

6 Routine care for underlying health conditions

Ensuring appropriate care provision for mild COVID-19 cases and maintaining care continuity for all other patients are key elements of resilient health systems. During a pandemic, strong primary health care system is well placed both to manage acute care needs in co-operation with hospitals and keep people in better health condition through continuous care. While the response from LAC-7 countries has been very hospital-centric during the early phase of the pandemic, countries with stronger primary health care have put a greater emphasis on the role of primary health care and community services. Such initiatives have helped to reduce pressure on health systems and minimise complications and direct death from COVID-19. Evidence also demonstrates that maintaining care continuity for all has been one key challenge in LAC-7 countries, with high levels of care disruption and changes to treatment plans for chronic diseases such as cancer, hypertension or diabetes.

Introduction

As the first point of contact between patients and the health care system, primary health care plays a vital role in ensuring an efficient management of diseases. Its key attributes of being people and community oriented, offering comprehensive and co-ordinated services over time, enable the system to effectively provide personalised care tailored to the needs of the patients and to local context. The community-based approach of primary health care is fundamental to ensure that patient's treatment and routine care are carried-out close to where people live or work, driving greater efficiency in health spending by reducing avoidable use of hospital care.

LAC-7 countries are experiencing an epidemiological transition, where chronic conditions are becoming the leading causes of mortality (see Chapter 3). In 2019, 82% of all deaths across LAC countries were caused by NCDs, a slightly lower portion when compared with 85% across other OECD countries. Although this transition is accompanied by improvements in overall population health, it poses new challenges to disease management across health care systems. Treatment and routine care for chronic conditions generally requires more medical resources, generates longer-term demands for health care, and calls for appropriate care co-ordination between primary health care teams, specialised care, hospital care and social care.

During the COVID-19 pandemic, health care systems had to quickly respond to contain the spread of the emergent infectious disease while maintaining care continuity for non-COVID-19 patients. The role that primary health care systems play in managing health care needs became even more relevant when health systems as a whole face strong surges in demand due to outbreaks and other health emergencies. Apart from having the ability to absorb and respond to new health needs – such as providing care for mild COVID-19 cases in the community and making appropriate referrals to hospitals – primary health care critically needs to maintain care continuity for all other conditions. Any care disruption for patients with underlying health conditions will translate in rapid health deterioration and some health complications, leading to hospitalisation or deaths. The COVID-19 pandemic has therefore been a major test for PHC performance in managing both COVID-19 health needs and all other health care needs. LAC-7 countries had to reorganise the functioning of the primary health care system in order to respond at speed and scale.

This chapter describes the third core function of primary care, which is about delivering routine care in the community to help reduce morbidity and mortality, while maintaining continuity of care for all during a health emergency. The second section of the chapter presents the overall performance of PHC in delivering routine care before the onset of the COVID-19 pandemic, followed by an analyses of the role of PHC in managing COVID-19 health care needs in the community (Section 3). The fourth section lastly points out to the ability of PHC in LAC-7 countries to maintain care continuity for patients with underlying health conditions during the COVID-19 pandemic.

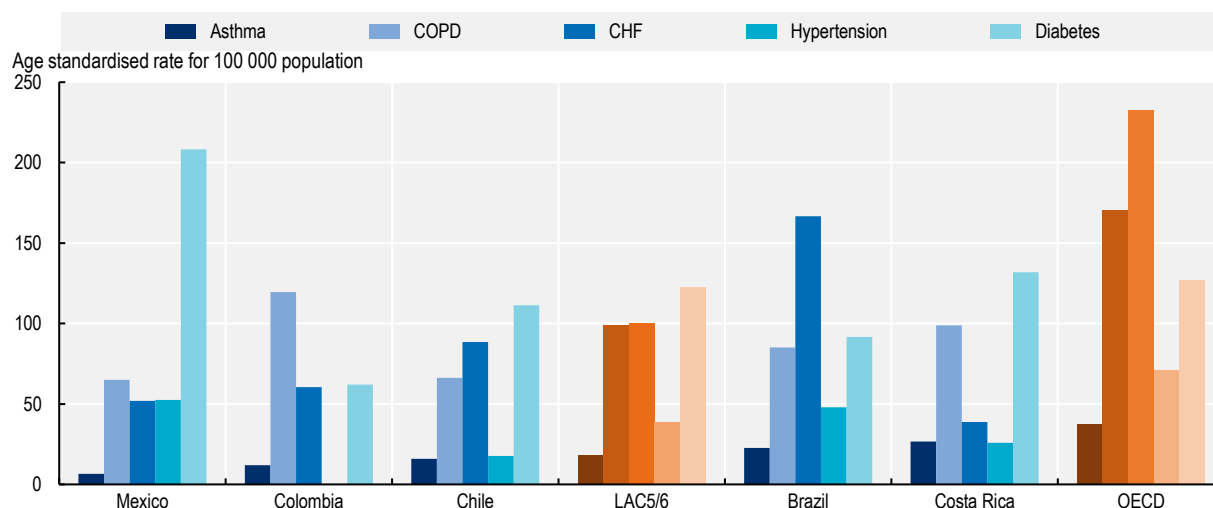
Before the pandemic, the performance of PHC in disease management varied across LAC-7 countries

High rates of avoidable hospitalisations for diabetes suggest poor care quality in LAC-7 countries

Avoidable hospital admissions is a key performance indicator of effective management of chronic disease at primary health care level for conditions that can, in most cases, be treated in community and primary care settings. This measurement has been widely used by the OECD in order to analyse how efficient primary care is at keeping patients from going to get treatment in hospitals. Ambulatory care sensitive conditions (ACSCs) is the category of diseases that are generally most characterised as treatable at the PHC level and in which early interventions can reduce the risk of complications, i.e. hospitalisation (Agency for Healthcare Research and Quality, 2018^[1]). Diabetes, chronic obstructive pulmonary disease (COPD),

asthma, hypertension and congestive heart failure (CHF) are ACSCs with clear evidence that much of the required treatment can be conducted at the primary care level (OECD, 2020^[2]). By lowering avoidable hospitalisations, a high performing primary health care system helps to reduce wasteful use of medical resources and the overburden of specialised care. Indeed, the cost of treatment for patients at PHC is only a fraction when compared with curative services for the same condition in hospitals (OECD, 2020^[2]).

Figure 6.1. Avoidable hospital admissions, 2019 (or latest year)



Source: OECD Health Statistics 2022.

Across LAC-7 countries, avoidable hospitalisations for diabetes have reached similar values when compared with other OECD countries. In 2018, the LAC-5 average with available data amounted to 122.5 admissions per 100 000 population, while in the OECD this rate was of 127.1. The highest rate was observed in Mexico, with over 208 admissions per 100 000 population, whilst the best performing LAC country was Colombia, at a rate of 62.1 hospitalisations (see Figure 6.1). Avoidable hospitalisations rates for CHF were also considerably high in LAC-7 countries, with an average of 100.3 admissions per 100 000 population. This rate, however, was disproportionally higher in Brazil (166.7), and both were considerably lower than the OECD average (232.6).

The lower rate of avoidable hospitalisations for some chronic conditions in LAC-7 countries also relates to a lower prevalence of chronic conditions in these countries. Differences in data reporting practices between LAC and other OECD countries also limit cross-country comparisons.

PHC treatment for diabetes patients appears to be particularly underperforming in LAC-7 countries given the high levels of avoidable hospital admissions in Mexico and Costa Rica. Multiple studies have analysed the financial and health burden of such inefficient management of disease across the health care system. For instance, Lugo-Palacios and Cairns (2016^[3]) have observed a 130% increase in patients being admitted to hospital due to diabetic complications in Mexico between 2001 and 2011, with an increase in financial costs attributed to these avoidable admissions of 125% over the same period. However, a more recent study has observed a significant decrease in avoidable admissions for a wide range of ACSCs in Mexico, going from almost 13% of all hospital admissions in 2010 to 10.7% in 2017 (Poblano Verástegui et al., 2022^[4]). Such a reduction can be explained by a recent improvement in quality governance in Mexico APS-I. In fact, in an attempt to modernise PHC management and improve care quality, Mexico's APS-I has included avoidable hospitalisations as a key indicator to evaluate PHC performance, improving monitoring and performance over time. By contrast, Peru's 2008 policy programme to improve treatment for NCDs does not consider these indicators to measure PHC performance (See Box 6.1), while it has already been used by national evaluation (Arrieta, 2012^[5]).

Box 6.1. Peru's programme to tackle NCDs morbidity and mortality

Launched in 2008, the Budget Programme 0018 of Non-communicable Diseases has been promoted as one of the main health policies to develop better routine care in the PHC level and aims at reducing morbidity, mortality and disability due to NCDs. Federal and regional authorities have allocated resources to focus on treatment for diseases such diabetes, hypertension, cataract, amongst other preventive services. The programme outlined a series of ambitious improvements related to selected indicators, with clear targets for controlling and treatment for visual deficiencies, restorative dentistry acts and diabetes, for instance.

During the years prior to the COVID-19 pandemic, some areas of work for the programme were slowly progressing. For instance, the number of hypertensive patients which had their condition under control went from 3 554 in January 2019 to over 6 250 patients in December 2019. Although notable progress was observed, the total number of hypertensive patients with controlled conditions in that year (57 310) was still far from the annual goal of 287 176, representing only 20% of the objective.

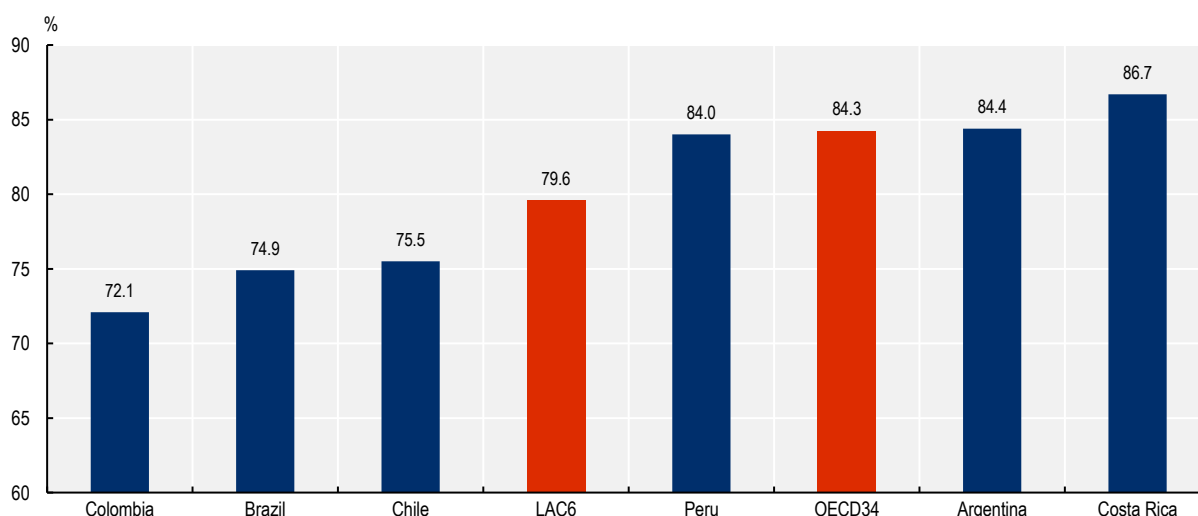
Additionally, budget allocation for hypertension treatment has constantly increased since 2016, but indicators of disease prevalence have remained relatively stable since then, going from 17.6% to 19.7% between 2016 and 2019. In 2020, the prevalence of hypertension reached 21.7% in the 15 and older population.

