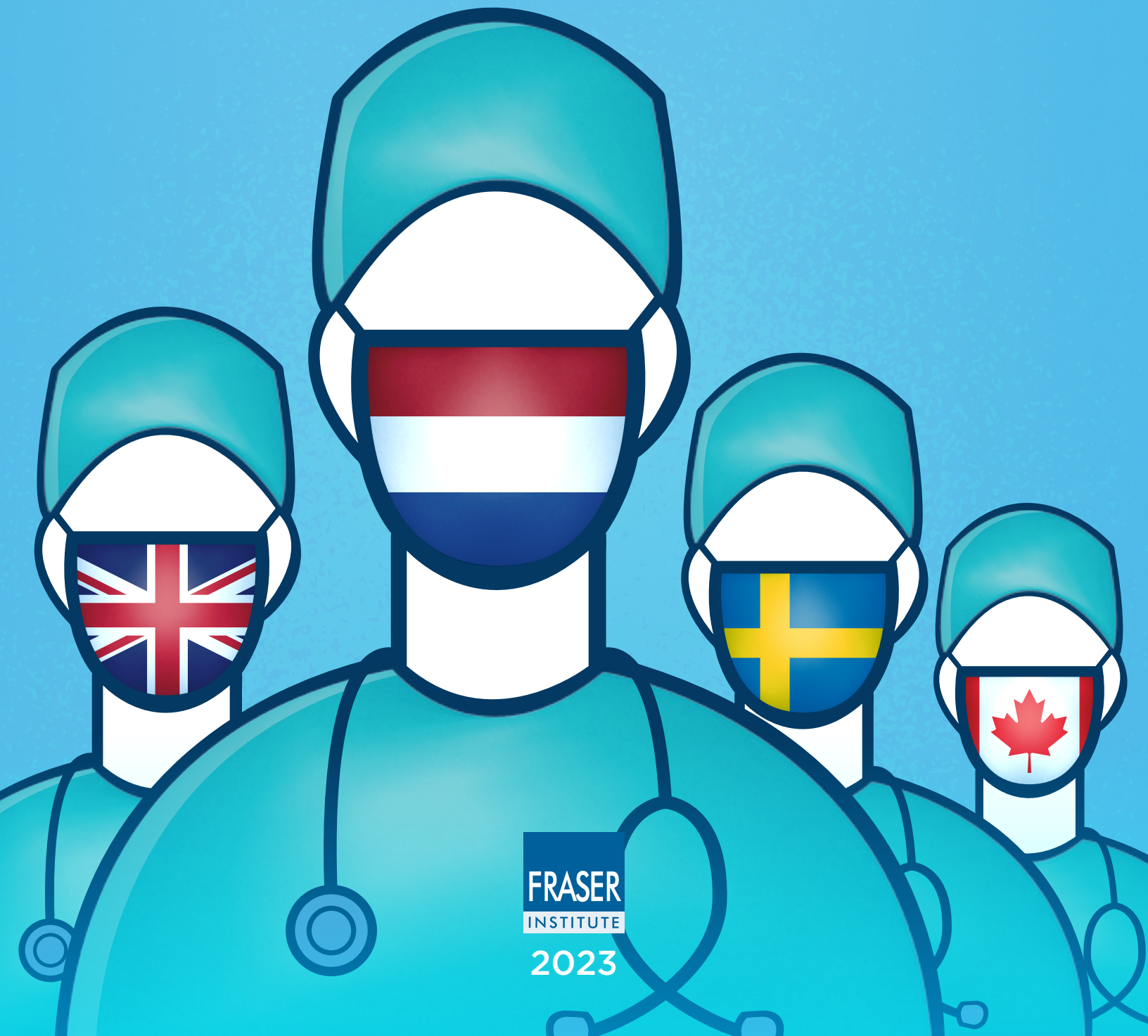


TACKLING THE SURGERY BACKLOG IN THE CANADIAN PROVINCES

SOME LESSONS FROM INTERNATIONAL EXPERIENCE

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by Yanick Labrie

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Executive Summary

The COVID-19 crisis that spread in the spring of 2020 has made many Canadians realize how woefully less prepared their health-care system was than the systems of other developed countries to face the health emergency. At the time of the arrival of the pandemic, Canada had no extra capacity in the hospital sector to deal with the influx of cases of patients affected by the virus. The level of health resources was—and still is—among the lowest in the developed world, despite public spending among the highest per capita. The pandemic has therefore brought major challenges to hospitals and health-care professionals. The mobilization of staff and the reallocation of medical resources to take care of COVID cases have forced provinces to cancel and postpone thousands of elective surgeries across provinces resulting in longer waiting times for patients.

However, even before the pandemic, there were major problems with access to elective surgeries in the country. Data collected over the past 30 years reveals a steady deterioration in access to such care across Canada. International data suggests that for many years Canadians have endured some of the longest delays in the developed world while they wait for access to medically necessary care. The COVID-19 pandemic has simply put an additional strain on our already fragile health-care systems.

Over the last few decades, provincial governments have tried to address this chronic access problem in their health-care systems, but without much success. Most of the time, this has boiled down to targeted increases in public funding dedicated to certain types of elective treatments. Without the necessary reforms, targeted funding programs have done nothing to solve the problems at the root of the long waiting lists for care. While they may have temporarily increased the capacity of the health system in specific areas, these one-time funding programs have not changed the incentives in place to improve the efficiency of our health-care systems in the long run.

Hospitals in Canada, in every province, still operate in a virtually monopolistic environment, where competition and the associated pressure to remain efficient are absent. Canadian patients have very few real options for obtaining specialized health-care services. Furthermore, hospitals in each province receive a global budget that does not vary according to the activities carried out or the number of patients treated.

Many other countries with universal health care, such as England, the Netherlands, and Sweden, have moved away from these centrally planned systems where the State is in charge both of financing and delivering services. These countries have sought to provide better incentives to care providers, separating the role of purchaser from that of provider of services, while at the same time regulating and monitoring the quality

of care provided. Freedom of choice for patients, competition among a mix of public and private providers, as well as a funding method that makes money follow patients are among some of the policy tools that have been used successfully to improve access and efficiency in these health-care systems. By making patients no longer a source of expenses in a fixed budget but rather a source of additional revenue, patient-based funding schemes encourage providers to deliver quality services in order to attract patients and treat them in a timely fashion.

These European countries have also allowed private care providers a more active role, increasing available capacity and diminishing the pressure on the public system. By making more optimal use of operating-room capacity, the private providers are able to increase the volume of elective surgeries performed in the health-care system, being less at risk of having to cancel or postpone surgeries due to unforeseen situations, as is often the case in large public hospitals. As a matter of fact, without the use of additional capacity from the private sector, several countries would be grappling with delays in surgeries much worse than the current ones.

Clearly, these health-care policies offer incentives for providers to become more efficient and at the same time contribute to improving the allocation of available resources. This efficiency, which replaces the rationing of care, is the source of improved access in countries like England, the Netherlands, and Sweden that have taken this path. This policy lesson should serve as an inspiration to decision-makers in their search for solutions to tackle the backlog of elective surgeries in the Canadian provinces.

Introduction

Since March 2020, the COVID-19 pandemic has disrupted public health, the economy, and the well-being of Canadians. Less studied is the collateral damage inflicted as a result of the cancellation and postponement of thousands of elective surgeries and treatments. In September 2022, about 938,000 fewer surgeries had been performed in Canada compared with the number completed in 2019 (CIHI, 2023).

This situation is not unique to Canada. In early 2020, as COVID-19 cases began to rise along with the number of hospitalizations, health-care systems around the world were postponing elective procedures in an effort to maintain available capacity and to prevent patients undergoing surgeries from becoming infected with the new virus. In many countries, this has resulted in longer waiting lists and a growing backlog of elective surgeries. Also, additional delays have accumulated in medical visits, diagnostic tests, and referrals, as medical staff have been redeployed elsewhere in the health-care systems to take care of mounting COVID cases (COVIDSurg Collaborative, 2020).

Long before the arrival of the pandemic, however, problems with access to surgical services in Canadian provinces were much greater than in many developed countries with universal health care (CIHI, 2017). In addition, survey data on wait times collected from physicians show a steady deterioration in access to elective treatments over the past 30 years in Canadian provinces (Moir and Barua, 2022c). In other words, the COVID-19 pandemic has simply put an additional strain on our already fragile health-care systems.

Going forward, the challenges that provincial governments will face in addressing the current backlog of elective surgeries will be unprecedented in magnitude. Provinces must not only attempt to tackle the current surgical backlog as soon as possible by making a better use of existing capacity, but also seek sustainable, long-term solutions to make their health-care system more resilient in the future. While this goal is perhaps not new for health-care systems that were already performing poorly in providing timely access to care prior to the arrival of the pandemic, the additional backlog created since then has clearly focused Canadians' attention on their shortcomings and failure to do so will now put at risk the wellbeing of many more patients than would be the case under normal circumstances.

This study aims to provide lessons inspired by foreign experience in this quest for solutions to the chronic problem of waiting times in elective surgeries in Canada. It is organized as follows. The first chapter shows a brief statistical portrait of the magnitude of the impact of the pandemic on the volumes of surgeries in Canada and the

resulting backlog. It also presents data on the evolution of waiting times for elective treatments in Canada before the pandemic, including comparisons with that of other developed countries with universal health-care systems. After doing so, it examines some possible factors responsible for chronic access problems in our health-care systems. The following three chapters look at the experiences of other countries that have successfully introduced some market-based reforms in the past to address wait times challenges and improve accessibility in their healthcare systems—approaches that may assist Canadian provinces dealing with a ballooned post-pandemic backlog.

1. The COVID Surgery Backlog and the Chronic Problem of Waiting Times in the Canadian Health-Care Systems

The COVID-19 pandemic, which began to spread in the spring of 2020, had the effect of increasing once again the pressure on already overloaded hospital medical staff, leading to the cancellation of many medical consultations and the postponement of thousands of elective surgeries throughout Canada. These scheduled procedures are all medically necessary and include treatments ranging from cataract removal to coronary bypass surgery, and even cancer surgeries. [1]

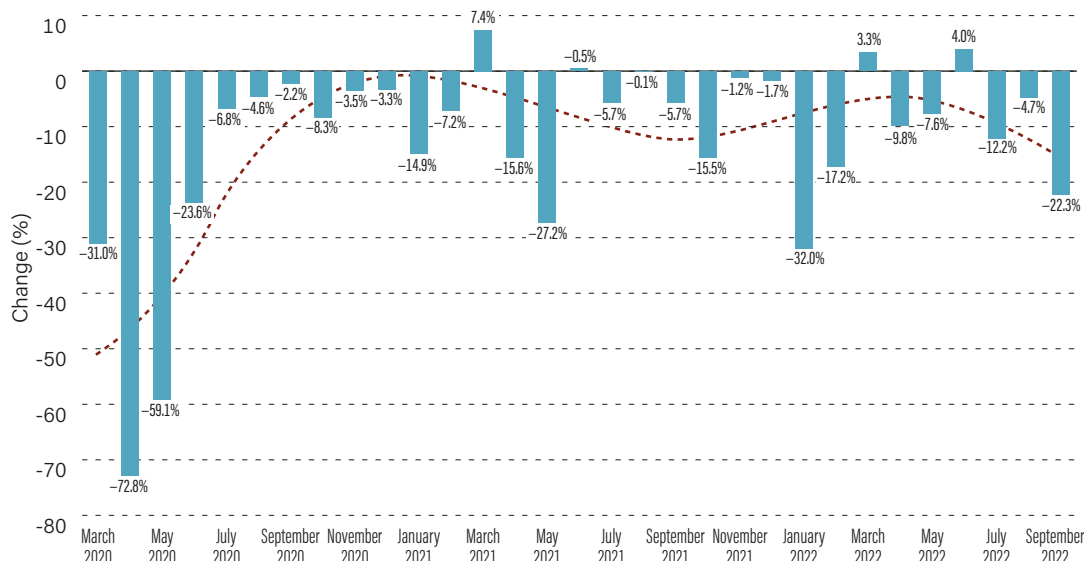
According to data compiled by the Canadian Institute for Health Information (CIHI), over 938,000 fewer surgeries were performed throughout the country in the first 31 months of the pandemic, compared with 2019. Patients living in lower-income neighbourhoods have been the most affected by the postponement and cancellation of surgeries, while waiting times have lengthened for these groups of population (CIHI, 2023). **Figure 1** shows how much the pandemic has affected the ability of provinces to maintain the same volume of surgeries during the pandemic as during the pre-pandemic period. Compared to 2019, surgical volumes saw a sharp decline of almost 75% in April 2020, as the first wave of the COVID-19 pandemic hit the country. Surgical volumes did not return to pre-pandemic levels until July to September 2020. [2] During the spring of 2021, surgical volumes showed a general downward trend, falling nearly 35% below pre-pandemic levels. As for cancer, the number of surgeries performed throughout Canada decreased by about 20% in 2020 compared with 2019 (CIHI, 2023).

