeries or diagnostic exams that require direct physical examinations. A study of insured populations in the United States found strong reductions were observed from January-February to March-April 2020 in diagnostic procedures such as colonoscopies, mammograms, hemoglobin A1C tests, and vaccines; some types of non-elective surgeries, includingangioplasties, elective surgeries, and the use of mangetic ressonance imaging from – the point at which the pandemic had begun to spread aroudn the world (Whaley et al., 2020[17]).

Figure 3.1. In the United States, populations living in less socially advantaged areas had less access to telemedicine

Total ambulatory encounters per person (in-person and telehealth) in March-June 2019 and March-June 2020, and share of telehealth encounters in March-June 2020, by level of deprivation of place of residence in the United States



Note: From March to June 2019, telehealth ambulatory encounters were 0.3% of the total for all four quartiles of social deprivation index.
Source: Authors preparation with data from Weiner et al. (2021[13]), "In-Person and Telehealth Ambulatory Contacts and Costs in a Large US Insured Cohort Before and During the COVID-19 Pandemic", https://doi.org/10.1001/jamanetworkopen.2021.2618.

Engaging people has been critical for pandemic containment efforts, but a balance between incentives and restrictions is still needed

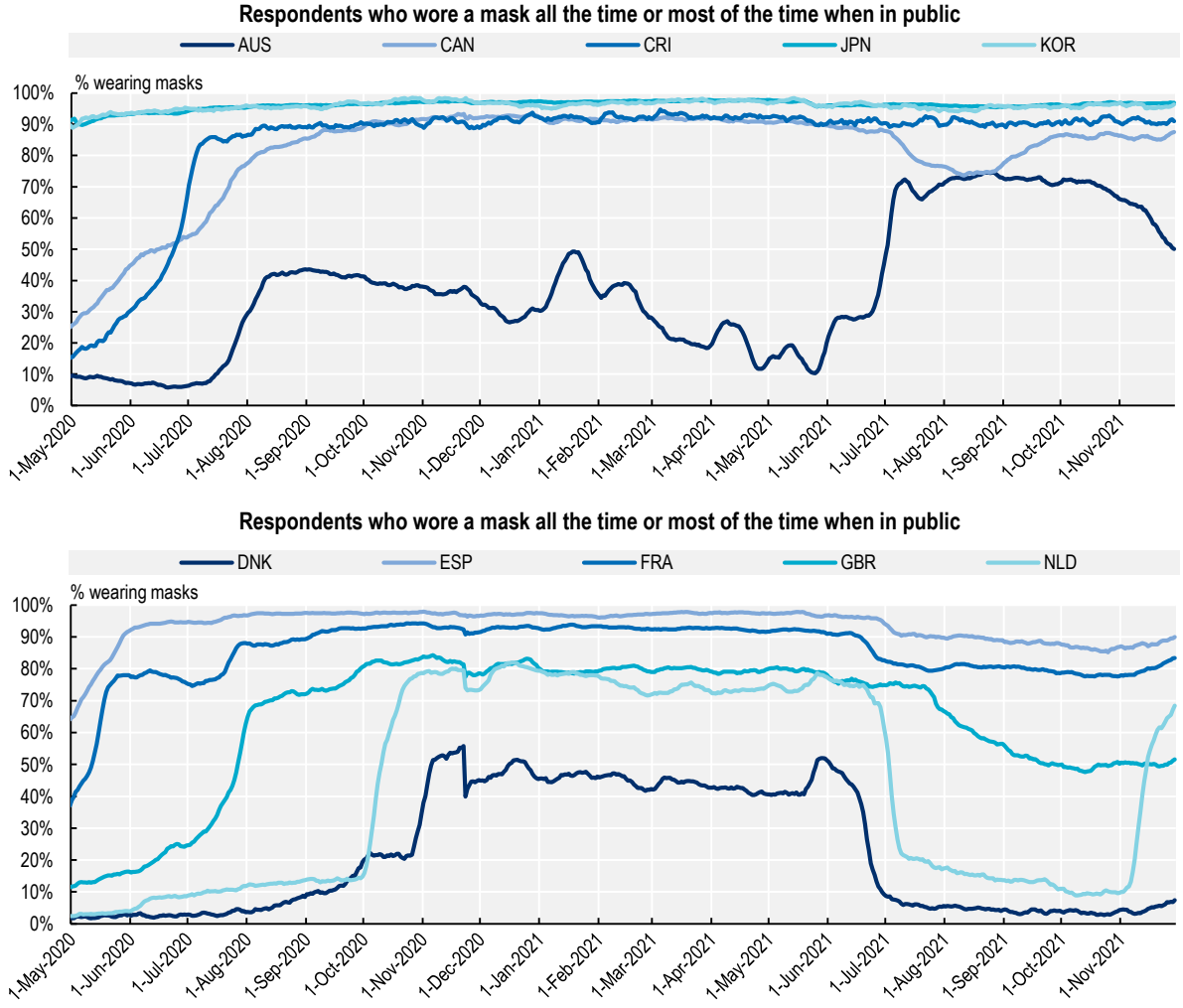
As part of the containment policies introduced in the first semester of 2020, severe restrictions in the circulation of people were adopted and levels of population compliance were high. A study of 52 countries found that on 11 March 2020, population mobility had dropped 63% from its baseline (Nouvellet et al., 2021[18]).

People's engagement was also necessary for the adoption of other preventive behaviours, such as the use of facemasks. When the virus first appeared, the predominant modes of transmission were initially unclear, but evidence emerged to suggest that the main mode of transmission was through respiratory droplets and that the use of facemasks was an effective way to prevent transmission (Howard et al., 2021[19]). Countries gradually adopted mandates or recommendations for the use of facemasks in public spaces: during 2020, the first mandates and requirements for facemasks usage in public were introduced in Chile, Italy, and Germany in early April; in France, Korea, and Spain in early May; in the Netherlands in early June; in Canada, Costa Rica, and the United Kingdom in late June; in Australia in late July; and in Denmark in late August, albeit with regional variation in some of these countries, notably in Spain, the United Kingdom and the United States (Hale et al., 2021[20]).

Results of large international studies conducted with Facebook users have provided some insights about the usage of facemasks, even though these need to be interpreted with caution as the data represents only social media users and may not be representative of the general population (Perrotta et al., 2021[21]; Fan et al., 2020[22]; Badillo-Goicoechea et al., 2021[23]). While mandates and recommendations did have an effect in the uptake of facemask usage, many other factors impact the response across countries. Some countries, including Japan and Korea, had persistently high rates of reported facemask usage, remaining

well above 90% throughout the pandemic. Other countries, including Costa Rica and Spain, saw a rapid uptake in facemask usage in May and June 2020 and have maintained high levels of usage of over 90%; in Canada and France, mask usage rates have been between 80% and 90%. In the United Kingdom, the highest rates were between October 2020 and July 2021, and have fallen in subsequent months. In Australia, around 30% of the population reported usage between August 2020 and July 2021, with usage rising sharply thereafter before more recently declining. In Denmark, reported facemask usage has mostly remained below the 50% mark, with the highest rates observed between November 2020 and June 2021 (Figure 3.2). Some of the variation in face mask usage is likely related to the country's guidelines and rules concerning use: in France, for example, face masks remain required in indoor buildings such as shops, while obligatory face coverings were lifted in the United Kingdom in mid-summer 2021, though have since been re-imposed in some settings.

Figure 3.2. Self-reported facemask usage, 7-day averages between May 2020-November 2021



Note: Results from 64 572 869 responses collected between 23 April 2020 and 29 November 2021 from Facebook users in 113 countries and territories by "The University of Maryland Social Data Science Center Global COVID-19 Trends and Impact Survey, in partnership with Facebook".