Source: MINSA (2020^[6]), Evaluación de Desempeño Programas Presupuestales Año 2020.

There is room to improve cancer care in LAC-7 countries

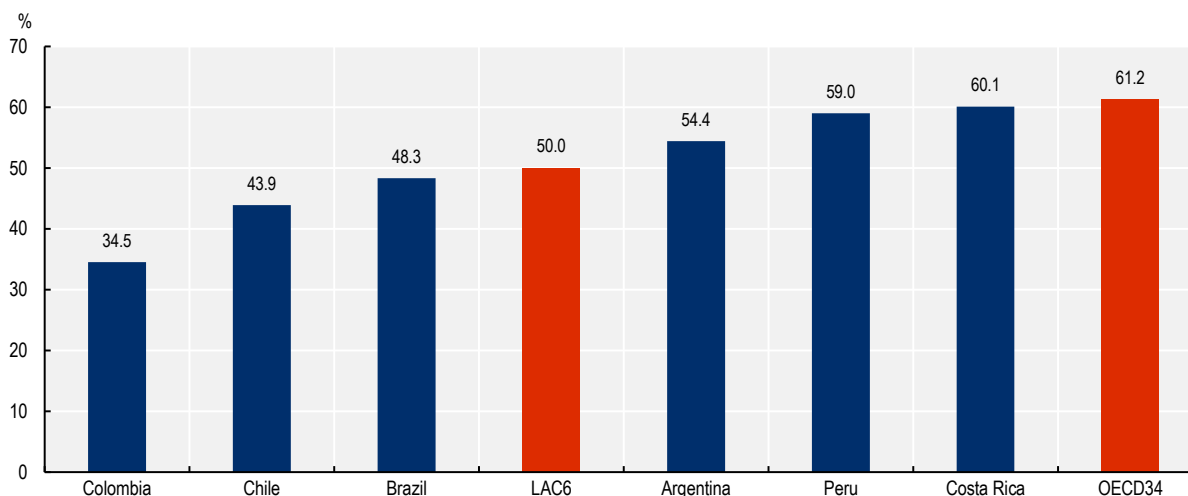
On top of its preventive function through screening procedures (see Chapter 5), PHC has increasingly played a vital role in providing care for cancer, and its related comorbidities and palliative care. As cancer prevalence increases in developing countries due to the introduction of more advanced treatments and growth in the share of elderly population, primary health care has also become instrumental for the future sustainability of cancer treatment and management. Randomised controlled trial studies focused on breast cancer patients in remission have already shown that transferring specialised-based care practices to primary care settings, such as follow-up consultations, have presented better outcomes in terms of quality of care (length and frequency of visits) and lower costs to patients (Grunfeld et al., 1999^[7]). Models of shared follow-up between GPs and hospital-based practitioners have also proven to be effective at generating a series of better process outcomes, especially when it comes to patient satisfaction, provider confidence and knowledge and patient perceptions of care (Emery et al., 2014^[8]). Together with effective referral and gatekeeping systems, PHC care co-ordination has proven its potential as a key component in cancer treatment (OECD, 2013^[9]). Therefore, measuring treatment outcomes for certain types of cancer can also provide countries with an additional indicator of PHC performance in disease management.

Cancer represented the second leading cause of death in LAC-7 countries in 2020, only after cardiovascular diseases, with a regional average mortality rate of 120 per 100 000 population (OECD/The World Bank, 2020^[10]). Among LAC-7 countries, breast and colon cancer 5-year survival rates are clearly separated between two different groups of countries in terms of performance (Figure 6.2 and Figure 6.3). Whilst Peru, Argentina and Costa Rica have performed better in net survival indicators for these two types of cancer, with averages similar to other OECD countries, Colombia, Brazil and Chile ranked below the LAC-6 average. For both breast and colon cancer survival rate indicators, Colombia presented the lowest survival rates, with 72.1% of the population having survived breast cancer five years after diagnosis, and only 34.5% in colon cancer cases. This poor result is in contrast with Colombia's relatively lower mortality rate for all cancers when compared with other OECD countries (OECD/The World Bank, 2020^[10]).

Figure 6.2. Breast cancer 5-year net survival (%), adults (15-99 years)

Source: BRA, CHI, COL and CRI from OECD Health Statistics 2022, others from CONCORDE-3.

Although for both indicators Brazil and Chile performed better than Colombia, their 5-year survival rates remained below the regional average (79.6% for breast and 50% for colon cancer). The higher rates were found in Costa Rica, which performed above the OECD average in breast and colon cancer survival rates (86.7% and 60.1%, respectively).

Figure 6.3. Colon cancer 5-year survival rate (%), adults (15-99 years)

Source: BRA, CHI, COL and CRI from OECD Health Statistics 2022, others from CONCORDE-3.

The overconsumption of antibiotics in LAC-7 countries gives cause for concern

Total volume of antibiotics and second-line antibiotics (as a proportion of total volume) has been validated as markers of quality in the primary care setting, given the increased mortality and morbidity, duration of hospital stays, infections from antibiotic-resistant pathogens, and overall increased health care costs (OECD/The World Bank, 2020^[10]) (OECD, 2018^[11]). Promoting a prudent use of antibiotics allows to reduce

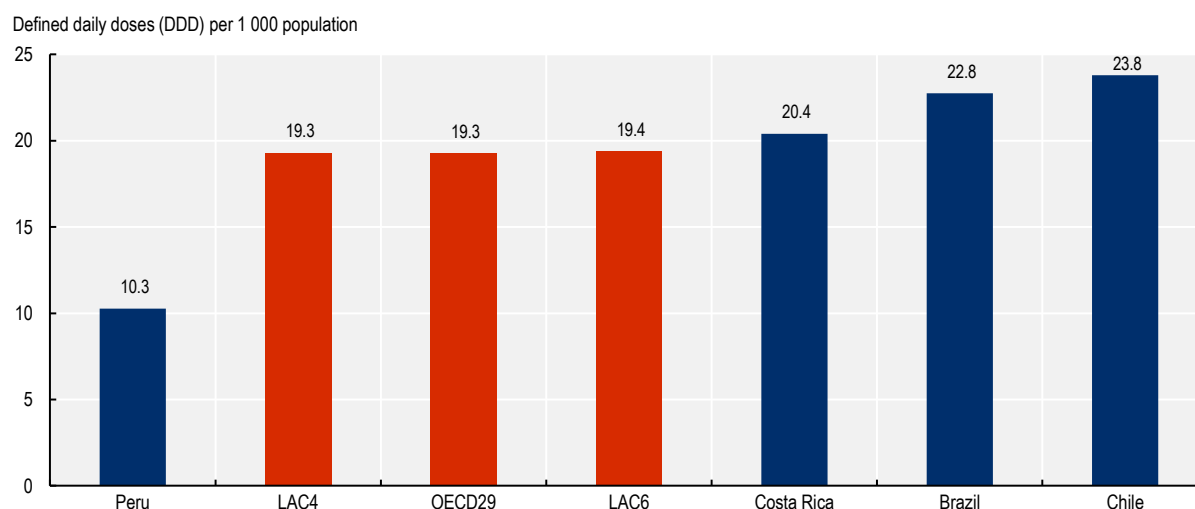
waste in the health sector and save the resources for other necessary treatments. This implies avoiding both overuse and misuse, which refers to their use in cases where antibiotics are not needed or the wrong antibiotic is prescribed.

Moreover, the rational use of antimicrobial medicines is important to contribute to preserve their clinical effectiveness. Despite this, PAHO estimates that around 50% of antibiotic use is not appropriate, affecting their sustainability and health outcomes (PAHO, WHO and FIU, 2018^[12]). Most antibiotic prescription is made at the primary care sector, mostly for respiratory tract infections.

Figure 6.4 below shows antibiotic consumption in four reporting LAC countries. Highest consumption is in Chile and Brazil, with 23.8 and 22.8 daily doses per 1 000 inhabitants, respectively. The average of LAC countries is similar to the OECD average, although the number of countries is not representative of the region.

The country with lowest consumption is Peru, although this can be explained because the data does not include all institutions in the health sector but only shows the best approximation to antibiotic use (OECD/The World Bank, 2020^[10]). Removing the data for Peru, the average of the three countries is 22.3 daily doses per 1 000 inhabitants, higher than the OECD average of 19.3 and much higher than some OECD countries such as the Netherlands (9.5) or Estonia (11.8) (OECD, 2021^[13]).

Figure 6.4. Antibiotics consumption in LAC countries, 2019 or latest year available



Note: Data is from 2019 from OECD database, 2018 for WHO antibiotics report. Data only available for six countries in LAC: Bolivia, Brazil, Chile, Costa Rica, Paraguay and Peru.

Source: 2022 OECD Health Statistics for OECD average, Chile and Costa Rica. WHO antibiotics report for the other countries.

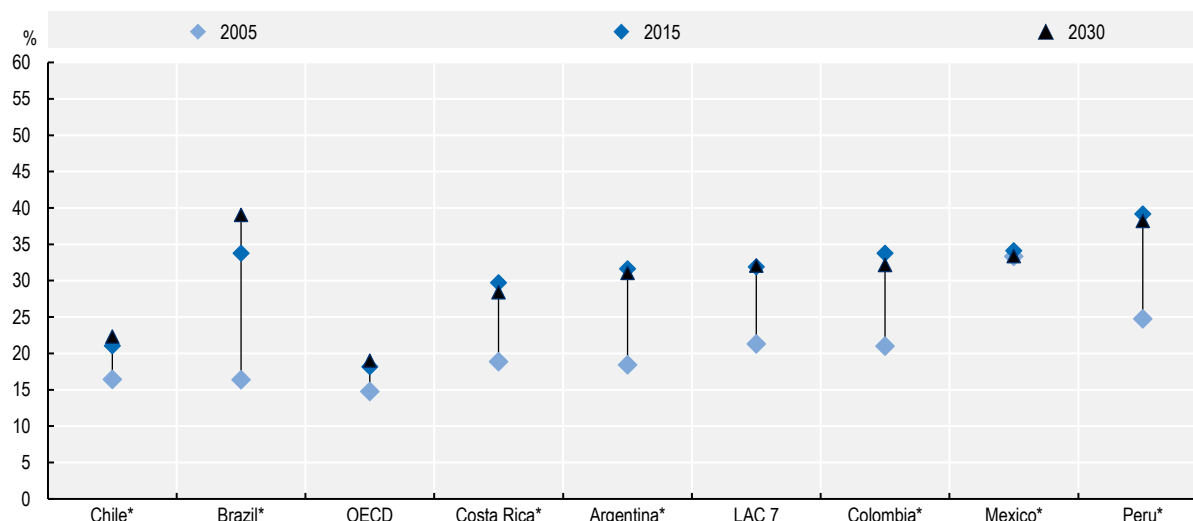
The OECD conducted in 2018 an extensive study looking at antimicrobial resistance at the global level, and reviewed actions to prevent its emergence and spread (OECD, 2018^[11]). The result for LAC-7 countries, looking at the average proportion of infections caused by bacteria resistant to antimicrobial treatment for eight antibiotic-bacterium combinations in 2005, 2015 and 2030 is shown in the Figure 6.5. The estimated average proportion of infections caused by anti-microbial resistance has grown up in all countries between 2005 and 2015. Brazil has the highest increase of estimated anti-microbial resistance (with a 51% increase) while Mexico has the lowest increase (at 2%).

