Health at a Glance: Latin America and the Caribbean 2020

Chapter 2

Identifying and tackling wasteful spending in Latin American and Caribbean health systems

Mobilising additional resources for health financing in Latin America and the Caribbean (LAC) is necessary to achieve high-quality universal health coverage. However, LAC countries must balance investments in their health systems with other needs in a context of limited public funding and competing priorities. This chapter focuses on the importance of reducing wasteful expenditures particularly in the areas of clinical care, operational and governance waste, as a way to accelerate the path towards universal health coverage. Addressing waste in health systems entails reviewing structures, regulations, services and processes that are either harmful or do not deliver expected benefits, as well as costs that could be avoided by substituting cheaper alternatives with comparable or superior benefits. Policy-makers and managers in LAC should consider such waste-reduction initiatives as tools at their disposal to build higher quality and more sustainable health systems. In the LAC region, spending better on health is as important as spending more. Without cutting budgets and even in a scenario of increasing government health expenditure, being more efficient and achieving better results for more people can be a self-reinforcing strategy, if properly designed so as to be synergic.

Introduction

Understanding wasteful health spending: experience in Latin America and the Caribbean

While health expenditure has grown in LAC, it is remains well below that of OECD countries and it is more dependent on private spending. The path to high-quality universal health coverage requires expansion of government health expenditures in most countries. However, spending better on health is as important as spending more. Increasing efficiency and reducing waste in health systems should be high on the agenda for all countries, regardless of differences in economic and epidemiological outlooks. The bottom line is that health systems should offer the best possible value to people, which includes not only the best possible care to address patients' needs and preferences, but also the least possible cost. In LAC, this coincides with a moment where there is a growing middle-class, which has raised the expectations of people in terms of both coverage and quality of health services (OECD et al., 2019[1]), putting more pressure on health budgets.

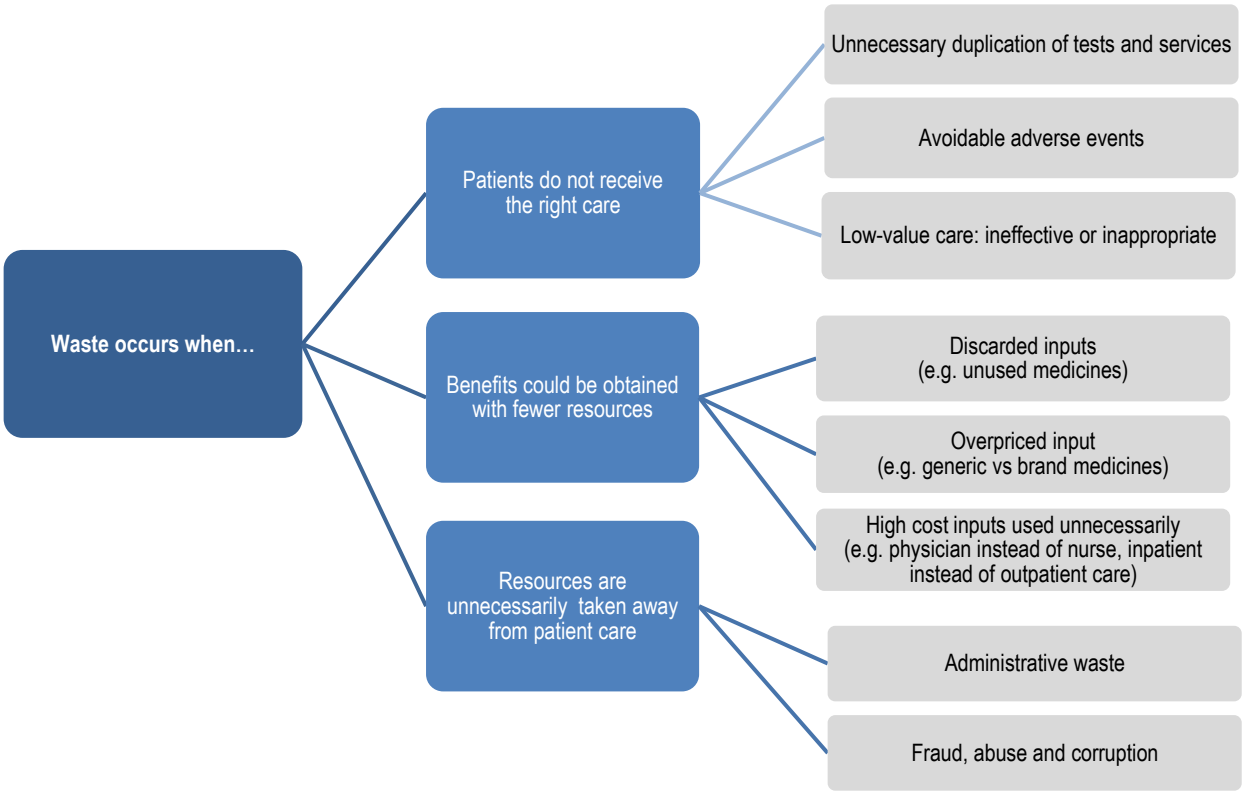
Wasteful health spending can be understood as the resources destined to: i) services and processes that are either harmful or do not deliver benefits; and ii) costs that could be avoided by substituting cheaper alternatives with identical or better benefits (OECD, 2017[2]). In no case, this should be misunderstood as reducing or making cuts on health expenditure. In fact, wasteful spending can and should be tackled in both expansive and austere health budgeting times, as a way to mobilise the necessary amount of resources to obtain the best health outcomes.

Limiting waste means that health systems are able to mobilise sufficient resources and spend them with the highest possible value to improve the population's health, in a context of growing expectation for better services, increasingly stringent fiscal limitations, and continuous cost pressures from technological development and an ageing population. In the short run, reducing waste frees up existing resources in the system and increases societal willingness to mobilise additional resources for health. In the long run, it ensures sustainability and resilience against current or future lack of public funding or emerging issues and shocks to the health system.

It is estimated that around 20-30% of all health sector resources are wasted even in highly developed countries with advanced medical care and significant legislative/media/academia oversight of care, costs, and outcomes (OECD, 2017[2]). Hence, there is a strong likelihood that such problems occur in less developed countries/systems, even if data constraints limit the ability to precisely document their status. Indeed, data limitations have hindered such analyses in LAC, but available evidence suggests that a very significant proportion of resources is wasted. For instance, in 2009, 19% of all hospitalisations were estimated to be avoidable, accounting for a potential saving of 1.5% of total health expenditure related to this specific dimension of waste alone (Guanais, Gómez-Suárez and Pinzón, 2012[3]). Most LAC countries are still in the process of improving care access and coverage, and still rely primarily on curative, specialist, and hospital care, rather than less expensive, more efficacious preventive care (Pinto et al., 2018[4]), underscoring the simultaneous potential for savings *and* improved outcomes.

Figure 2.1 illustrates the three dimensions of waste reflecting low value and high cost, leading to concrete examples of inefficiency (OECD, 2017[2]). First, patients may receive unnecessary or low-value care that makes little or no difference to their health outcomes and in some cases may even

Figure 2.1. **A pragmatic approach to identifying and categorising wasteful spending on health**



Note: Adapted from OECD (2017[2]), *Tackling Wasteful Spending on Health, https://dx.doi.org/10.1787/9789264266414-en*.

prove inherently detrimental (for example, when hospitals are vectors of infection). This type of waste occurs at the clinical level and has the largest impact on health, since low-value care hinders recovery and wellbeing of patients. Second, comparable outcomes can often be achieved with fewer resources. For example, some health systems have low utilisation of generic medicines; others provide care in resource-intensive places such as hospitals, when it could be provided in primary care. Third, administrative processes may add no medical value, and associated funds may be lost to fraud and corruption – which typically flourish more (and are harder to detect and address) in complex, multi-process organisational structures. This type of waste occurs outside the clinical level, produced by flawed processes originally in place to contribute to the smooth running of the health system. The impact associated with this type of waste grows larger the more of it takes place. The larger the corruption and fraud, the more challenging they become to tackle.

It is important to understand that waste often derives or at least is supported by institutions or flawed processes that are generated by dependent, inefficient instances at different levels of a health system. Such a structure will produce more of these arrangements and will perpetuate unbalanced practices and institutions. Even highly transparent, advanced, and thoroughly monitored health systems will fall short of perfection. Building an efficient health system is less about investing substantial resources to eliminate waste, than it is about implementing mechanisms to identify waste more promptly and building capacity to address it. A truly efficient system is dynamic and flexible, and it allows for adjustments for the benefits of patients and its own sustainability (OECD, 2017[2]).

Wasteful spending has begun to be addressed in LAC mainly as part of financial sustainability policies, but it remains to be thoroughly evaluated

To tackle waste effectively in all its components and levels, health sector stakeholders and policy-makers must incorporate waste as a priority focus within the agenda encompassing the entire system. It is likely that policy-makers, health professionals, and patients in all LAC countries are already concerned about efficiency in different degrees, but evidence suggests that most countries do not use all the available tools at their disposal to implement waste-tackling measures.

The LAC Health System Characteristic Survey (Lorenzoni et al., 2019[5]) records the health system administrative arrangements put in place by countries. One of the elements explored by the survey is the existence of mechanisms designed to contain public health spending. Fourteen countries set ceilings for public health spending across several health system actors (levels of government, insurance funds, etc.). The budgetary ceilings are set by the central budgetary authority (usually the Ministry of Finance) and must be approved through the national legislature. Thirteen of these countries have an early warning system that signals when expenditures might exceed the ceilings.

There are several measures to respond to budgets exceeding initial ceilings. Most countries, except Brazil, Costa Rica, and Panama, make supplemental budget appropriations. Other measures include deficit increases by subnational levels of government and providers. Cuts in the procurement of medicines is a widely used cost containment tool (Lorenzoni et al., 2019[5]). It is critical that countries establish mechanisms to further control expenditure and ensure institutional accountability, in addition to reacting to budget overspendings.

As health budgets confront increasing pressures, some LAC countries have faced rising debts accrued by different actors in the system, for instance, with hospitals and entities providing goods and services to hospitals or primary care centres (e.g. pharmaceutical companies, laboratory or radiological services). Examples of recent debt-related waste-reduction measures in Chile and Colombia are provided in Box 2.1.

Box 2.1. **Recent waste-related measures developed in LAC that still remain to be evaluated**

'Acuerdo de Punto Final' in Colombia

The *'Acuerdo de Punto Final'* (Full-Stop Agreement) in Colombia is focused on reducing the accumulated public hospital debt owed by the central government through the country's private health insurers (*Entidades Promotoras de Salud, EPS*). The plan began with the payment of more than USD 0.5 billion to providers, which will enable them to improve their human resources, infrastructure, and technologies and thus enhance quality and efficiency over the long term.

The agreement also describes measures to reduce waste to avoid further debt accumulation. These include updating the Health Benefit Plan (*Plan de Beneficios de Salud,* PBS), control of drug prices, centralised purchasing of medical goods, and other administrative and organisational adjustment to streamline processes and mechanisms.

Hospital debt reduction in Chile

Chile has implemented initiatives to reduce the debt owed to entities that provide goods and services to public institutions, such as hospitals, which have accumulated in the present decade. In 2019, the public insurer (FONASA) paid special attention to ensuring that both base and supplemental-yearly funds were used to reduce payment arrears/delays to providers rather than to cover other needs.

Efforts to reduce existing debt include building capacity to operate at higher efficiency. These measures have been agreed upon with providers and payment mechanisms will now take the efficiency produced by hospitals into account. Other measures include the reduction of hospital activities outside of regular working hours, increasing centralisation of

Box 2.1. **Recent waste-related measures developed in LAC that still remain to be evaluated** *(cont.)*

medicine purchases through the National Procurement Agency *(CENABAST),* and technical support from the central level to less efficient hospitals.