The waiting list for surgical treatment has grown since the pandemic hit the country. According to data obtained by the organization Second Street, at least 645,000 Canadians were waiting for surgery across Canada (excluding the provinces of Manitoba and Nova Scotia) at the beginning of 2023 (Second Street, 2023). Given the size of its population, Ontario is the province with the largest backlog of elective

[1] Although we often use the terms “elective” and “non-urgent” interchangeably, elective surgeries can become urgent when wait times exceed a certain time threshold, a situation that seems to be increasingly common in Canada (Wiebe, Kelly and Kirsch, 2022).

[2] This decline in surgical volumes does not even account for increased population growth or potential increases in demand/need for treatment between the two periods of time.

Figure 1: Percentage change in surgical volume in Canada from pre-pandemic (2019) level to levels in the corresponding month of the pandemic period



Source: Canadian Institute for Health Information (CIHI), 2023.

elective surgeries, with nearly 206,000 patients on the waiting list. In Quebec, as of the end of January 2023, there were more than 160,000 patients on the waiting list for a planned surgery, of which nearly 55,000 had been waiting for more than 6 months (MSSS, n.d.).

Backlogs of elective surgeries likely added to the health problems and financial hardships of patients and their families as the pandemic raged and lockdowns were imposed by governments (Bryan, Buajitti, Rosella, and Goel, 2021). In addition, the prolonged wait times due to the COVID backlog may increase patient anxiety, contribute to the deterioration of their health conditions and, in some cases, lead to increased mortality (Gagliardi, Yip, Irish, Wright, Rubin, Ross *et al.*, 2021). Indeed, studies have shown that the increase in diagnostic and surgical backlogs in the early months of the pandemic resulted in potentially preventable deaths for several cancer patients (Khandelwal, Begum, and Nippak, 2022). The treatment delays that have accumulated during the pandemic are likely to increase cancer mortality rates in years to come. According to a group of researchers from McGill University and the Canadian Partnership Against Cancer (CPAC), disruptions to cancer care during the COVID-19 pandemic could lead to about 20,000 additional deaths between 2020 and 2030 in Canada (Malagon, Yong, Tope, Miller Jr., Franco, *et al.*, 2022).

Ever-increasing waiting times in the Canadian health-care systems
Long wait times for elective treatments are nothing new for Canadians. Over the decades, despite promises and numerous reforms by successive governments to tackle this chronic problem once and for all, long waiting times have become a characteristic

feature of Canadian health-care systems. Almost 20 years ago, in September 2004, Premiers agreed to jointly endorse a set of general principles included in the 10-Year Plan to Strengthen Health Care in Canada with the goal of reducing wait times for elective surgeries and specialized care. The sectors targeted as priorities were as follows: cancer care, cardiac care, diagnostic imaging, joint replacements, and sight restoration services. With the help of billions of dollars of public funds from the federal government, the provinces and territories pledged a series of commitments that included the hiring and training of additional health-care professionals, an accelerated shift to ambulatory care, and the development of common benchmarks for determining medically acceptable wait times. **Table 1** summarizes the main elements of the wait-time benchmarks agreed to by the Canadian provinces in the wake of this accord.

Table 1: Pan-Canadian wait-time benchmarks

Priority area	Service	Wait-time benchmark	Percentage of patients receiving treatment within the benchmark
Cancer care	Radiation therapy	Within 28 days	90%
Cardiac care	Cardiac bypass surgery	From 14 to 182 days	90%
Sight restoration	Cataract surgery	Within 112 days	90%
Joint replacement	Hip replacements	Within 182 days	90%
	Knee replacements	Within 182 days	90%
	Hip fracture repair	Within 48 hours	100%

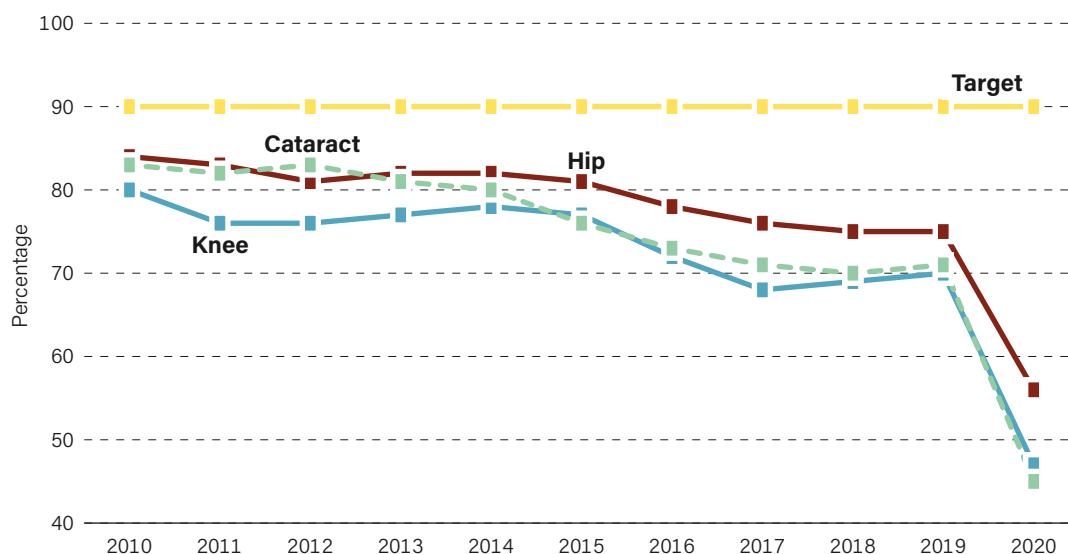
Source: Segall, Takata, and Urbach, 2020.

Despite the considerable injection of public funds over the following decades, the benchmarks set by the provinces have never really been reached on a consistent basis since (**figure 2**). [3] The improvements in access to elective treatments, when they occurred, were not sustained over the long run and delays quickly rebounded when funds dried up or some initiatives, although initially promising, were abandoned.

According to data from CIHI, the median wait time for knee replacement rose from 52 to 67 days across provinces in Canada from 2010 to 2019, before the COVID-19 hit the country. A similar trend is observed for hip and knee replacements, whose median wait times during this interval increased from 82 to 106, and from 99 to 121

[3] Admittedly, some provinces have reached the targets set for certain categories of surgeries, but these achievements were not maintained throughout the period for which data are available (2008–2020).

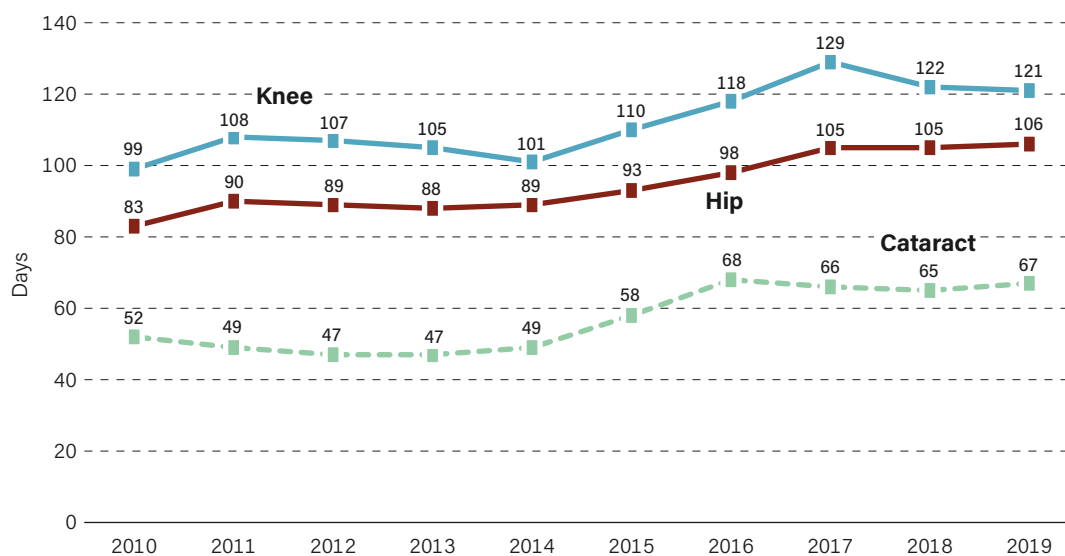
Figure 2: Proportion (%) of patients obtaining their elective surgery within the wait-time target, various types of surgeries, Canada, 2010–2020



Source: Canadian Institute for Health Information (CIHI), 2022.

days, respectively (figure 3). In 2019, about 30% of patients awaiting joint replacements or cataract surgeries had waiting times that exceeded pan-Canadian benchmarks. This trend is supported by survey data on wait times collected from physicians, which also show a constant deterioration in access to elective treatments in Canadian provinces (Moir and Barua, 2022c).

Figure 3: Median wait times (in days) for cataract surgery, hip and knee replacements in Canada, 2010–2019



Source: Canadian Institute for Health Information (CIHI), 2022.

Comparative data on the extent of waiting times for elective treatments internationally show a picture that does not favour Canada. OECD wait-time statistics for member countries show that Canada lags behind most of its international peers for which data can be compared. In 2019, before the arrival of the pandemic, wait times were already relatively long for hip and knee surgeries in Canada compared to other countries, as can be seen in **table 2**.