Moreover, the 2015 average proportions are much higher in all the LAC-7 countries than the OECD average. The country with the highest resistance was Peru (at 39.2%), which can indicate an underreported level of antibiotic consumption (Figure 6.4).

On a more positive note, five out of the seven LAC countries are projected to lower the average proportion of infections (all except for Brazil and Chile with a small projected increase), although all will continue to have higher levels than across other OECD average.

Figure 6.5. Average proportion of infections caused by bacteria resistant to antimicrobial treatment for eight antibiotic-bacterium combinations

2005, 2010 and 2030 projections



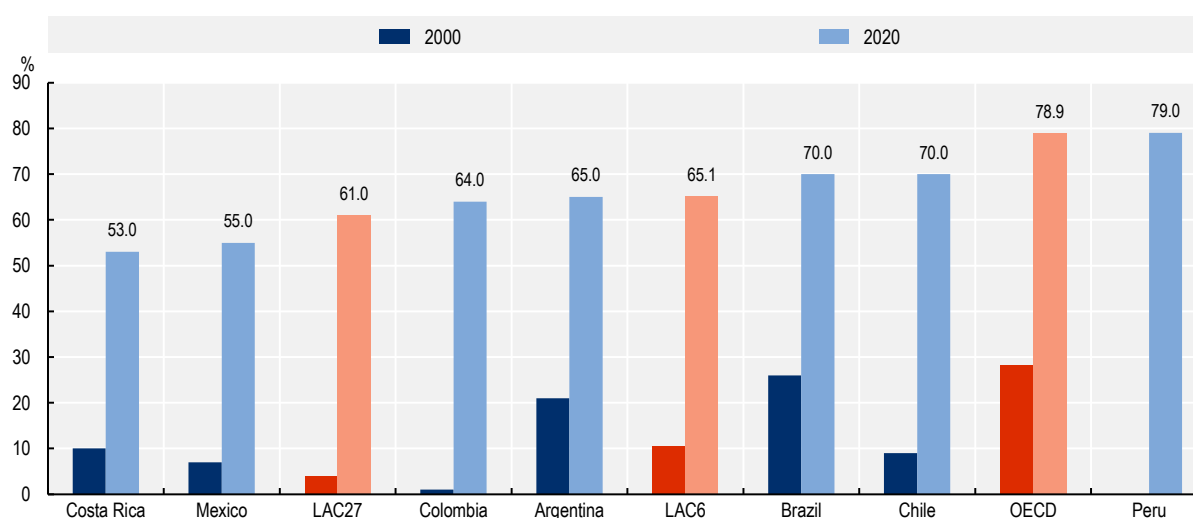
Note: For countries on the left of this graph Chile and Brazil, resistance proportions will be higher in 2030, compared to 2015. For countries on the right, rates will be lower in 2030. Otherwise, countries are sorted left to right based on ascending resistance proportions in 2015.

Source: OECD (2018^[11]), *Stemming the Superbug Tide: Just A Few Dollars More*, <https://doi.org/10.1787/9789264307599-en>.

HIV treatment coverage has considerably increased in LAC-7 countries, but it is still far from the UNAIDS 2020 targets

For the estimated 2 million people in LAC countries living with HIV/AIDS (OECD/The World Bank, 2020^[10]), routine antiretroviral treatment (ART) can be extremely effective, preventing transmission from mother to child during pregnancy and breastfeeding and between sexual partners (WHO, 2022^[14]). WHO guidelines (2017^[15]) have reinforced the necessity of implementing a people-oriented approach to HIV treatment which holds a minimum dataset for patient care, and well integrated at all levels of the health care system through unique patient identifiers. PHC and its community-based approach has been found effective to ensure care continuity for HIV patients, a critical care component to improve quality in HIV treatment (Sherer et al., 2002^[16]). Indeed, primary health care teams are instrumental to make sure HIV patients attend regular follow-up sessions with medical doctors in order to manage treatment and the surveillance for other risks factors related to the disease (Box 6.2).

Amongst the UNAIDS 90-90-90 targets for HIV treatment, 90% of patients with a confirmed HIV diagnosis should receive ART by 2020 (UNAIDS, 2020^[17]). LAC-7 countries are still far from reaching this goal, with an average treatment coverage of 65.1% in 2020, compared with 78.9% in OECD countries. However, considerable efforts by health authorities to increase the accessibility of pharmaceuticals and screening of risk groups have made noteworthy progress in the last decades, with a more than six-fold increase in ART coverage from 2000 to 2020 in LAC-7. Amongst those, Peru was the best performer, with a rate similar to the OECD average. This finding also corroborates the low number of new HIV infections in Peru when compared with other LAC countries (OECD/The World Bank, 2020^[10]). Costa Rica and Mexico presented coverage rates below the LAC-27 average, at 53% and 55%, respectively.

Figure 6.6. Antiretroviral therapy coverage for people living with HIV (%)

Source: WHO 2020.

Box 6.2. Primary health care has a central role in treating for HIV in Brazil

Whilst Brazil has leveraged the potential of PHC in HIV treatment, some other countries have not followed the same path. In the beginning of the HIV pandemic, antiretroviral treatment for patients was mostly concentrated in specialised units and secondary care. However, in the last decades, treating and accompanying people living with HIV has become embedded and effectively managed in the PHC practice. Brazil is a very good example of a country where PHC has been integrated to the different functions of care for HIV. At first, testing and rapid screening procedures were made available at the Sistema Único de Saúde (SUS). From 2013, the Ministry of Health issued guidelines for monitoring low-risk and asymptomatic HIV patients at the PHC level. The possibility of transferring treatment from specialised centres to a shared system between family health units and specialists also benefited patients, as they could follow their care from health units closer to their home. Some challenges to disease management for HIV at the primary care level remain, such as the lack of patients privacy and confidentiality in health information (Melo, Maksud and Agostini, 2018^[18]).

However, although this transferring of responsibilities to the PHC level has proven to be effective, other LAC-7 countries have maintained care pathways focused at specialised care, with very limited roles attributed to PHC. In Chile, where the increase in new HIV infections was the highest in the Americas between 2010 and 2016, antiretroviral drugs are delivered at secondary care and hospitals. The role of PHC is therefore limited to the phases of screening and early detection.

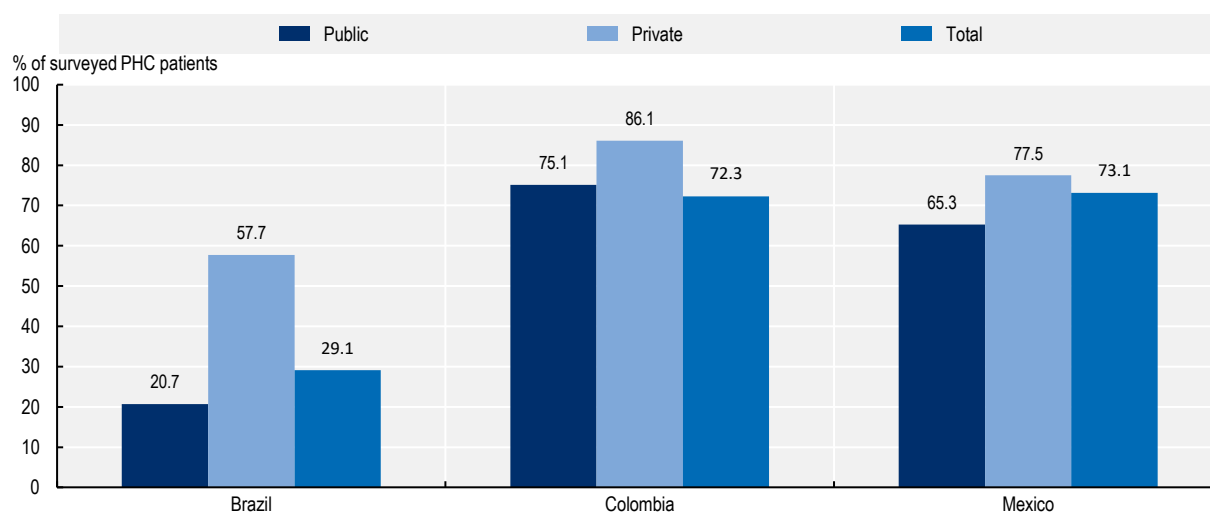
Source: BRASIL (2014^[19]), 5 passos para a implementação do Manejo da Infecção pelo HIV na Atenção Básica.

More efforts are needed to regularly collect indicator around people-centredness

Designing people-centred health care systems has increasingly been set as an important policy objective. The perspective of service users – their needs, preferences and experiences – is recognised as a major factor to improve health care outcomes, quality and patient satisfaction (OECD, 2021^[20]). People-centred health care also allows for patients to be better informed and empowered, making them more able to self-manage their treatment and shape health services in co-ordination with medical professionals. The community based approach of primary health care makes it a strategically well suited environment to improve patient experiences with the health care system, as the main point of contact between health system providers and patients.

Patient-reported experience measures (PREMs) are an important tool for policy makers to better understand how health care systems are performing from the perspective of users themselves. While cross country comparison of PREMs can give health authorities a clearer picture on the performance of their health systems, few international data exist. The OECD is conducting an extensive work on this matter through its PaRIS survey, of which LAC-7 countries should consider becoming part of (Box 6.3). Indeed, LAC countries lack a comprehensive set of data on people's experiences and overall satisfaction with health care. This data can shed light not only on relevant cross-national differences, but also care inequalities between providers. When asked if the PCP spent a sufficient amount of time with the patient during their appointments, PREMs from users of PHC in Brazil, Colombia and Mexico demonstrated clear disparities between private and public providers (Guanais et al., 2018^[21]). Brazil performed particularly poorly both with regards to spending enough time with a doctor during consultation and with regards to the disparity between public and private providers. Whilst 57.7% of users of the private system responded positively, only 20.7% felt they had spent a sufficient amount of time with their PCP. Although Colombia and Mexico also reported highest rates for private users, in both countries disparities between providers were smaller and the share of positive experience were considerably higher than in Brazil, at 65.3% in Mexico and 75.1% in Colombia amongst public health care patients.

Figure 6.7. Brazil lags behind Colombia and Mexico with regards to patient experience measures such as communication with the PHC provider



Note : The indicator relates to doctor spending enough time with patient during consultation.

