Medicines availability in Ecuador's public system (2015–2024): a policy design analysis of financing, public procurement, and governance

Alejandro Hernández-Luis, Guillaume Fontaine, and José Luis Morales*

The Comparative Policy Lab, FLACSO-Ecuador, Quito, Ecuador

The Lancet Regional Health - Americas 2026;56: 101399

Published Online 12 February 2026

https://doi.org/10.1016/j.lana.2026.101399

Summary

Medicines shortages are a major health policy challenge in Ecuador and reflect inconsistencies in the architecture of public-sector medicines access policy. This Health Policy paper, grounded in the policy design framework, synthesises administrative records and policy documents (2015–2024) to show how budget contraction, volatile execution, and weak *ex ante* needs assessment hinder the translation of allocations into sustained availability. Procurement has shifted from a centralised electronic catalogue towards more fragmented purchasing modalities, while limited transparency in inventory management sustains uncertainty about needs and stock. Governance constraints, including institutional weakness, gaps in timely information, and extensive Constitutional Court oversight, further strain decision-making. Strengthening coherence across financing, procurement, information systems, and governance, alongside more stable leadership, is essential to translate formal commitments into reliable access to essential medicines.

Copyright © 2026 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/).

Keywords: Health governance; Medicine shortage; Pharmaceutical supply; Public procurement; Policy design

Introduction: medicine shortage as a policy problem

Inadequate access to essential medicines is widely characterised as a wicked problem for health systems.[1] This gap contributes to millions of preventable deaths and exacerbates health inequalities. Explanations in the policy literature link the problem to contingent factors,[2] including sectoral fiscal sustainability,[3] deficits in transparency and corruption in public administration,[4] limited capacities of regulatory and oversight bodies,[5] the concentration of innovation and production in a small number of countries,[6] limited experience with health technology assessment,[7] and gaps in professional training that affect prescribing and treatment practices.[8] In South America, these obstacles extend even to well-established medicines,[9] generating episodes of shortage that erode public trust in health systems. This situation is particularly evident in Ecuador, where persistent weaknesses undermine sustained medicines availability.

Ecuador's near-total reliance on public health services, together with the rapid expansion of the private pharmaceutical market, underscores the urgency of assessing its medicines access policy framework. We engage with evidence on socioeconomic gradients in unmet need,[10] the effects of market deregulation,[11] the fragility of supply chains and import dependence,[12] and regional purchasing and governance arrangements.[13]

Debates on medicine shortages take place in a highly politicised environment and often rely on fragmentary evidence. This paper grounds the discussion in a systematic empirical basis. We analyze the design of Ecuador's medicines access policy framework, with a focus on the conditions driving shortages, and propose feasible adjustments. Our approach draws on the policy design framework,[14,15] and on the institutional analysis of policy instruments understood as state resources.[16]

The policy problem of medicine shortages in Ecuador

Determining the magnitude of the problem of access to medicines in Ecuador is not straightforward due to weaknesses in the data sources. The national indicator of out-of-pocket health expenditure, for example, does not disaggregate the pharmaceutical component and therefore cannot measure households' direct spending on medicines with precision. Moreover, it relies on the 2012 Household Income and Expenditure Survey and the 2014 Living Conditions Survey, which have not yet been updated; consequently, the data reported for 2016–2023 (30.6–33%) derive from pre-COVID-19 estimates[17] rather than from direct measurements that

*Corresponding author. The Comparative Policy Lab, FLACSO-Ecuador, Calle La Pradera E7-174 y Av. Diego de Almagro, Quito, Ecuador.

E-mail address: oahernandezfl@flacso.edu.ec (A. Hernández-Luis).

Disclaimer: This summary is available in Spanish in the Supplementary Material.

would allow the effects of public interventions to be assessed. Nevertheless, the available sectoral information allows for characterising the context in which shortages occur.