Table 2: Mean waiting times from specialist assessment to treatment (in days), selection of OECD countries, 2019

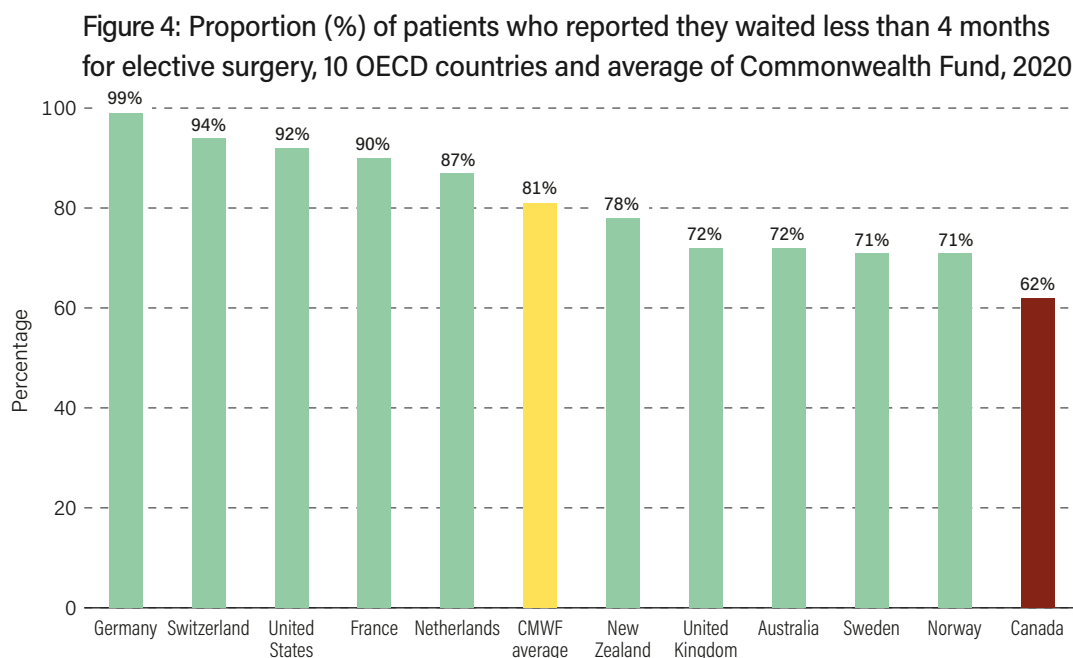
	Cataract surgery	Hip replacement	Knee replacement
Canada	67	106	121
Denmark	36	35	44
Finland	106	65	80
Hungary	30	38	91
Israel	77	56	85
Italy	28	46	42
New Zealand	70	99	106
Sweden	48	71	96
United Kingdom	59	92	97

Source: OECD, 2022.

The Commonwealth Fund ranked Canada last out of 11 international health systems in a recent comparison that examined timeliness of access to care. In a study conducted from March to June 2020, 38% of Canadians reported having to wait four months or more for elective surgery, much more than citizens of the Netherlands (13%), France (10%), Switzerland (6%), and Germany (1%) (**figure 4**). When it comes to waiting time to see a medical specialist, Canada once again ranks dead last among the countries compared by the Commonwealth Fund, with the highest percentage (62%) of patients reporting having to wait more than 4 weeks for an appointment (CIHI, 2021). The report did not reveal anything new: for years, studies have shown that Canada ranks at the bottom of most international rankings comparing wait times for elective treatments and specialized care (Moir and Barua, 2022a; Schneider, Sarnak, Squires, Shah, and Doty, 2017).

The health and economic consequences of waiting for care

Prolonged wait times can pose a significant health concern for patients, increase their stress and pain, with repercussions such as deterioration in their underlying condition, deterioration in quality of life and poorer surgical outcomes (Ackerman,



Source: Canadian Institute for Health Information (CIHI), 2021: 47.

Bennell, and Osborne, 2011; Desmeules, Dionne, Belzile, Bourbonnais, and Frémont, 2012). Notably, longer pre-surgery waiting time is associated with increased morbidity, reduced mobility, longer hospital stays, and increased risk of premature death (OECD, 2020).

In a recent study, Sommer and colleagues (2021) examined the factors behind the difficulty in obtaining elective surgical care in Canada and their effects on patient health. Their results showed that, from 2005 to 2014, about 1 in 4 patients who required planned surgery reported having been negatively affected by a cancelled or postponed surgery (enduring pain, stress, anxiety, loss of income, and problems with activities of daily living, among others) (Sommer, Jacobsohn, and El-Gabalawy, 2021). According to the authors, the difficulties in obtaining surgical care in a timely fashion are almost entirely explained by factors related to the poor functioning of the health-care system (difficulty getting an appointment, appointment cancelled or deferred, and so on), and very rarely by patients' circumstances (deterioration of health, unable to leave house because of health problems, language barriers, and so on) (Sommer, Noh, Jacobsohn, Christodoulou, and El-Gabalawy, 2020).

Waiting times also have economic consequences for society, by reducing the ability of affected patients to work and earn a living. When we factor in the productivity losses associated with waiting for surgery, we see that the overall economic burden to be borne by patients and society is enormous. In Canada, Moir and Barua (2022b) estimated that the total value of lost productivity for patients associated with waiting times for medically required treatments amounted to nearly \$4.1 billion in

2021. This amount likely underestimates the true magnitude of the overall economic burden of wait times for medically required care, since it does not consider the direct costs incurred by patients seeking to alleviate pain or to find alternative treatments while waiting, nor the costs associated with potentially poorer health outcomes.

The economic costs for patients who cannot participate actively in the labour market given their state of health are often substantially larger than the direct costs associated with the treatment for which they are waiting. This is the general conclusion reached by a group of researchers from the University of Western Ontario, in a recent study using Canadian data. They showed that most costs associated with waiting for total knee replacement surgery were borne by the patients themselves and their private insurer, while a small remaining proportion was supported by the public payers. [4] Across all stages of care, more than 60% of the total costs was attributed to productivity losses incurred by patients being unable to work (Lebedeva, Churchill, Marsh, MacDonald, Griffin, and Bryant, 2021).

The rationing of medical resources

Throughout Canada, rationing mechanisms have multiplied in the provincial health-care systems over time, in an effort to curb the growth of public spending. This rationing has taken place by reducing the availability of medical resources: closing beds, reducing the number of nursing staff, reducing the hours of availability of operating rooms and medical equipment, restraining admissions into medical schools, and so on (Ariste and Fortin, 2007; Ariste, Béjaoui, and Dauphin, 2019; Malko and Huckfeldt, 2017; Déry, 2018; Day, 2022).

These rationing mechanisms—which have not prevented public health-care expenditure from rising (Di Matteo, 2021)— have led to shortages and underuse of human and medical resources. Although Canada ranks among the most expensive universal healthcare systems in the OECD, its performance for availability and access to resources is generally below that of the average country. Canada has globally fewer medical technologies than the average high-income OECD country for which comparable inventory data are available (Moir and Barua, 2022a; OECD, 2021). The number of beds in proportion of the population fell in half in Canada between 1998 and 2020, from 4 to 2 beds per 1,000 inhabitants, a reduction much greater than that observed in most other OECD countries (OECD, 2022).

Canada also has fewer health professionals in proportion of its population, compared to its international peers. It ranks below the average of 30 OECD countries in terms of the number of nurses, doctors, and medical specialists. It ranks 22nd for nurses,

[4] The costs considered in the authors' analysis concern direct medical costs borne by governments (physician visits, procedures, etc.), or private insurers (prescription drugs, diagnostic tests, etc.) as well as out-of-pocket expenditures and productivity losses supported by the patients themselves.

and scores above the average only for general practitioners (GPs) but ranks 25th out of 30 countries for the total number of GPs and specialists combined. In 2021, the number of physicians per 1,000 inhabitants in Canada stood at 2.8, whereas the average ratio in the OECD countries was 3.8, or almost 40% more than in most Canadian provinces (Moir and Barua, 2022a). The shortage of physicians primarily affects specialists and is particularly acute in certain critical areas of care (Wyonch, 2021).

While medical staff seem to be in a perpetual state of shortage, there is paradoxically involuntary unemployment or underemployment for many health professionals, including registered nurses and qualified doctors. A recent study shows, for instance, that 32% of registered nurses and 51% of registered practical nurses working part time in Ontario would prefer full-time work (Drost, Alam, Boamah, Kralj, Costa, and Sweetman, 2023). [5] According to another report, this one conducted by the Royal College of Physicians and Surgeons of Canada, around 20% of specialists cannot find work at the time of their certification (Fréchette, Shrichand, Manogaran, Jabob, and Dimillo, 2019). What's more, when a position becomes available, the doctor who is recruited to fill it is limited in the hours of work he/she can devote to operating on patients, since the operating rooms are not used at full capacity due to rationing measures (Lee, 2019; OAGO, 2021). Using data from Ontario between 1994 and 2013 to compare health services provided by recent graduates and established ophthalmologists, Campbell and colleagues (2017) showed, for instance, that recent ophthalmology graduates performed many fewer cataract surgery procedures after volume controls were implemented in the province. This suboptimal use of operating-room capacity forces too many doctors to devote their time to unnecessary paperwork or other administrative tasks that do not require clinical expertise (Alegbeh and Jones, 2023).

Canada's health-care systems are therefore facing a paradox: there seems to be, on the one hand, a lack of nurses and doctors to meet the needs of the population in a timely manner and, on the other hand, there are many candidates in these professions who cannot find full-time work. Add to that the fact that today's surgeons are also struggling to get time in the operating room, while health-care costs are ever increasing.

According to the common perception, the mismatch between the number of health-care professionals and the jobs available is explained by a lack of data on future population and health needs, so that planners do not always know where the most in-demand areas are (Owens, 2019). As economist and Nobel laureate Friedrich Hayek already demonstrated in 1945, this is a typical problem emanating from systems

[5] A sizeable proportion of registered nurses (25.5%) and registered practical nurses (34.9%) were working part time in the Ontario health care system in 2019 (Drost, Alam, Boamah, Kralj, Costa, and Sweetman, 2023).

that operate through central planning. Centralization requires planners to know and assimilate an inordinate amount of information. Each individual has tacit knowledge about particular resources and potential opportunities for using these resources that a central planner can never have (Hayek, 1945). However, in centrally planned systems such as those in which public health-care facilities operate in Canada, managers have little decision-making autonomy to use their tacit knowledge, especially in recruiting and retaining qualified professionals; this lack of autonomy negatively affects their ability to adequately meet their staffing needs according to local labour-market realities (Belzile and Guénette, 2017).

Hence, it would be overly simplistic to suggest that Canada could solve the surgical backlog problems and avoid long waiting times only by matching the volume of health resources available in other OECD countries. An analysis carried out by OECD researchers has shown that the correlation between the volume of resources devoted to health care (that is, public expenditure and number of doctors per capita) and the extent of waiting times for elective surgery is weak and not statistically significant (Siciliani, Borowitz, and Moran, 2013). [6] After all, access to care does not merely depend on the overall level of resources available, but most importantly on how those resources are allocated within the health-care system and on whether local managers in the hospital sector have the flexibility and incentives to use them appropriately as they see fit to respond to patient needs.

The non-competitive environment of the Canadian hospital sector

At the forefront of the reasons that resources are not allocated efficiently in our health-care systems is because hospitals in Canada, regardless of the province, operate in a virtually monopolistic environment, where competition and the associated pressure to remain efficient are absent (Bilodeau, Crémieux, and Ouellette, 2009; Chen and Lamba, 2020). Patients have very few real options when it comes to obtaining specialized health-care services, which remain largely under the stranglehold of an absolute public monopoly. Most of them are dependent on the referral decisions taken by their family doctor (when they have one) and have generally no choice but to wait to be treated in the hospital closest to home (Labrie, 2014).

Patients do not choose their surgeon and do not have access to information about his or her waiting times either. By not having comparable information on waiting times for each surgeon, patients are therefore not aware if another surgeon has a shorter waiting list or if another hospital could perform the surgery sooner, nor are treating physicians able to make informed decisions to reduce wait times

[6] The only exception pertains to the number of beds per 1,000 inhabitants, which is correlated with the length of waiting times (see Siciliani, Borowitz, and Moran, 2013: 28).

for their patients. As a recent report by the Auditor General of Ontario pointed out, this results in “patients making ill-informed decisions because they have no way of knowing whether the surgeon to whom they are referred has a longer waiting time than other surgeons in the region” (OAGO, 2021: 22).

Furthermore, hospitals in each province receive a global budget that does not vary according to the activities carried out or the number of patients treated. Most hospitals are allocated annual budgets to cover their operating costs. Hospital revenues do not increase with the number of procedures performed by their physicians, while they are responsible for the cost of hospital resources that physicians need, such as operating-room availability and staff. Prices for specialist services are determined according to fee schedules in each province. This encourages specialists to perform as many medical procedures as they can manage. On the other hand, hospital managers have to deal with fixed global budgets that limit their ability to give doctors the resources they need to perform their work, namely time in the operating room and nursing staff to assist them. The result is an inefficient allocation of resources and labour slack among specialists and other health professionals, despite high demand for their services (Blomqvist, Busby, Jacobs, and Falk, 2015).