These plans and policies remain to be assessed, both in the short and long term, from an economic perspective pertaining the public budgets and from the impact on service provision, equity, quality, and patient outcomes.

Clinical care waste

Measuring differences in health care utilisation and quality

Detecting and understanding differences in utilisation and quality is a prerequisite to addressing waste. Varying circumstances between in-country regions or facilities will factor into such differences, but differences will also reflect different degrees of waste. Evidence from several countries shows that clinical and administrative practices account for a greater degree of variation than differences in illness or patient preference (Wennberg, 2011[6]). While benchmarking waste against a global or regional standard provides a useful guide/spur for countries, it is more important for them to understand the extent, how, and where resources are wasted domestically (since it is these that enable them to better serve their citizens, and in doing so rise within the global/regional ranks). Variations across geographic areas can be as high or higher than cross-country ones, and naturally tend to fall under the control capacity of national governments to a greater extent than international variations. Public reporting of geographic variations potential over- and under-use of resources, including through visual displays of 'atlases'/maps, can be a key step toward addressing domestic variations in an easily comparable and comprehensive way that implicitly raise questions about why these variations exist (OECD, 2014[7]).

Colombia, for example, has invested in developing an atlas of variations in recent years (Kim, 2014[8]). The atlas (see Box 2.2 and Figure 2.2) was developed from a pilot study financed by the World Bank Group in 2015 and focuses on the utilisation of acute care services and the differences in caesarean utilisation (two main potential sources of waste discussed later in this chapter).

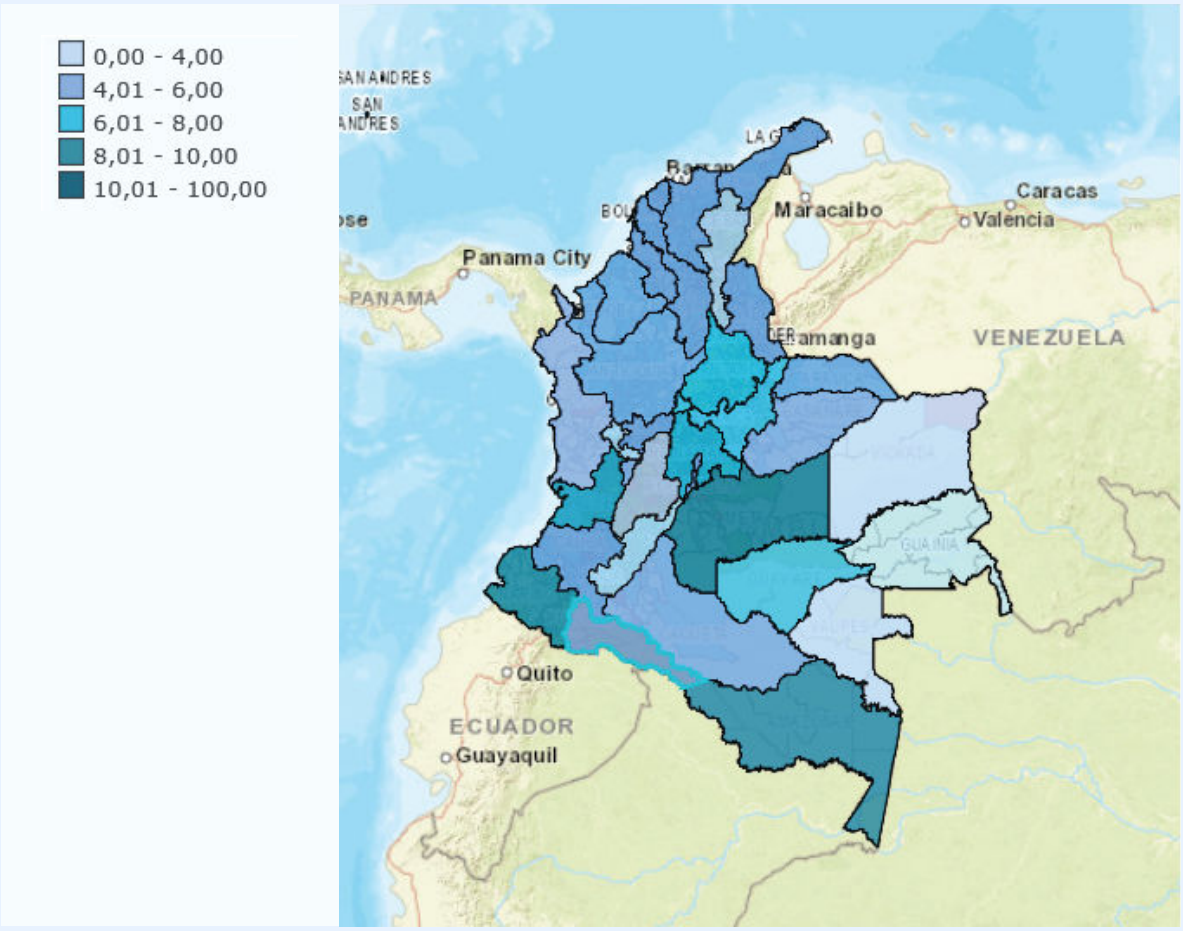
Using atlases to track variations allows for regionally specific targets to be set, although it is important to recognise that they do not directly indicate what factors led to the variation. In some cases, services are under- or over-provided, which reflects in differing outcomes or performance indicators. However, it is a useful method to detect systemic waste around several services, which is often correlated in affected areas. Once variations are identified, further analysis is needed to determine the underlying factors behind instances of overuse and underuse. Regional target setting can then be combined with other interventions to address specific challenges.

Measuring the compliance with clinical practice guidelines (CPGs) is another useful tool for improving patient outcomes and avoiding unnecessary costs. An analysis of compliance with CPGs for 324 000 diabetic patients in Colombia affiliated with private insurers (EPS) of the contributory regime revealed that only 15% of the diabetic population was provided all recommended tests, including yearly blood glucose, cholesterol, and kidney function tests. The variation in compliance was substantial across regions and between EPS providers. For example, complete testing compliance varies from 27% for the best EPS provider to nearly zero for the worst. In addition, the study estimated that complete blood glucose (HbA1c) monitoring lowers the average annual total per patient by USD 430, representing 15% of total costs. Thus, efficiency is not only about the average level of prevention, but also about homogeneous provision across regions and providers (Izquierdo, Pessino and Vuletin, 2018[10]).

Box 2.2. **Atlas of Geographical Variations – Colombia**

The Colombian Atlas of Geographical Variations covers a variety of indicators related to health status, activities, quality, and use of resources. Such a tool helps identify waste by highlighting outliers in the geographical data. Thus, for example, the map below displays the varying rates of surgical cancellations (a wasteful practice) observed in Colombian departments in 2018.

Figure 2.2. **Rates of surgical cancellations per 100 programmed surgeries in Colombian Departments, 2015**



Source: MINSALUD (2019[9]), Colombian Atlas of Geographical Variation, *https://sig.sispro.gov.co/sigmsp/index.html*.

Reducing unnecessary procedures

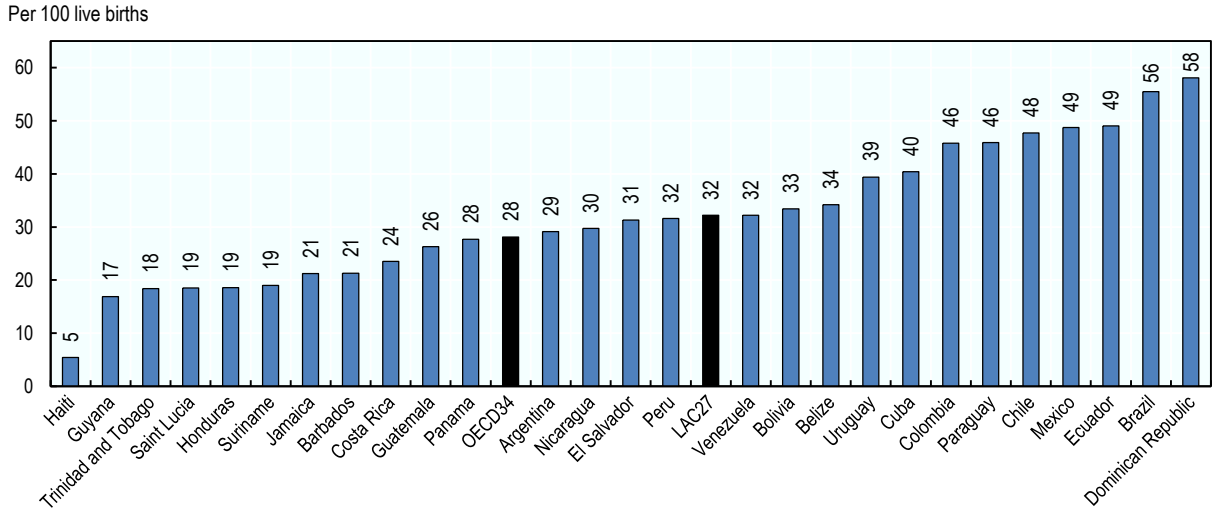
Wasteful clinical care refers to situations when patients do not receive the right care, but also when they receive ineffective and inappropriate care. The latter category is sometimes known as low-value care, and in several countries efforts have been put in place to reduce it. Despite being widely performed, activities such as tonsillectomies in children and hysterectomies or prostatectomies in benign conditions do not have demonstrated effects in improving health and well-being of most patients, and may even be a source of harm, representing a potential source of waste when used excessively or unnecessarily.

C-sections are a classic example of a surgical procedure that can be lifesaving when clinically necessary, but for which the benefits of its wide use are disputed. C-section carries an increased risk of infections for mothers and respiratory distress for new-borns, as well as precluding the benefits

associated with passing through the birth canal. C-sections have been linked to several health risks during infancy, such as Type 1 diabetes, celiac disease, allergies and asthma, and obesity (Magne et al., 2017[11]).

Evidence indicates that a rate of C-sections above 15% is not associated with further reductions in maternal, neonatal or infant mortality (Stordeur et al., 2016[12]). Some estimates for LAC show that more than half of all new-borns are delivered by C-section (Magne et al., 2017[11]). C-section rates have been climbing up worldwide despite WHO recommendations, from 6.7% in 1990 to 19.1% in 2014. South America has been the region with the highest rates since the 1990s, with Brazil in particular having very high rates in public sector facilities (40-50%) and even higher rates in private sector (80-95%) (Magne et al., 2017[11]). In 27 LAC countries, 32% of all births are performed through C-section, higher than the 28% in 34 OECD countries. The highest rates are observed in the Dominican Republic and Brazil, and the lowest in Haiti, Guyana, and Trinidad and Tobago (see Figure 2.3).

Figure 2.3. **Caesarean section rates in 27 Latin American and Caribbean countries, 2016 or latest year available**



Source: WHO (2019[13]), Global Health Observatory data, *https://www.who.int/gho/en/*. OECD Health Statistics (2019[14]) for Chile and Mexico, *https://doi.org/10.1787/health-data-en*.

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The first intervention to be revised to reduce overuse of C-section surgeries should be elective C-sections among low-risk women. Other interventions can include promoting behaviour change through dedicated tools, feedback, and audits; financial incentives to discourage providers from delivering C-sections when unwarranted; and producing and publishing information on overuse, to raise awareness and enable providers to benchmark against their peers (OECD, 2017[2]).