The Ecuadorian pharmaceutical market is characterised by high external dependence, rapid retail expansion following deregulation, and rising prices. Imports between 2015 and 2022 ranged from USD 1.07 to 1.25 billion, peaking at USD 1.43 billion in 2021, while exports declined from USD 65 million to USD 35 million.[18–21] Over the same period, deregulation coincided with a marked expansion of the retail market, with the number of pharmacies increasing from 6000 to 12,964, equivalent to one pharmacy per 1307 inhabitants, roughly twice the OECD average.[22–24] Price pressures also intensified, with the pharmaceutical products index rising from 99.9 to 121.8 (+21.9%).[25] In this context of a saturated market and rising prices, dependence on the public sector heightens the risk of unmet need: in 2023, only 23.3% of the population had social insurance and 10% had private insurance, meaning that roughly two thirds (around 11.3 million people) relied on the Ministry of Public Health (MPH) as their principal provider.[26]

In this context, access to medicines enters the public agenda chiefly through social mobilisation. Since 2018, patients and health professionals have repeatedly protested against medicines shortages in public facilities.[27–30] These actions intensified during the pandemic and have remained prominent in media coverage, creating a highly conflictual environment and polarising the debate. Demands have focused, inter alia, on the lack of essential medicines and treatments for chronic, catastrophic and rare diseases, as well as interruptions to outsourced critical services (e.g., oncology and dialysis).[31,32]

In parallel, corruption acted as an aggravating factor. During 2020–2021—the so-called "other pandemic"[33]—more than 30 investigations were opened into irregularities and overpricing in the procurement of supplies and medicines, implicating senior officials of the public health system, legislators and even a former president.[34,35] Although few cases culminated in convictions, extensive media coverage consolidated perceptions of opportunism in public purchasing and deepened public distrust.

Faced with social pressure and accumulating distrust, the MPH was compelled to respond. In the absence of unit-level public data on availability, it acknowledged that "shortage is not a perception but a fact"[36] and declared two health emergencies. The 2022 decree recognised shortages since 2020 and an availability level of 69% against a target of >90%. The September 2025 decree reported continued difficulties since 2023 and a rolled-over budget with "non-executable sources, preventing its effective use".[37] Although the resolution did not specify a national availability percentage, the MPH reported hospital levels of 18%–77%.[38]

Occasionally, these allegations have triggered horizontal accountability mechanisms. In 2019 and 2023, the National Assembly censured the Ministers of Health for improper involvement in revisions of the National Basic Medicines Formulary (NBMF), the purchase of expired medicines, and failure to prevent shortages.[39,40] The Office of the Comptroller General documented recurrent irregularities, including deficient inventory management, the absence of market studies, and inadequate procurement planning.[41] In addition, more than 100 rulings by the Constitutional Court have been issued, some of which have influenced the design of access-to-medicines policies.[42]

While other challenges persist, such as the circulation of falsified or substandard medicines[43,44] and territorial inequalities in access,[45] the immediate priority is to restore the availability of medicines in the public system. This priority directly affects treatment continuity and the system's legitimacy.

Methods

This Health Policy paper draws on an in-depth, single-country case study of Ecuador, combining a narrative review of policy and regulatory documents with a descriptive use of existing administrative records. We brought together (i) an exhaustive review of policy documents, health regulations and legal frameworks on access to medicines and (ii) administrative data from the Ministry of Economy and Finance, the National Public Procurement Service (SERCOP), the NBMF, and current norms governing access to medicines and public purchasing. We selected the period 2015–2024 because, since 01 January 2015, public procurement data have been available in Open Contracting Data Standard open format, enabling systematic analysis.[46] The analysis is guided by the "instrumentation" function of the policy design framework, which interprets the resources the state allocates to addressing a public problem as expected empirical manifestations of the policy process (Panel 1). Quantitative information is used descriptively to contextualise the policy discussion and does not involve formal hypothesis-testing or impact evaluation.