Source: Guanais et al. (2018^[21]), *Desde el paciente: Experiencias de la atención primaria de salud en América Latina y el Caribe*, <https://doi.org/10.18235/0001255>.

Box 6.3. The OECD PaRIS Survey

In 2017, the OECD launched the Patient-Reported Indicators Survey (PaRIS) to address the need to understand the outcomes and experiences of people with chronic diseases. PaRIS offers an opportunity for gathering the evidence necessary to transform health care systems into patient-centred systems based on the needs of the people they serve. The initiative includes:

- The collection of validated, standardised, internationally comparable patient-reported indicators in three areas: hip and knee replacements, breast cancer care and mental health care;
- The collection of a new set of internationally comparable measures which focus on patients with one or more chronic conditions, who are living in the community, and who are largely treated in PHC or other ambulatory care settings.

Until today, 20 countries have joined the PaRIS survey.

Source: OECD (2022^[22]), Patient-Reported Indicator Surveys (PaRIS), <https://www.oecd.org/health/paris/>.

Recent available researches in Mexico show a relatively high patient satisfaction with care delivered in public and private facilities (Flores-Hernández et al., 2019^[23]; Holt et al., 2020^[24]). For instance, 88% of public health service users reported receiving clear information about the diagnosis, 87.5% clear information about the pharmacological treatment, and 84.4% a clear answer to their questions. There were no differences in these indicators between indigenous and non-indigenous health service users (Flores-Hernández et al., 2019^[23]). However, in 2021, the IMSS National Satisfaction Survey found that only 60% were satisfied with PHC services; the main reasons for dissatisfaction were long waiting times (69%), lack of health personnel (66%), unavailability of medicines (53%), and staff impoliteness (42%) (IMSS, 2021^[25]). Nonetheless, these surveys did not cover multiple aspects of patient-centred care.

In Colombia, a 2020 study of public evaluation of the health care system conducted by the Ministry of Health found consistently high satisfaction rates for both in-person and remote care for different types of services. Almost 87% of respondents considered in-person GP consultations as “good” or “very good”, while remote care had a satisfaction rate of 80%. The same study has also shown positive experience when comparing both the subsidised and the contributive regimes in Colombia, with 89% and 80% satisfaction rates, respectively (MSPS, 2020^[26]).

A powerful strategy to make health care more people-centred is allowing patients to have access to and knowledge of their health information. By using digital solutions such as Electronic Health Records (EHR), patients can better influence, self-manage and participate in decision making for some aspects of their treatment. However, international progress on implementing these instruments is still very low. In 2020, only 43% of OECD countries reported allowing patients to interact with their personal health information (OECD, 2021^[20]). In LAC-7 countries, the ambition to adopt EHR technology has varied widely. Costa Rica sets an example to the region and other OECD countries on the implementation of its EHR system EDUS (*Expediente Digital Único en Salud*) across all health care public facilities (including PHC, clinics and hospitals). EDUS is widely used across the country to record patients' contacts, medical appointments, diagnosis, treatments, family health information provided by the patient and other health data. EDUS was further developed to also include comprehensive data from secondary and tertiary levels of care, making it one of the most comprehensive electronic health record system in the world (OECD, 2017^[27]). However, other countries in the region still lack comprehensive EHR policies. In Argentina, Mexico, Peru and Colombia, electronic health records are underused for disease surveillance, notably because of a relatively low penetration amongst primary health care physician – at 17%, 50%, and 36%, respectively (Global Health Intelligence, 2017^[28]) (see Chapter 4). In Peru however, EsSalud recently launched the Smart

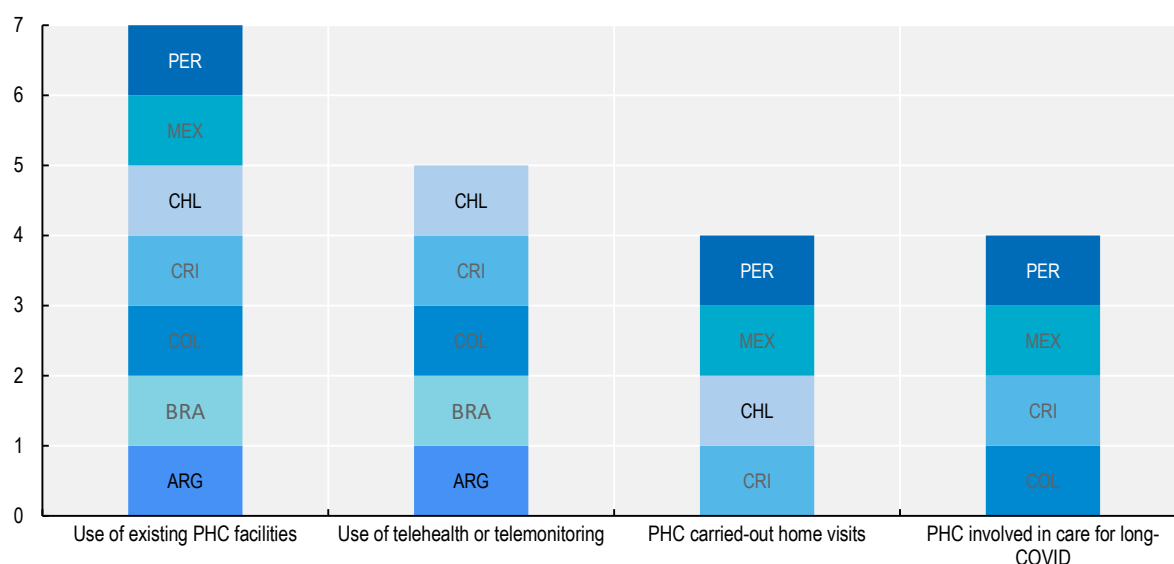
Health Service (EsSI), a new digital tool where patients can access their medical records and health providers are able to visualise information from users such as auxiliary tests, diagnoses, prescriptions and treatments. Scheduling for consultations and appointments across different levels of care can also become better co-ordinated and standardised through EsSI (EsSalud, 2019^[29]).

Role of PHC in managing COVID-19

As in many other OECD countries, the overall response from LAC-7 countries to the pandemic has been very hospital-centric. In some cases, LAC-7 countries with stronger primary health care have made a greater use of primary health care and community services to reduce pressure on the health system and minimise complications and direct deaths from the COVID-19 crisis. There are good local experiences where primary health care has been effective to respond to the surge in demand, through for example the use of existing primary health care facilities, making quick and effective referral to hospitals and the development of new model of organisation such as home visit and telehealth. However, in all LAC-7 countries, available evidence shows that people with underlying health conditions have been strongly impacted by care disruptions.

Figure 6.8. Primary health care in LAC-7 countries has managed mild-COVID-19 care needs in the community

Number of LAC-7 countries



Source: OECD (2021), Policy Survey on the role of primary health care during the COVID-19 pandemic.

The deployment of PHC facilities with specific care pathways for COVID-19 has been an effective response to manage COVID-19 in the community

Gatekeeping and care-co-ordination strategies to better organise treatment and follow-up of COVID-19 patients depending on their symptoms and severity level has been pointed out as an effective measure to help sustain health systems during the COVID-19 pandemic (WHO, 2020^[30]). In order to cope with surges in demand for care, PHC must be able to have the necessary resources and the proper organisation to rapidly increase capacity whilst implementing timely adaptations, such as the creation of specific care pathways for COVID-19 patients.

During the first year of the pandemic, very limited amount of resources and a lack of planning for emergency situations mainly resulted in hospital-centric response from LAC-7 countries, with a high focus given to treating patients with severe COVID-19 symptoms in hospitals. This was the case in Mexico, where emergency rooms have traditionally been considered as the main point of entrance to the health care system by the population. Health authorities were quick to repurpose hospitals and transfer medical staff to cope with the high demand of patients seeking treatment for COVID-19 in secondary or tertiary care. While the referral system in Mexico was not working effectively before the pandemic (Sánchez-Talanquer et al., 2021^[31]), health authorities implemented a new policy approach for managing suspected or confirmed cases of COVID-19 which was centred around the Respiratory Care Modules (*Módulos de Atención Respiratoria des Seguro Social, MARSS*) in PHC units.

Box 6.4. The Respiratory Care Modules (MARSS) helped manage COVID-19 patients in primary health care settings in Mexico

Mexico implemented the Respiratory Care Modules (*Módulos de Atención Respiratoria des Seguro Social, MARSS*) in the primary health care setting. With a clear set of guidelines on care pathways for patients showing a series of COVID-19 symptoms, MARSS is run by a team of nurses and laboratory assistants. On arrival, patients would complete a form through a QR code indicating all the symptoms and individual risk factors. Patients showing difficulty to breath or chest pain were sent to specific COVID-19 areas and had their oxygen level evaluated. If a patient had a less than 90% oxygen saturation level, the patient received a referral to be treated at a hospital unit. In case oxygen levels were not alarming, the MARSS team would evaluate if the patient was part of any risk group, in which case he/she would remain under medical surveillance for any signs of additional symptoms. After signs of improvement, patients would be sent home and received recommendations to self-isolation for 10 days, together with a series of COVID-19 related information, masks, an oximeter and antipyretic medicines. This was also the case for patients that did not belong to any risk group. MARSS staff would then conduct follow-up consultations with isolated patients by phone.

In addition to MARSS units, the Mexican Government also implemented MacroMARSS, which are larger centres with the same responsibilities, and with guidelines to identify and care for mild COVID-19 patients. In late January 2022, there were 5 181 MARSS across the country and 57 MacroMARSS, which had carried out 12.2 million consultations, of which 1.3 million received a follow-up from medical teams. Even though a great number of COVID-19 patients were cared through the framework of the MARSS units, no evaluation of this policy has been carried out yet.

Source: IMSS (2022^[32]), Los MARSS del IMSS han sido un pilar en la respuesta institucional ante la pandemia de COVID-19, <https://www.gob.mx/imss/es/articulos/los-marss-del-imss-han-sido-un-pilar-en-la-respuesta-institucional-ante-la-pandemia-de-covid-19?idiom=es>.

Colombia and Costa Rica were two other LAC-7 countries where PHC had a clearer referral framework plan for COVID-19 patients and which also mobilised their PHC systems to play a more central role in caring for confirmed cases. However, both countries put in place different strategies to adapt their PHC services to the challenges posed by the pandemic.

Costa Rica for example introduced comprehensive adaptations to PHC services to treat for mild cases of COVID-19. From the start of the pandemic, the PHC system was placed at the centre of the health system to manage the unexpected surge of demand and avoid overcrowding in hospitals. The country separated care pathways for COVID-19 patients and non-COVID-19 patients at the primary health care units to respect social distancing protocols and ensure patient safety. Rapid response teams in PHC, which comprises doctors and nurses, were responsible for the follow-up of cases and clinical care for COVID-19.