With such a system in place, governments claim to be better able to control the total amount spent on hospital services, as well as the distribution of funds among hospitals and regions of the country (Feldman and Lob, 1997). It is, however, an anachronistic method of financing hospital expenditure that is hardly ever seen in other developed countries (Labrie, 2012; Esmail, 2021).

It is not difficult to conceive why other countries have gradually abandoned this method of financing hospitals. Think of a referring physician, who acts as an agent for her patients requiring specialized treatments. She can refer them to any hospital in their respective region. However, hospitals that accept referred patients do not get additional funding to do so and therefore have no incentive to treat them in a timely fashion. In fact, their incentive is quite the opposite. As any additional patient requires a mobilization of resources and increases expenses for the hospital, which will not be adequately compensated, managers have incentives to delay the treatment of the patient by adding him to a waiting list or trying to transfer him to another health-care provider (Derfel, 2016).

Hence, by breaking the link between funding and the volume of services provided, global budgets encourage hospitals to take on fewer patients to avoid going over budget, to discharge earlier those who are more costly to treat in order to reduce expenses, and to engage in risk selection where lower-cost patients get priority over higher-cost ones (Esmail, 2021). In Canadian hospitals, which are funded by global budgets, overuse of operating rooms is thus a financial risk that is frequently managed by cancelling elective surgical procedures (Azari-Rad, Yontef, Aleman, and Urbach, 2013).

Provincial initiatives to tackle wait times

In an effort to combat wait times for elective procedures, provincial governments have introduced a number of policy initiatives to reduce wait times over the last few decades. These initiatives have taken various forms, including increased funding for targeted procedures, the outsourcing of publicly insured procedures to private medical centres, and the establishment of specialized patient assessment clinics aimed at increasing the efficiency of the referral process (Wennberg, Takata, and Urbach, 2020).

In 2006, the Quebec government introduced Bill 33, a set of regulations allowing for the creation of private specialized medical centres, a duplicative insurance market, and a centralized waiting-list system for select surgical procedures. But this legislative change, which was presented as the answer to the *Chaoulli* ruling, did not have a significant impact on the reduction of waiting times, nor on the market for duplicate private health insurance. In principle, the enacted reform authorized Quebecers to purchase duplicate private insurance for a limited number of medical and surgical treatments, such as hip and knee replacements and removal of cataracts. In practice, however, no actual market for this kind of insurance developed, as the number of admissible surgeries was too small to make new insurance products profitable. Public hospitals were also given authorization to sign partnership agreements with private clinics (called Specialized Medical Centers, or SMCs) for the transfer of a certain volume of publicly funded surgeries. However, before the beginning of the pandemic, very few agreements had been signed given hospital managers' lack of autonomy and the onerous regulatory framework surrounding these partnerships. [7] Hence, the timid reforms adopted in the wake of the *Chaoulli* ruling have had only a marginal impact on access to care (Labrie, 2015; Khan, Quesnel-Vallée, and McKay, 2021).

Arguably, some experiments have yielded positive results. One of the strategies to reduce patient waiting times in some provinces has been to set up surgery centers (public or private) for ambulatory patients in order to increase the surgical capacity of health systems and to offer patients the possibility of obtaining their surgeries in a more reasonable time frame. The outsourcing of certain elective surgeries for which delays are long has been done on a small scale in some Canadian provinces for several years (Wennberg, Takata, and Urbach, 2020). These partnerships with the private sector have many times proven to be cost effective for governments, offering good value for money (Sadri, Vanderheyden, Sinigallia, and Souche, 2021). [8]

[7] Admittedly, since the beginning of the pandemic, the number of partnerships signed with private specialized medical centers to address the backlog of elective surgeries has seen significant growth (Benomar, Jobin, Fortin, and Chênevert, 2021).

[8] For instance, Sadri and colleagues (2021) show that the average cost of a cataract surgery is 20% more costly in the Ontario public-hospital network than at the private not-for-profit Kensington Eye Institute (assuming that 76% of available capacity is used).

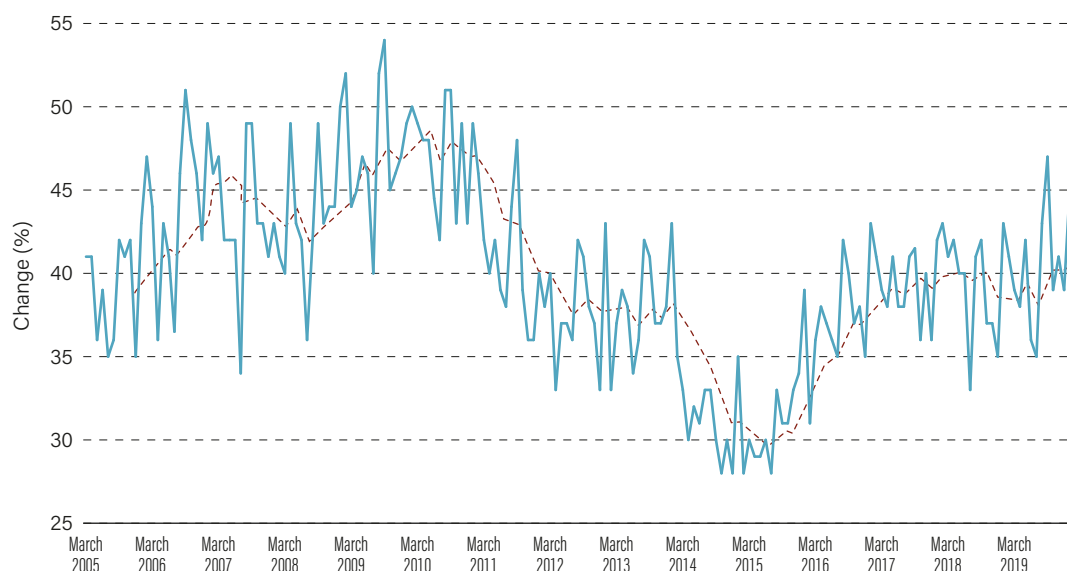
In 2010, the Saskatchewan government launched the Saskatchewan Surgical Initiative (SSI) to tackle wait times in the province. It promised that by 2014 no patient would wait more than three months for surgery. The principal means used to achieve this goal was to increase surgical capacity by using private for-profit clinics to perform 34 types of day surgery procedures, including cataract, knee, shoulder, dental, ear, nose, throat, and orthopedic surgery. In addition to partnering with private surgery clinics, the initiative included an online specialist directory to help patients identify surgical options, more specialist groups pooling referrals so that patients could either elect to see the first appropriate specialist or choose to wait, the province-wide implementation of a safety checklist as well as measures to reduce the frequency of infections contracted at the surgical site (Johnston, 2018).

The private clinics helped reduce wait times as they allowed for a more efficient use of available surgical capacity in the province: the total cost of performing the 34 procedures in the clinics was 26% less than the cost of performing the same procedures in hospitals (MacKinnon, 2017). In 5 years, there was a 96% reduction in the number of patients waiting more than 3 months for treatment. The median wait time for elective surgery went down from a peak of 54 days in September 2009 to a low 28 days in December 2014. As can be seen in **figure 5**, wait times began to rise again from 2015, when the government ended the initiative.

This type of initiative has seen renewed interest since the arrival of the pandemic, as the use of private clinics to help clear the surgical backlog has increased in several provinces, notably in British Columbia and Quebec (Campbell and Speer, 2022). However, even if they garner majority support from the population (Wright, 2023), this type of partnership with the private sector often face well-organized opposition in Canada. For some opponents, the presence of the private sector constitutes a threat to the public system (Lévesque, 2022; Payne, 2023). Failing to consider that public and private organizations often differ in their management practices and their ability to use their available resources efficiently, including operating rooms and medical staff (Lucifora, 2023), these critics fear that greater openness to private-sector involvement in health care might simply create an exodus of human resources from the public sector, with no net gain in terms of access to care (Reddekopp and Balintec, 2022). Throughout Canada, this argument often resurfaces when such experiments are attempted, even if the experiments turned out to be successful in improving access for all patients, as in Saskatchewan during the Surgical Initiative.

This is a classic demonstration of Mancur Olson's collective-action problem involving interest groups (Olsen, 1965). For example, unionized health-care workers often feel they will bear most of the costs of the proposed institutional change, while the benefits will be spread to the entire society (accruing mainly to patients, who will get faster access to care). This is the reason that they quite often oppose such a reform, even if its societal benefits largely outweigh its costs.

Figure 5: Median wait time (in days) for elective surgery in Saskatchewan, from March 2005 to February 2020



Source: Saskatchewan Government, 2023.

The need to learn from international experiences

A large number of countries in the developed world are trying to provide their populations with universal health-care coverage, primarily financed by taxes, as in Canada. However, universal coverage alone, whether fully funded by taxpayers' money or not, does not guarantee high-quality or efficiently delivered health-care services. Indeed, several studies have shown that there is no direct relationship between the level of public health-care expenditure and the efficiency obtained or access to care provided (Siciliani, Borowitz, and Moran, 2013; Esmail, 2013; Kaya Samut, and Cafri, 2016). Indeed, when we carefully observe the experiences of various countries, we realize that increased capacity or public funding alone do not ensure that the resources will be used efficiently in the health-care system, in the absence of good incentives (Kate, London, Bevan, Steyn, and Walley, 2004).

This is partly why several OECD countries have moved away from systems where the State is in charge both of financing and delivering health care. These countries have sought to provide better incentives to care providers, separating the role of purchaser from that of provider of services, while at the same time regulating and overseeing the quality of care provided (OECD, 2018).

As will be seen in the next chapters, freedom of choice for patients, competition between a mix of public and private providers, as well as a funding method that makes money follow patients are among the few policy tools that have been used successfully to improve access and efficiency in many European health-care systems, without compromising the principle of universality or requiring a major increase in government spending.

2. Patient Choice and Competition among a Mix of Public and Private Providers—the Experience of England

Some commentators and economists perceive the health-care sector to be unique, and, as such, to be affected differently by the mechanisms of competition and choice that are more generally understood to improve outcomes in the economy as a whole. In recent decades, this thesis has been largely discredited by the concrete experience of many nations (Chandra, Finkelstein, Sacarny, and Syverson, 2016).

In several health-care systems, notably in Europe, patients now have the freedom to choose not only their doctors but also the hospitals where they wish to seek treatment, whether in the private or public sector. [9] These market-based reforms have not attempted to question the role of the State in ensuring universal health-insurance coverage for all citizens. However, when accompanied by adequate monitoring and public reporting, they have generated substantial benefits for patients, particularly in offering improved waiting times and quality of care (Siciliani, Chalkley, and Gravelle, 2017; Brekke, Canta, Siciliani and Straume, 2021; Fernández-Pérez, Jiménez-Rubio, and Robone, 2022).

In a comprehensive analysis of international experiences, Siciliani and colleagues (2013) showed that policies focusing on patient choice and provider competition, in combination with activity-based hospital funding, are among the most successful measures to reduce waiting times in a sustainable way in countries that have adopted them in recent decades (Siciliani, Borowitz and Moran, 2013). Among these countries are Denmark, England, Italy, Japan, Norway, Netherlands, Portugal, Spain, and Sweden.