To describe public expenditure on medicines, we used monthly data from the "Budgetary Classification of Revenues and Expenditures of the Public Sector" of Ecuador's General State Budget. Specifically, we examined the current expenditure (530,809) and investment expenditure (730,809) lines for medicines and considered all four budget modalities of the state. All amounts are expressed in United States dollars (USD).

For procurement processes, we used SERCOP open-data records to identify procedures that included the term "medicines" in their description. For low-value

Panel 1: **Policy instruments as empirical observations of the policy process**

The policy-design framework conceives design as the attempt to articulate a coherent set of instruments that links problem definition to public intervention.[47] To classify these instruments, we draw on Christopher Hood's typology of governmental resources—nodality, authority, treasure, organisation (NATO)[48]—and adapt it functionally to four categories used in this study: finance, information, regulation, and administrative organisation. The correspondence with the original scheme is preserved.

- Finance (treasure): resources through which the state allocates or transfers money, or other fungible goods, to public or private actors to enable action.
- Information (nodality): resources that allow the state to generate, concentrate or disseminate information required to steer behaviour or coordinate actors.
- Regulation (authority): resources expressing a legal or official power to require, prohibit, enable or guarantee specified behaviours.
- Administrative organisation (organisation): resources that mobilise structures, entities and government personnel to execute decisions directly.

Understood in this way, instruments are the basic mechanisms by which the public sector seeks to influence society and the market. In this study, we use this classification to identify, across legal and policy documents, the budget, and procurement records, the concrete traces of the policy process. A forward mapping of the instrument mix shows whether the state responded to the problem with a coherent set of measures or, instead, with overlapping and fragmented interventions.

procedures not available on the open-data portal, we obtained an anonymised database directly from SERCOP (incident No. 2025019780; response dated 17 March 2025). The combined dataset covers January 2015 to December 2024 and captures procurement procedures related to medicines recorded in the national system. Because some records aggregate purchases under the general heading "medicines" without item-level detail, descriptive estimates based on these data should be interpreted as conservative.

Using R, we extracted the process title, award amount, award date and procurement modality and produced simple descriptive summaries of total medicines expenditure by modality to support the narrative analysis. No new data were generated and no individual-level information was accessed; all empirical references rely on published or publicly available administrative sources.

Inefficient public expenditure and diversification of procurement modalities (finance)

In low- and middle-income countries, the availability of medicines depends on the execution of public spending on health.[49,50] This underscores the importance of budget planning and execution as core financing instruments within the medicines access policy framework. In Ecuador, current public spending on medicines consists primarily of direct public procurement, whereas investment public spending is directed towards acquiring physical assets and developing infrastructure, as well as production, storage, and distribution logistics capacities. Fig. 1 summarizes the evolution of this expenditure over the period 2015–2024.[51]

Our examination of available budget and expenditure figures indicates a threefold pattern. First, there is a systematic discrepancy between the initial budget and the expenditure recorded each year. This budgetary gap was most pronounced in 2015, 2018–2020, and 2023 for current expenditure, and in 2015, 2017, and 2023 for investment expenditure. This pattern is consistent with the absence of robust *ex ante* needs-assessment methods and an optimistic bias in resource allocation, partly shaped by political incentives.

Second, budget execution is highly erratic. The ratio of executed to codified current expenditure ranges from 78.1% in 2018, to 85% in 2023–2024 and to 98% in 2015–2017. Likewise, the execution of investment expenditure ranges from 48% in 2023, to 55.5% in 2018, to 90% in 2015–2017 and to 100% in 2021–2022. Such volatility undermines the government's capability to translate state resources into a sustainable supply of medicines.