Costa Rica also converted non-medical institutions (such as hotels, public schools etc) into isolation centres for patients who could not afford to self-isolate at home. More than 10 000 confirmed or suspected cases were able to self-isolate in these facilities (PAHO, 2020^[33]). The quick and effective response from the Costa Rican PHC system to manage mild-COVID-19 cases in the community is undoubtedly related to its pre-pandemic central role in providing comprehensive, continuous and co-ordinated care. By contrast, in Peru and Argentina, a lack of resources and an unclear mission and vision for primary health care severely limited PHC's scope in this care function during the pandemic.

In Chile, during the first months of the pandemic, PHC played a relevant role in caring for mild COVID-19 cases through home visits with medical, nursing and kinesitherapy professionals. In case patients had an increase in symptoms, transfers to PHC units were arranged in order to provide testing, hydration, low-oxygen therapy and clinical surveillance. The first level of care network in Chile was separated between units that would receive patients with a respiratory condition (i.e. suspected COVID-19 cases) and non-respiratory cases. This physical separation also provided for different pathways of care, and aimed at minimising contacts from positive COVID-19 individuals with uncontaminated patients and more efficiently allocate resources to protect medical staff and provide treatment (MINSA, 2020^[34]).

The Brazilian Ministry of Health took important steps to reorganise its PHC system in order to implement an integrated response to COVID-19 management at the PHC level. Confirmed and suspected cases and those who presented respiratory symptoms were directed to separate care pathways. Larger PHC units implemented separate internal pathways, with triage occurring at an exterior area at the unit's entrance, whilst smaller units arranged exterior areas with tents to receive COVID-19 patients. As PHC in Brazil is mostly managed at the municipal level, the level of integration between different levels of care varies widely across the country. Cities like Belo Horizonte implemented effective referral and transport systems between PHC and higher levels of care in accordance with information on the availability of beds in hospitals (Giovannella et al., 2021^[35]). At a late stage, in March 2021, the Brazilian Ministry of Health published a set of seven main steps to improve PHC effectiveness in the context of the pandemic. Amongst them, guidelines were proposed to increase working hours for PHC units, implement reference units for COVID-19 cases and train staff to diagnose and manage mild COVID-19. The guidelines also recommended that PHC units treat patients with moderate symptoms where there are appropriate human and material resources (Ministério da Saúde, 2021^[36]).

At the same time, reference centres for treating COVID-19 patients at the PHC level were implemented in poor and dense communities (*favelas*) through financial incentives from the federal government. Beyond providing care for people in areas of increased risk of contamination, these centres also aimed at updating patient health information to subsidise remote care and community disease management by health authorities. On top of fixed financial transfers to municipalities that implement the reference centres, the federal Government of Brazil also provided a per capita financial incentive to selected municipalities for each person that had their health registry updated (Ministério da Saúde, 2020^[37]).

In Argentina, PHC does not normally act as a co-ordinating axis of care for the population, as there is no referral system to access secondary care (see Chapter 3). Similarly to Mexico, the country also faces an artificial division between public and private providers in terms of co-ordination and compliance with national health care policies. Territorial differences in Argentina are also important obstacles, as PHC providers between administrative regions do not share common financing schemes and, as a consequence, do not share a common set of services that are covered by the first level of care. Guidelines provided by the Ministry of Health are only indicative of which types of services PHC should provide, and each province in the country establishes its own referral and triage systems. This created severe inequalities between regions on the level of care co-ordination and efficiency provided by the health care service during the COVID-19 pandemic. The pandemic has however stimulated innovative practices at local level. The Jujuy province for example introduced a Single Patient Management Centre to co-ordinate the transfer of patients between health care units and different levels of care. This centre evaluated three times per day the number of beds available in each unit and the spare capacity in terms of medical

resources and workforce. Transfer of patients was also organised by this centre, which integrated public and private health care providers.

A lack of basic infrastructure and human resources in Peru's PHC system posed challenges to the country's response to COVID-19. With a lack of policies to attract physicians to more remote areas, almost half of public PHC centres suffer from physician shortage (Comptroller general, 2016^[38]). This shortage was further aggravated by the pandemic as these facilities drastically reduced their staff numbers due to age and comorbidities related to COVID-19. Temporary staff which had no previous work connection with PHC were hired by the Peruvian Government in order to conduct field interventions to provide diagnosis and clinical follow-up that would otherwise be provided by regular staff. Additionally, an increase in 2020 of medical staff in Peru through temporary contracts varied considerably between regions (Murillo-Peña et al., 2021^[39]). Workforce shortage in primary health care have considerably limited the capacity to deliver routine care at the first level of care and clearly had an impact on the reduced responsibilities attributed to primary health care.

In 2021, emergency response teams mostly focused on contact tracing work were converted into Integrated Intervention Teams (IIT). Each team is composed of one health professional and one health technician, and both are trained in epidemiological surveillance, management of symptoms and clinical follow-up for COVID-19, and work in fixed, mobile and remote modalities. Working in close co-operation with PHC staff, EIIs provide care based on a dedicated COVID-19 care pathway. Mild COVID-19 cases that are unable to self-isolate at home can be allocated at Community Centres for Temporary Isolation (CATS), which functioned in originally non-medical structures, such as stadiums, schools, hotels etc. These centres were initially administered by local authorities with funding from the federal government, with an initial offer of ten centres across the country. Moderate and severe cases are referred to receive care in hospitals and intensive care units.

Use of digital health and home visits have been complementary solutions facilitating the management of mild-COVID-19 in the community

In order to minimise contact between medical staff and infected patients, PHC in LAC-7 countries extensively made use of digital health with variation in the scope and depth of utilisation. The strategy helped to reduce pressure on inpatient care while maintaining access to routine health care services. Although teleconsultations predate COVID-19, the pandemic has been a watershed moment in its uptake by both health professionals and patients. The expansion of telehealth enabled to maintain care continuity for patients who may have feared physically visiting health care facilities and it also protected health care professionals most at risk of serious COVID-19. There are however multiple underlying challenges that must be overcome to remove barriers and make sure they become part of mainstream care delivery. For instance, low levels of internet connectivity and digital literacy in some countries has considerably limited the use of telehealth solutions by PHC (Carrillo-Larco et al., 2022^[40]). In some cases, national legislations also required a good level of modifications. However, as in many other OECD countries, LAC-7 countries have reported a clear uptake of telehealth and home-based care during the pandemic, a trend that can point to fundamental changes in the way PHC will deliver services in the aftermath of COVID-19.

In Chile, it has been a common practice for physicians in PHC to provide teleconsultations to refer patients to hospitals or specialised care. The Digital Hospital tool, a website with a set of digital solutions for health care implemented by the Chilean Government, has been a key component of the digital health strategy in the country before the COVID-19 pandemic. Digital Hospital offers teleconsultations both with physicians and a wide variety of secondary care doctors, and it also provides information to help patients to self-manage their conditions. The platform was an important tool to support both patients and medical staff during the pandemic, as it offered COVID-19 disease management seminars and instructional videos for self-care. PHC consultations were drastically moved from in-person to virtual settings due to the pandemic, but data on the number of appointments only started being collected from the second semester of 2020.

From July to December 2020, 580 609 teleconsultations in PHC were carried out, and a further 472 751 in the next semester (DEIS, 2021^[41]). In addition to remote consultations, PHC teams with doctors, nurses and kinesitherapy professionals would go to mild COVID-19 patients' homes to provide in-person care.

The COVID-19 pandemic prompted the implementation of telehealth services and programme across Mexican states. According to the Telehealth Observatory of the National Centre for Technological Excellence in Health (Observatorio de Telesalud del Centro Nacional de Excelencia Tecnológica en Salud, CENETEC), from January to November 2020, 5 741 033 telehealth services were provided in 20 states (Centro Nacional de Excelencia Tecnológica en Salud, 2020^[42]). These services included:

- 1 527 281 medical consultations of COVID-19 patients
- 1 096 175 COVID-19 triages
- 802 642 follow-ups
- 712 383 medical advice
- 647 037 monitoring
- 424 479 tele-education
- 162 753 COVID-19 inter-consultations
- 115 473 non-COVID-19 triage
- 113 219 specialty teleconsultations
- 79 590 co-ordination of services
- 60 001 family visits to hospitalised patients

Follow-up teleconsultations for patients self-isolating at home has been widely expanded to ensure continuity of care in Colombia and Costa Rica. In Colombia, as a way to access high risk population, the use of telemedicine expanded by capitalising on previously existing regulatory guidelines and standards defining procedures and provision conditions. The scope of such services included remote care for people in confinement or preventive isolation, population groups with a higher risk of complications from COVID-19 and preventive and routine health services. From December 2019 to April 2021 there was a 184% increase in providers authorised to perform telemedicine (5 302 providers) and a 264% increase in types of services provided (21 094 telemedicine modality) (OECD, 2021^[43]).

In Costa Rica, a Health Supervision Program integrated by 50 primary care physicians gave continuous medical information to patients with doubts or concerns via phone. The aim of this programme was to support the network of services in areas where health systems were already overwhelmed. Teams were composed by physicians specialised in family health (PAHO, 2021^[44]). Between 2018 and 2019, 28 082 teleconsultations were made, compared to 2.85 million during 2020 and 2021. New regulation and monitoring guidelines were created to support this technological implementation. Between April and December of 2020, between 30 to 40% of all consultations were made by alternative means (OECD, 2021^[43]).

In Brazil, PHC has adopted telemedicine services, including an online teleconsultation platform and the TeleSUS service. Around 2 300 professionals were certified to use the system. In addition, an online tool called “Consultório Virtual de Saúde da Família” has also been made available to PHC facilities and FHTs. PHC workers can receive the necessary equipment, training and technical support on a 24 hours basis. Particularly, PHC teams managing COVID-19 cases were provided assistance from specialised health staff to support decisions about diagnosis and procedures through digital platforms. To help PHC units access digital technologies, the Ministry of Health has also instituted an exceptional incentive to be paid to municipalities and states for each health team that has not yet been digitalised, with a budget of USD 83.8 million for 2020 alone (OECD, 2021^[45]).

Argentina's TeleCOVID programme to provide remote care for people with a suspected or confirmed diagnosis for COVID-19 has increasingly expanded its coverage and quality throughout the pandemic. Beyond treating for mild cases and people in self-isolation, the remote care system also aimed at ensuring continuity of care for people in high risk groups, such as elderly patients. A total of 267 000 telehealth consultations were made in 2020. The Ministry of Health conducted a survey among physicians and patients to analyse their experiences with the TeleCOVID-19 system. Out of all teleconsultations, 57% were related to COVID-19 treatment. Seventy-seven percent of patients positively evaluated their experience with the teleconsultation and up to 82% of health professionals reported they are familiar with the teleconsultation modality. On top of this, both patients and medical staff pointed out the avoidance of unnecessary transfers, increased in safety in the context of the pandemic and obtaining diagnostics results more quickly as other positive effects of TeleCOVID (Fundación Carlos Slim, 2020^[46]).