In Denmark, a set of reforms focusing on patients' freedom of choice was gradually put in place beginning in 1993, with the objective of reinforcing competition between providers and improving access to specialized health-care services. Initially, patients were able to choose the hospital where they wanted to receive treatment

[9] This contrasts with the situation in Canada, where bureaucratic constraints severely limit patient options. Canadian patients still have very few real choices when it comes to hospital services, which remain largely monopolized by the public sector (see, for instance, OAGO, 2021).

among those in the public sector. In 2002, the Danish government extended the reform by giving patients the possibility of receiving their publicly funded treatment in a private care facility or abroad if wait times in the public system exceeded two months (reduced to 30 days from 2007). The tariffs for treatments offered by health-care providers, whether public or private, were determined according to diagnostic related groups (DRGs). This activity-based funding system encouraged providers to attract patients in order to generate more income. Thanks to the patient-choice policy and the activity-based funding system, access to elective care has improved considerably since the mid-2000s in Denmark. From 2006 to 2018, waiting time for surgery has fallen by more than 30%, while outpatient admissions have increased by 40% (Kristensen and Rud, 2021).

In Spain, the regional government of the Community of Madrid enacted a law in November 2009 that gave patients the right to freely choose their health-care provider in the entire community, not necessarily the one closest to their area of residence. As their revenues were closely linked to the type of diagnosis and the number of patients treated, hospitals were encouraged to attract and treat more of them. Researchers recently analyzed the effects of the introduction of the freedom-of-choice policy on the responsiveness of the health system in Madrid, compared to those of other Spanish regions. Using data for the period from 2002 to 2016 and a synthetic control method to evaluate the impact of the reform, the authors found a sharp and significant improvement in access to specialized care in Madrid after 2009, as waiting times were shown to be 22% lower than they would have been in the absence of freedom of choice. Interestingly, as the authors noted, the number of health personnel per capita in all publicly and privately managed hospitals in the Madrid region remained constant during the study period, which makes it unlikely that the staffing level of hospitals was the determining factor explaining the observed drop in wait times (Fernández-Pérez, Jiménez-Rubio, and Robone, 2022).

Empowering patients with a choice among a mix of providers in the English National Health Service

England offers another telling lesson illustrating how a policy of patient choice, coupled with the right financial incentives, can help improve access to health care. In the late 1990s, when Tony Blair's Labour government took office, England was struggling with average waiting times of around 23 weeks for elective surgery, that could stretch to a maximum of over 18 months (Ede and Phillips, 2021). Like the situation in Canada, the population seemed resigned to the long wait before receiving treatment.

In the early 2000s, the English National Health Service (NHS) made substantial efforts to promote patient choice and competition among different providers in order to improve access to care. From 2006, GPs were mandated to offer their patients at least five health-care facility options for their treatment, including at least one from

the private sector. In April 2008, patients were granted the right to choose any care provider in the country. The policy of choice, enshrined in the NHS Constitution, therefore put an end to the common practice of referring patients to the public hospital closest to home (Beckert, 2018). At around the same time, maximum wait-time targets were introduced that aimed to have at least 92% of patients in need of an elective surgery treated within 18 weeks from referral (OECD, 2020).

The government also created a referral and appointment-bookings system, as well as a web portal publishing quality information, to help patients make informed choices. This system, known as “Choose and Book” has made it easier for patients to book appointments online, and provided them with the ability to compare providers on the basis of wait times and other quality metrics. In addition to waiting times, the web portal also included information collected by national hospital-accreditation bodies, such as risk-adjusted death rates, infection rates, and hospital activity rates for particular procedures, among others. [10] Thus, both patients and treating physicians were able to consult important information to help them make their choices (Beckert, 2018).

Studies have shown that quality and wait-time indicators are valued by the population and the patient-choice policy resulted in better quality of care (Cooper, Gibbons, Jones, and McGuire, 2011; Gaynor, Rodrigo Moreno-Serra, and Propper, 2013; Gaynor, Propper, and Seiler, 2016). The electronic booking system has contributed to a significant reduction in the number of patient cancellations and non-attendances, and improved appointment scheduling and access to specialist care (Dusheiko and Gravelle, 2018).

These policy changes were accompanied by an activity-based funding method that rewards hospitals for the level of activity they perform; this is called Payment by Results (PbR). In parallel, public hospitals have been reorganized into trusts and given larger financial and managerial autonomy, which made them more resistant to government control and interference in their decisions. Some well-run public hospitals were allowed to become autonomous Foundation Trusts (FT). Unlike traditional trusts, FTs have the possibility of keeping their financial surpluses, which they can use to recruit more staff when required, improve their salary conditions, invest in new cutting-edge technologies, and generally devote more resources to improving patient care (Salehnejad, Ali, and Proudlove, 2020).

Now that providers operate in a competitive environment in which money follows patient choices, political decision-makers need not intervene in the management and day-to-day affairs of English hospitals. In the words of economist Kristian Niemietz:

[10] The National Booking Service of NHS Digital/NHS England may be found here: <<http://www.chooseandbook.nhs.uk>>.

For the first time since 1948, the revenue of health care providers would, to a considerable extent, depend on the free choices of patients, giving providers a good reason to be responsive to those patients' needs. It is only in this context that the introduction of FT [Foundation Trusts] status also became sensible. Now that providers were more directly accountable to their patients (and potential patients), government interference with their day-to-day operations became less necessary. The discipline of the quasi-market could replace government-imposed discipline. Competition made greater autonomy possible and, indeed, necessary. If providers were to cope with competitive pressures, they also had to be given the leeway to respond to those pressures. They had to be given the managerial autonomy to reshape their organizations accordingly. (Niemietz, 2015: 101)

An expanded role for the private sector

Another important component of the market-based reforms focused on patient choice has been the establishment of private providers specializing in elective treatments—the Independent Sector Treatment Centers (ISTC)—in 2002 to increase the capacity of the public health-care system. The objectives were to reduce NHS waiting times for operations, broaden the range of choices for patients, and stimulate innovation in the delivery of health services. This private-sector presence was expected to stimulate innovation within NHS organizations through increased competition for government contracts. It was also hoped that for-profit providers, placed in a competitive environment, would bring about new and innovative methods of delivering care in a more timely manner (Turner, Allen, Bartlett, and Pérotin, 2011). [11] These newly created specialized centres, like other private hospitals, were remunerated according to the same uniform tariff for the provision of elective care as the existing public hospitals, so that all providers would compete on quality instead of price.

With this model, the government also wanted to separate more routine cases from more complex ones, which generally require large-scale surgical facilities. The aim was to improve efficiency and access for all, while minimizing the unnecessary risk for some patients of being exposed to healthcare-related infections more commonly encountered in hospital settings.

Detached from the existing routines and conventions of the NHS for providing health services, the ISTCs have been able to rely on greater decision-making

[11] Unlike Canada, England has always admitted the presence of private care providers within its public health system (NHS). However, the participation of the private sector, for profit or not, in the provision of health services has increased over the last 20 years in England, after the implementation of reforms centered on patient choice and activity-based hospital funding.

autonomy and thus promote the application of innovative initiatives in the provision of surgical services (Chard, Kuczawski, Black, van der Meulen *et al.*, 2011). Competition also played a role by encouraging private care providers to quickly identify needs and find new and innovative ways to meet them. At the same time, elements of reward, such as profit or the success of the firm, contributed to push the overall quality in the system upwards.

A study by Gutacker and Street (2018) showed that private ISTCs have a higher overall performance than public NHS hospitals. The authors used four performance measures to compare ISTCs and public hospitals: (a) length of inpatient stay; (b) readmission to emergency department within 28 days of discharge; (c) waiting times, measured as the time elapsed between the surgeon's decision to admit and the actual admission to hospital; and (d) the postoperative health status of patients. The data analysis showed that ISTCs performed better than public hospitals on all dimensions. These results are not explained by ISTC treating less complex cases, since the authors controlled for a rich set of risk factors, including the patients' health status before treatment.

ISTCs manage to lower the length of stay for patients, while maintaining lower postoperative readmission rates than NHS hospitals (Crothers, Liaqat, Reeves, Watson, Gallier, Khunti *et al.*, 2021). This greater efficiency allows them to treat more patients with the resources at their disposal. Better performance may be the result of a more streamlined production process, with specialization in the treatment of elective joint replacement patients providing performance benefits, consistent with the original goals of the policy makers who proposed their establishment in England.

The presence of ISTCs in the English NHS also creates an emulation effect that increases the efficiency of other institutions in the health system. Indeed, researchers found that public hospitals that had a private surgical center nearby experienced substantial reductions in length of stay before surgery for hip and knee replacements. Adding an ISTC near a public hospital led to a significant reduction in preoperative length of stay of 16%, allowing a 24 percentage-point increase in the proportion of patients being treated on the day of admission. The faster treatment of patients requiring elective surgery has occurred without incurring additional expenditure for public hospitals, which implies that having been exposed to increased competition from the private sector has made them more efficient (Cooper, Gibbons, and Skellern, 2018).

Some economists recently examined the impact of the increased participation of private care providers in the English NHS on waiting times for elective treatments (Kelly and Stoye, 2020). Their results indicated that the entry of an additional private hospital in the market is associated with a reduction in waiting times of 12%. Additionally, the impact of entry did not vary between more and less deprived areas, and the improved access benefited all groups of patients regardless of the income level. The researchers also found that the entry of private care providers into the

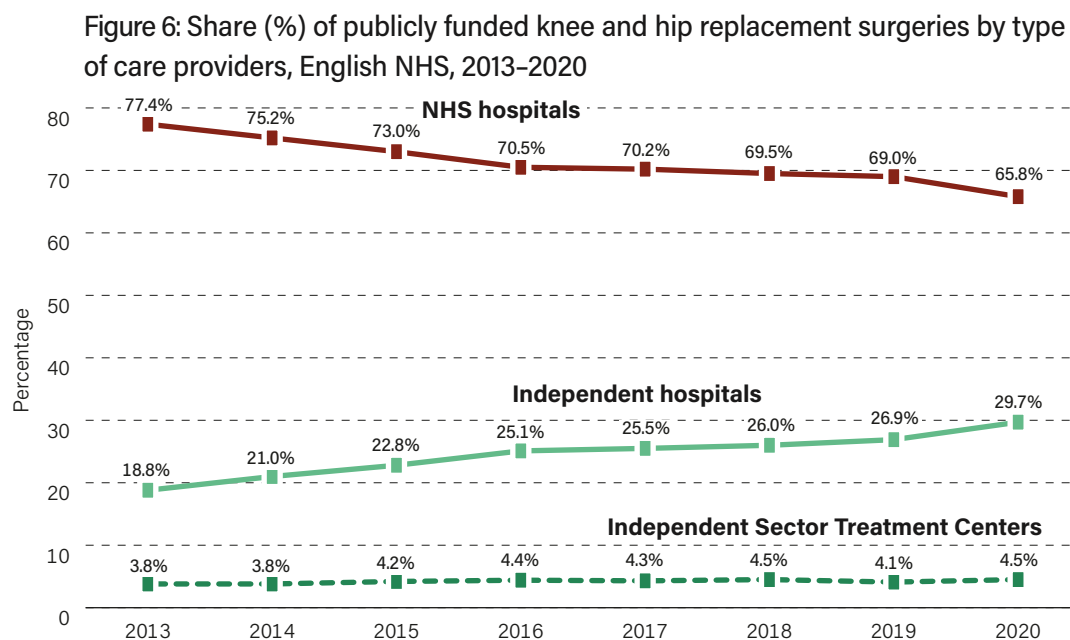
public elective market was not associated with a reduction in the number of privately funded hip replacement surgeries, therefore suggesting that increasing volumes financed by the NHS represents real new procedures that would not have taken place without their entry on the market. The length of stay also decreased considerably, going from 9 days to 4 days over the studied period. These efficiency gains allowed more patients to be treated in a timely fashion. As a consequence, average waiting times from referral to treatment in the NHS hospitals fell from 137 days in 1997/98 to 40 days in 2009/10, a 71% reduction (NHS, 2010). These efficiency gains occurred alongside improved outcomes, as the 30-day emergency-department (ED) readmission rate fell from 6.1% to 5.6% and the in-hospital mortality rate was halved from 0.2% to 0.1% during this interval (Kelly and Stoye, 2020).