As with other drivers of waste, the region still must also cover gaps in coverage. LAC countries must continue working to ensure that all women in need of a C-section can access one, as well as driving down cases where there is overuse. Tools such as the Robson classification, promoted by WHO as a way of identifying high-risk women in need of a C-section, enable providers to direct resources to the women most in need of them, functioning well in combination with measures that are specifically designed to drive down C-section rates (WHO, 2015[15]).

Internationally, Choosing Wisely® is a health educational campaign aimed at improving patient-doctor relationships and reducing unnecessary health care by pulling evidence-based medicine into

the public domain (ABIM Foundation, 2020[15]). For instance, clinical guidelines exist in several OECD countries to promote a more rational use of costly MRI and CT exams, when these are unnecessary. Similar tools exist in virtually every medical area of specialisation.

Promoting a rational use of antibiotics and preventing antimicrobial resistance

Rational use of antimicrobial medicines is key not only in terms of monetary savings and broader health system efficiency, but also to preserve their clinical effectiveness. However, PAHO estimates that around 50% of antibiotic use is inappropriate, which hurts sustainability and health outcomes (PAHO and FIU, 2018[17]).

Misuse of antimicrobials causes allergic and adverse drug reactions, morbidity and mortality, increased duration of hospital stays, infections from antibiotic-resistant pathogens, microbiota changes, and overall increased health care costs. It medicalizes certain conditions for which other treatments are more effective and it puts patients at risk of adverse effects (and the increased costs associated with treating them). The majority of antibiotic prescribing occurs at the primary care level, most of them for respiratory tract infections.

Table 2.1 illustrates the volumes of antibiotics consumed in five reporting LAC countries. Consumption is lowest in Peru and highest in Brazil. The low figure for Peru might be explained because the data does not include all institutions in the health sector but only shows the best approximation to antibiotic use. The average estimated daily defined dose (DDD) consumption of 17.2 DDDs per 1 000 inhabitants per day in the five LAC countries is higher than in other countries such as Canada (17.05), Germany (11.49), Netherlands (9.78) and Sweden (13.23), and close to the Ibero-American countries of Portugal (17.72) and Spain (17.96). In the OECD, the average for 31 countries with data is 18.

Table 2.1. **Total consumption of antibiotics, DDD per 1 000 inhabitants per day, 2016**

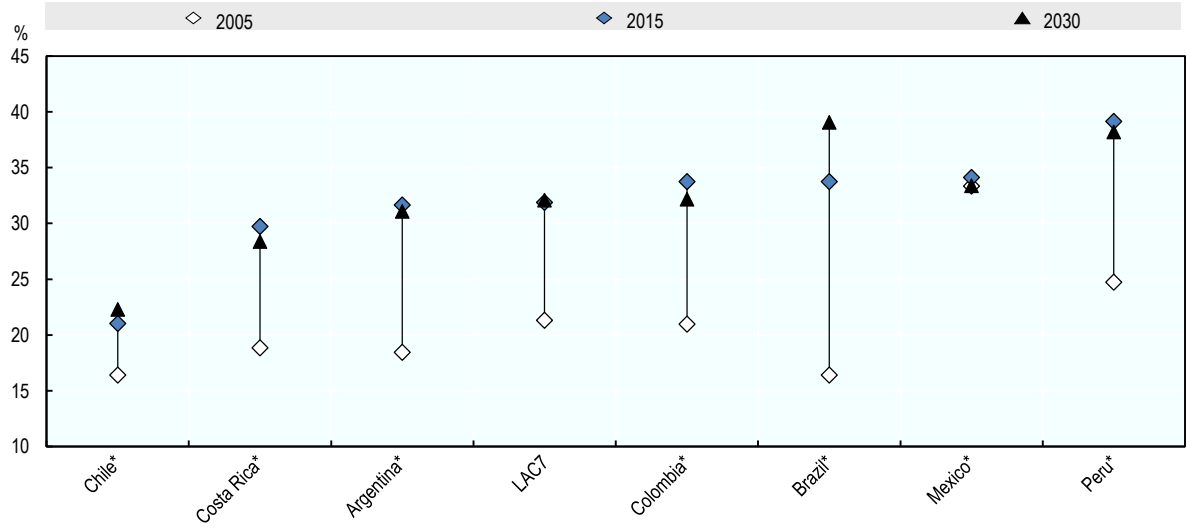
	DDD/1 000 inhabitants per day
Brazil	22.8
Bolivia	19.6
Paraguay	19.4
OECD31	18.0
LAC5	17.2
Costa Rica	14.2
Peru	10.3

Note: DDD, daily defined doses.
Source: WHO (2018[18]) WHO Report on Surveillance of Antibiotic Consumption: 2016 - 2018 Early implementation and OECD (2019[14]), OECD Health Statistics, *https://doi.org/10.1787/health-data-en*.

The relatively high levels of antibiotic usage can lead to antimicrobial resistance, which has been declared as one of the most critical emergent public health challenges of our times. In seven LAC countries, average resistance proportions across eight antibiotic-bacterium combinations are estimated to have increased from 21.3% (range: 16-33%) in 2005 to 31.9% (range: 21-39%) in 2015, and may go up further to 32.1% (range: 22.3-39%) by 2030 if current trends in resistance, and correlates of resistance, continue into the future and no policy actions are taken (see Figure 2.4). However, the trend toward 2030 is not the same in all countries: only Chile and Brazil are expected to substantially increase antimicrobial resistance, while the other five countries remains similar to the situation in 2015.

The WHO report on surveillance of antibiotic consumption (WHO, 2018[18]) noted which LAC countries have implemented systems to control or monitor the use of antimicrobials. As of 2016,

Figure 2.4. **Average proportion of infections (including 2030 projections) caused by bacteria resistant to antimicrobial treatment for eight antibiotic-bacterium combinations in 2005, 2015, and 2030**



Note: All seven countries are missing more than 50% of observations, across all eight antibiotic-bacterium pairs, between 2005 and 2015.
Source: OECD (2018[19]), *Stemming the Superbug Tide: Just A Few Dollars More*, *https://dx.doi.org/10.1787/9789264307599-en*.

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13 countries did not have a national plan or system in place to monitor antimicrobial use. Brazil, Chile, and Colombia have implemented Antimicrobial Stewardship Programs (ASPs), with the objective of tackling misuse, with the specific goals of reducing or stabilising antimicrobial resistance, reducing prescriptions, and improving clinical outcomes. These three countries and Mexico also introduced legislation to reduce antibiotic consumption by establishing mandatory prescriptions of antibiotics, to reduce self-medication.

Effective ASPs can reduce adverse events associated with antibiotic use while keeping the treatment of infection optimal, and can accomplish these goals while saving costs. Evidence from Colombia (Hernández-Gómez et al., 2016[20]) found that the implementation of ASPs in three hospitals resulted in a 52.3% reduction of antibiotic consumption, with an average monetary saving of more than USD 15 000 per hospital. The average cost of implementing the ASP program was USD 4 300 per month.

To tackle antimicrobial misuse, it is important for countries to accurately and promptly measure pharmaceutical consumption – for which an integrated and timely information system and response mechanism are needed to identify problem areas and tackled them rapidly. Interventions such as improving hand hygiene in health care facilities, implementing stewardship programmes to increase awareness and rationalising prescription practices, deploying rapid diagnostic tests to confirm the need of antimicrobial treatment before, delayed antimicrobial prescribing, and promoting mass media campaigns, have proven to be cost-effective (OECD, 2018[19]).

Operational waste

Using Health Technology Assessment to improve coverage prioritisation processes

Health Technology Assessment (HTA) is a fundamental tool to foster better clinical and financing decisions, and thus reduce waste in health systems. HTA enables policy-makers to know what methods or goods are most effective to accomplish positive health outcomes. They are a comparative, multi-disciplinary process used to evaluate the added benefit or impact of health technologies, and they can inform decision-makers' assessment of the opportunity cost of replacing an existing standard

of care with an alternative. In this way, selection and coverage decisions can avoid displacing high-value products with ones of lesser value to the health system. HTAs can also be used to review the value for money offered by existing technologies, and to adjust prices to reflect a desired level of cost-effectiveness or willingness to pay.

The HSC survey results (Lorenzoni et al., 2019[5]) show that 13 of the responding countries conduct HTA, mainly in the public sector, but only a handful use HTA systematically to determine coverage decisions. No country reported using HTA to determine reimbursement levels (e.g. prices). Most countries that reported employing HTAs did so through the main purchaser at the central level; while only four did so through an independent body, whereas an increasing number of OECD countries use HTAs to provide evidence related to new medical technologies for decision-making. In LAC, only 10 countries report to use HTAs to inform coverage for all technologies, either systematically or under certain circumstances (see Table 2.2).

Table 2.2. **Countries using HTA systematically or occasionally to make coverage decisions or set reimbursement levels**

Type of technology	Use of HTA to make decisions	Countries
Medical procedures	Systematically used to make coverage decisions	Brazil, Trinidad and Tobago, Uruguay
	Used in some circumstances to make coverage decisions	Argentina, Belize, Chile, Colombia, Guyana, Mexico, Paraguay
	Used to determine reimbursement level	-
Pharmaceuticals	Systematically used to make coverage decisions	Belize, Jamaica, Mexico, Paraguay, Uruguay
	Used in some circumstances to make coverage decisions	Argentina, Brazil, Chile, Costa Rica, El Salvador, Guyana, Peru
	Used to determine reimbursement level	-
Implantable medical devices	Systematically used to make coverage decisions	Brazil, Trinidad and Tobago, Uruguay
	Used in some circumstances to make coverage decisions	Argentina, Chile, Colombia, Costa Rica, Mexico, Paraguay
	Used to determine reimbursement level	-

Source: Reproduced from Lorenzoni, et al (2019[5]) "Health systems characteristics: A survey of 21 Latin American and Caribbean countries", *https://doi.org/10.1787/0e8da4bd-en*.

There is also variation in the circumstances in which HTAs are used in LAC. One-third of LAC countries use HTAs to establish practice guidelines, whereas only Argentina and Peru reported their use to determine the objectives of pay-for-performance schemes. Around half of the countries use HTA to support the design of public health policies (see Table 2.3).

Table 2.3. **Circumstances in which Health Technology Assessments are used**

Circumstances	Countries
To establish practice guidelines for health professionals	Argentina, Belize, Brazil, Chile, Mexico, Paraguay, Peru, Uruguay
To determine objectives for pay-for-performance schemes	Argentina, Peru
To support the design of public health policies	Argentina, Belize, Brazil, Colombia, El Salvador, Mexico, Paraguay, Peru, Trinidad and Tobago, Uruguay

Source: Reproduced from Lorenzoni et al. (2019[5]). "Health systems characteristics: A survey of 21 Latin American and Caribbean countries", *https://doi.org/10.1787/0e8da4bd-en*.

International collaboration can be also fostered, as HTAs can be used by different countries in different contexts. This means that the knowledge obtained through HTAs can be shared among decision-makers, which (if acted upon) reduces costs and facilitates coherent approaches regardless of geographical location. Through international cooperation, countries with more limited resources can seek assistance from foreign HTA agencies, be informed of available new technologies, and contribute to the production of common tools and knowledge. This is the case of the Regional Database of Health Technology Assessment Reports in the Americas (BRISA), which shares the HTA reports produced by member organizations of the Health Technology Assessments Network for the Americas (RedETSA) (PAHO, 2019[21]).

Reducing potentially avoidable hospital admissions

A number of conditions can be effectively treated at the primary-care level, such as asthma, chronic obstructive pulmonary disease, and congestive heart failure. A strong primary care system can provide effective services for patients in need of preventive care and treatment for these conditions, saving costly hospital resources. Primary care services can also tackle these conditions sooner and more effectively than a hospital setting would.