Third, the progressive contraction of public spending in medicines has led to a continuous decline in final execution (cumulative current and investment expenditure), falling from USD 235 million to USD 135.7 million between 2015 and 2020, followed by a temporary recovery to USD 212.3 million in the second year of the COVID-19 pandemic, and stabilising afterwards at USD 173 to 178 million. In other words, the exceptional mobilisation of state resources during the pandemic did not reverse the trend of suboptimal budget execution, despite the increased long-term demand for medicines, which reveals recurring policy implementation gaps.

Disaggregated data show that budget execution across contractual modalities changed markedly over the reference period (Fig. 2).[52] Because medicines procurement is recorded under current expenditure, this

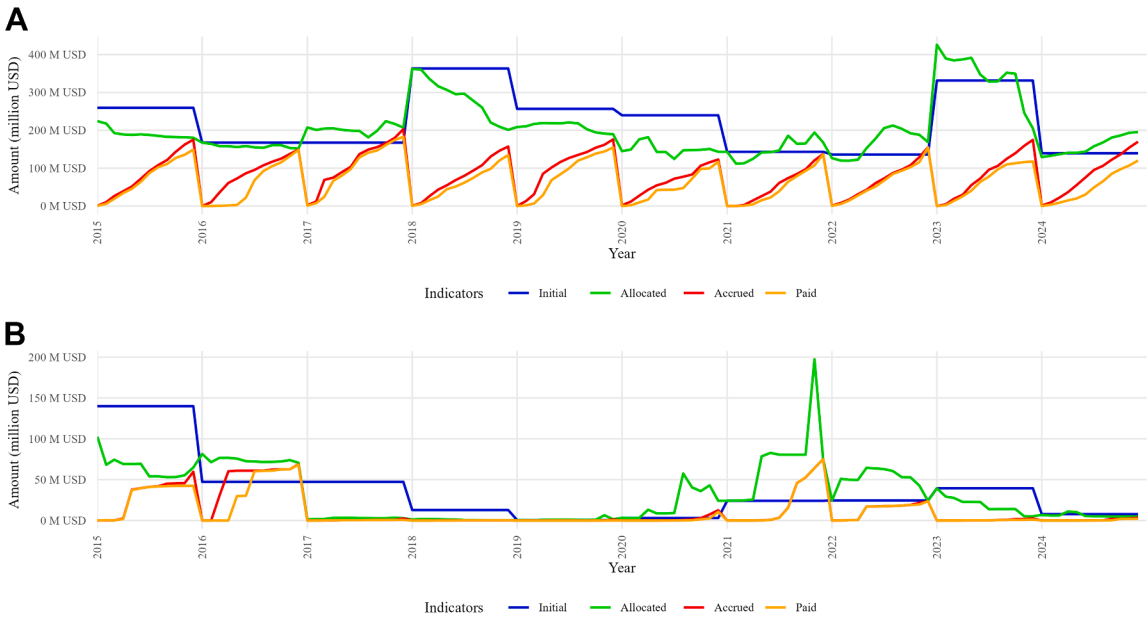

Fig. 1: **Evolution of current and investment public spending in medicines in Ecuador, 2015–2024.** Panel A) current spending; Panel B) investment spending. *Source*: Authors' elaboration based on items 530,809 (Current Goods and Services—Medicines) and 730,809 (Capital Goods and Services—Medicines) from the Budgetary Classification of Public Sector Income and Expenditure. Available from: https://www.finanzas.gob.ec/ejecucion-presupuestaria/.

spending represents the largest component of the state budget for the acquisition of medicines through public procurement, which is implemented through five modalities described below.

Direct purchasing through the national electronic catalogue is the primary modality; it accounted for 91.7% of total procurement in 2015 but declined to 33.5% by 2021 (Fig. 2). Meanwhile, this regime was increasingly replaced by reverse auctions conducted outside the electronic catalogue (Fig. 2).