These private providers have been able to increase the volume of elective surgeries performed in the health-care system, as they may be better positioned to optimize use of operating rooms and less at risk of having to cancel or postpone surgeries due to unforeseen events, as is frequently the case in large public hospitals (McIntosh, Cookson, and Jones, 2012). However, the growth in the proportion of surgeries performed in the private sector slowed down in the last decade at the same rate as the growth of public expenditure in the NHS. For instance, there was a substantial increase in the number of hip-replacement patients treated in private hospitals and ISTC, from zero in 2002 to 21% in 2013, and to 29% in 2019 (Moscelli, Siciliani, Gutacker, and Gravelle, 2016; NJR, n.d.). Before the pandemic, providers in the independent sector were already contributing to a sizable volume of NHS-funded elective care, with a particularly large impact in certain specialties (**figure 6**). In 2020, the percentage of NHS patients treated in private hospitals and ISTCs stood at 32% for hip replacements and 37% for knee replacements (NJR, n.d.)

In 2019, the independent sector represented 7.8% of the care pathways completed in total, but 20.9% in traumatology and orthopedics and 9.4% in ophthalmology. After providing over 10,000 beds at the start of the pandemic to provide additional capacity to the public network (Gardner, Fraser, and Peytrignet, 2020), the independent sector is now being called upon to help solve the elective care backlog, and is awarded a larger share of the more urgent cases (Remsing, Reeves, Evison, Morton, Chilton *et al.*, 2023).

Improved access and health outcomes

The changes made to the English health-care system have produced impressive results. By promoting freedom of choice and a mixed public-private provision of services, the reforms have greatly contributed to improving hospital management and the quality of care offered to patients (Bloom, Propper, Seiler, and Van Reenan, 2015). Despite some remaining challenges, the changes also have fulfilled the promise to improve access to care.



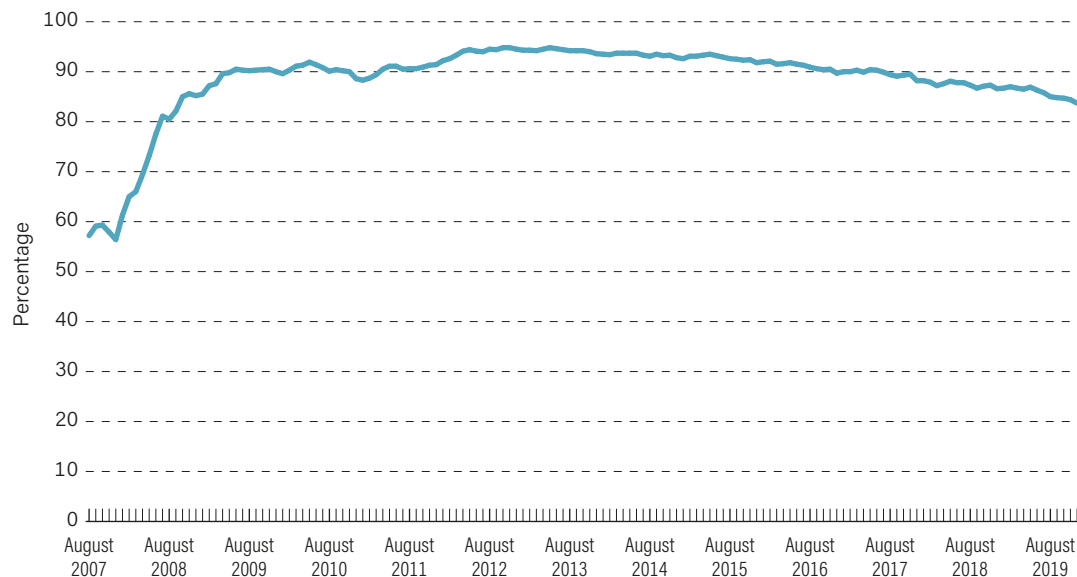
Source: National Joint Registry, 2022.

The changes made and the implementation of a coherent set of health policies based on market mechanisms bore fruit quite rapidly. As can be seen in **figure 7**, by 2009 more than 90% of patients had been seen within the 18-week referral-to-treatment target. Perhaps more importantly, by helping to facilitate a more rapid growth of elective treatments over time in socioeconomically deprived areas, the patient-choice policy has contributed to improving equity in access to care (Cooper, McGuire, Le Grand, and Titmuss, 2009; Cookson, Laudicella, and Li Donni, 2013; Moscelli, Gravelle, and Siciliani, 2023).

It is interesting to compare the evolution of the English NHS with that of its Scottish, Welsh, and Northern Irish counterparts. After devolution in 1999, health policies in these four countries from the United Kingdom (UK) began to diverge quite a bit, as summarized in **table 3**. England was the only country in the group to set up a policy program favouring freedom of choice for patients and competition among providers, a method of financing hospitals based on activity, and the establishment of Foundation Trusts (FT).

The smaller countries in the UK have had funding increases that are the same as, or greater than, those of England, and have, after some delay, introduced similar performance targets. While England has introduced market-oriented reforms, the UK's smaller countries have for the most part not taken this route. On the other hand, health spending has increased much more, markedly so in Scotland. As documented by Bevan and colleagues (2014), England employs proportionately fewer hospital, medical, dental, nursing, midwifery, visiting, hospital management, and support staff

Figure 7: Proportion (%) of patients waiting less than the 18-week target for elective treatment in the English NHS, August 2007 to December 2019



Source: NHS England and NHS Improvement.

Table 3: Differences in health policy and organizational characteristics of the health-care systems in the four countries of the United Kingdom

Organisational characteristics	England	Scotland	Wales	Northern Ireland
Purchaser/provider split	Yes	Abolished 2004	Abolished 2009	Yes
Activity-based hospital funding	Yes	No	No	No
Managerial autonomy for hospitals (Foundation trusts)	Yes	No	No	No
Patient choice	Yes	No	No	No
Competition between public and private providers	Yes	No	No	No
Wait-time targets	Yes	Yes	Yes	Yes

Source: adapted from Bevan, 2014: 32.

than other UK countries. The number of hospital beds is also less in proportion to the population in England than in the three other countries. And yet, England managed to reduce waiting times for elective treatments much more drastically than its British counterparts, especially during the first decade following market reforms (2002–2012) (Bevan, Karanikolos, Exley, Nolte, Connolly, and Mays, 2014). At the dawn of the pandemic, England was the closest UK nation to meeting its (more stringent) elective surgery wait-time targets, with 87% of patients waiting less than 18 weeks before an operation as of the first quarter of 2019 (Appleby, 2019). [12]

The health gains for English patients who obtained quicker access to treatments during that time frame have been enormous (Nikolova, Harrison, and Sutton, 2016). As one economist who has conducted an exhaustive comparative study of the British health-care systems aptly puts it: “England’s better health outcomes may have many other determinants that are beyond the reach of the health system, but regarding differences in efficacy [among the four UK countries], there is no other plausible candidate in sight” (Niemietz, 2015: 104–105).

Some remaining challenges

Admittedly, the maintenance of market-oriented policies in English health-care services began to wind down a couple of years ago when the new coalition government has chosen to give priority to so-called collaborative strategies between care providers rather than a competitive approach (Propper, 2018). Care commissioners are now using competitive tendering for more peripheral services to improve quality of care and value for money. [13] As a consequence, England has struggled in recent years to maintain the standards achieved for waiting times.

These difficulties, which have worsened since the arrival of the COVID-19 pandemic, are also partly explained by a slower growth of health expenditure and staff shortages in the NHS (Charlesworth, Anderson, Donaldson, Johnson, Knapp, McGuire, *et al.*, 2021). These shortages are not the result of departures of staff from the NHS, but rather of lower growth in the number of doctors and nurses than is needed by the hospital network in recent years (Lee, Propper, and Stoye, 2019).

Similar to the situation in Canada, the work organization in the English NHS is indeed heavily regulated in order to address the information asymmetry and the

[12] By comparison, 77% of patients in Scotland were waiting less than 18 weeks for elective surgery at the same period of time (Appleby, 2019).

[13] For instance, *The Five Year Forward View* (5YFV), a white paper published by NHS England in 2014, did not mention competition among organizations and instead focused on how NHS organizations should cooperate with each other (see Allen, Osipovič, Shepherd, Coleman, Perkins, Garnett, and Williams, 2017).

associated risks that are assumed to be part of health care. The regulations cover various aspects of the training, remuneration, and standards of practice of health professionals. Although the rationale for regulation is laudable, the way the regulatory framework has developed over time accentuates the labour shortage issues in the health-care system (Charlesworth and Lafond, 2017). [14] With the aging of the population and the expected increase in demand for health care, these labour issues are expected to intensify in the coming years, unless the government regulation surrounding university admissions and salary conditions of health professionals is loosened (Fox, 2007).

[14] In particular, the tight control of wages and the movement of labour contributes to undermining the allocation of human resources, which negatively affects the quality and efficiency of care in the English NHS (Propper and Van Reenan, 2010).

3. Make Money Follow Patients to Tackle Wait Times—the Experience of the Netherlands

In Canada, the majority of hospital expenditures are currently funded through global budgets (sometimes referred to “budget-based allocations” or “block grants”), which do not vary according to the number of patients treated or the amount of care needed. Under this system, a pre-determined level of funding is distributed yearly among hospitals, based on previous budgets, and the anticipated rate of inflation of various medical, technological and labour costs. The main objective of this financing system is to control the rise in hospital spending (Labrie, 2012).

Global budgets are often decried in the economic literature for the type of incentives they generate or fail to generate (Sutherland, Crump, Repin, and Hellsten, 2013). Because they are fixed by a central government, global budgets impose a constraint on hospitals not to exceed a certain number of medical procedures that would “bust” their budgets (Sutherland and Repin, 2014a). The use of this method of financing is expected to lead to an excessive demand for hospital services, which can translate into longer wait times for elective procedures (Feldman and Lob, 1997).

In contrast, several OECD countries have implemented activity-based funding (ABF) reforms since the 1990s (Esmail, 2021). [15] ABF systems create a different set of incentives by allowing funding [16] to vary as a function of the volume of services proffered. This form of hospital financing aims to increase hospital efficiency and activity by allowing “hospitals to earn the difference between the cost of service and the ABF payment amount” (Sutherland and Repin, 2014b). Hospitals have strong incentives to innovate and adjust their operations to earn additional revenues or, alternatively, reduce patients’ length of stay in order to avoid being financially penalized. Hospitals that become more efficient thus free up medical and professional resources, allowing them to treat more patients and consequently improve the speed of access to treatments.

[15] To be fair, some provinces, including Ontario and Quebec, have attempted to integrate this type of funding into their public health system for part of their hospital activities in recent years, but these changes have proven to be very timid compared to the reforms introduced overseas, and the results did not materialize (see, for instance, Laberge, Brundisini, Champagne, and Daniel, 2022).

[16] Conditional on funding being a price above marginal cost. See Valentelyte, Keegan, and Sorensen, 2021 for more details on analytical methods to assess the impacts of activity-based funding reforms.

An ABF reform generally never comes alone, which makes it more difficult to identify its direct contribution to improving access in a health system (Esmail, 2021). However, the statistical methods for assessing the impact of these changes in the mode of financing have been refined over time, allowing researchers to measure the magnitude of the gains in efficiency (and consequently in access to care) that result in the hospital sector (Valentelyte, Keegan, and Sorensen, 2021). The scientific literature is increasingly filled with studies demonstrating the efficiency gains and the improvement in waiting times associated with the ABF method for hospitals.