The legal framework changes in Peru completely restructured telehealth parameters to deal with the pandemic. Before these regulative changes, telehealth were only regulated between health professionals in health facilities and physicians were not allowed to prescribe remotely¹. Telehealth activities targeted tele-expertise to improve capacity of small or remote health facilities by consulting with hospitals or specialised health institutes. After regulation changes, the two main public providers implemented a centralised offer of tele health services, including tele-orientation and tele-monitoring during 2020 ("Teleatiendo"). This network was not based on PHC, but in telehealth centres that made more than 14 million consultations during 2020.

Telehealth can only function properly with minimal technological requirements. PAHO (2020^[47]) guidelines recommend health care teams to have at least a stable internet access (minimum 1 MB/300kb) and an audio/video-capable computer to be able to provide adequate remote consultations. Precarious availability of ICT infrastructure in PHC units can severely hampered the efforts made by some LAC-7 countries. In Peru, nine out of ten health centres have inadequate infrastructure and over 80% do not have internet connection (Carrillo-Larco et al., 2022^[40]). In Brazil, although internet connectivity has been increasing in the past years, only 71% of households reported being connected in the last ICT Household Survey of 2019 (Cetic.br, 2020^[48]). This lack of appropriate TIC infrastructure can severely limit the bold objectives set out in the country's new telehealth legislation (see Box 6.5). Although the legislation indicates EsSalud, the armed forces, regional and local governments as the main supporters of adequate ICT infrastructure for telehealth, it does not propose specific policies to better equip such health care units.

Box 6.5. The pandemic has considerably improved legislation on telehealth: examples from Brazil and Peru

Legislative frameworks regulating telehealth must be comprehensive enough to support a healthy digital environment for medical appointments, prescribing and remote care. Telehealth can affect different policy aspects which might require regulatory oversight, such as individual privacy assurances for both doctors and patients, regulating payment reimbursement schemes for remote care and defining which kinds of care services can be provided remotely (WHO, 2019^[49]). Despite continuous bottlenecks, Pierce, Schroeder and Suchecki (2021^[50]) have identified considerable improvements in the legislative framework of some countries in order to make better use of digital tools during the pandemic. The authors mention the example of Brazil, where law 13.989/2020 and ordinance n° 467 have allowed for temporary use of telemedicine in the public and private sectors and provided basic guidelines of practice for professionals, such as standards for authenticating prescriptions delivered remotely. The Brazilian legislation, however, clearly lacks in some critical aspects to make telehealth policy more sustainable. For example, it doesn't include any norms pertaining to medical liability or data and information protection and security, which could hamper the current Brazilian telehealth strategy (OECD, 2021^[45]). Recent ministerial resolutions have introduced clearer requirements for which health professionals are

allowed to provide telehealth services and ethical principles to ensure confidentiality of information, non-maleficence and patients' informed consent and autonomy.

Peru has comprehensively improved its regulatory framework to develop a Telehealth Policy environment in the country, including a series of changes to previous legislation, which imposed a series of obstacles and limitations to eHealth initiatives. Supreme Decree n° 005-2021-SA has increased the types of exchanges between doctors and patients that can be conducted through remote tools and has given doctors the possibility of prescribing electronically. Through the improved legislation, Peru's Minister of Health and EsSalud, one of the country's main health insurer, have implemented centralised offers of telehealth. These systems, however, are not based in primary health care.

Source: WHO (2019^[49]), *WHO guideline: recommendations on digital interventions for health system strengthening*, <https://apps.who.int/iris/handle/10665/311941>; Pierce, Schroeder and Suchecki (2021^[50]), *Telehealth in Latin America: Progress, Challenges, and Opportunities in the Face of COVID-19*, <https://doi.org/10.30953/tmt.v6.238>; OECD (2021^[45]), *Primary Health Care in Brazil*, <https://doi.org/10.1787/120e170e-en>.

Across other OECD countries, several policies have been implemented to expand and consolidate the use of telehealth. Estonia, Germany, Portugal and Australia, for example allowed medical staff other than doctors to perform teleconsultations after the start of the pandemic (OECD, 2023^[51]). Funding and purchasing was also a key area where policy interventions were necessary to boost the use of telemedicine to maintain routine care. In Belgium, Hungary, Latvia and Korea, before the COVID-19 pandemic, there were no government payments for telemedicine service providers. All four countries introduced new mechanisms to pay for telemedicine services (OECD, 2023^[51]). After the start of the COVID-19 pandemic, the United States, Belgium and New Zealand reduced or eliminated the out-of-pocket payments for tele-health services, making it cheaper for patients than the in-person alternative (OECD, 2023^[51]).

In addition to remote care through telehealth solutions, strategies on home-based care visits by PHC teams were also adopted by some countries. Building on previous work carried out by CHWs, these strategies vary from simple follow-up sessions with isolated patients, as is the case of Peru, to more complex and nuanced policies, such as in Mexico with the *Brigadas Especializadas* (specialised brigades). In Mexico, the specialised brigades are composed of one doctor and a nurse and work in close co-operation with the local PHC clinic and the health promotion brigades (see Chapter 4). The latter will indicate to the specialised teams which households must be visited based on the identification of COVID-19 symptoms and risk group populations. Specialised brigades must conduct further exams, and follow-up on subsequent days if no alarming signs are identified. The teams can also refer patients to PHC or hospital units in case more severe symptoms are observed. The brigade's strategy is implemented by the Mexican Secretary of Health in partnership with PAHO, and is particularly well suited to reach more isolated communities. Follow-up for suspected cases could also be conducted remotely via telephone. Similarly, in Peru follow-up of isolated patients is conducted by IITs through regular telephone and home visits. If assistance at a PHC unit is needed, patients will receive a referral from a CHW. Home-based visits were also conducted in Costa Rica (Figure 6.9).

Despite good local initiatives, LAC-7 countries are unprepared to face the challenge of long COVID

From the first months of the pandemic, both patients and medical staff already started reporting numerous side effects and long lasting symptoms after being contaminated by COVID-19. Prevailing symptoms range from fatigue and persistent cough to loss of smell, taste and cognitive dysfunctions. The time frame of such symptoms also varies between a few weeks to several months. Although there is no consensus on its clinical definitions, some common characteristics are emerging in the literature. For instance, long COVID occurs generally three months from the onset of COVID-19 symptoms in a patient with a suspected or

confirmed contamination by SARS-CoV-2, and usually lasts at least two months, with the possibility of occurring following full recovery from COVID-19 or through the persistency of symptoms (WHO, 2021^[52]).

WHO estimates indicate that around 10% to 20% of people who contracted COVID-19 experience a variety of mid- and long-term effects (WHO, 2021^[53]). A flagship international study examining COVID-19 patients from 56 middle and high-income countries with symptoms lasting over 28 days has found that for more than nine out of ten respondents the recovery time exceeded 35 weeks. Fatigue, breathing issues and cognitive dysfunctions were the symptoms cited by patients as the most debilitating symptoms (Davis et al., 2021^[54]). A similar study in the city of Belo Horizonte in the Southeast region of Brazil identified similar symptoms in patients with persistent disabling symptoms associated with previous COVID-19 infection. In this cohort of 646 patients, the most frequently reported symptoms were fatigue (35.6%), persistent cough (34%), shortness of breath (26.5%) and mental disorders (20.7%). The study followed patients for 14 months, and 1.2% of them were still experiencing symptoms such as fatigue, dyspnoea, joint pain and loss of smell or taste by the end of this period (de Miranda et al., 2022^[55]). Both analyses showcase the wide range of conditions and duration of symptoms that can result from a COVID-19 infection, and how holistic and comprehensive care pathways at the PHC level may be the best setting to provide treatment for these patients. Medical institutions have already highlighted how there will be a shift in focus when it comes to treating for COVID-19, which will increasingly move from ICU to general practitioners in PHC caring for chronic conditions derived from the infection (Royal College of General Practitioners, 2020^[56]).

Despite this urgent need for governments to place PHC at the centre of the health system to provide treatment for patients with long symptoms, LAC-7 countries have shown little progress in this matter. There are however some good initiatives in Mexico, Costa Rica and Colombia, where primary health care teams could have an important role:

- Mexico has implemented a comprehensive network of rehabilitation centres to treat people who suffer from continuous COVID-19 symptoms. Rehabilitation specialists contact patients remotely to assess individual health needs and provide guidance on the appropriate recovery process. Videos and infographics for a wide set of rehabilitation activities (including respiratory, mental and child health) are provided, and follow-up sessions with specialists can be arranged at 21 centres across the country (Secretaría de Salud, n.d.^[57]). Up until August 2021, 178 000 patients with post COVID-19 condition were cared for in the context of Mexico's rehabilitation programme (IMSS, 2021^[58]).
- In Costa Rica, PHC also has a central role in providing rehabilitation care post COVID-19. The National Rehabilitation Centre (CENARE) concentrates the provision of these services, with co-ordination and referral of cases provided by PHC units. CENARE's approach is multi-disciplinary, including respiratory, speech, occupational and physical therapy. In order to be enrolled in the programme, the patient must fulfil certain criteria, such as moderate to severe inability in the execution of daily activities or trouble walking. While the comprehensive approach of the programme is a best-practice, it has been criticised due to its concentration in the large metropolitan area of the country, making access more difficult for people living in more remote areas.
- In Bogotá (Colombia), a post-COVID recovery unit was inaugurated in a hospital in April 2021. Apart from providing care, this centre conducts studies in order to better understand the magnitude and main characteristics of patients' symptoms. A recent study with 100 adult patients found that most common symptoms were depression and musculoskeletal disorders (Asociación Colombiana de Ingenieros de Sistemas, 2021^[59]). The Government of Colombia has recently announced the implementation of a policy agenda centred on long-COVID. The strategy aims to improve the care management of long COVID, and includes a series of measures such as conducting national surveys, implementing specific care pathways, and reorganising financial and workforce resources in order to better meet health care demands, such as through training sessions for medical staff.

- Peru's EsSalud has introduced a post-COVID package to treat patients remotely, which includes physical therapy, psychology, nutrition, family health and rehabilitative care modules. The National Telemedicine Centre (CENATE) is comprised of 175 health professionals who are in charge of contacting patients by video call to provide follow-up consultations (Andina, 2021^[60]). The telemedicine system for post-COVID condition care has an installed capacity to provide up to 800 teleconsultations per day. If required, co-ordinated care and exams can be conducted with PHC units and hospitals. After one year from its launch in October 2020, EsSalud's comprehensive package has provided more than 194 000 consultations (EsSalud, 2021^[61]).

By contrast, Chile's rehabilitation programs for COVID-19 do not seem to be comprehensive enough to meet the growing increase in health care demand. Only patients discharged from hospital after a long stay in ICU (>15 days) are automatically referred to rehabilitation treatment in community rehabilitation rooms at PHC units. For these patients, multidisciplinary teams focused on physical and mental health therapies is provided. However, health authorities' bold strategy to offer treatment for all patients who suffer from long COVID symptoms is currently underperforming due to the already saturated demand for care from people who had long-standing disabilities before the pandemic. Therefore, the absence of specialised therapies, teams and care pathways focusing on long COVID patients can undermine Chile's ambitious plans to tackle this issue.