The remaining three regimes comprise minor purchases, unique goods and services, and contracts between public entities or their subsidiaries (institutional purchases). Minor purchases remained marginal, accounting for between 2.1 and 4% of the total, except in 2022, when it reached 6.9% (Fig. 2). Institutional purchases were similarly residual (less than 0.2% in 2015) and declined thereafter, except during the pandemic, when they rose to 15% (Fig. 2). Notably, the unique goods and services regime increased from 3.1% (2015) to 9.2% (2024) (Fig. 2). This increase indicates greater reliance on sole providers in the local market, which raises concerns from a corruption-control perspective.

In summary, these trends confirm a shift from a model centred on the electronic catalogue to a more diversified procurement arrangement, marking a substantial institutional change. To interpret the observed variations and tensions in budget execution, however, it is necessary to consider how financing interacts with the other policy instruments. Rather than an isolated development, this diversification, together with persistent weaknesses in budget execution, points to broader inconsistencies in medicines access policy design. Analysing how these instruments operate in combination is therefore essential to explaining why resources and formal commitments have not translated into sustained medicines availability in Ecuador's public system.

Shortcomings in Ecuador's medicines access policy design: planning without operationalisation for essential medicines (information)

Two informational instruments are particularly relevant to Ecuador's policy framework for access to medicines: the National Medicines Strategy (NMS) and the NBMF. The former is the official document that presents the government's vision and sets out the basic guidelines to ensure access to medicines. The latter comprises a list of essential medicines, aligned with epidemiological, cost-effectiveness, and supply sustainability criteria. This section examines the genesis and scope of this Strategy, as the main planning instrument, before assessing the operational role of the Formulary, as a complementary instrument of information.

The first NMS was adopted in 2007 and remained the principal formal planning instrument until 2017.