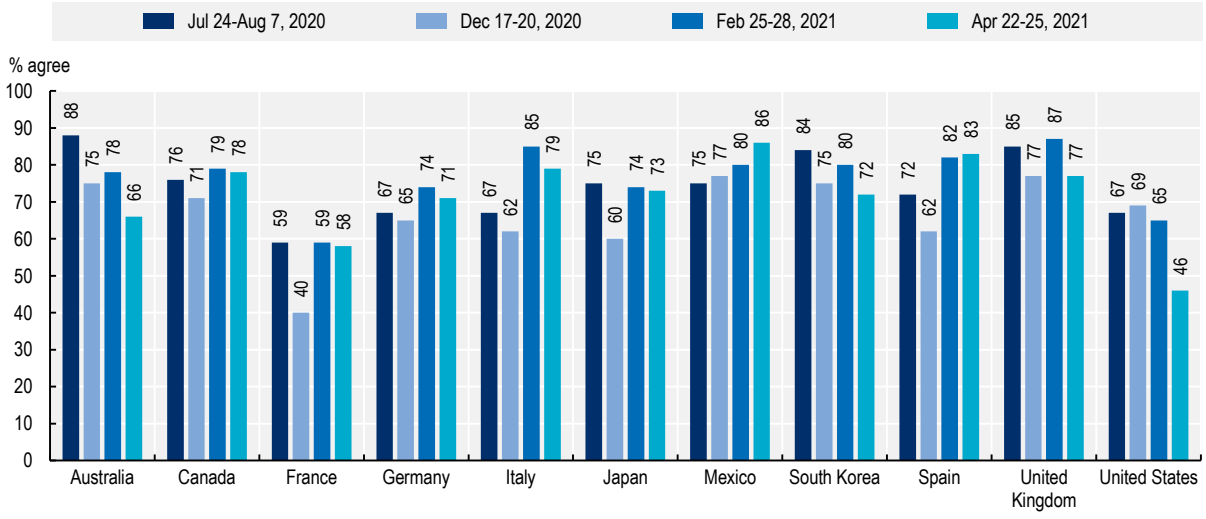
Source: Fan et al. (2020[22]), The University of Maryland Social Data Science Center Global COVID-19 Trends and Impact Survey, in partnership with Facebook, https://covidmap.umd.edu/api.html.

While the evidence still confirms that the use of facemasks is important to prevent infections (Li and Sun, 2021[24]; Howard et al., 2021[19]; Liao et al., 2021[25]), immunisation became the main policy tool to contain the pandemic as soon as vaccines became available in late 2020 and early 2021. As countries began to expand their vaccination programmes, ensuring people understand and agree with the new vaccines has been critical to reach the high levels of population vaccination that are needed for herd protection given the highly contagious nature of SARS-CoV-2 (Fontanet and Cauchemez, 2020[26]). However, after the initial supply and logistical challenges were addressed across OECD countries, persistence in vaccination hesitancy among a fraction of the population has been a roadblock in reaching universal immunisation. Bringing people on board is further critical given the likelihood that vaccination against COVID-19 will not be a one-off occurrence, but will rather require some booster doses in addition to their initial immunisation in at least the medium term.

Across 11 OECD countries in December 2020, when the vast majority of the people had not yet been vaccinated, between 23% and 60% of the population indicated that they would not get a COVID-19 vaccine if it were made available to them (Figure 3.3). Vaccine hesitancy dropped somewhat by the end of February 2021, when between 13% and 35% of the people across the eleven countries indicated that they would not get a vaccine. However, as vaccination programmes expanded, by late April 2021, the proportion of unvaccinated people who were unwilling to receive a vaccine grew in several countries, reaching 29% in Germany, 34% in Australia, 42% in France, and 54% in the United States.

Figure 3.3. Attitudes on COVID-19 vaccination in 11 OECD countries, Aug 2020-April 2021

"If a vaccine for COVID-19 were available to me, I would get it"



Note: April 2021 only among those reporting they had not received the vaccine.
Source: Ipsos (2021[27]), COVID-19 Vaccination Intent. Ipsos survey for The World Economic Forum.

Misinformation appears to have played a role in fuelling vaccine hesitancy, even before the COVID-19 pandemic. A study in Italy found an association between the dissemination of fake news and misinformation about immunisation in social networks in 2012 and a decrease in child immunisation rates (Carrieri, Madio and Principe, 2019[28]). More recent studies have also discussed the association of misinformation on social media and COVID-19 vaccine hesitancy (Garett and Young, 2021[29]; Lockyer et al., 2021[30]). These concerns illustrate the challenge that countries face in rapidly scaling up a population-wide vaccination campaign and underscores the importance of good communication and co-production between health systems and the broader population (OECD, 2021[31]).

As the pandemic persisted into the second half of 2021, many OECD countries still struggled to convince a sizable minority of their citizens to be vaccinated, and a plateauing effect in vaccination coverage was observed in several OECD countries, including Austria, the Czech Republic, Germany, Hungary, Israel, Switzerland, the United States and others. This has created a major roadblock in efforts to prevent the further spread of the COVID-19 virus, particularly given the onset of the more virulent Delta variant, and the looming threat of further highly infectious variants such as Omicron. In November 2021, even countries where a majority of the eligible population had been vaccinated still had sizeable numbers of people susceptible to the disease, and a sharp resurgence of cases was observed in many European countries.

One measure taken by the majority of OECD countries to discourage COVID-19 transmission and incentivise vaccination has been the introduction of COVID-19 'passes' intended to restrict access to certain public venues to people who fulfil requirements, often related to vaccination, testing, or recovery from COVID-19. Across the 38 OECD countries, by early December 2021, over three-fifths (24 countries) had implemented national COVID-19 pass requirements, while a further ten countries had introduced voluntary, partial, or regionally based COVID-19 passes (Table 3.1). Only four countries had not introduced any form of COVID-19 pass control to restrict access in at least some public spaces. Despite their coercive nature and an arguable restriction of individual liberty, these measures – introduced in many countries to incentivise vaccination – have received broad popular support, indicating a possible balance between incentives and coercion as a way forward through the pandemic.

Table 3.1. Status of COVID-19 pass requirements in OECD countries, early December 2021

Country	Has a COVID-19 pass been implemented?	Locations applicable	Requirements	Further information
Australia	No			
Austria	Yes	For hotels, restaurants, bars, nightclubs, leisure centres, gyms, cultural institutions (cinemas, theatres etc.), Christmas markets, ski lifts/cable cars and body-related services (such as hairdressers)	Vaccination or recovery	Lockdown measures implemented in November 2021 following a rise in number of cases; domestic use of COVID-19 certificate continues (Federal Ministry of Social Affairs, Health Care and Consumer Protection, 2021[32]; Schengeninfonews, 2021[33])
Belgium	Yes, regionally	restaurants, gyms, hospitals, cafes, discos, cultural venues hosting more than 50 people, optional for residential care facilities of vulnerable people (mandatory in Wallonia)	Vaccination, recovery or test	(Bencharif, 2021[34])
Canada	Yes, regionally	Mainly, for international and domestic travel	Vaccination	Each province in Canada may use the certificate in a different manner (Al Jazeera, 2021[35])
Chile	Yes	Public venues, restaurants, bars etc. and long-distance travel on public transport	Vaccination	Booster doses will be required from 1 Jan 2022 for those that have +6 months of full vaccination (Government of Chile, 2021[36])