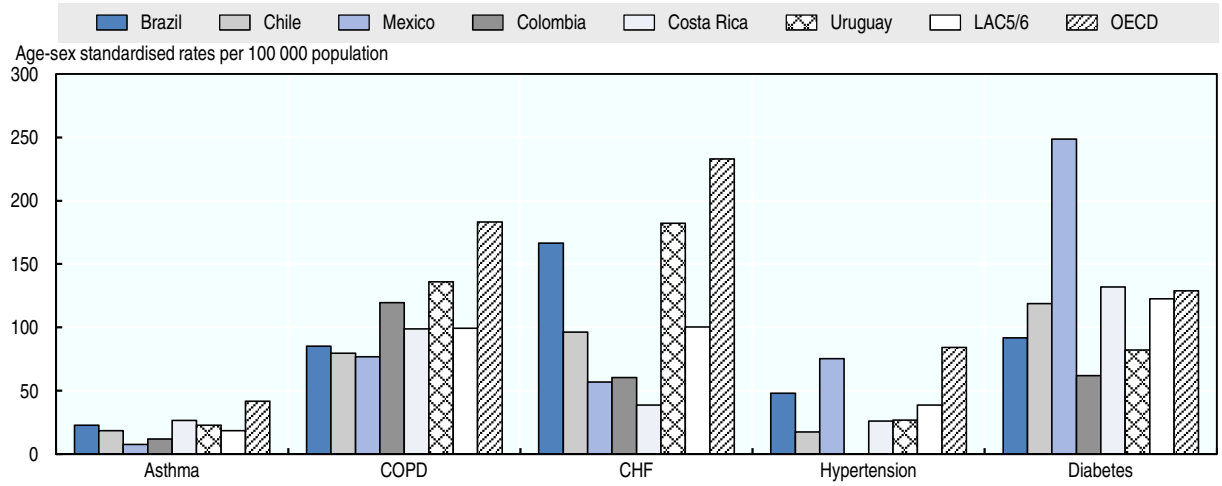
The inability of the primary care system to deal with these patients results in overutilisation of hospital resources, which is a significant source of inefficiency and waste and may expose patients to additional risks such as hospital-acquired infections. Estimates from six LAC countries have suggested that between 8.1 and 10 million hospitalisations in 2012 were preventable, representing as high as 2.5% of the reported total health expenditure in 2009 (Guanais, Gómez-Suárez and Pinzón, 2012[3]).

Figure 2.5 reflects the available data on avoidable hospitalisations in LAC countries with available data. There is variation among LAC countries, although their rates are generally lower than the OECD average. This could indicate success in the implementation of effective primary care systems. However, in the context of the LAC region it is important to mention that access remains relatively unequal, and that a certain degree of underutilisation of hospital resources might be taking place. Finding an adequate balance to ensure the least wasteful level of hospital utilisation, while ensuring adequate access across the entire population should be the ultimate goal. Another factor to consider is that the NCD burden is relatively lower in LAC than in OECD countries, given the respective demographic and epidemiological profiles. However, variation across these LAC countries suggests that Costa Rica might be having issues regarding the ambulatory management of asthma, Uruguay and Colombia for chronic obstructive pulmonary disease, Uruguay and Brazil for congestive heart failure, and Mexico for hypertension and, especially, diabetes.

As LAC countries advance in the demographic and epidemiological transitions, the burden placed by NCDs on hospital use and on the health system as a whole is likely to increase even further. Scaling up primary care systems is the key for tackling this growing burden, and potentially contribute to significant financial savings. Strong and integrated primary care services would not only be less costly but they would also improve health outcomes by detecting conditions earlier and addressing them before emergency hospital care is necessary. A well-integrated system would allow for agile referral of patients that do need to make use of hospital resources as well, to ensure the best possible clinical outcomes.

Several countries have introduced mechanisms to screen patients at the primary level to avoid overutilization of specialized care. Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Guyana, Jamaica, Mexico, Panama, Suriname, and Trinidad and Tobago have established gatekeeping mechanisms by driving patients to seek a referral from a primary health care physician except in emergencies. However, registration with a primary care physician is only mandatory in

Figure 2.5. **Avoidable hospital admissions in adults for selected conditions in five LAC countries and the OECD average, 2017 or latest year available**



Note: COPD = chronic obstructive pulmonary disease; CHF = congestive heart failure.
Source: OECD Health Statistics (2019[14]) for Chile, Colombia, Costa Rica, and Mexico, *https://doi.org/10.1787/health-data-en*. Data for Brazil and Uruguay provided by their respective health ministries

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Brazil, Chile, and Suriname; it is incentivised in Argentina, El Salvador, and Panama (Lorenzoni et al., 2019[5]).

It is important to acknowledge that overuse of hospital resources is a more significant challenge in some countries in the region, while others are still mostly concerned with a lack of access to said services. However, the importance of strong primary care services remains valid for all, as PHC can also benefit underserved areas, and a rational approach to hospital use is beneficial even when scaling up hospital services in underserved areas.

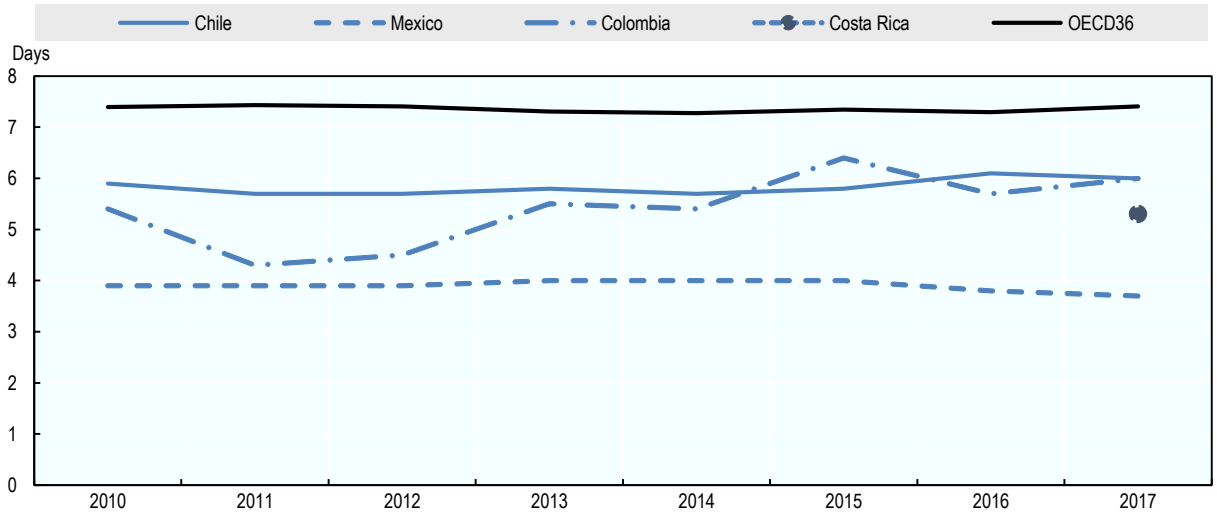
Innovative provision arrangements, such as e-health delivery, one-stop shop facilities, community-level interventions, can complement the implementation of primary care centres to further reduce the burden on hospital resources. They can also be effective ways of reaching populations that are vulnerable to exclusion from traditional service delivery mechanisms.

Reaching a good balance between access and length of stay in hospital care

Average length of stay (ALOS) it is a useful measure related not only to the use of hospital resources but also to other health system units in place. Longer-than-ideal ALOS may arise from clinical reasons, but also from lack of coordination within the hospital or between health facilities, home-care services, or other post-discharge care settings. A recent review suggests that extra bed-days could account for up to 30.7% of total hospitalisation costs, and cause cancellations of elective operations, treatment delay, and repercussions for subsequent services, especially for elderly patients (Rojas-García et al., 2017[22]). Delayed discharges also contribute to higher costs through their adverse effects on patients' health. Longer hospital stays increase the risk of infections and lead to more rapid health decline and worse outcomes, especially for older patients.

Figure 2.6 shows the trend in ALOS for hospital acute care in four LAC countries with comparable data: Chile, Colombia, Costa Rica, and Mexico. All four countries rank below the OECD average, which has maintained relatively stable the ALOS between 2010 and 2016. In contrast, Colombia has increased hospital ALOS, while Chile and Mexico have maintained it relatively stable in the period.

Figure 2.6. **Average length of hospital stay, 2010 to 2016**



Source: OECD Health Statistics (2019[14]), *https://doi.org/10.1787/health-data-en*.

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To tackle hospital overstays, countries can move to prospective payment methods, often based on diagnosis-related groups (DRGs), to set payments based on the estimated cost of hospital care in advance of service provision. These payment methods encourage providers to reduce the cost of each episode of care; for example, by reducing the duration of hospital stays. (In LAC, however, DRG-based payments are rare, particularly among public hospitals (Lorenzoni et al., 2019[5]). In addition, policies must ensure adequate integration between levels of care and providers, so that patients can be transferred or given specialized care as quickly as possible. This goal can be fostered by payment mechanisms that encourage better coordination and follow-up of patients, as well as by more robust processes that ensure the timely transfer of patients. As with other interventions suggested in this chapter, this type of incentive seeks to establish a behavioural shift among providers to inhibit default into more costly, already established approaches.

Countries can also invest in non-hospital care settings to provide long-term or intermediate care to patients. In LAC, efforts to strengthen home-based care and follow-ups in places with limited access to health facilities can foster more rapid and safe discharge of patients. Day surgery is another alternative to reduce hospital stay times, provided hospitals have the technical capacities and a proper follow-up can be established for patients.

Readmission rates are another issue to consider when looking for the proper balance between access to hospital care and ALOS. Early hospital readmissions (following premature discharge) have been recognised as a common and costly source of waste, particularly among elderly and high-risk patients. Reviews have found that effective interventions to reduce unnecessary readmissions are often complex and depend upon enhanced patient capacity to access post-discharge care reliably including, for instance, risk-prioritised telephone follow-up, specialised pharmaco-therapeutic counselling, self-management education programmes, individualised care plans at discharge, among others (Leppin et al., 2014[23]; Renaudin et al., 2016[24]).

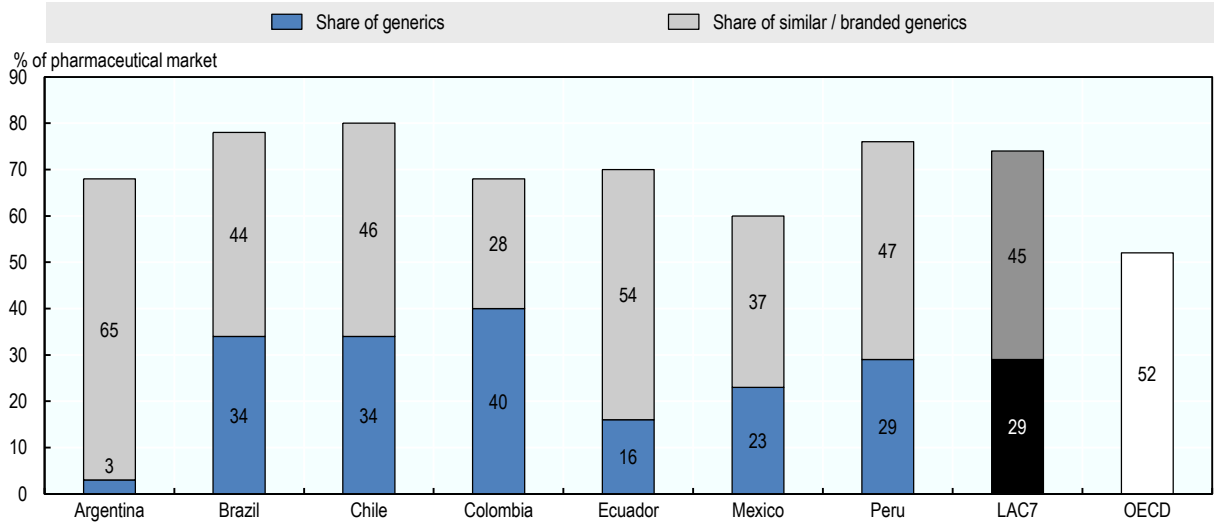
Data on ALOS and hospital readmissions in LAC is limited, in part because of decentralisation and lack of integration among providers. It is important that countries monitor ALOS, delayed discharges, and readmissions more closely; this will open the door for further options to tackle these challenges.