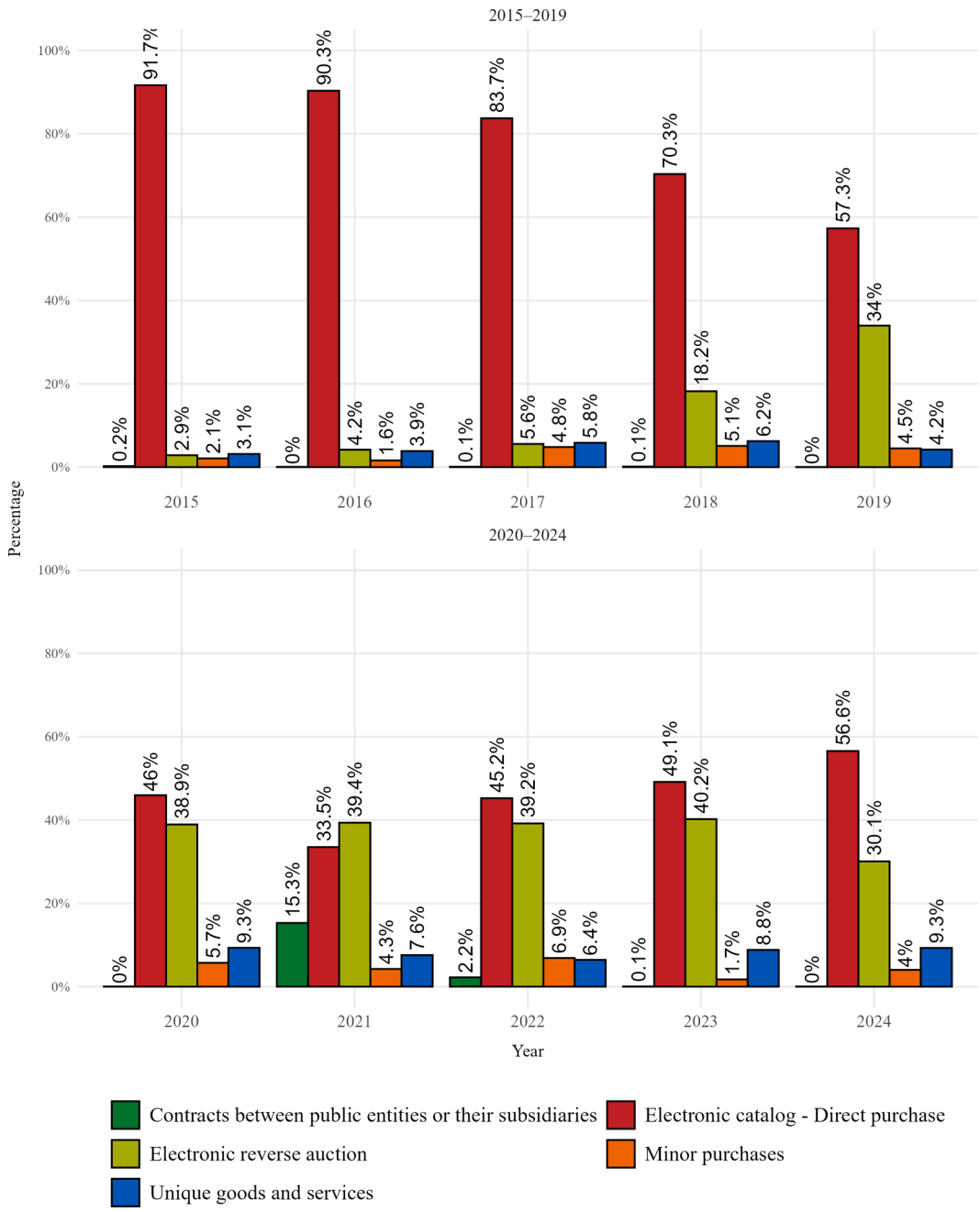

***Fig. 2:* Annual share of public procurement expenditure for medicines by modality in Ecuador, 2015–2024.** *Source*: Authors' elaboration based on SERCOP (Servicio Nacional de Contratación Pública) open data (Available from: https://datosabiertos.compraspublicas.gob.ec/PLATAFORMA/datos-abiertos); including minor purchases.

This document included a concise description of the policy problem, focusing on the high health costs borne by the poorest populations. It also highlighted the low share of generic medicines, market concentration among a handful of stakeholders, the urban–rural gap in access to pharmacies, and the discrepancy between consumer practices and social needs. Based on this diagnosis, the government's strategy aimed to achieve universal access, improved quality, rational use, increased national production, and greater transparency in public procurement. Yet these declarations amounted to little more than wishful thinking, as they failed to

specify the operational mechanisms, instruments, indicators, and goals necessary for assessing and evaluating the strategy.

A new Strategy was adopted in 2017,[53] and it remains the sole orientation document for the government's medicines access policy. It provides a bureaucratic and legal justification that, while acknowledging Ecuador's international obligations, insists on aligning the medicines access policy framework with constitutional principles, the organic laws on health and the national health system, the legislation on generic products for human use, and the five-year National Development Plan (2013–2017).

The diagnosis provided in the 2017 Strategy is more detailed and precise than in the 2007 Strategy. It begins by acknowledging the unavailability of certain essential medicines and compounded preparations listed in the NBMF. It also describes the mandatory marketing authorisation and regulatory control procedures, but does not address substandard and falsified medical products or weaknesses in quality-assurance systems across manufacturers. Further, it underscores the need to assess the therapeutic value of medicines, to improve the selection process for the Formulary, and to evaluate health technologies. However, this section lacks the disaggregated data necessary to enable a precise description and a clearer understanding of the policy pathways prioritised by the government.

The 2017 Strategy also offers strategic guidance that includes goals and indicators, giving the policy design the veneer of evidence-based decision-making. Yet from the outset, its practical effectiveness is undermined by the absence of a baseline and any benchmark for monitoring progress; consequently, the annual objectives prove unattainable.