In Norway, researchers have shown that activities and efficiency increased significantly in the first years following the adoption of an activity-based funding system (Hagen, Veenstra, and Stavem, 2006). The 1997 reform led to an increase in the annual growth rate of hospital activities, while public health expenditure remained relatively stable or even decreased (when inflation is taken into account) (Hurst and Siciliani, 2003). The new funding method also coincided with a significant reduction in waiting times in the hospital sector, which fell by 30% between 2002 and 2006 (Martinussen and Magnussen, 2009).

In a more recent study, a group of researchers looked at the impact of such a financing reform implemented in England (*Payments by Results*) almost two decades ago. They assembled a longitudinal data set including details of all hospital treatments provided by facilities in England and Scotland (which did not adopt such a reform) over a 15-year period, in order to compare outcomes in the two health systems. The researchers were thus able to confirm that not only the previous evidence that the introduction of an ABF system reduces resource use through shorter hospital treatments, but also found that the effect is at least as large as previously reported and increases over time. While Farrar and colleagues (2009) found an 8% to 18% reduction in length of stay, the researchers' estimates show that the adoption of the ABF system is associated with efficiency gains (measured by reduction in length of stay) from 20% to 70% after 10 years. As the authors point out, "shorter lengths of stay are associated with lower resource utilization and therefore lower cost, they are a mechanism by which hospitals can gain financially—in contrast to systems where they recover their costs but cannot retain any cost savings" (Aragón, Chalkley, and Kreif, 2022: 957).

From global budget to patient-based hospital funding

The abolition of global funding for hospitals and the transition towards an activity-based payment method was the key policy that contributed to solve the problem of long waiting times in the Dutch health-care system (Siciliani, Moran, and Borowitz, 2013). Prior to 1999, hospitals in the Netherlands received a pre-determined global budget to cover anticipated health-care expenses, which did not vary according to the number of patients treated or the health services actually delivered. This form of financing had a whole host of disincentives for hospitals. Seeing more patients than

expected in a given year resulted in reduced revenue the following year for a hospital. This had the effect of discouraging any attempt to attract patients and treat them in a timely manner, since hospitals in such circumstances were running into financial strangulation. In addition to the rationing of care, this method of financing hospitals also slowed down investment in medical equipment (for example, hospital beds) and the hiring of nursing staff. These budgetary and capacity constraints thus contributed to the increase in waiting lists and waiting times for hospital care, and the growing discontent among the population in the late 1990s (Schut and Varkevisser, 2013).

The increase in wait times led to calls for reforms and a 1999 court decision stating that the wait times violated patients' enforceable right to timely care (a decision that essentially created a court-imposed ceiling on the government's ability to ration care through wait times). After a few unsuccessful attempts to sustainably improve access through targeted grants following the court ruling, [17] the Dutch government decided to implement an ABF reform in November 2000 to replace the fixed-budget funding scheme for hospitals.

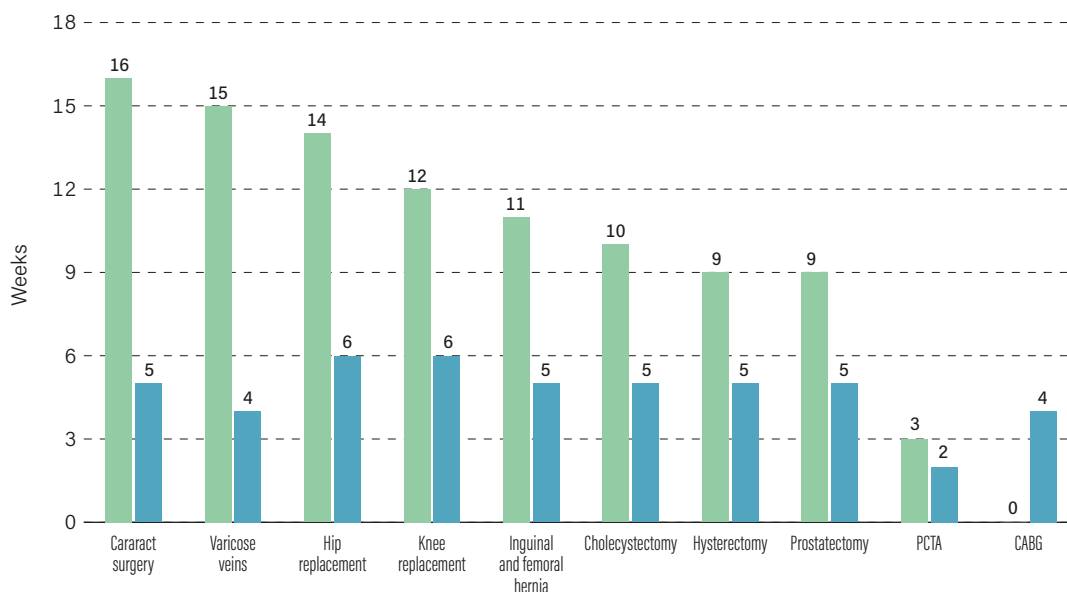
This reform preceded an attempt to introduce "managed competition" inside the health-care system, which came into force in 2006. Since then, all citizens have been mandated to take out a basic and uniform insurance scheme from private firms, and pay a flat-rate contribution plus an income-dependent contribution, to cover their health-care costs (Jeurissen and Maarse, 2021). Private insurers have been encouraged to compete for clients while also being free to offer insurance policies that stand out in term of features (for example, pre-selected providers, reimbursements, benefit-in-kind) and complementary benefits to top off basic plans (for example, dental care for adults, physiotherapy). This source of pressure from consumers on insurers was combined with pressures from insurers on hospitals through the freedom to negotiate prices for routine procedures between hospitals and insurers (Schut and Varkevisser, 2013). This helped bring a cost-reducing incentive into play. Initially, only 10% of the hospital budget could be subjected to free-price negotiation. However, the government gradually increased that proportion over time, which stood at 70% as of 2012 (Maarse, Jeurissen, and Ruwaard, 2016).

Improved access and health outcomes

Mean wait times for elective treatments fell considerably in the first decade following the ABF reform in the Netherlands (**figure 8**). The largest reductions were for cataract surgeries (–69%) and varicose veins (–73%). The smallest reductions were for percutaneous transluminal coronary angioplasty (PTCA) and hysterectomies

[17] Targeted grants resulted in additional hospital production, but did not reduce waiting lists and average waiting times, except for certain specialties where the waiting times were the longest (see Schut and Varkevisser, 2013: 129).

Figure 8: Evolution of mean wait times (in weeks) by procedure in the Netherlands from the onset of Activity-Based Financing, 2000 and 2011



Note: PCTA = percutaneous transluminal coronary angioplasty; CABG = coronary artery bypass graft surgery.

Source: Schut and Varkevisser, 2013.

(–33% and –44%). As some researchers have suggested, the increased activity generated by the ABF reform have likely led to gains of life expectancy for the elderly due to an improved access and increase in health care utilization (Mackenbach, Slobbe, Looman, van der Heide, Polder, and Garssen, 2011).

The method of financing hospitals in the Netherlands has been refined over time to optimize its benefits. Policy makers have understood that activity-based funding could yield better results if accompanied by greater competition from care providers and management autonomy. Before 2007, planning of hospital capacity was very complex and strictly regulated by the government, leaving little room for the autonomy of managers in the field. The entry into force of the Health Care Institutions Admission Act (WTZi) marked the beginning of a break in the hospital management approach, which evolved from central planning and strict government oversight to a decentralized system centered around patient choice. From then on, the government's role was limited to establishing the preconditions that govern hospital planning, without interfering in the daily practice of facilities. "The rationale [was] that consumer demand and market competition on the health care providers market will determine the required hospital capacity. Withdrawal of governmental interference in capacity planning was replaced by promoting entrepreneurship" (Den Exter, Krabbe-Alkemade, and Mikkers, 2018: 44). [18]

[18] Hence, the decentralized nature of the Dutch system has allowed some local experiments with different payment systems to fit local needs (Remers, Wackers, van Dulmen, and Jeurissen, 2022).

Of course, the increased hospital activity has initially resulted in a commensurate rise in health-care spending in the Netherlands. Indeed, the growth rate of health expenditures amounted to 5% per year, which is higher than the growth rates of real GDP during the period from 2000 to 2011 (Schut and Varkevisser, 2013). This has led some authors to conclude that “the Dutch strategy of tackling hospital waiting times by activity-based funding proved to be effective but expensive” (Schut and Varkevisser, 2013: 133). However, such a judgment was premature for multiple reasons. It is true that activity-based financing will by definition *increase* the volume of services as a result of how it changes incentives for hospitals. But the increase in health-care expenditures that ensue does not represent an inefficiency but the inevitable result of creating a better functioning system that does not ration care through waiting lists. In fact, such an increase in expenditures may be beneficial if rationing was too extreme under the previous system (that is, global budgeting). The issue is to avoid the provision of unnecessary care, which is why the role of competitive pressures is a necessary complement to activity-based financing. The 2006 reform created a different type of activity-based funding by having insurers (who, in part, pay hospitals for the volume of care provided) negotiate prices with hospitals. This format automatically includes the competitive pressures necessary to limit cost overruns. As a matter of fact, when the growth of hospital expenditures is analyzed to account for the 2006 reform, it is slower after 2006, suggesting that activity-based funding was more effective at controlling expenditures *with* managed competition than without (Schut and Varkevisser, 2013; Maarse, Jeurissen and Ruwaard, 2016). [19] Between 2013 and 2018, the Netherlands recorded the lowest annual increase in overall health expenditure among European countries (Jeurissen and Maarse, 2021).

Increased capacity from the private sector

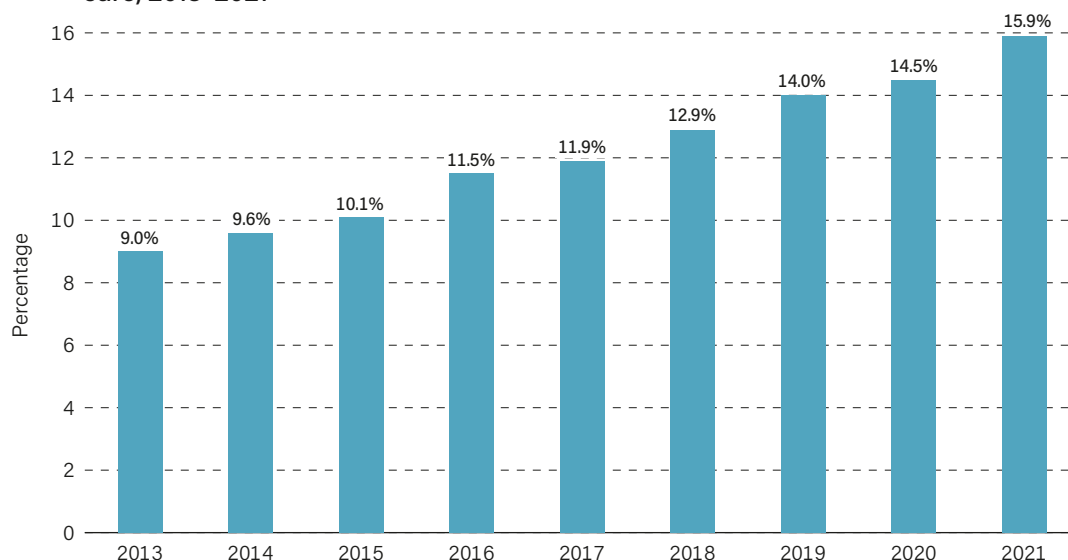
The Dutch government has also widened competition by allowing the entry of independent clinics specializing in day surgery and routine treatment (ISTC). The formal distinction between independent treatment centers and (private non-profit) hospitals was abolished. Now, hospitals and ISTCs are officially defined the same way, as specialist medical care providers, and operate under the same level playing field (Kruse, Groenewoud, Atsma, van der Galiën, Adang, and Jeurissen, 2019).