Country	Has a COVID-19 pass been implemented?	Locations applicable	Requirements	Further information
Colombia	Yes	Public venues, restaurants, bars, cinemas and other commerce	Vaccination	(Terra Colombia, 2021[37])
Costa Rica	Yes	Capacity of some businesses and public spaces limited to 50% if not accepting only vaccinated clients (hotels, restaurants, bars, casinos, museums, gyms etc.)	Vaccination	From 8 Jan 2022, vaccine certificates will be required to enter certain venues; first country to mandate COVID-19 vaccine for children; Mandate for all state workers (BBC, 2021[38])
Czech Republic	Yes	Public events and services	Vaccination (and possibly recovery)	(de Goeij, 2021[39])
Denmark	Yes	Bars, restaurants, cafes and nightclubs; cultural activities, churches with more than 200 participants (indoors), courses, conferences	Vaccination, recovery or test	Denmark had previously implemented and abolished requirements associated with its Coronapas, and has reinstated the pass (Nationalt Kommunikations Partnerskab COVID-19, 2021[40])
Estonia	Yes	Restaurants, gyms, hospitals, cafes, discos, cultural venues, public saunas and pools	Vaccination, recovery or test	(Kriss.EE Government Communication Unit, 2021[41])
Finland	Yes, optional (with restrictions)	Restaurants, cafes, bars, amusement parks, museums, spas, pools and other public venues.	Vaccination, recovery or test	Passes are introduced on a voluntary basis by each establishment, but restrictions apply to those not willing (prohibition on serving alcohol after 5pm, e.g.) Restrictions may vary between regions. (Kanta Services, 2021[42])
France	Yes	Wide range of use, most of public venues, including also long distance travel	Vaccination, recovery or test	Third dose of vaccine being rolled out as a requirement to keep the *passe sanitaire* (El Pais, 2021[43])
Germany	Yes	Indoor hospitality venues, stores (excluded basic necessities)	Vaccination and recovery (some few regions also accept tests)	Additional restriction for the non-vaccinated (El Pais, 2021[43])
Greece	Yes	Restaurants, cafes, bars, cinemas, theatres, gyms	Vaccination, recovery (test depending on venue, more limited)	Third dose of vaccine to be introduced for the certificate First country in Europe to mandate vaccines for over 60 (Politico.EU, 2021[44])
Hungary	Yes	Indoor sports and cultural events and outdoor events with +500 people	Vaccination	Vaccination mandate for health workers, could be extended to public sector employees (Reuters, 2021[45])
Iceland	No			There are restrictions on the number of people in public spaces, but no passport for vaccination/tests
Ireland	Yes	Gyms, leisure centres, hotel bars and restaurants	Vaccination or recovery	(Ireland Department of the Taoiseach, 2021[46])

Country	Has a COVID-19 pass been implemented?	Locations applicable	Requirements	Further information
Israel	Yes	Public spaces and events, no longer required for events of max 100 people indoors + for **work** in certain industries and professions	Vaccination and recovery	Israel has already introduced booster shots to all its population, and it's a requirement to keep the COVID-19 pass (Ministry of Health, 2021[47])
Italy	Yes	Most indoor facilities + events + long distance travel + **work**	Vaccination, recovery or test	In work restrictions, employees can be suspended and have their salaries withheld if they don't show a pass (El Pais, 2021[43])
Japan	Yes	Leisure in groups of more than 4, inter-city travel, some leisure activities and public spaces	Vaccination, tests	(Kyodo News, 2021[48])
South Korea	Yes	Restaurants, cafes, cinemas, gyms, saunas, discos and other public spaces	Vaccination	(Reuters, 2021[49])
Latvia	Yes	Large public venues and all services, except most basic needs	Vaccination, recovery or test	(Investment and Development Agency of Latvia, 2021[50])
Lithuania	Yes	Limits on the number of people in certain venues, which is higher in places that check COVID-19 passes	Vaccination, recovery or test	Booster shots to become mandatory in order to keep the travel vaccination certificate (Ministry of the Economy and Innovation of the Republic of Lithuania, 2021[51])
Luxembourg	Yes	Inside restaurants and bars, events of more than 10 people	Vaccination, recovery (test only in some occasions)	New legislation aims at restricting access to unvaccinated people to most non-essential venues. Also, plans to introduce the *pass sanitaire* at work (The Luxembourg Government, 2021[52])
Mexico	No			
Netherlands	Yes	Several indoor leisure activities and public venues (restaurants, bars, museums, cinemas, gyms etc.)	Vaccination, recovery or test	From Feb 2022 only people with booster shots will be able to maintain their COVID-19 pass (validity of 9 months) (Government of the Netherlands, 2021[53])
New Zealand	Yes, partially	Events, hospitality, close-contact services etc.	Vaccination	Optional in many venues, but with additional restrictions on number of people if verification is not applied (Ministry of Health, 2021[54])
Norway	Yes, optional and partially		Vaccination, recovery or test	Plans to introduce the corona pass (Reuters, 2021[55])
Poland	No			
Portugal	Yes	Restaurants, cafes, hotels, events, bars, discos, air and sea travel.	Vaccination, recovery or test	(GEO, 2021[56]; El Pais, 2021[43])
Slovak Republic	Yes	Events, restaurants, non-essential shop and shopping malls. Unvaccinated workers must get test regularly.	Vaccination	As of Dec 2021 under a curfew-based lockdown, which was recently extended. As of 10 Dec 2021, shops can open for vaccinated and recovered people (The Slovak Spectator, 2021[57])

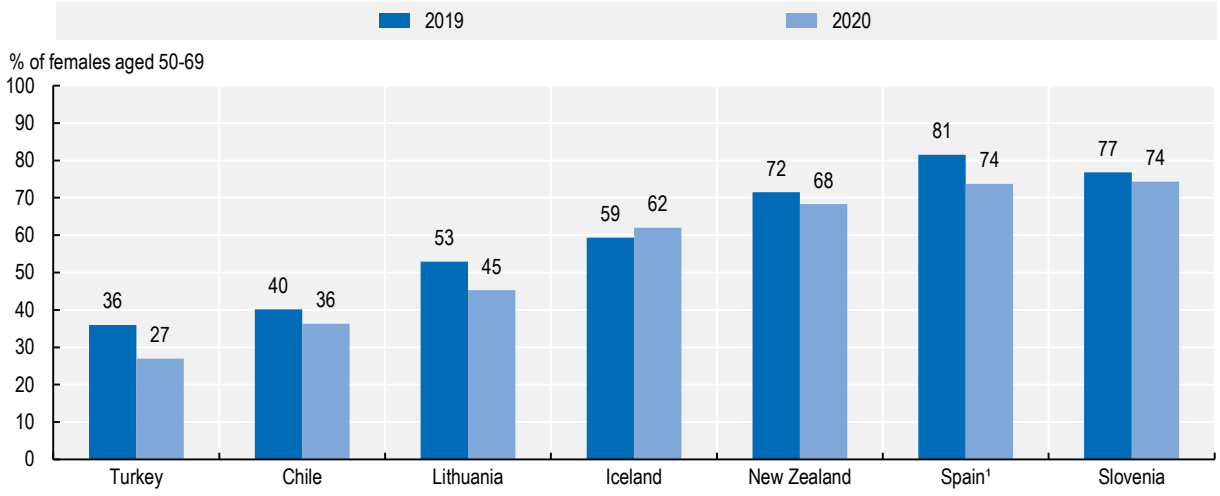
Country	Has a COVID-19 pass been implemented?	Locations applicable	Requirements	Further information
Slovenia	Yes	Hospitality, restaurants, stores, public transport	Vaccination, recovery or test	Passes required from employees and users of public venues (Euractiv, 2021[58])
Spain	In preparation by regions	Most indoor hospitality venues, gyms, long term care facilities	Vaccination, recovery or test	Some regional governments are preparing the requirement of passes, Canary islands approved on a voluntary basis (El Pais, 2021[59])
Sweden	Yes, partially	Indoor events with more than 100 people.	Vaccination	Government has announced plans to introduce legislation aiming at extending the use of COVID-19 passes for restaurants and gyms (Government Offices of Sweden, 2021[60])
Switzerland	Yes	Restaurants, bars, indoor events, museums, libraries, gyms etc.	Vaccination, recovery or test	Referendum on the extension and use of COVID-19 passes received a strong backing from voters (France24, 2021[61])
Turkey	Yes, partially	Concerts, cinemas and theatres, for instance	Vaccination, tests	(Turkish Ministry of the Interior, 2021[62])
United Kingdom	Yes, partially	Nightclubs and large venues	Vaccination, recovery, tests	Wales requires for large events and nightclubs. Passes required in England for nightclubs and large venues (The Times, 2021[63]; El Pais, 2021[43])
United States	Partially			Vaccine certificates only being implemented in some states/cities, such as in New York. Only federal requirement concerns air travel (El Pais, 2021[43])

Containment efforts must consider the need for engaging people and providing support for the continuity of care, especially for people living with chronic conditions

Engaging people has been critical not only to achieve better results in mitigation efforts, but also to ensure ongoing care management. In addition to individual responsibility and adoption of preventive behaviours to contain the spread to the COVID-19 pandemic, another important aspect related to the COVID-19 pandemic was the continuity of care for chronic patients. In the opinion of over 200 health care professionals from 47 countries who participated in an online survey, diabetes care was by far the chronic condition most impacted by COVID-19 due to reduction of care (Chudasama et al., 2020[1]). In Portugal, hospital at home services that had been previously implemented were further strengthened during the pandemic, to encourage earlier hospital discharge and care integration that followed patients once they were home. Chronic disease commissions, including both health care professionals and patient representatives, helped to define strategies and action plans in response to care during the pandemic.