Hence, in the absence of formal protocols in the evaluation methodology, the National Institute of Statistics did not incorporate the indicators of the NMS into its accounts or any other official records. In fact, the 2017 Strategy has never been evaluated owing to the lack of basic information with which to compare its outcomes. In other words, this was a fundamental flaw in strategic planning from the very beginning. This planning model, which lacks operationalisation, ultimately generated inconsistencies in the policy design by preventing any meaningful evaluation or adjustment.

The other key informational instrument—the NBMF—stems from the WHO Essential Medicines List (EML). It has been updated 11 times since its original publication in 1986, with notable revisions in 2014, 2019 and 2022.[54–56] The formulary is based on the national epidemiological profile and aims to address basic health needs. It seeks to optimise the purchase and distribution of high-quality medicines, while promoting their rational use and reducing costs for both the health system and the population.[57] Yet, the WHO reports that, in low- and middle-income countries, the availability of these medicines in pharmacies ranges from 8% to 41%,[58] which raises questions about the effectiveness of this instrument and reinforces the need for further evaluation.

Over time, the NBMF has followed a similar trajectory to the EML and currently contains roughly twice as many line items as its first edition. As of 2022, it listed 484 active ingredients and 671 pharmaceutical products. However, there are still no direct indicators routinely used to assess its effectiveness or to determine whether this sustained increase in scope actually meets the health needs of the Ecuadorian population. Existing data systems do not systematically link Formulary updates to procurement decisions, stock levels, prescribing patterns or household expenditure on medicines. As a result, it is not possible to establish whether changes in the Formulary have translated into improved access in practice, and the instrument remains largely unevaluable.

Taken together, the NMS and the NBMF illustrate a planning approach without operationalisation within Ecuador's policy framework for access to medicines in the public system. Both instruments are formally aligned with constitutional principles, sectoral legislation and international guidance, but they lack the operational mechanisms, indicators and information systems required for their implementation, monitoring and evaluation. In the absence of these basic evaluative tools, the government's access-to-medicines policy framework cannot be meaningfully adjusted in light of its results.

Judicial and regulatory shortcomings (regulation)

Regulation instruments of Ecuador's medicines policy consists of a complex framework that comprises the Organic Law of Public Health alongside a body of technical and procedural norms. The two most significant instruments are (i) the 2020 Constitutional Court ruling (case 679-18-JP/20), which establishes binding criteria on the availability and accessibility of medicines, and (ii) the Regulation on Medicines Supply, Medical Devices, and Administrative and Financial Control Management, which defines operational processes for procurement, storage, and inventory oversight within the public health system.

Case 679-18-JP/20 arose from social claims based on several consolidated constitutional rights actions concerning the denial or unavailability of medicines for catastrophic or highly complex diseases. The Constitutional Court selected the case for review of constitutional guarantees to harmonise legal standards, address administrative inaction, and set binding benchmarks for availability and accessibility. From an institutional perspective, the Court is the supreme oversight agency,

responsible for reviewing the compatibility of public policies with the Constitution. However, for the sake of the due process, judges are not supposed to design or constrain the government in designing public policies. In that instance, the Court instructed the MPH to design a special policy for catastrophic and highly complex diseases,[59] a step that may be perceived as encroaching on the policy-making prerogatives of the executive.

More importantly, the Court ordered the government to adapt the NMS and to incorporate a set of indicators it had devised. These drew mainly on the 1988 Protocol of San Salvador,[60] an Organization of American States instrument that addresses a broad spectrum of economic, social and cultural rights. While pertinent to a rights-based approach, the Protocol offers high-level guidance and does not operationalise access to essential medicines. For monitoring and evaluation, internationally standardised metrics provide greater specificity and comparability—e.g., SDG indicator 3.b.3,[61] established procurement and supply-chain indicators,[62] accountability/oversight metrics,[63] and the WHO measures related to essential medicines for universal health coverage.[64] Cross-referencing these tools would enhance alignment with global practice and facilitate benchmarking; the Court judgment does not explicitly cite them.