Across other OECD countries, the United Kingdom has allocated funds to financed research and specialised treatment pathways – so called long COVID clinics – for patients with long-term symptoms following COVID-19 (Box 6.6). Considered as a good practice, such long COVID clinics support a multi-disciplinary approach to clinical care, involving a holistic and comprehensive approach of the disease and its symptoms.

Box 6.6. UK pathways of care for long COVID

The National Institute for Health and Care Excellence (NICE) in the United Kingdom classifies COVID-19 and prolonged symptoms into four categories: acute COVID-19 when symptoms last up to four weeks; ongoing symptomatic COVID-19 when symptoms last from four weeks to 12 weeks; post-COVID-19 syndrome when signs and symptoms last longer than 12 weeks; and long COVID when symptoms persist more than four weeks and includes ongoing symptomatic COVID-19 and post-COVID-19 syndrome.

The United Kingdom has allocated funds to financed research and specialised treatment pathways – so called long COVID clinics – for patients with long-term symptoms following COVID-19. Long COVID-19 clinics support a multi-disciplinary approach to clinical care, involving a holistic and comprehensive approach of the disease and its symptoms. At present, there are around 80 long COVID Clinics in England, which involve referrals from primary health care for patients (both adults and children) experiencing a range of symptoms such as brain fog, anxiety, depression, breathlessness, and fatigue. The health care team comprises general practitioners, physiotherapists, occupational therapists, and psychologist.

Source: 2022 OECD Policy survey on Long COVID-19.

Greater integration between PHC and mental health is required during a pandemic to prevent worsening of mental health in LAC-7 countries

Mental health disorders dramatically increased across OECD and LAC countries during the pandemic. Meta analyses of 62 studies with a total of 196 950 participants found very high prevalence levels of anxiety (35%), depression (35%), distress (32%) and insomnia (35%), with concerning high levels observed amongst health care workers, women and the young population. (Zhang et al., 2022^[62]) (WHO, 2022^[63]).

Some LAC-7 countries reacted quickly to increase mental health support both for COVID-19 and non-COVID-19 patients with anxiety or depression symptoms. As in many other OECD countries, LAC-7 countries including for example Colombia, Mexico and Chile developed new mental health information and telephone support lines. These platforms and support lines gave tips on coping measures during the COVID-19 crisis and improve access to mental health support. Brazil has also made additional efforts to improve mental health during the pandemic through educational videos and training programs for health professionals and emergency response units aimed at preventing self-harm and suicide, particularly amongst teenagers.

In addition, some countries have made efforts to integrate mental health professionals into PHC team – such as psychologists, social workers and psychiatrists – in an attempt to provide an increasingly wider set of care services for both COVID-19 patients being treated at the PHC level and non-COVID patients. In Colombia and Chile for example, mental health policies and guidelines specifically issued for the pandemic crisis also included recommendations on how to deal with gender-based and domestic violence. In Colombia, when contacting the mental health support line, victims could access support services from psychologists and lawyers in order to denounce cases of violence and receive counselling. In Chile, whilst teleconsultations in mental health were overwhelmingly adopted, face to face sessions could be schedule for extreme cases, one of them being domestic violence episodes.

The level of integration of mental health in PHC during the pandemic was rather heterogeneous across LAC-7 countries. Chile has a long-standing tradition of integrating community-based mental health services in PHC, with pre-existing policy frameworks aimed at addressing mental health symptoms during emergency disaster situations, which was further developed during the pandemic. On the other hand, Mexico has limited human resources and programmes at PHC to deal with these types of conditions, with most care being delivered in specialised clinics, ultimately limiting access to mental health services in the country. During the first year of the COVID-19 pandemic, Mexican health authorities did not involve PHC in caring for people suffering from mental health, with a preference instead for telehealth care being provided by academic and non-governmental organisations.

Greater integration of mental health support into primary health care is required across LAC-7 countries to quickly react and better meet an increasing prevalence of mental ill health during and after a health emergency. This will help LAC-7 countries to absorb and recover from a massive health shock such as the COVID-19 pandemic. Learning from the experience of other OECD countries such as Norway, Lithuania and Slovenia (Box 6.7), LAC-7 countries could better integrate mental health into primary health care to promote well-being and prevent worsening for severe mental ill-health in case of future health emergencies.

Box 6.7. Mental health is being integrated into primary health care in 12 OECD countries

For people with mild to-moderate ill health, low-intensity, low threshold services such as psychological therapies or talking therapies provided in primary health care practice are a way to promote well-being and prevent worsening for severe mental ill-health. In 12 countries primary care practitioners are providing some form of talking therapy, for example brief psychological therapy. Best practice examples come from Norway, Lithuania and Slovenia:

- 62 Norwegian municipalities have established 'Rask psykisk helsehjelp – Prompt mental health care' to improve access to psychological therapy by offering low threshold services without referral, cost or long waiting times, supported by the government with a grant scheme since 2013.
- Lithuania now has more than 100 mental health centres that work alongside with general practitioners and are the first point of contact for people with mental health disorders. These centres consist out of a psychiatrist, psychologist and social workers.
- In Slovenia, community mental health centres are being established (currently there are 10 for adult populations and 11 for child and adolescent populations), at a primary care level, where interdisciplinary work with multiple professionals (psychiatrists, psychologists, social workers, speech therapists, occupational therapists, nurses) are working together.

Source: OECD (2021), *A New Benchmark for Mental Health Systems: Tackling the Social and Economic Costs of Mental Ill-Health*, <https://doi.org/10.1787/4ed890f6-en>.

Maintaining care continuity for non COVID-19 illness

On top of implementing new models of care to absorb the surge of demand related to COVID-19 needs, primary health care systems also had to face the challenge of ensuring continuity of care for services that were provided before the onset of the pandemic. These include for instance routine care for chronic conditions such as cancer, diabetes, hypertension, but also all procedures for diseases that can be treated at the PHC level. The section shows that in LAC-7 countries, as in many OECD countries, primary health care has been one of the most impacted categories of health services, with high level of disruptions for people having chronic conditions and other non-COVID-19 needs.

Cancer patients have faced high level of disruptions for their routine care in LAC-7 countries

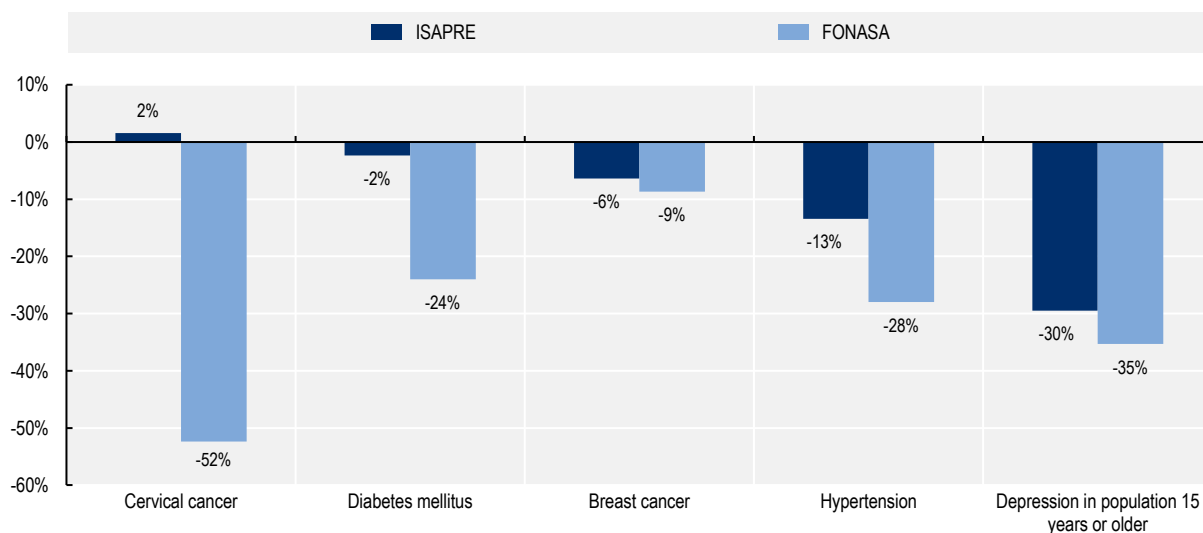
While cancer patients were at higher risk of severe COVID-19 symptoms, they also faced indirect impacts of the pandemic due to disruptions in routine health care related to lock-down and fears of COVID-19 infection in health care facilities. Patients with cancer have high health care needs and are at risk of severe health complications if their conditions are not well managed.

Recent surveys with oncology physicians in the LAC region during the pandemic reveal clear changes in care methods and a perceived decrease in the number of new patients being evaluated when compared with pre-pandemic levels. Out of a group of 704 oncology physicians from 19 LAC countries, 70% reported a reduction of new patients and 72% noticed a decrease in follow-up consultations, whilst 58% affirmed having changed the treatments offered to patients with cancer. Specialty care was also seriously disrupted, with 65% of doctors surveyed reporting delays in referrals to surgical oncology, with 20% saying that surgeries had to be cancelled (Bernabe-Ramirez et al., 2022^[64]).

In several LAC-7 countries, available data confirms this worrying scenario:

- In Peru, for instance, a 50% drop in registered cancer cases was observed in 2020 when compared with the previous 4-year average. In the first semester of 2021, a further reduction of 34% was observed when compared with pre-pandemic levels. Out of the 49 cancer registries in health units operating regularly up to the outbreak of the pandemic, a considerable amount of them stopped functioning after COVID-19 hit (MINSA, 2021^[65]). Through an analysis of data provided by the Ministry of Health, estimates show that more than 81 000 advanced-stage treatments and more than 21 000 diagnostic consultations for cancer in Peru were not performed – a decrease of 37% between March 2020 and March 2021 (Chávez Amaya, 2021^[66]). As a consequence of this steep reduction in care, cancer mortality has increased in the country by 5.3% when comparing 2020 with 2018 values (WHO, 2020^[67]).
- Chile is another country in which a steep decrease in cancer care has been reported. Treatment for cervical cancer was reduced on average by 55% between 2019 and 2020 and a further 8% in 2021. When broken down by health care providers, care disruption for cervical and breast cancer, diabetes, hypertension and depression is consistently higher for users of the National Health Fund (FONASA), which provides care for low- and middle-income populations (Figure 6.9). This suggests that the most disadvantaged population were disproportionately impacted by care disruption than high income population who can afford private insurance (Superintendencia de Salud, 2022^[68]).
- In Brazil, evidence shows a significant reduction in patient referral for cancer treatment in the South region. There were more than 700 fewer newly referred patients attending a medical appointment from mid-March to late June 2020, a decrease of 42% when compared with the same period in 2019. The study observed a clear negative correlation between the number of appointments per week and the number of COVID-19 cases in Brazil (Borges et al., 2020^[69]).

Figure 6.9. Changes in patient admissions between 2015-19 average and 2020 by health care provider in Chile



Note: Admissions refer to all admission in the health care sector, not restricted only to Primary Health Care.

Source: Chile Health Superintendence 2022.