Emerging data points to the impacts of the pandemic on delays in care for chronic conditions, including cancer, as well as elective procedures. Across seven OECD countries with available data, the proportion of women aged 50-69 who were screened within the previous two years for breast cancer fell by 5 percentage points between 2019 and 2020, with reductions in screening particularly acute during the initial months of the pandemic (Figure 3.4). While the full impact of COVID-19 remains to be seen, delays in screening, diagnosis and treatment for conditions like cancer will likely have impacts on survival rates, further exacerbating the damaging legacy of the pandemic.

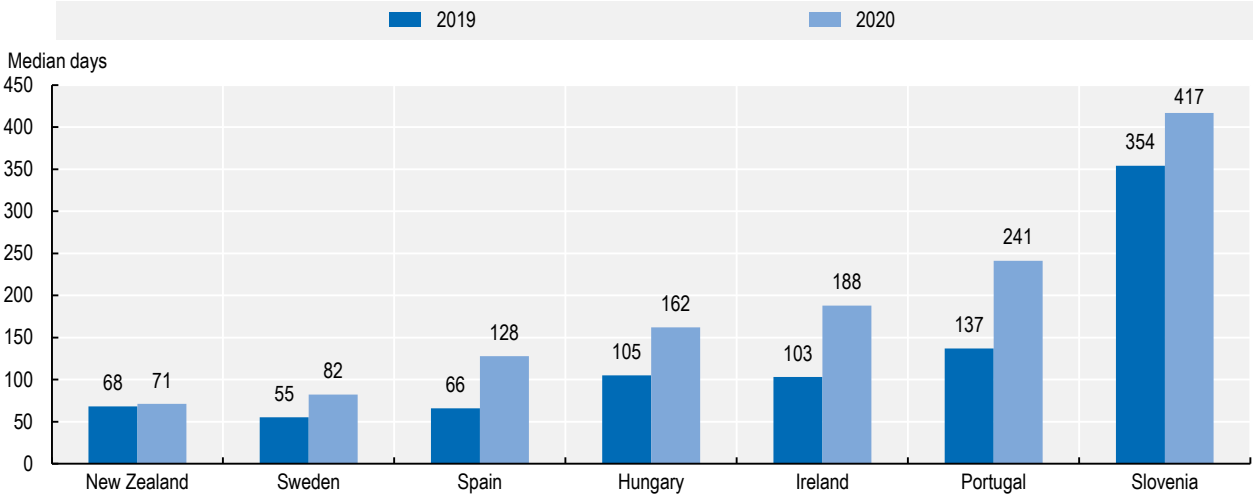
Figure 3.4. Breast cancer screening in previous two years



Note: Data for Spain is survey (not programme) data.
Source: OECD (2021[64]), *Health at a Glance 2021: OECD Indicators*, https://doi.org/10.1787/ae3016b9-en.

Non-urgent procedures also continue to be disrupted due to the pandemic. While delays in elective surgeries such as hip replacement may not have the same long-term impact on survival rates as delays in cancer care and treatment, postponements of elective surgery nonetheless have enormous impacts on the quality of life and well-being of the people who must live in discomfort or pain for longer than they had initially anticipated. Waiting times for hip replacement, knee replacement and cataract surgery all increased across the seven OECD countries with available data for 2020. On average, the median days spent on a waitlist before undergoing knee replacement surgery increased by 88 days in 2020 compared to 2019 for patients on surgery waiting lists, and 58 days for those on hip replacement surgery waiting lists (Figure 3.5).

Figure 3.5. Waiting times for hip replacement



Source: OECD (2021[64]), *Health at a Glance 2021: OECD Indicators*, https://doi.org/10.1787/ae3016b9-en.

Digital technologies such as diabetes management apps can increase opportunities for co-production of health by patients and more agency in self-care through the capture of diabetes device data. However, not only is uptake of such technology relatively low, but their effectiveness also depends on the ability to share these data back to providers and integrate the information generated within patient's records to inform virtual care and improve care management (Gamble et al., 2020[65]). The pandemic has also offered a clear demonstration of the importance of harnessing available digital tools to facilitate better continuity of care. Electronic records in primary care, for example, offer a powerful tool to fight outbreaks. Some countries have harnessed the opportunity to identify and notify people at particularly high risk of complications, as identified through information recorded in electronic health and medical records, including people who are immunocompromised, have diabetes, and other chronic conditions. In many countries, digital tools have been employed to speed up access to COVID-19 testing results.

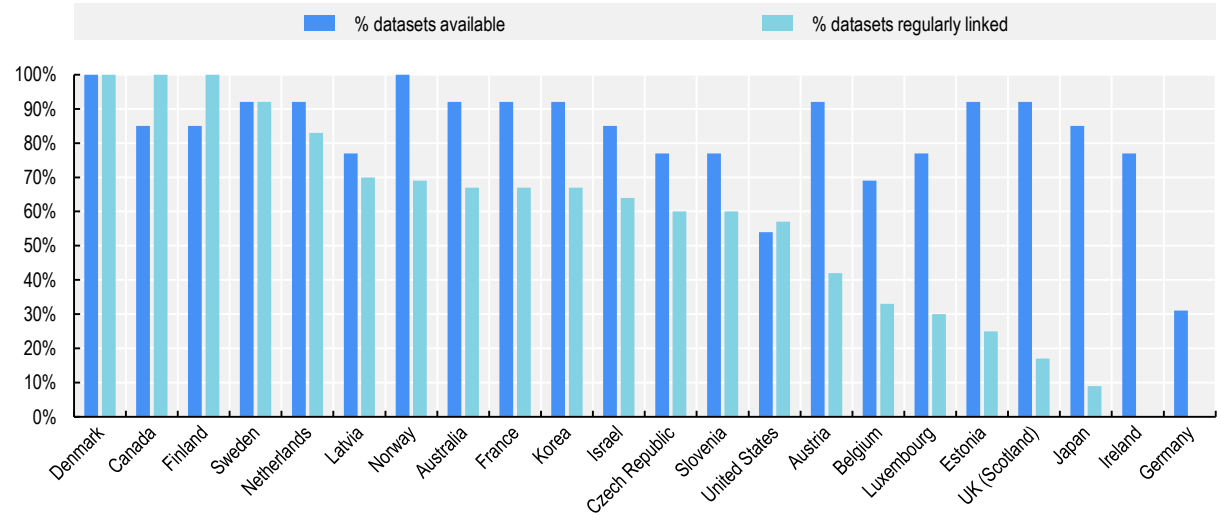
Strengthening multidisciplinary teams has helped to bolster co-ordination and integration of care, but information gaps remain a limiting factor

In many OECD countries, the scope of practice of community pharmacists has been expanded so that they can take on some of the tasks from doctors and allow them to spend their time more effectively on the most complex cases and minimise the number of medical consultations (OECD, 2021[4]). In Canada, Ireland, Portugal and the United States, for example, pharmacists have been allowed to extend prescriptions beyond what they were previously allowed to do and to prescribe certain medications. In the United States, community pharmacists have been authorised by the Food and Drug Administration to order and administer COVID-19 tests. In Scotland, community pharmacists performed an enhanced role during the COVID-19 pandemic, support more patients through the extension of Minor Ailment Service (MAS) to reduce the burden across the NHS and ensure patients continue to get the necessary medicines.