Increasing value in the pharmaceutical market by expanding the use of generics

The pharmaceutical sector is one of the largest sources of health expenditure in LAC (see Chapter 6). As medicines are a substantial financial burden for both governments and people, several areas are subject of policy concerns. In this context, the development of generic markets stands out as an opportunity to increase efficiency in pharmaceutical spending; but many countries do not fully exploit this potential. Underutilisation of generic drugs is a substantial source of waste. Although generics *usually* have comparable therapeutic effects as branded alternatives, typically they are significantly less expensive.

In seven LAC countries with data, the introduction of generics has been a challenge, for varying reasons. Figure 2.7 shows that on average, LAC countries have a larger proportion of generics in their markets (79%) compared to the OECD average (52%). However, it is important to note that the majority of these generics are branded generics (52%). Branded generics (or *similares)*, like unbranded ones, are copies of off-patent products that are sold to the public using a trade name instead of, or in addition to, the name of the molecule. Their prices are usually higher than those of non-branded generics. In contrast, in OECD countries, branded or unbranded generics do not make a major cost difference, mainly because health systems provide coverage for them irrespective of this classification. In addition, in several LAC countries, not all generics are mandated to demonstrate therapeutic equivalence, and some regulatory agencies still need to be strengthened, which poses a quality challenge in the pharmaceutical markets of the region.

Figure 2.7. **Volume share of generics in the retail pharmaceutical market in seven LAC countries, April 2019**



Note: OECD average is calculated with data for 2017 or nearest year.
Source: Adapted from IQVIA (2019[25]), *Precio de los Medicamentos en América Latina, Análisis Comparativo*. OECD data from OECD Health Statistics (2019[14]), *https://doi.org/10.1787/health-data-en*.

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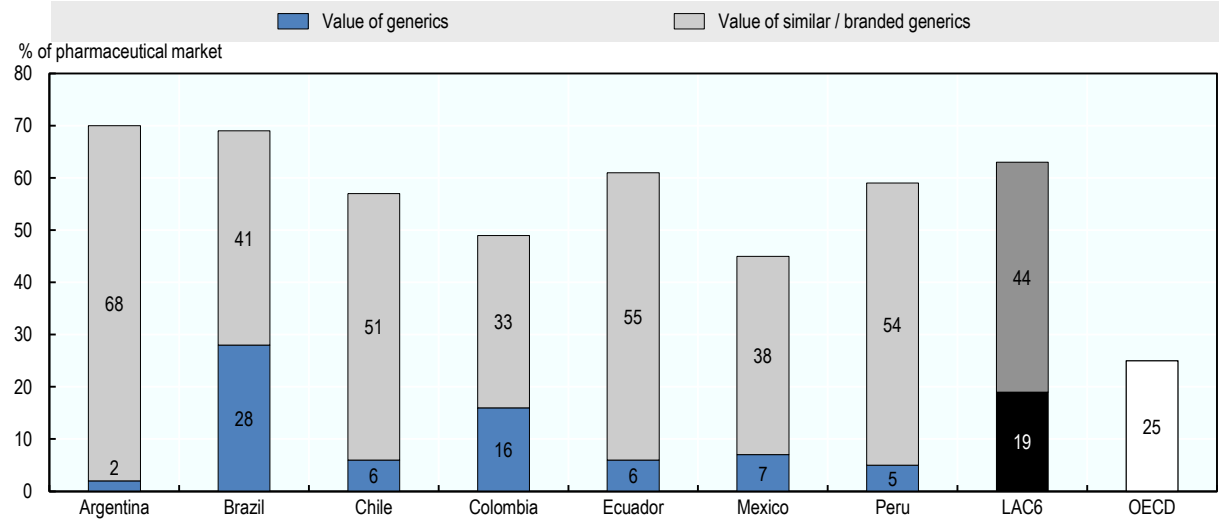
In complement to the volume of generics in LAC markets, Figure 2.8 displays the value share of generic markets, which may be expressed, depending on the country, in terms of the turnover of pharmaceutical companies or the amount paid for pharmaceuticals by consumers. The value of generics as percentage of the total retail pharmaceutical market is higher in LAC countries than in the OECD (64% versus 25%), chiefly because of common use of branded generics (or *similares),* which typically have higher prices than unbranded generics. In general, this means that difference in prices

between originator and generic medicines is smaller in LAC than in OECD countries. In line with these findings, a recent study by the Chilean National Economic Prosecutor found that profit margins obtained by pharmaceutical companies in Chile are higher for branded generics than for non-branded generics, which may be another reason for the larger presence of branded generics in LAC pharmaceutical markets. In addition, the study found that the population has a low trust in generics, meaning that this is another area to address from a policy point of view (FNE, 2019[26]).

Figure 2.8. **Value share of generics in the retail pharmaceutical market in seven LAC countries, April 2019**



Note: OECD average is calculated with data for 2017 or nearest year.
Source: Adapted from IQVIA (2019[25]), *Precio de los Medicamentos en América Latina, Análisis Comparativo*. OECD data from OECD Health Statistics (2019[14]), *https://doi.org/10.1787/health-data-en*.

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Some LAC countries have already implemented incentives to promote the production or registration of generics. Colombia applies lower tariffs, Mexico awards tax exemptions, Ecuador eases bureaucratic processes, and El Salvador supports small and medium-size pharmaceutical producers working on generics.

In addition to targeting registration, distribution, and production of generics, countries could invest in information campaigns, designed to educate the population on the advantages of using generics as well promoting their use at doctors' offices and pharmacies. Examples include promoting mass media campaigns to educate patients about the safety and quality of generics; making it mandatory for pharmacists to remind patients whenever there is a generic alternative to the prescription they are receiving; and encouraging pharmacies to sell more generics through performance-based payment mechanisms.

Evidence from Argentina (Maceira and Palacios, 2016[27]) suggests that consumer and pharmacists' attitudes must be taken into account when regulating and promoting the use of generics. Consumers will often express interest in spending less when purchasing drugs but often they are not willing to pick the cheapest generic alternative, even when the pharmacist suggests alternatives at the point of sales. A study of the Chilean experience between 2002 and 2017 of the effect of the entry of branded generic medications (Alvarez, Gonzalez and Fernandez, 2019[28]), found that sales of these

drugs sold rose by 148.1% after four years – an increase driven by their lower cost (on average 33%) than their branded non-generic counterparts.

Governance waste

Health system fragmentation is a key source of waste in LAC

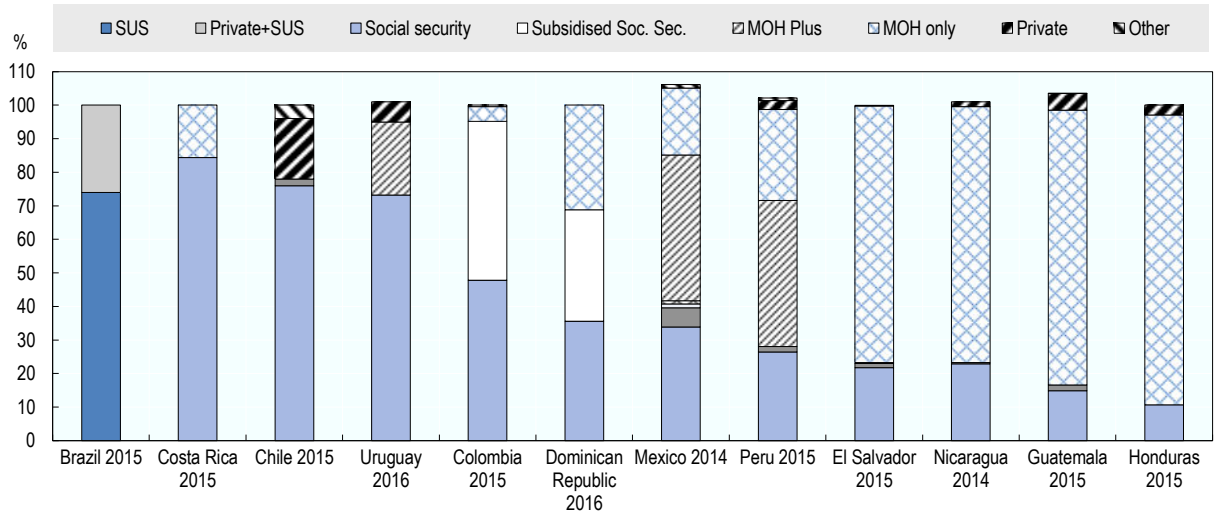
Most health systems in LAC are organised as several parallel subsystems. Usually, these subsystems represent a public component (e.g. managed by the Ministry of Health and funded by general taxes); a social security sector (e.g. public and/or private insurers funded through social contributions and, in some cases, partly by general taxes); and a private sector (e.g. funded directly by users, pre-paid or out-of-pocket). The mix of these three subsystems varies, but they are present in almost all countries, especially since the 1990s, when government-financed insurance schemes and health-service provision to cover poor people and informal workers were introduced or expanded, reinforcing the vertically articulated subsystems with fragmentation of financing and service delivery. This has led to segregation of population segments according to employment and socio-economic status and, often, left the poorest segments without effective coverage in many countries (Atun et al., 2015[29]).

Figure 2.9 provides a comparative picture of selected LAC countries where institutional fragmentation leads to duplication of financing and delivery functions (Vermeersch and Mohpal, 2017[30]). In one group, Brazil shows one of the lowest national level of fragmentation, by covering all its citizens with a national health system (SUS); however, around 26% of the population purchases supplementary private insurance. In a second group, Costa Rica, Chile, Colombia, the Dominican Republic, and Uruguay have close to or more than 70% of their population covered by contributory and/or subsidised social security schemes. In a third group, Mexico and Peru have more than 40% of their population affiliated to institutions dependent on the Ministry of Health *(Seguro Popular* and *Seguro Integral de Salud,* respectively), along with others covered by social insurance, private insurance, or directly by the ministry. In a fourth group, El Salvador, Nicaragua, Guatemala, Honduras, and Nicaragua have more than 75% of their population served directly by the Ministry of Health, with social insurance covering most of the remainder of the population.

From a governance point of view, the sources of waste mainly derive from the stewardship and management of resources and services, and the health-financing functions (OECD, 2017[2]). Table 2.4 provides an overview of the governance functions where waste can be identified in relation to fragmentation, along with examples from selected LAC countries.