Hence, the number of ISTCs has increased significantly over the past decade, and more and more patients are opting to receive care in such clinics. In 2021, 15.9% of patients went to independent treatment centres for specialist medical care. From 2013 to 2021, the number of patients opting to be treated in those independent centres grew by 79%. In some fields, like ophthalmology (26%) or dermatology (24%),

[19] Table 3 in Maarse, Jeurissen, and Ruwaard, 2016: 168 confirms this by providing a breakdown before and after the 2006 reform.

about 1 in 4 patients elect to receive their treatment in these clinics, and the market share of ISTCs in the total health-care landscape in the Netherlands has grown considerably over the last several years (figure 9).

Figure 9: Percentage of Dutch patients going to private medical clinics for specialist care, 2013–2021

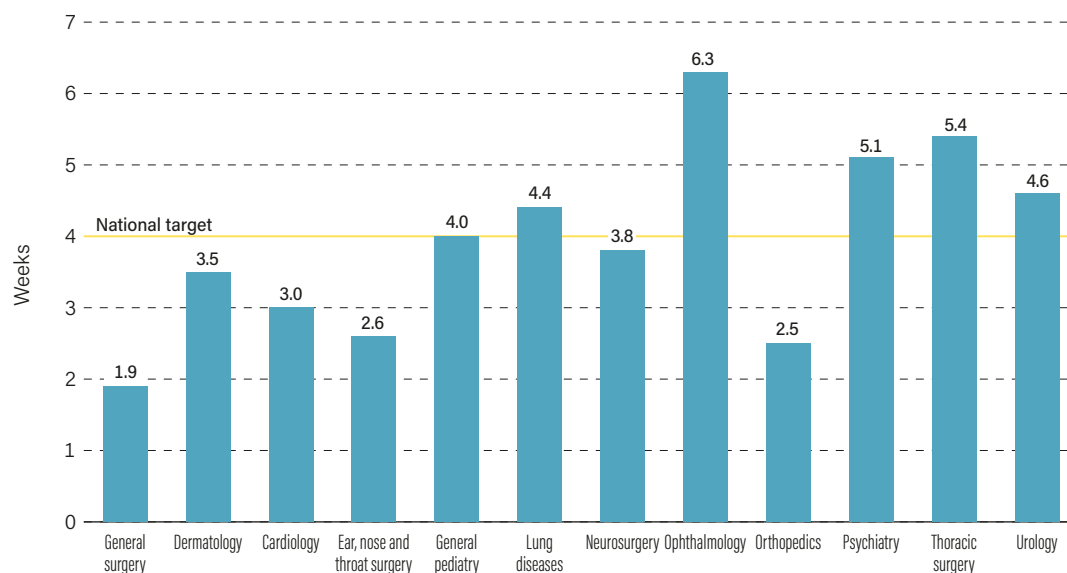


Source: ZKN, 2022: <<https://www.zkn.nl/over-zkn/kengetallen>>.

In 2015, the government mandated the publication of performance indicators to compare care facilities. The avowed objective of the publication of these indicators, which relate in particular to standardized mortality ratios, readmission rates after surgery, waiting times before surgery, was to promote transparency and help patients make more informed decisions. Dutch researchers have found that readmission rates, institutional reputation, and wait times play an important role in patient choices (Beukers, Kemp, and Varkevisser, 2014).

The combination of these policy measures has contributed to maintaining low waiting times for elective treatments over the last decade in the Netherlands. Even during the first year and a half of the COVID-19 pandemic, the Dutch were able to obtain health care in private outpatient clinics within the 4-week time-frame targets for most medical specialties (figure 10).

Figure 10: Average waiting times (weeks) at private outpatient clinics in the Dutch universal health-care system, by specialty, August 2020 to July 2021



Notes: Waiting times are measured as the number of days between an appointment at the outpatient clinic and treatment.
 Source: VZinfo, 2021: <<https://www.vzinfo.nl/ziekenhuiszorg/wachttijden/polikliniek>>.

4. Value-Based Health Care in a Decentralized System—the Stockholm OrthoChoice Revolution

In Sweden, the health-care system shares some characteristics with the Canadian system in that the government provides its population with universal coverage for a relatively large basket of medical services, including pharmaceuticals and long-term care, paid for by income taxes. As in most other European countries, health care is provided to all citizens, regardless of their ability to pay.

In the early 1990s, the Swedish health system underwent major reforms following a severe budgetary crisis that affected access to care. Decision-making powers were decentralized to 21 autonomous local authorities and responsibilities for financing and delivering health services were separated. Today, each county collects income taxes directly from its people, which form the bulk of its health budget. The counties have full autonomy in matters of health-care policies, and are free to undertake the changes they deem necessary in order to meet the needs of the population.

Unlike Canada, hospitals and other health-care facilities are now mostly financed by means of an activity-based system, rather than with global budgets. In Sweden, the private sector is not seen as a menace, but rather as an ally. Private medical clinics have multiplied in recent years and now represent approximately 40% of the overall primary care supply. Patients have the freedom to choose in which medical clinic or hospital they wish to receive their treatment and providers, whether public or private, compete on quality to attract them. These clinics receive both patients funded by the public health-insurance program and those privately insured, without discrimination. Patients pay relatively small user charges on visits to general practitioners or to hospitals, in order to curtail unnecessary visits without denying access to needed services. Contrary to what was feared by some, the market-based reforms have not called into question the principle of fairness to which the Swedes remain attached (Labrie, 2021).

Over the years, various initiatives have been put in place in many Swedish counties to improve access to elective surgeries and specialized care, without undermining its quality. “An increased patient focus was the impetus behind several policies with the objective of increasing patients’ choices, strengthening patients’ rights, and improving health-care service satisfaction” (Rönnérstrand and Oskarson, 2020: 475).

The OrthoChoice revolution

The decentralized nature of the Swedish health-care system has fostered the emergence of various local experiments with value-based payment initiatives for care providers designed to improve efficiency and patient access to elective treatments. OrthoChoice was one of the earliest examples of a bundled payment system in Sweden, in which health-care providers receive reimbursement based on outcomes and undergo close monitoring of health-care delivery. Launched in all major hospitals and in three private specialized orthopaedic centres in Stockholm County in 2009, OrthoChoice provided knee and hip replacement surgery, and was ultimately extended to spinal surgery. Two other private providers were accredited after 2017 (Ericksson, Tropp, Wiréhn, and Levin, 2020).

The value-based reimbursement system was intended to be an alternative to the traditional way of financing hospitals and to traditional activity-based funding, by including a performance-based component within the bundled payment. The bundled payment covered all costs related to the patient visit along the entire care pathway (medical consultation, surgery, potential complications, reoperation, rehabilitation visits, and so on) (Ericksson, Tropp, Wiréhn, and Levin, 2020). Under the terms of the OrthoChoice program, a small portion of the bundled payment, approximately 3.2%, was withheld and paid retroactively only if the provider achieved the previously agreed-upon performance targets. By changing providers' incentives, the OrthoChoice reform aimed at increasing productivity and reducing wait times in the health-care system, while improving or preserving the quality of care provided to patients (Wohlin, Fischer, Carlsson, Korlén, Mazzacoto, Savage, *et al.*, 2021).

The results of this experiment were conclusive. In OrthoChoice's first year, the volume of hip and knee replacements rose 20%, as newly established private specialized orthopedic centres expanded overall system capacity. Waiting times fell dramatically, with the percentage of patients waiting at least 90 days for treatment dropping from 33% in 2008 to 13% in 2011/12 (Wohlin, Fischer, Carlsson, Korlén, Mazzacoto, Savage, *et al.*, 2021). Average pre-operative sick leave for hip and knee replacement patients fell in Stockholm from 50 days in 2008 to 39 days in 2010. By 2011, complications and revisions were down about 20% compared to a control group using traditional reimbursement plans, and the county's total cost per patient was also reduced.

In 2013, Uppsala County introduced a model identical to OrthoChoice with a slightly higher bundled payment. Ultimately, the program was deemed a success in the County as well, with several studies showing that complication rates and costs decreased accordingly. As a result of the success of the program, other counties also began discussions about implementing similar bundled payments for hip and knee replacements and have entered into similar agreements with care providers (Porter, Marks, and Landman, 2015).

Clearly, patient choice and competition in the decentralized decision-making context of Sweden create incentives that allow providers to seek which means work best to respond to patients' needs, accelerate access to care, and, ultimately, improve health outcomes (Le Grand, 2007). As stated by a group of researchers who examined the impact of the OrthoChoice program, "creating competition by introducing patient choice, accepting both public and private providers, and setting the scene for competition on quality, not cost through a fixed price funding formula, in a publicly funded system, succeeds in meeting the original policy goals (improved access, quality and reduced cost)" (Wohlin, Fischer, Carlsson, Korlén, Mazzacoto, Savage, *et al.*, 2021).

Conclusion

The COVID-19 crisis that spread in the spring of 2020 has made many Canadians realize how woefully less prepared their health-care system was than the systems of other developed countries to face the health emergency. At the time of the arrival of the pandemic, Canada had no extra capacity in the hospital sector to deal with the influx of cases of patients affected by the virus. The level of health resources was—and still is—among the lowest in the developed world, despite public spending among the highest per capita. The pandemic has therefore brought major challenges to hospitals and health-care professionals. The mobilization of staff and the reallocation of medical resources to take care of COVID cases have forced provinces to cancel and postpone thousands of elective surgeries across provinces resulting in longer waiting times for patients.

Even before the pandemic, there were major problems with access to elective surgeries in the country. Data collected over the past 30 years reveals a steady deterioration in access to such care across Canada (Moir and Barua, 2022c). International data suggests that for many years Canadians have endured some of the longest delays in the developed world while they wait for access to medically necessary care. In addition to the significant economic consequences, long wait times can increase patient stress, cause a deterioration of their health condition, and, in the worst case, lead to preventable deaths.

Over the last few decades, provincial governments have tried to address this chronic access problem in their health-care systems, but without much success. Most of the time, this has boiled down to targeted increases in public funding dedicated to certain types of elective treatments. Without the necessary reforms, targeted funding programs have done nothing to solve the problems at the root of the long waiting lists for care. While they may have temporarily increased the capacity of the health system in specific areas, these one-time funding programs have not changed the incentives in place to improve the efficiency of our health-care systems in the long run.

Other countries with universal health-care systems, such as England, the Netherlands, and Sweden, have managed to turn the tide and significantly improve access to care for their populations by pragmatically adopting changes based on patient choice, competition between public and private care providers, and hospital funding based on activity and value. By making patients no longer a source of expenses in a fixed budget but rather a source of additional revenue, patient-based funding schemes encourage providers to deliver quality services in order to attract

patients and treat them in a timely fashion. These European countries have allowed private care providers a more active role, increasing available capacity and diminishing the pressure on the public system, thereby improving overall access to care.

The COVID-19 pandemic also illustrated the value of private care centers in increasing system capacity. These private providers, whether for-profit or not, can increase the volume of elective surgeries performed in the health-care system by making more optimal use of operating-room capacity, being less at risk of having to cancel or postpone surgeries due to unexpected situations, as is often the case in large public hospitals. Without the use of additional capacity from the private sector, several countries would be grappling with delays in surgeries much worse than the current ones.

Clearly, these health-care policies offer ways to incentivize providers to become more efficient and at the same time contribute to improving the allocation of available resources. This efficiency, which replaces the rationing of care, is the source of improved access in countries like England, the Netherlands, and Sweden that have taken this path. This policy lesson should serve as an inspiration to decision-makers in their search for solutions to tackle the backlog of elective surgeries in the Canadian provinces.

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