Community health workers have a role to play during the COVID-19 pandemic to ensure patients access to needed care. Community health workers who are integrated into primary health care services can also be beneficial during health emergencies. While community health workers provide opportunities to ensure that patients are connected to health care systems, they have not been mobilised as much as they could during the first wave of the COVID-19 pandemic. Only a few OECD countries made the best of community health workers to provide timely, accurate information about COVID-19 and ensure that people obtained access to care and support. The United States and the United Kingdom are two notable exceptions. In the United States, community health workers served as support in navigating the health care systems, and mitigating fear and correcting misinformation in disadvantaged communities (Peretz, Islam and Matiz, 2020[66]). The United Kingdom also proposed to use community health workers to provide support for vulnerable people (Haines et al., 2020[67]).

Information gaps limit the possibilities that different providers, teams, and professionals across the health system offer seamless, integrated care. In the case of COVID-19, it is critical that primary care providers are up to date about what happens to their patients in hospital settings, for example. Similarly, priority lists for vaccination can be drawn more efficiently if records are integrated and risk factors can be quickly identified by authorities who are planning the deployment of vaccines, just to give a few examples. For this to happen, health records need to be linked across the different databases of the health system. Record linkages enable the information value of individual datasets to grow, permitting connections between health care provided and the outcomes of that care over time; and permitting data within one dataset to be put into context with data from other sources (Oderkirk, 2021[68]). However, even though most countries are broadly using electronic health records, their health data infrastructure may limit the possibility that the data follow the patients across different levels of care, types of providers, and regions. Across 22 OECD countries, on average 83% of key national health datasets are available, but a much smaller percentage, 55% are regularly linked for research, statistics and monitoring (Figure 3.6).

Figure 3.6. Percentage of key national health datasets available and regularly linked for monitoring and research across 22 OECD countries and Singapore



Source: Oderkirk (2021[68]), "Survey results: National health data infrastructure and governance", https://dx.doi.org/10.1787/55d24b5d-en.

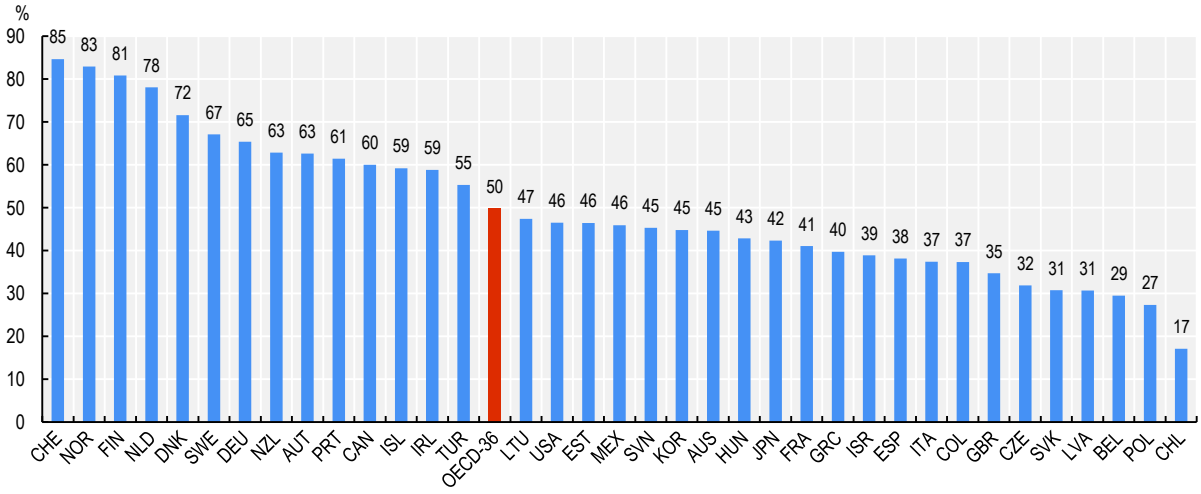
Respectfulness was sometimes compromised to ensure patient and staff safety and must be urgently restored

Policies to promote patient safety have sometimes come at the expense of people-centred care – especially at the end of life. Many initial policy responses focused on containment in high-risk environments. Long term care (LTC) facilities and hospitals put in place policies highly restricting patient and family choice. LTC and end-of-life care has been particularly fraught, with family members and loved ones in some cases prevented from seeing sick family members in hospital or long-term care facilities, and funerals banned or restricted in many areas. In successfully implementing policies to fight COVID-19 that infringe on regular behaviours and undercut many rights people take for granted, other dimensions of people-centred care can become even more important.

Strongly institutionalising co-production and respectfulness, in particular, may be critical to ensuring populations trust and comply with these difficult decisions. Where health systems users and patients feel they have a say and are engaged in their health and are treated with respect, it may be easier to ensure buy-in when difficult policy measures must be put in place. In Poland, a free telephone patient hotline, serviced by the Patients' Rights Ombudsman, was established to collect complaints, problems, and other issues related to the COVID-19 pandemic.

In some cases, matters of trust may be beyond the control of health systems and health policy makers. Broader trust in government, including how the government has responded to the social crisis engendered by the COVID-19 pandemic, can colour how populations see the health systems response as much as the actual response itself. Across 36 OECD countries, fewer than half of people indicated they trusted their government in 2020 (OECD, 2020[69]).

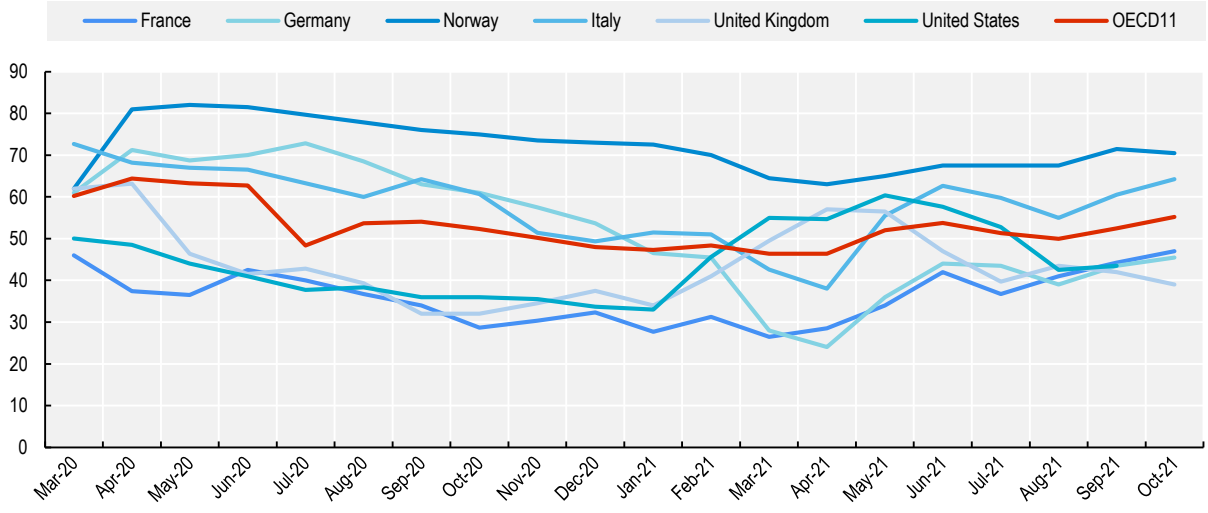
Figure 3.7 Trust in government in OECD countries



Source: OECD (2020[69]), *How's Life? 2020: Measuring Well-being*, https://dx.doi.org/10.1787/9870c393-en.