In practice, the existence of multiple subsystems and actors leads to duplication of tasks, such as enrolment, collection of contributions, claims processing, benefits management, sales and marketing, purchasing and contracting, and compliance with government and non-government regulations. Findings from analyses in OECD countries (OECD, 2017[2]) specifically related to the consequences of fragmentation in administrative spending within health systems provide key insights that can be useful for LAC. First, little difference arises in governments' administrative costs between tax-based systems with residence-based entitlement and single-payer, insurance-based systems. In LAC, this would be the case when comparing Brazil with Costa Rica and Uruguay. Second, single-payer systems have lower administrative costs than multi-payer systems. In LAC, this could be applied when comparing a single-payer system in Costa Rica and Uruguay with countries having multi-payer schemes, such as Argentina, Chile, Colombia, Mexico, and Peru. Third, multi-payer systems with free choice of insurer tend to have higher administrative costs than multi-payer systems with automatic affiliation. This can be applied to compare multi-insurer countries with automatic affiliation, such as Bolivia, Dominican Republic, Mexico, Panama, and Peru with countries implementing multi-insurer schemes with choice of insurer, such as Argentina, Chile, Colombia, Guatemala, and Surinam. Fourth, private insurance schemes have much higher administrative costs than public schemes. This

Figure 2.9. **Fragmentation leading to duplication of financing and provision functions in selected Latin American and Caribbean health systems, 2015**



Note: Countries can appear to have more than 100% of the population covered because of double or even triple health service affiliations. SUS – National Health System in Brazil; Private+SUS – double coverage of SUS plus a private insurance in Brazil; Social Security – Costa Rica (Caja del Seguro Social), Chile (FONASA), Uruguay (FONASA), Colombia (Regimen Contributivo), and Dominican Republic (Regimen Contributivo); Subsidised Social Security – Regimen Subsidiado in Colombia and Dominican Republic; MoH Plus – Mexico (Seguro Popular), Peru (Seguro Integral de Salud), Uruguay (free affiliation to AUSSA); MoH only – Ministry of Health.
Source: Vermeersch and Mohpal (2017[30]), Latin America and the Caribbean: A Narrative for the Health Sector.

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finding implicates almost all LAC countries, since private insurance has been established with different characteristics and regulations. For instance, private insurance in Brazil is complementary or supplementary to the coverage provided by the national health system (SUS), while in Chile private insurers (ISAPREs) can receive and manage the mandatory health contribution from their affiliates, but regulation still allows them to 'cherry-pick' low-risk and higher-income segments of the population, and gives plenty of freedom to define premiums, benefits, and coverage for a large component of their services.

Fragmentation in health care coverage creates silos of the population, in most cases dividing them by social conditions, and undermines efforts aimed at reducing inequalities and achieving efficient health systems. Although some LAC countries have introduced reforms and organisational changes that emphasise the intrinsic value of health for citizens, they have not been able to eliminate the inequities in access, financial protection, and outcomes produced by fragmentation – this remains one of the key challenges in LAC.

Measuring expenditure to identify the most efficient disaggregation by function and level of care

Data on functional expenditure indicates the share of spending by health systems' functions and type of care. This can illustrate potential sources of waste. For example, an efficient health system offers an optimal mix of curative care (generally less cost-effective, treats patients as they become sick) and preventative care (generally more cost-effective, targets patients before they become sick). Efficient systems should also aim to reach the appropriate administrative expenditure, avoiding duplications and unnecessary or low-value governance actions.

Collecting this data is an effective way to identify administrative and allocative inefficiencies, which account for a significant share of waste in all health systems. Current data availability is limited, with only eight LAC countries reporting this information as of 2019. As data for more countries

Table 2.4. **Examples of fragmentation-induced waste in the governance structure of selected LAC health systems.**

Governance area	Governance functions	Examples of waste sources in selected LAC countries
Differences in stewardship and management of resources	Planning and benefit basket design	In El Salvador, insurers can freely determine benefits and level of coverage, meaning that services for the population and their co-payments are not the same between the Salvadorian Institute of Social Security (ISSS), the Salvadorian Institute of Magisterial Welfare (ISBM), the Armed Forces Social Prevision Institute, and the Ministry of Health (which covers around 77% of the population) (Lorenzoni et al., 2019[5]).
	Human resources	Chile has several laws regulating the management of human resources in the public sector: one for health workers in primary care administered by municipalities; three laws for doctors, dentists, and pharmacists working in secondary care and hospitals; and one for all other health workers of secondary care and hospitals. In addition, the general Labour Code is applied to some health workers in the public sector and to all in the private sector (Sugg, Galleguillos and Caravantes, 2018[31]).
	Health information and ICT development	Paraguay collects health information separately from the three subsystems of the health sector, each with its own rules and infrastructure. The Ministry of Health collects information by different programmes directly from its providers (e.g. family health units); the Social Security Institute (IPS) gathers data from its providers network; and the Superintendence of Health assembles information from private providers (OECD, 2018[32]).
	Executive management, regulation and monitoring	In Peru, each of the Institutions for the Administration of Health Insurance Funds (EAFAS) and the Ministry of Health has its own executive management and oversight structure and machinery. Therefore, managerial functions such as planning, control and enforcement in the Social Health Insurance (EsSalud), the Integral Health Insurance (SIS), the Police and Armed Forces Insurances, and the private sector run mostly in parallel (OECD, 2017[33]).
	Resource mobilisation	The Dominican Republic collects funds separately for four subsystems having their own accounting and managerial arrangements: the MoH and the National Health Service through general taxes; social contributions from employers and employees for the Contributory Regime of the social security fund; general taxes for the Subsidised Regime of the social security fund; and direct pre-paid premiums for private insurers (Rathe, 2018[34]).
Duplication of health financing functions and costs	Pool funds	Argentina has more than 500 private health care insurers, national social insurance organisations, and provincial health insurance organisations; each of them can be considered as a single pooling fund. Only for the insurers of social security ('Obras Sociales'), which cover 60% of the population, there is a Solidary Redistribution Fund, where currently only 15 to 20% of social contributions can be distributed across insurers aiming to equalise some of the risks and cover some specific services (Cetrángolo and Goldschmit, 2018[35]).
	Purchasing	Mexican operating institutions – Seguro Popular and State Health Services, social security institutes (IMSS, ISSSTE, PEMEX, SEDENA, and SEMAR), the private sector, as well as the Ministry of Health in a few cases – own and administer their facilities, integrating the functions of purchasing and delivering services and pharmaceuticals mostly within their own networks. Duplication occurs for functions such as setting priorities regarding infrastructure needs and services offered, hiring workers, procurement of goods (e.g. pharmaceuticals), and defining payment mechanisms (OECD, 2016[36]).

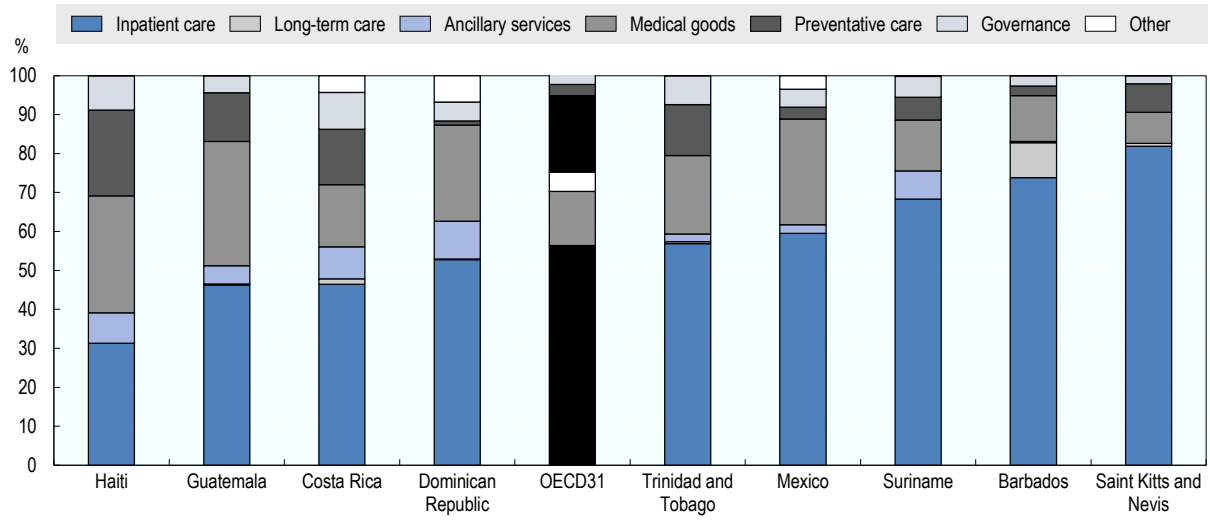
Source: Author's review and adapted from OECD (2017[2]), *Tackling Wasteful Spending on Health*, *https://dx.doi.org/10.1787/9789264266414-en*.

becomes available, a more precise optimal mix of functional expenditure can be identified to further guide countries to minimise waste.

Figure 2.10 shows that the disaggregation of current health expenditure (CHE) by function varies substantially across LAC. Spending on curative care is the largest share in all countries, although it is relatively smaller in Haiti (conversely, Haiti spends a disproportionate amount on medical goods), while the Dominican Republic spends very little on preventive care.

The available data suggest that some LAC countries (particularly Costa Rica, Haiti, and Trinidad and Tobago) spend a higher share of CHE on preventative care than OECD countries. OECD countries expenditure on prevention most often falls between 1% and 6%. Although an optimal share of prevention spending has not been established, prevention interventions have been defined as highly cost-effective, which suggests that OECD countries' limited prevention share leads them to miss opportunities to capitalise on such investments. However, evidence from OECD countries also suggests that a large proportion of prevention spending is used for less cost-effective interventions,

Figure 2.10. **Current health expenditure by health care function**



Source: WHO (2019), Global Health Expenditure Database.

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such as check-ups. Activities such as vaccinations and screening campaigns have been proved to be more cost-effective, suggesting that all countries should examine the composition of their prevention spending to minimise waste. The budget constraints posed by recessions also tend to particularly affect prevention activities, which are often the first function to be scaled down. Maintaining adequate spending in a context of limited funds is a challenge for all countries, but it is critical that cost-effectiveness is considered when making budget reduction decisions.

Improving health information systems to reduce waste

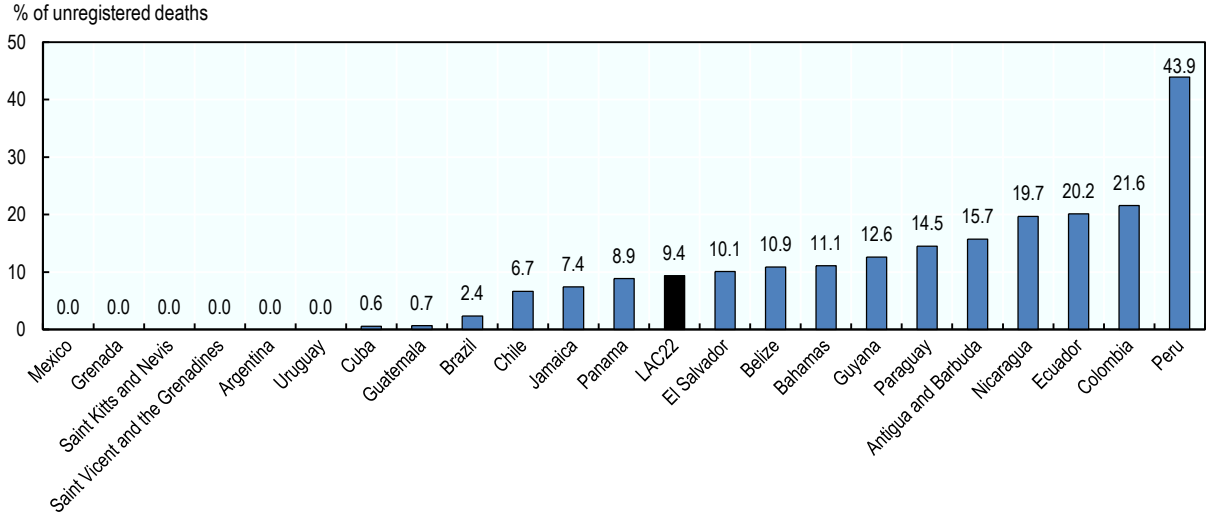
Good quality data on inputs, outputs, outcomes, processes, and feedback mechanisms are needed to identify sources of inefficiency and areas of potential improvement. In parallel to the necessary data for efficiency-specific interventions, countries should invest in health infrastructure and IT systems that inform policy and clinical processes in an agile and useful way.