Oncologists and general practitioners managing cancer patients may be able to adapt cancer treatment to limit in-person care when this is medically acceptable. For instance, follow-up and surveillance sessions with patients who have completed their treatments and don't show any acute symptoms might have their appointments done remotely through telehealth (Schrag et al., 2020^[70]). However, for high-risk cancer patients, any disruption in care treatment and surgeries will come at high cost, exacerbating health complications and leading to severe health consequences. Recent evidence shows that delaying surgical treatment for cancer by four weeks for bladder, breast, colon, rectum, lung, cervix, and head and neck cancers has previously been estimated to increase the risk of death by about 7%, while a delay of systemic therapy (such as chemotherapy) or radiotherapy by four weeks may increase the risk of death by up to 13% (Hanna et al., 2020^[71]).

Hypertension and diabetes care saw steep decrease in patient consultations during the pandemic

Hypertensive and diabetic patients also faced severe challenges to access routine care during the COVID-19 pandemic. Similarly to cancer patients, both conditions are considered as high risk factors for severe COVID-19, making in-person treatment at health facilities challenging in period of high level of COVID-19 incidence (WHO, 2022^[72]; OECD, 2021^[73]).

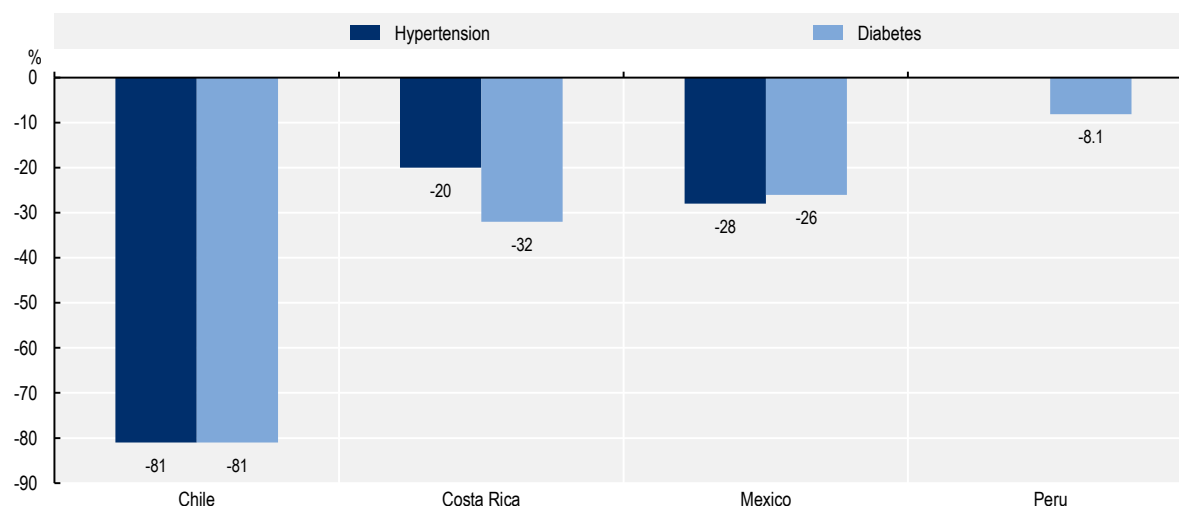
The last round of the WHO Pulse survey on continuity of health care services during the COVID-19 pandemic, which was conducted during the last quarter 2021, shows that 74% of countries reported some level of disruption to diabetes care and 71% to hypertension disease management. The share of countries which recorded over a quarter of disrupted services in diabetes and hypertension care was of 18% and 20%, respectively (WHO, 2022^[74]).

Country specific data on patient consultations for hypertension and diabetes care in some LAC-7 countries also revealed worrying signs of care reduction. A recent study comparing 2020 visits from patients in 10 countries with pre-pandemic levels has found a drop of 80% and 26% in diabetes care consultations in Chile and Mexico respectively (Figure 6.10). For hypertension, the reduction was slightly higher, at 81% for Chile and 28% for Mexico (Arsenault et al., 2022^[75]). Further studies on continuity of care in Mexico also confirm these findings, indicating a 32% drop for both hypertension and diabetes care consultations and a decline in diagnosed patients with controlled conditions by 17% and 22%, respectively (Doubova et al., 2021^[76]).

In Peru, when comparing 2019 with 2020 data, a survey conducted by INEI (National Statistics and Computing Institute) shows a reduction of 8% of diabetes treatment, while no changes are observed for hypertension treatment. There are in addition large disparity in care disruption across socio-economic groups: the reduction in diabetes treatment for patients with primary education or less is twice as high the reduction in diabetes treatment among patients with higher levels of education (11.5% and 6.3%, respectively) (INEI, 2021^[77]). Costa Rica also saw considerable variations in PHC consultations during the pandemic, with a decrease of 32% for diabetes patients and 20% for hypertensive patients (CCSS, 2020^[78]).

In Argentina and Colombia, a lack of data on consultations or number of patients with controlled primary health care conditions limits the evaluations of the impact of COVID-19 on routine care. A more regular data collection is therefore urgently needed.

Figure 6.10. Reduction in consultations for hypertension and diabetes from 2019-20 in LAC-4 countries (%)



Note: Peru data refers to people with diagnosis treated for selected conditions in the last 12 months, others refer to overall consultations visits for selected conditions.

Source: Arsenault, 2022 for CHL and MEX; INEI, 2021 for PER; CRI from CCSS, 2020.

LAC-7 countries mobilised a set of policies in order to mitigate the sharp reduction in patients' consultations and disruption in routine care at PHC level. For instance, Mexico and Chile implemented strategies to maintain drug adherence from patients, such as the installation of online refills, external pick-up points and community drug delivery (Arsenault et al., 2022^[75]). Whenever possible, teleconsultations modalities were also used by PHC providers in order to ensure care continuity. In Costa Rica, for instance, from January to May 2020, out of 680 644 consultations registered at the first level of care, 188 108 were conducted through alternative methods of care (phone or video calls) (CCSS, 2020^[79]).

As done in other OECD countries, LAC-7 countries could also consider rearranging tasks and attributing new roles for health workers. Pre-existing workforce shortages in PHC has already motivated some other OECD countries to re-evaluate the scope of practice attributed to health care staff such as nurses and community health workers (see Chapter 7). International evaluations of task shifting for nurse practitioners with proper education and training have proven their capability of improving access to services, reduced waiting times and delivered the same quality of care as doctors for services such as routine follow-up of patients with chronic conditions (Maier, Aiken and Busse, 2017^[80]). During the pandemic, several countries have made efforts to issue short-term, fast-track licenses and provide exceptional training to mobilise health care providers and address the surge in demand related to the COVID-19 pandemic. Australia, Austria, Finland, Latvia, Spain, Switzerland, United Kingdom, or the United States for example created new roles and rearranged tasks from both physician and non-physician health workers to maintain care continuity for non-acute COVID-19 cases in the community or at home.

In LAC-7 countries, the role of CHWs and nurses could be further expanded in care management for certain conditions, such as follow-up sessions with patients having chronic diseases, to build the require staff capacity during health emergencies and minimise any care disruption. CHWs in Brazil are already assigned with the task of ensuring and encouraging patients to take their medications (OECD, 2021^[45]), one activity that could prove as very relevant to ensure care continuity for patients having chronic diseases. In the United States for example, community health workers provided educational sessions to patients with chronic conditions to help them manage their conditions, they made home-visits, and prepared patients for tele-health appointments. Given the already well developed role of community health workers in patient's

education and counselling in LAC-7 countries (see Chapter 4), their role could be further expanded. As shown in the Chapter 7, investing in PHC workforce will help build stronger health system preparedness and resilience for future pandemic.

Conclusions

Appropriate, flexible and sound disease management policies in primary health care is essential to quickly absorb and recover from a shock as the COVID-19 pandemic. Primary health care has a key role to play by managing COVID-19 care needs in the community in co-operation with hospitals and by keeping people in better health condition through maintaining routine and continuous care.

Even before the outbreak of COVID-19 pandemic, there was scope for improving the quality of primary health care in LAC-7 countries. High rates of avoidable hospitalisations for some primary health conditions (in particular for CHF and diabetes), low breast and colon cancer survival rates, and overconsumption of antibiotics signal poor management of diseases at primary health care level, with performance consistently falling behind other OECD countries. Systematic differences in patient's experiences between users of public and private sectors in countries such as Colombia, Mexico and Brazil, suggest also inappropriate people centred-care.

Bottlenecks in the strength of primary health care has led to a mixed response to place primary health care at the centre of the COVID-19 response. While in the early phase of the pandemic the majority of policy actions have focused on hospital care, some LAC-7 countries with stronger primary health care have activated primary health care and community services to reduce pressure on the health system and minimise complications and direct death from the COVID-19 crisis. In fact, there are good local experiences where primary health care has been effective to respond to the surge in demand, through for example the use of existing primary health care facilities to meet COVID-19 health needs (such as Costa Rica, Chile and Brazil), making quick and effective referral to hospitals and develop new model of organisation such as home visit (such as Costa Rica and Mexico) and telehealth (such as Colombia and Argentina). For example, Colombia capitalised on previous expansions of its remote care system to drastically expand the number of providers authorised to practice telemedicine. In Mexico, new models of home-based care were develop with the support of CHWs to provide follow-up consultations for COVID-19 patients. Mexico's *Brigadas Especializadas* is a good policy framework that combines CHWs and other medical professionals organised in co-ordinated teams with different set of responsibilities to reach out high risk patients, working in close collaboration with local PHC units. However, in Peru or Argentina, insufficient infrastructure, a lack of workforce and the fragmentation of PHC services between regions has led to a limited involvement of primary health care in COVID-19 management and poor co-ordination between PHC and hospital.

Growing evidence demonstrates the dramatic impact of COVID-19 on care continuity, especially those having high health care needs. While the level of care disruption widely varied across LAC-7 countries, routine care for chronic conditions such as cancer, hypertension and diabetes has been delayed. In Peru, for example, a 50% drop in registered cancer cases was observed in 2020 when compared with the previous 4-year average. In Chile, treatment for cervical cancer was reduced on average by 55% between 2019 and 2020 and a further 8% in 2021. There are also high level of disparities in care disruption between public and private providers in some countries. Amongst countries with available data for private and public health care providers, such as Chile and Brazil, more accentuated drops in consultations were observed among users of the public system, which are the most disadvantaged population. Going forward, the changes introduced during the COVID-19 to move care towards primary health care should be maintained and policies aim at reducing backlogs must be implemented urgently, prioritising medical outreach for the most disadvantaged population.

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Note

¹ See Supreme Decree No. 005-2021- SA (2021) that approves the Regulation of Law No. 30421, Telehealth Framework Law, and Legislative Decree No. 1490, Legislative Decree that strengthens the scope of Telehealth, <https://www.gob.pe/institucion/presidencia/normas-legales/1599291-005-2021-sa>.



From:

Primary Health Care for Resilient Health Systems in Latin America

Access the complete publication at:

<https://doi.org/10.1787/743e6228-en>

Please cite this chapter as:

OECD (2023), "Routine care for underlying health conditions", in *Primary Health Care for Resilient Health Systems in Latin America*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/76f5503d-en>

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