Over the course of the pandemic, people's trust in their government's response fell across most countries. The proportion of people reporting that they feel their government handled the coronavirus "well" or "somewhat well" declined on average across 11 OECD countries between March 2020 and March 2021, from 60% at the start of the pandemic to 46% by March 2021 (Figure 3.8). While the proportion of people who feel their government has responded well or somewhat well to the pandemic remains below spring 2020 levels in nearly all countries surveyed, confidence in the government response has increased steadily since spring 2021, possibly associated with rising vaccination rates and some relaxing of restrictions in spring-summer 2021 in many countries. By October 2021, 55% of people surveyed reported that they felt their governments were handling the pandemic well or somewhat well, a marked improvement from earlier in the year.

Figure 3.8. Proportion of people who feel their government is handling the coronavirus well or somewhat well

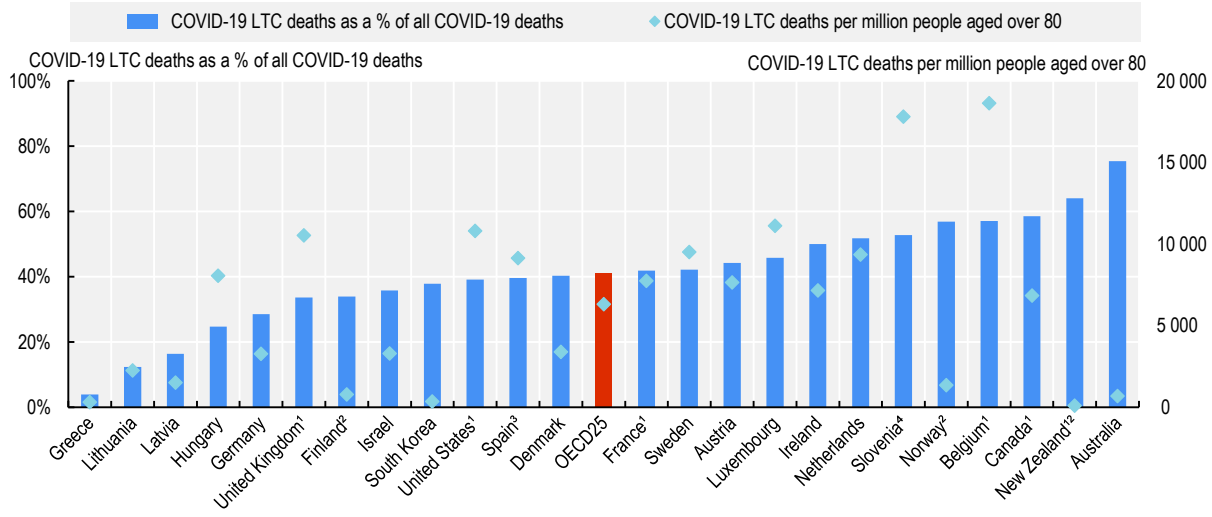


Note: In some cases, monthly averages were calculated by averaging multiple survey waves from the same month.
Source: YouGov (2021[70]), COVID-19 Public Monitor, https://yougov.co.uk/COVID-19.

The experience tackling the COVID-19 pandemic has severely tested health systems across OECD countries, and underscored how uneven progress towards people-centred care remains, despite important steps taken in recent years to put people at the centre. Reflecting the importance of better ensuring access and affordability for all, the impact of the COVID-19 pandemic – both in health and material terms – has disproportionately hit vulnerable groups, including low-income workers and older persons, especially those living in long-term care facilities. Across 25 OECD countries, more than 40% of all COVID-19 related deaths through February 2021 had taken place among residents of long-term care facilities, including 50% or more COVID-19 deaths among residents of LTC facilities in nearly one-third (8/25) of OECD countries with available data (Rocard, Sillitti and Llena-Nozal, 2021[71]). Long-term care was under-prioritised in health emergency planning prior to the pandemic, while staffing shortages and workforce challenges that predated the health emergency – including low pay, high turnover and skills mismatch – exacerbated pre-existing weaknesses when the sector faced such a dramatic health shock (OECD, 2020[72]; Rocard, Sillitti and Llena-Nozal, 2021[71]).

Figure 3.9. Proportion of all COVID-19 deaths occurring among long-term care residents

Share of COVID-19 deaths in LTC in all COVID-19 deaths (left scale); Number of COVID-19 deaths in LTC per million people aged 80 years and over (right scale)



Note: Data on cumulative deaths up to early February 2021 (see Annex for details).
1. Includes confirmed and suspected deaths.
2. Only includes deaths occurring within LTC facilities.
3. Data come from regional governments using different methodologies, some including suspected deaths.
4. Slovenia includes deaths in nursing homes and social LTC facilities.
Source: OECD (2021[73]), OECD Questionnaire on COVID-19 in Long-Term Care; European Center for Disease Prevention and Control (2021[74]), Surveillance data from public online national reports on COVID-19 in long-term care facilities, https://www.ecdc.europa.eu/en/all-topics-z/coronavirus/threats-and-outbreaks/COVID-19/prevention-and-control/LTCF-data.

In the first semester of 2020, most OECD countries adopted restrictions in the form of isolation measures and restricted visits to residents in LTC institutions, including a complete ban on all visits in Austria, Hungary, Italy and Slovenia, and suspension of most visits in Ireland and Portugal (OECD/European Union, 2020[3]). While these restrictions have been associated with adverse effects on resident well-being in North America and Europe (Levere, Rowan and Wysocki, 2021[75]; Pitkälä, 2020[76]), there have also been reports of interventions introduced to mitigate these impacts. Innovations to increase resident social connections, improve physical fitness, promote communication between families and care staff or

administrators, and support relationships between residents and staff have been reported in Canada, Japan, Spain, Switzerland, and the United States (Bowers et al., 2021[77]).

Building people-centred health systems: Lessons from COVID-19

As the magnitude of the impact of the COVID-19 pandemic became clearer in the first months of 2020, it may have seemed consensual among policy makers that some of the guiding principles of health systems would need to be placed on hold in the name of rapid containment of the spread of the virus. The cost of reducing patient involvement in decision-making, limiting choice and access to services, and dedicating the resources of health systems to treating COVID-19 patients, among other policies, may have seemed to be low in comparison to the potential death toll of the pandemic. However, after nearly two years of an enduring pandemic and its continuing effects, it is clear the principles of people-centredness remain a key approach to not only control the spread of infection but also to achieve the best possible health outcomes. Rather than being an obstacle, people-centredness should be seen as an asset of health systems in developing an effective response to COVID-19 and to other health shocks.

Some of the most important measures to contain the spread of the pandemic require high levels of participation and compliance from the part of the general public including, for example, the use of face masks, isolation of the infected, notification of contact cases, adherence to vaccination and proactive testing following the onset of symptoms. Similarly, successful outcomes in the continuity of care for all other conditions, especially non-communicable chronic diseases, also depend on principles of people-centredness, including ways to allow for people to be and remain active participants in their own treatments, developing and disseminating tools to allow for care to continue to be provided even during times of disruption, and promoting integrated delivery of care.

While health policy makers and health professionals did on some occasions correct course and develop more people-centred policies as the pandemic continued, the experience of the pandemic has shown that a people-centred approach should work far better when it is institutionalised far before a health shock hits. One definition of health systems resilience refers to their ability to absorb and minimise the effects of health shocks, while adapting and planning based on lessons learned for to ensure better performance in the future. With this perspective in mind, the COVID-19 pandemic offers many lessons to build more people-centred health systems going forward.