Figure 2.11 displays the current gap in reporting of vital statistics of mortality data in LAC, the challenge in many countries of adequately tracking life events and clinical information throughout the life of a patient, and his or her interactions with the health system. Unregistered deaths are exceptionally common in Peru, while also high (in descending order, from above 21% to above 15%) in Colombia, Ecuador, Nicaragua, and Antigua and Barbuda.

Information technologies can be used both directly and indirectly to reduce waste. Firstly, efficient process in all areas of the health system are dependent on effective information systems. This includes systems to adequately refer patients between facilities and levels of care, to share information in real time to inform decisions at the operational and governance levels, amongst other uses. Secondly, they are fundamental in detecting wasteful practices and unwarranted variations, which can then be addressed more rapidly and precisely.

Fragmentation across providers, regions, and levels of care and a divide between policy-makers and health workers on the ground are particularly significant challenges for health information systems in LAC. For example, Peru has invested in an information system capable of producing large amounts of information; however, limited interoperability among different providers and regions challenges the quality, utility, and comprehensiveness of this data. In addition, health information collection is often a

Figure 2.11. **Under-reporting of deaths in 22 Latin American and Caribbean countries, 2016 (or latest year available)**



Source: PAHO (2019[37]), *Core Indicators 2019: Health Trends in the Americas*, *http://www.paho.org/data/index.php/en/indicators.html*.

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burden for front-line health workers, particularly in contexts with limited infrastructure (use of paper records or irregular connectivity). This can lead to reducing both the quality of information and of care provision. In some cases, even when information is adequately collected at the point of care and shared with institutions responsible for its processing, it is often not used in a meaningful way to make evidence-based decisions or to provide feedback to providers (OECD, 2017[38]). The collection of information that has no real purpose or value for the improvement of the system represents a clear example of waste that countries should address as a priority.

Another priority for countries looking to build information systems that help reduce waste is developing capacity to track and inform decisions on quality of care. The data collection exercise implemented by the World Bank and OECD in the context of this publication found that very few LAC countries collect quality indicators at the national level, rendering it impossible to perform a comparable and comprehensive assessment of quality of care. Since quality is a key dimension of UHC, countries should aim to better measure it in order to drive its development, parallel to efforts to improve access and financial protection.

Improving governance and institutions in LAC health systems

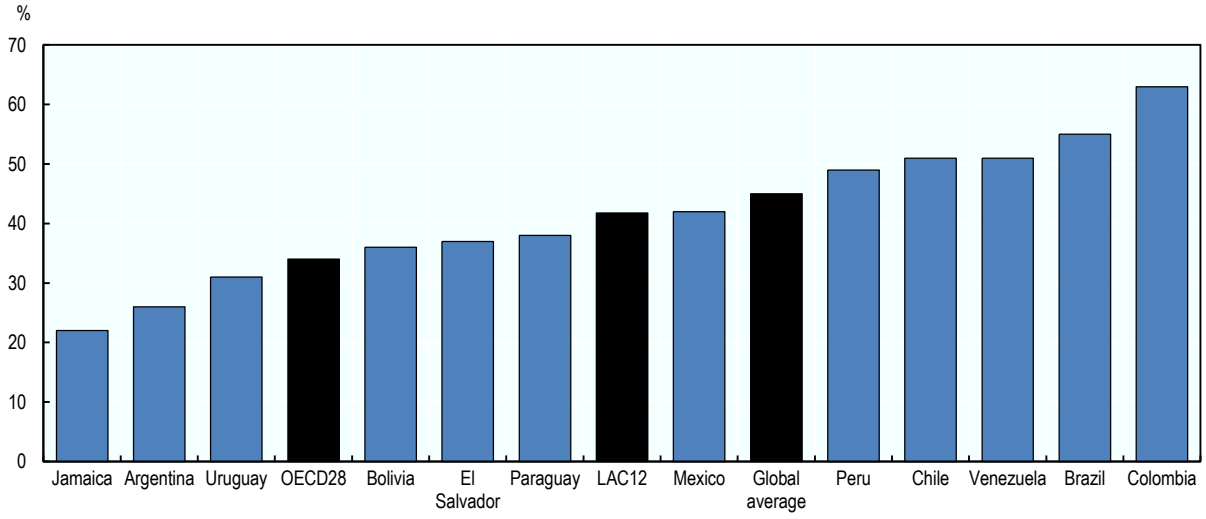
Ineffective governance and institutions are an important driver of inefficiency. In some cases, miscarried governance processes take the form of corruption, where actors deliberately divert resources from the health care system in their own self-interest or in the interest of a group they support. These integrity violations prevail in all countries around the world and can take place in the context of a vast array of transactions involving providers of health services, payers of these services, and/or recipients/consumers. In addition, they can occur in the procurement and distribution of medical goods and services, and the promotion of corporate/industrial interests in the health sector (OECD, 2017[2]).

Corruption in health can affect the financial arena, with waste developing in direct (money is diverted from the system) and indirect ways (the risk of corruption requires additional investments in prevention or detection activities). Furthermore, integrity violations can impact the quality of goods and services (e.g. provision of substandard quality of medicines or equipment or of unnecessary

service), access to care and equity (e.g. informal payments can discourage access), allocative efficiency across sectors (e.g. spending less on health), and public trust and welfare (OECD, 2017[2]).

Integrity violations in health are difficult to measure, including because the understanding of what may constitute fraud, abuse, and corruption is not uniform. However, surveys to assess people's perceptions of such incidences are at least suggestive as proxies and allow cross-country comparisons. Figure 2.12 displays the percentage of the population that believes the health sector to be corrupt or very corrupt for 12 LAC countries with available data, the OECD average for 28 countries, and the global average for 103 countries. The level of perceived corruption in health within LAC countries varies between 63% in Colombia and 22% in Jamaica, with an average of 42%, higher than the OECD28 average of 34% and lower than the global average of 45%.

Figure 2.12. **Percentage of the population that considers the health sector to be corrupt or very corrupt in LAC countries with data**



Note: The global average includes 103 countries. The OECD and LAC average includes 28 and 12 countries, respectively.
Source: Transparency International (2013[39]), Global Corruption Barometer 2013, *https://www.transparency.org/gcb2013/report*.

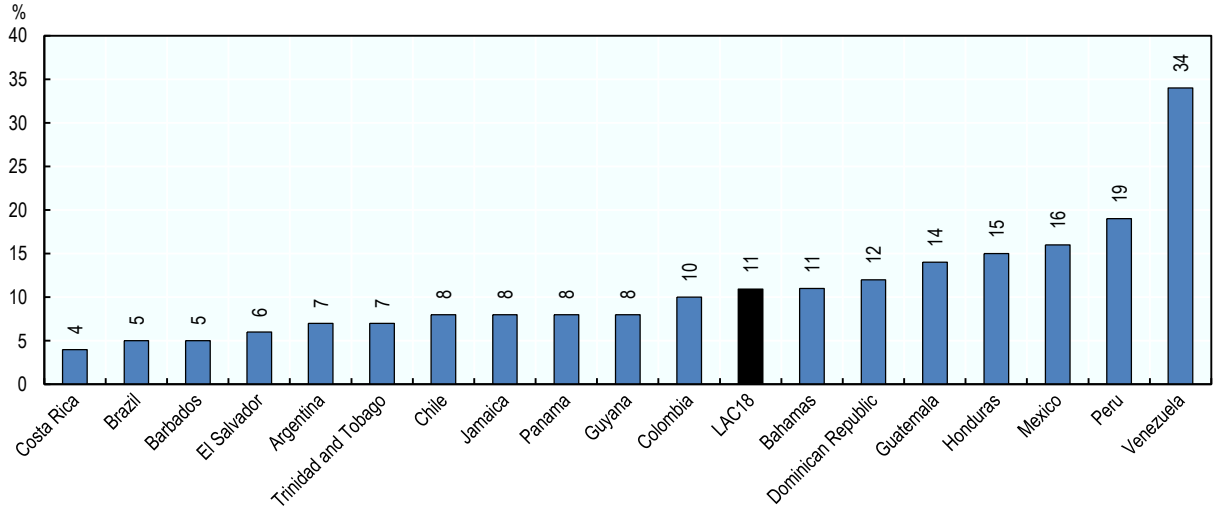
StatLink https://stat.link/if2xvk

Figure 2.13 shows the rates of people who stated that they had given bribes in their encounters with public clinics and health centres in 18 LAC countries. Venezuela stands out, with 34% of people declaring to given bribes, followed by Peru (19%), Mexico (16%), and Honduras (15%). At the other end of the spectrum, less than 5% of the populations of Costa Rica, Brazil, and Barbados stated that they had given bribes to health institutions.

The main stakeholders to be addressed by policies and actions to tackle corruption-related waste include providers of medical goods and services, suppliers or manufacturers of medical goods and services, payers of such goods and services, the regulatory sector, and individuals. All of these actors can either resist/respond or be the victim of corruption. Integrity violations by these stakeholders can occur in health service delivery, payment, and coverage decisions; in procurement and distribution; and through inappropriate business practices (Transparency International, 2006[41]).

Some OECD countries have developed policies related to the active detection of integrity violations in service delivery and financing, using data mining and review campaigns. In addition, other countries have regulated the relationship between public and private actors, mainly by increasing transparency, for instance, mandating the disclosure of financial relationships and

Figure 2.13. **Bribery rates in public clinics and health centres based on people who used these public services in the previous 12 months, 2019**



Source: Transparency International (2019[40]), Global Corruption Barometer, Latin America & the Caribbean 2019. Citizens' views and experiences of corruption, *https://www.transparency.org/files/content/pages/2019_GCB_LatinAmerica_Caribbean_Full_Report.pdf*.

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transfers of value (e.g. Sunshine Acts). In particular with respect to the pharmaceutical sector, codes of conduct have been developed and implemented, mostly as self-regulation initiatives (OECD, 2017[2]). These actions align with policy recommendations, such as ensuring people can safely report corruption, guaranteeing that punishments are fairly given, enabling NGOs to operate freely, and empowering citizens to hold governments to account (Transparency International, 2019[40]).

In LAC, several countries have put in place regulations to control corruption. For instance, with the exception of Bolivia, Costa Rica, Cuba, and Venezuela, most countries in the region have laws that guarantee access to official information, including from the health sector (UNESCO, 2017[42]).

Conclusion

This chapter has discussed the importance of identifying and reducing wasteful health spending for countries in LAC, in a context of a necessary expansion of health financing and a shift toward less reliance on private health expenditures as paths to high-quality universal health coverage. As countries face recurrent limitation of public funds, technological innovation, and changing epidemiological and demographic profiles, they should invest in their capacity to keep waste at minimum levels in all dimensions and areas of health systems. This will help free up existing resources and increase the willingness of key stakeholders for the mobilisation of additional resources for health. Furthermore, it will contribute to ensure the long-term sustainability of health systems and its resilience against current or future lack of funds or emerging challenges.