References

Al Jazeera (2021), *Canada launches COVID vaccine passport for travel*, https://www.aljazeera.com/news/2021/10/21/canada-launches-covid-vaccine-passport-for-travel. [35]

Badillo-Goicoechea, E. et al. (2021), *Global trends and predictors of face mask*. [23]

BBC (2021), *Covid vaccine to be mandatory for children in Costa Rica*, https://www.bbc.com/news/world-latin-america-59162510. [38]

Bencharif, S. (2021), *Belgium's new coronavirus measures: Schools targeted, bars left alone*, https://www.politico.eu/article/belgium-coronavirus-measures-covid19-alexander-de-croo-education/. [34]

Bhaskar, S. et al. (2020), "Telemedicine Across the Globe-Position Paper From the COVID-19 Pandemic Health System Resilience PROGRAM (REPROGRAM) International Consortium (Part 1)", *Frontiers in Public Health*, Vol. 8, http://dx.doi.org/10.3389/fpubh.2020.556720. [11]

Bowers, B. et al. (2021), *What COVID-19 Innovations Can Teach Us About Improving Quality of Life in Long-Term Care*, Elsevier Inc., http://dx.doi.org/10.1016/j.jamda.2021.03.018. [77]

Carrieri, V., L. Madio and F. Principe (2019), "Vaccine hesitancy and (fake) news: Quasi-experimental evidence from Italy", *Health Economics*, pp. 1377–1382, http://dx.doi.org/10.1002/hec.3937. [28]

Chudasama, Y. et al. (2020), "Impact of COVID-19 on routine care for chronic diseases: A global survey of views from healthcare professionals", *Diabetes and Metabolic Syndrome: Clinical Research and Reviews*, Vol. 14/5, pp. 965-967, http://dx.doi.org/10.1016/j.dsx.2020.06.042. [1]

de Goeij, H. (2021), *The Czech Republic prepares for new restrictions as cases soar*, https://www.nytimes.com/2021/11/18/world/europe/the-czech-republic-prepares-for-new-restrictions-as-cases-soar.html. [39]

Dobiášová, K., Z. Kotherová and D. Numerato (2021), "Institutional reforms to strengthen patient and public involvement in the Czech Republic since 2014", *Health Policy*, http://dx.doi.org/10.1016/j.healthpol.2021.03.011. [9]

El Pais (2021), *Certificado covid en España: qué comunidades han aprobado su uso y para qué actividades*, https://elpais.com/sociedad/2021-11-26/certificado-covid-que-comunidades-han-aprobado-su-uso-y-para-que-actividades.html. [59]

El Pais (2021), *Covid passports: Which countries require them, and for what*, https://english.elpais.com/usa/2021-12-01/covid-passports-which-countries-require-them-and-for-what.html. [43]

Euractiv (2021), *Fourth COVID-19 wave plateauing in Slovenia*, https://www.euractiv.com/section/politics/short_news/fourth-covid-19-wave-plateauing-in-slovenia/. [58]

European Center for Disease Prevention and Control (2021), *Surveillance data from public online national reports on COVID-19 in long-term care facilities*, https://www.ecdc.europa.eu/en/all-topics-z/coronavirus/threats-and-outbreaks/COVID-19/prevention-and-control/LTCF-data. [74]

European Patients Forum (2021), *Survey Report. The Impact of the COVID-19 Pandemic on Patients and Patient Organisations*, European Patients Forum, Brussels, http://www.eu-patient.eu. [10]

Fan, J. et al. (2020), *The University of Maryland Social Data Science Center Global COVID-19 Trends and Impact Survey, in partnership with Facebook*, https://covidmap.umd.edu/api.html. [22]

Federal Ministry of Social Affairs, Health Care and Consumer Protection (2021), *Questions and Answers: FAQ and contacts in relation to the EU Digital COVID Certificate in Austria*, https://gruenerpass.gv.at/en/faq/. [32]

Fontanet, A. and S. Cauchemez (2020), *COVID-19 herd immunity: where are we?*, Nature Research, http://dx.doi.org/10.1038/s41577-020-00451-5. [26]

France24 (2021), *Swiss voters back Covid pass law*, https://www.france24.com/en/live-news/20211128-swiss-voters-back-covid-pass-law. [61]

Gamble, A. et al. (2020), *The challenges of COVID-19 for people living with diabetes: Considerations for digital health*, JMIR Publications Inc., http://dx.doi.org/10.2196/19581. [65]

Garett, R. and S. Young (2021), "Online misinformation and vaccine hesitancy", *Translational Behavioral Medicine*, http://dx.doi.org/10.1093/tbm/ibab128. [29]

GEO (2021), *Covid-19 : le Portugal, rétablit plusieurs restrictions sanitaires*, https://www.geo.fr/voyage/covid-19-le-portugal-retablit-plusieurs-restrictions-sanitaires-207303. [56]

Government of Chile (2021), *Pase de Movilidad: Qué es el Pase de Movilidad?*, https://www.gob.cl/yomevacuno/pasemovilidad/. [36]

Government of the Netherlands (2021), *Where do I need to show a coronavirus entry pass?*, https://www.government.nl/topics/coronavirus-covid-19/covid-certificate/coronavirus-entry-pass/where-do-i-need-to-show-a-coronavirus-entry-pass. [53]

Government Offices of Sweden (2021), *The Government's work in response to the virus responsible for COVID-19*, https://www.government.se/government-policy/the-governments-work-in-response-to-the-virus-responsible-for-covid-1/. [60]

Haines, A. et al. (2020), "National UK programme of community health workers for", *The Lancet*, Vol. 395, pp. 1173-1175, http://dx.doi.org/10.1016/S0140-6736(20)30735-2. [67]

Hale, T. et al. (2021), "A global panel database of pandemic policies (Oxford COVID-19 Government Response Tracker)", *Nature Human Behaviour*, Vol. 5/4, pp. 529-538, http://dx.doi.org/10.1038/s41562-021-01079-8. [20]

Howard, J. et al. (2021), "An evidence review of face masks against COVID-19", *Proceedings of the National Academy of Sciences of the United States of America*, Vol. 118/4, http://dx.doi.org/10.1073/pnas.2014564118. [19]

Investment and Development Agency of Latvia (2021), *COVID-19 and traveling to Latvia*, https://www.latvia.travel/en/article/covid-19-and-travelling-latvia. [50]

Ipsos (2021), *Covid-19 Vaccination Intent. Ipsos survey for The World Economic Forum*. [27]

Ireland Department of the Taoiseach (2021), *Public health measures in place right now*, https://www.gov.ie/en/publication/3361b-public-health-updates/. [46]

Johnsen, T. et al. (2021), *Suitability of video consultations during the COVID-19 pandemic lockdown: Cross-sectional survey among Norwegian general practitioners*, JMIR Publications Inc., http://dx.doi.org/10.2196/26433. [16]

Kanta Services (2021), *COVID-19 Certificate and COVID-19 Passport*, https://www.kanta.fi/en/web/guest/covid-19-certificate. [42]

Köther, A., K. Siebenhaar and G. Alpers (2021), "Shared Decision Making during the COVID-19 Pandemic", *Medical Decision Making*, http://dx.doi.org/10.1177/0272989X211004147. [6]

Kriss.EE Government Communication Unit (2021), *Current restrictions*, https://www.kriis.ee/en/crisis-management-qa/crisis-management/current-restrictions. [41]

Kyodo News (2021), *Japan to lift spectator cap in easing of COVID-19 restrictions*, https://english.kyodonews.net/news/2021/11/fc70189e98bc-japan-to-lift-spectator-cap-in-easing-of-covid-19-restrictions.html. [48]

Levere, M., P. Rowan and A. Wysocki (2021), "The Adverse Effects of the COVID-19 Pandemic on Nursing Home Resident Well-Being", *Journal of the American Medical Directors Association*, Vol. 22/5, pp. 948-954.e2, http://dx.doi.org/10.1016/j.jamda.2021.03.010. [75]

Liao, M. et al. (2021), "A technical review of face mask wearing in preventing respiratory COVID-19 transmission", *Current Opinion in Colloid & Interface Science*, Vol. 52, p. 101417, http://dx.doi.org/10.1016/j.cocis.2021.101417. [25]

Li, Y. and C. Sun (2021), "Face masks to prevent transmission of COVID-19: A systematic review and meta-analysis", *American Journal of Infection Control*, Vol. 49/7, pp. 900-906, http://dx.doi.org/10.1016/j.ajic.2020.12.007. [24]

Lockyer, B. et al. (2021), "Understanding COVID-19 misinformation and vaccine hesitancy in context: Findings from a qualitative study involving citizens in Bradford, UK", *Health Expectations*, Vol. 24/4, pp. 1158-1167, http://dx.doi.org/10.1111/hex.13240. [30]

Marin, A. (2020), "Telemedicine takes center stage in the era of COVID-19", *Science*, pp. 731-733, http://dx.doi.org/10.15585/mmwr. [12]

Mehrotra, A. et al. (2021), *The Impact of COVID-19 on Outpatient Visits in 2020: Visits Remained Stable, Despite a Late Surge in Cases*, Commonwealth Fund, New York, NY, http://dx.doi.org/10.26099/bvhf-e411. [14]

Ministry of Health (2021), *COVID Certificate*, https://corona.health.gov.il/en/covid-certificate-lobby/covid-medical-certificate/. [47]

Ministry of Health (2021), *My Covid Record: Proof of vaccination status*, https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-vaccines/my-covid-record-proof-vaccination-status. [54]

Ministry of the Economy and Innovation of the Republic of Lithuania (2021), *National Certificate*, https://eimin.lrv.lt/en/important-information-for-business-on-coronavirus-3/national-certificate. [51]

Moore, A. and M. MacKenzie (2020), "Policy making during crises: How diversity and disagreement can help manage the politics of expert advice", *The BMJ*, Vol. 371, http://dx.doi.org/10.1136/bmj.m4039. [8]

Murphy, E. et al. (2020), "COVID-19: Public and patient involvement, now more than ever", *HRB Open Research*, Vol. 3, p. 35, http://dx.doi.org/10.12688/hrbopenres.13067.1. [7]

NationalT Kommunikations Partnerskab COVID-19 (2021), *Corona passport – where and how?*, https://en.coronasmitte.dk/corona-passport. [40]

Nouvellet, P. et al. (2021), "Reduction in mobility and COVID-19 transmission", *Nature Communications*, Vol. 12/1, http://dx.doi.org/10.1038/s41467-021-21358-2. [18]

Oderkirk, J. (2021), "Survey results: National health data infrastructure and governance", *OECD Health Working Papers*, No. 127, OECD Publishing, Paris, https://dx.doi.org/10.1787/55d24b5d-en. [68]

OECD (2021), "Enhancing public trust in COVID-19 vaccination: The role of governments", *OECD Policy Responses to Coronavirus (COVID-19)*, OECD Publishing, Paris, https://doi.org/10.1787/eae0ec5a-en. [31]

OECD (2021), *Health at a Glance 2021: OECD Indicators*, OECD Publishing, Paris, https://doi.org/10.1787/ae3016b9-en. [64]

OECD (2021), *OECD Questionnaire on COVID-19 in Long-Term Care*. [73]

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 (2020), *How's Life? 2020: Measuring Well-being*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9870c393-en. [69]

OECD (2020), *Who Cares? Atracting and Retaining Care Workers for the Elderly*, OECD Publishing, https://doi.org/10.1787/92c0ef68-en. [72]

OECD/European Union (2020), *Health at a Glance: Europe 2020: State of Health in the EU Cycle*, OECD Publishing, Paris, https://dx.doi.org/10.1787/82129230-en. [3]

Peretz, P., N. Islam and L. Matiz (2020), "Community Health Workers and Covid-19 — Addressing Social Determinants of Health in Times of Crisis and Beyond", *New England Journal of Medicine*, Vol. 383/19, p. e108, http://dx.doi.org/10.1056/nejmp2022641. [66]

Perrotta, D. et al. (2021), "Behaviours and attitudes in response to the COVID-19 pandemic: insights from a cross-national Facebook survey", *EPJ Data Science*, Vol. 10/1, http://dx.doi.org/10.1140/epjds/s13688-021-00270-1. [21]

Pitkälä, K. (2020), *COVID-19 has hit nursing homes hard*, Springer Science and Business Media Deutschland GmbH, http://dx.doi.org/10.1007/s41999-020-00411-1. [76]

Politico.EU (2021), *Greece toughens vaccine rules as coronavirus cases mount again*, https://www.politico.eu/article/greece-covid19-vaccination-booster-shots-europe-kyriakos-mitsotakis/. [44]

Reuters (2021), *Factbox: Countries making COVID-19 vaccines mandatory*, https://www.reuters.com/business/healthcare-pharmaceuticals/countries-making-covid-19-vaccines-mandatory-2021-08-16/. [45]

Reuters (2021), *Norway plans third vaccine dose for all adults, "corona passes"*, https://www.reuters.com/world/europe/norway-plans-third-covid-19-vaccine-dose-all-adults-2021-11-12/. [55]

Reuters (2021), *South Korea widens vaccine pass requirement as Omicron fears rise*, https://www.reuters.com/business/healthcare-pharmaceuticals/skorea-makes-vaccine-pass-mandatory-many-more-venues-omicron-fears-rise-2021-12-03/. [49]

Richardson, E. et al. (2020), "Keeping what Works: Remote Consultations during the COVID-19 Pandemic", *Eurohealth*, Vol. 26/2, https://apps.who.int/iris/handle/10665/336301. [15]

Richards, T. and H. Scowcroft (2020), "Patient and public involvement in covid-19 policy making", *The BMJ*, Vol. 370, http://dx.doi.org/10.1136/bmj.m2575. [5]

Rocard, E., P. Sillitti and A. Llena-Nozal (2021), "COVID-19 in long-term care: Impact, policy responses and challenges", *OECD Health Working Papers*, No. 131, OECD Publishing, Paris, https://dx.doi.org/10.1787/b966f837-en. [71]

Schengeninfonews (2021), *Travel to Austria for Touristic Purposes Will Be Possible Again After December 13*, https://www.schengenvisainfo.com/news/travel-to-austria-for-touristic-purposes-will-be-possible-again-after-december-13/. [33]

Terra Colombia (2021), *Mesures pour voyager en Colombie pendant le COVID-19*, https://www.voyage-colombie.com/pratique/infos-pratiques-covid-19. [37]

The Lancet Oncology (2021), *COVID-19 and cancer: 1 year on*, Lancet Publishing Group, http://dx.doi.org/10.1016/S1470-2045(21)00148-0. [2]

The Luxembourg Government (2021), *Coronavirus. Sanitary measures*, https://covid19.public.lu/en/sanitary-measures/restaurants-bars.html. [52]

The Slovak Spectator (2021), *Green pass, Covid pass, Covid certificate. Which do you need when?*, https://spectator.sme.sk/c/22795067/green-pass-covid-pass-covid-certificate-which-do-you-need-when.html. [57]

The Times (2021), *PM imposes plan B with working from home and Covid passports*, https://www.thetimes.co.uk/article/cabinet-rift-over-plan-for-vaccine-passports-r29vmv85l. [63]

Turkish Ministry of the Interior (2021), *PCR test obligation for some activities*, https://www.icisleri.gov.tr/bazi-faaliyetler-icin-pcr-testi-zorunlulugu-genelgesi-gonderildi. [62]

Weiner, J. et al. (2021), "In-Person and Telehealth Ambulatory Contacts and Costs in a Large US Insured Cohort Before and During the COVID-19 Pandemic", *JAMA network open*, Vol. 4/3, p. e212618, http://dx.doi.org/10.1001/jamanetworkopen.2021.2618. [13]

Whaley, C. et al. (2020), "Changes in Health Services Use among Commercially Insured US Populations during the COVID-19 Pandemic", *JAMA Network Open*, Vol. 3/11, http://dx.doi.org/10.1001/jamanetworkopen.2020.24984. [17]

YouGov (2021), *COVID-19 Public Monitor*, https://yougov.co.uk/covid-19. [70]