The chapter has identified specific areas of waste and has recognised tools that LAC countries can use to reduce it in three areas of the health system:

- Clinical-level care: Waste at the clinical level can be tackled by first investing in the capacity to identify unwarranted variations, which helps decision-makers understand where waste is more prevalent and what factors are influencing it. Clinical-level waste can also be addressed by reducing procedures that add little or no value to the system and the patient and in some cases may even increase harm to them. In addition, promoting rational use of medicines through incentives to only prescribe and consume antibiotics when necessary helps curtail expenditure and the threat posed by antimicrobial resistance.

- Operational waste: Countries should develop their prioritisation mechanisms further, such as the capacity to establish what technologies bring the best value through Health Technology Assessments and the use of such findings for decision-making. They can tackle the overuse of hospital resources by reducing admissions for conditions that can be more efficiently treated at the primary-care level and by ensuring that patients can be discharged as quickly (but not prematurely) and safely as possible. The use of generics should be incentivised to ensure that resources are not wasted in more expensive branded alternatives.
- Governance waste: Waste can also be addressed at the governance dimension. First, the fragmented structure of the majority of LAC health systems is a major source of waste, which will require further revision and reforms. Moreover, establishing an efficient balance in a country's functional expenditure is key to reduce wasteful resources in a functional category while underfunding another one. Countries should ensure that their information systems are able to track performance and produce useful data, while investing in their capacity to analyse such information and use it to inform decisions at all levels. Finally, there is evidence that LAC health systems are not free of intentional efforts to take financial advantage of institutional weaknesses for personal profit – highlighting the need to enhance system integrity in both the public and private components of the health sector.

Any successful effort to reduce waste must proceed in a comprehensive and holistic manner. It must also be based on the engagement of all health system actors and on effective communication and transparency. Ensuring that both patients and providers are well-informed and understand how their choices play a role in the larger picture of the health system is key. Evidence shows that several LAC countries have been undertaking well-targeted efforts to reduce waste but additional improvements are within reach for all health systems in the region. Without cutting health budgets and even considering the needs to increase government health expenditure, being more efficient and achieving better results for people who need it the most are not mutually exclusive. When policies are properly designed and implemented, these objectives can be synergic.

References

[16] ABIM Foundation (2020), *Choosing Wisely | Promoting conversations between providers and patients*, *http://www.choosingwisely.org/* (accessed on 29 January 2020).

[28] Alvarez, R., A. Gonzalez and S. Fernandez (2019), "The Competitvie Impact of Branded Generic Medicine in a Developing Country", *Universdiad de Chile, Departamento de Economía*.

[29] Atun, R. et al. (2015), *Health-system reform and universal health coverage in Latin America*, Lancet Publishing Group, http://dx.doi.org/*10.1016/S0140-6736(14)61646-9*.

[35] Cetrángolo, O. and A. Goldschmit (2018), *Las obras sociales y otras instituciones de la seguridad social para la salud en Argentina. Origen y situación actual de un sistema altamente desigual*, CECE, *http://fcece.org.ar/wp-content/uploads/informes/obras-sociales-argentina.pdf* (accessed on 15 November 2019).

[26] FNE (2019), *Estudio de Mercado sobre Medicamentos (EM03-2018) : Informe_preliminar*, Fiscalía Nacional Económica de Chile, Santiago, *https://www.fne.gob.cl/wp-content/uploads/2019/11/Informe_preliminar.pdf*.

[3] Guanais, F., R. Gómez-Suárez and L. Pinzón (2012), "Series of Avoidable Hospitalizations and Strenghening Primary Health Care: Primary Care Effectivenss and the Extent of Avoidable Hospitalizations in Latin America", *Inter-American Development Bank Discussion Paper*, *https://publications.iadb.org/en/publication/11805/series-avoidable-hospitalizations-and-strengthening-primary-health-care-primary*.

[20] Hernández-Gómez, C. et al. (2016), "Economic Impact of an Antimicrobial Stewardship Program Implementation in Three High-Complexity Hospitals in Colombia", *Open Forum Infectious Diseases*, Vol. 3/suppl_1, http://dx.doi.org/*10.1093/ofid/ofw172.726*.

[25] IQVIA (2019), *Precio de los Medicamentos en América Latina, Análisis Comparativo*, *https://www.cepal.org/es/publicaciones/45423-analisis-comparativo-precios-medicamentos-america-latina*.

[10] Izquierdo, A., C. Pessino and G. Vuletin (2018), *Better Spending for Better Lives: How Latin America and the Caribbean Can Do More with Less*, InterAmerican Development Bank, *https://publications.iadb.org/*

publications/english/document/Better-Spending-for-Better-Lives-How-Latin-America-and-the-Caribbean-Can-Do-More-with-Less.pdf.

[8] Kim (2014), *Atlas de variaciones geográficas en salud de Colombia*, Ministerio de Salud y Protección Social, Gobierno de Colombia.

[23] Leppin, A. et al. (2014), *Preventing 30-day hospital readmissions: A systematic review and meta-analysis of randomized trials*, American Medical Association, http://dx.doi.org/*10.1001/jamainternmed.2014.1608*.

[5] Lorenzoni, L. et al. (2019), "Health systems characteristics: A survey of 21 Latin American and Caribbean countries"*, OECD Health Working Papers*, OECD Publishing, Paris, *https://doi.org/10.1787/0e8da4bd-en*.

[27] Maceira, D. and A. Palacios (2016), "Percepciones, Actitudes y Patrones en el Consumo de Medicamentos", *Centro de Estudios de Estado y Sociedad*.

[11] Magne, F. et al. (2017), "The Elevated Rate of Cesarean Section and Its Contribution to Non-Communicable Chronic Diseases in Latin America: The Growing Involvement of the Microbiota", *Frontiers in Pediatrics*, Vol. 5, http://dx.doi.org/*10.3389/fped.2017.00192*.

[9] MINSALUD (2019), *Colombian Atlas of Geographical Variations SISPRO*, Sistema Integrado de Información de la Protección Social, Colombia, *https://sig.sispro.gov.co/sigmsp/index.html* (accessed on 4 October 2019).

[14] OECD (2019), *OECD Health Statistics 2019*, *https://doi.org/10.1787/health-data-en*.

[32] OECD (2018), *Multi-dimensional Review of Paraguay : Volume 2. In-depth Analysis and Recommendations.*, OECD Publishing, http://dx.doi.org/*doi.org/10.1787/23087358*.

[19] OECD (2018), *Stemming the Superbug Tide: Just A Few Dollars More*, OECD Health Policy Studies, OECD Publishing, Paris, *https://dx.doi.org/10.1787/9789264307599-en*.

[38] OECD (2017), *Monitoring Health System Performance in Peru: Data and Statistics*, OECD Reviews of Health Systems, OECD Publishing, Paris, *https://dx.doi.org/10.1787/9789264282988-en*.

[33] OECD (2017), *OECD Reviews of Health Systems: Peru 2017*, OECD Reviews of Health Systems, OECD Publishing, Paris, *https://dx.doi.org/10.1787/9789264282735-en*.

[2] OECD (2017), *Tackling Wasteful Spending on Health*, OECD Publishing, Paris, *https://dx.doi.org/10.1787/9789264266414-en*.

[36] OECD (2016), *OECD Reviews of Health Systems: Mexico 2016*, OECD Reviews of Health Systems, OECD Publishing, Paris, *https://dx.doi.org/10.1787/9789264230491-en*.

[7] OECD (2014), *Geographic Variations in Health Care: What Do We Know and What Can Be Done to Improve Health System Performance?*, OECD Health Policy Studies, OECD Publishing, Paris, *https://dx.doi.org/10.1787/9789264216594-en*.

[1] OECD et al. (2019), *Latin American Economic Outlook 2019: Development in Transition*, OECD Publishing, Paris, *https://dx.doi.org/10.1787/g2g9ff18-en*.

[21] PAHO (2019), *Base Regional de Informes de Evaluación de Tecnologías en Salud de las Américas (BRISA)*, Health Technology Assessments Network for the Americas (RedETSA), *http://sites.bvsalud.org/redetsa/brisa/* (accessed on 5 October 2019).

[37] PAHO (2019), *Core Indicators 2019: Health Trends in the Americas*, PLISA Database, *http://www.paho.org/data/index.php/en/indicators.html*.

[17] PAHO and FIU (2018), *Recommendations for Implementing Antimicrobial Stewardship Programs in Latin America and the Caribbean: Manual for Public Health Decision-Makers*, Pan American Health Organization. Florida International University, Washington, D.C., *http://iris.paho.org/xmlui/handle/123456789/49645*.

[4] Pinto, D. et al. (2018), *More efficiency for healthier lives*, Inter-American Development Bank.

[34] Rathe, M. (2018), "Dominican Republic: Implementing a health protection system that leaves no one behind"*, Universal Health Coverage Study Series*, No. 30, World Bank Group, Washington DC, http://dx.doi.org/*10.1596/29182*.

[24] Renaudin, P. et al. (2016), "Do pharmacist-led medication reviews in hospitals help reduce hospital readmissions? A systematic review and meta-analysis", *British Journal of Clinical Pharmacology*, Vol. 82/6, pp. 1660-1673, http://dx.doi.org/*10.1111/bcp.13085*.

[22] Rojas-García, A. et al. (2017), "Impact and experiences of delayed discharge: A mixed-studies systematic review", *Health Expectations*, Vol. 21/1, pp. 41-56, http://dx.doi.org/*10.1111/hex.12619*.

[12] Stordeur, S. et al. (2016), *Elective Caesarean Section in Low-Risk Women at Term: Consequences for Mother and Offspring*, Belgian Health Care Knowledge Centre.

[31] Sugg, D., P. Galleguillos and R. Caravantes (2018), *Caracterización del Gasto en Personal de los Servicios de Salud*, Dirección de Presupuestos, Ministerio de Hacienda, *https://www.dipres.gob.cl/598/articles-171767_doc_pdf.pdf*.

[40] Transparency International (2019), *Global Corruption Barometer, Latin America & the Caribbean 2019. Citizens' views and experiences of corruption*, Transparency International, *https://www.transparency.org/files/content/pages/2019_GCB_LatinAmerica_Caribbean_Full_Report.pdf*.

[39] Transparency International (2013), *Global Corruption Barometer 2013*, *https://www.transparency.org/gcb2013/report*.

[41] Transparency International (2006), *Global Corruption Report 2006: Corruption and health*, *https://www.transparency.org/whatwedo/publication/global_corruption_report_2006_corruption_and_health*.

[42] UNESCO (2017), *Access to information: lesson from Latin America*, UNESCO Office Montevideo and Regional Bureau for Science in Latin America and the Caribbean, *https://unesdoc.unesco.org/ark:/48223/pf0000249837*.

[30] Vermeersch, C. and A. Mohpal (2017), *Latin America and the Caribbean: A Narrative for the Health Sector*, The World Bank.

[6] Wennberg, J. (2011), "Time to tackle unwarranted variations in practice", *BMJ*, Vol. 342/mar17 3, pp. d1513-d1513, http://dx.doi.org/*10.1136/bmj.d1513*.

[13] WHO (2019), *Global Health Observatory data*, *https://www.who.int/gho/en/* (accessed on 5 October 2019).

[18] WHO (2018), *WHO Report on Surveillance of Antibiotic Consumption: 2016 - 2018 Early implementation*, World Health Organisation, Geneva, *https://apps.who.int/iris/bitstream/handle/10665/277359/9789241514880-eng.pdf?ua=1*.

[15] WHO (2015), *WHO statement on caesarean section rates*, World Health Organisation, Geneva, *https://apps.who.int/iris/bitstream/handle/10665/161442/WHO_RHR_15.02_eng.pdf?sequence=1*.