The scope of these indicators extends beyond medicines availability and accessibility, encompassing specific metrics on palliative care and broader measures such as the implementation of a unified electronic health record across the public health system. For instance, the Court adopts a broad reading of the constitutional principle of progressive public spending on health (up to 4% of the Gross Domestic Product), which may be understood as implying a non-regressive constraint on medicines spending.[65] In several cases, the indicators do not clearly specify data sources or articulate how they would contribute to monitoring and progress.

So broad a perspective downplays the central issue of medicines access, and constrains the government's role in policy design. It is also odd that the constitutional ruling orders the design of a policy for catastrophic and highly complex diseases within the framework of the NMS. The Strategy could instead guide the creation of disaggregated budget allocations for medicines both within and outside the NBMF, or establish a monitoring system for medicines dispensed beyond the Formulary.

Lastly, the 2020 ruling establishes no timeline nor specific deadlines for implementation, which goes against the basic principles of policy design. This omission further undermines public accountability and helps to explain why, by late 2025, the aspects of the ruling examined here had not been implemented.

The Regulation on Medicines Supply, Medical Devices, and Administrative and Financial Control Management is the operational instrument of regulation for medicines selection and public procurement. However, it suffers from serious flaws, such as the lack of oversight mechanisms to ensure a coherent policy implementation. Most of the responsibility for medicines sletelection is assigned to therapeutic committees and pharmacists. The document lets them elaborate lists based on the NBMF, without any validation or review process by the national health agency.

This discretionary capacity raises questions about how the government makes sure that the aggregation of these lists accurately respects the guidelines of that Formulary. Not only does the demand planning rely on estimates based on historical consumption rather than a robust forecasting system, but the selection is not even overseen by the national agency in charge of evaluating and standardising these projections.

Regarding public procurement, each establishment sets its own minimum stock levels and reorder points to trigger contracting procedures, which can lead to significant variation in both lead times and procurement volumes across facilities. With respect to inventory oversight, although the Regulation requires each warehouse to use a certified information technology system, it does not mandate a unified management platform. This hinders the consolidation of regional or national monitoring and prevents the early detection of shortages.

The fact that the Regulation assigns so much responsibility to therapeutic committees and pharmacists is inconsistent with the diagnosis provided by the 2017 NMS. This document had identified their institutional weaknesses, and noted that delegation to the local level created more confusion than solutions, owing to high turnover among the committees and their stakeholders' limited training and technical capacity to appraise scientific evidence.[53] Actually, one of the Strategy's priorities was to restructure and strengthen these agencies. Yet, in the absence of evidence of such improvements, the Regulation nevertheless places most oversight in their hands. Once again, the regulatory instruments expose the inconsistency of the policy design.

Lack of coordination in institutional arrangements (administrative organisation)

The institutional design of the NMS relies on the National Health System, which includes two principal coordinating bodies—the National Health Council (CONASA) and the Integrated Public Health Network (RPIS)—and engages with all stakeholders in the health sector. Although it is intended to operate under the stewardship of the MPH, coordination challenges and inter-agency competition persist.

The CONASA enjoys administrative and financial autonomy. It was created in 1980 and is enshrined in the 2002 Organic Law of the National Health System.[66] It was conceived as a consultative body for all actors within the System and was tasked with supporting the Ministry in policy design. With respect to medicines, it works with the National Commission on Medicines and Supply to update the NBMF.

A central source of the coordination problems lies in normative and hierarchical tensions between the CONASA and the MPH. The 2008 Constitution and the 2006 Organic Health Law assign stewardship of public health to the MPH, yet CONASA claims the status of supreme body of the National Health System, drawing on the 1998 Constitution and the 2002 Organic Law of the National Health System.[67]

These normative tensions are further exacerbated by a fragile coordination arrangement between the MPH and CONASA. Over the ten-year period analysed, 12 different ministers held office,[68] implying an average tenure of less than one year; this turnover accelerated during the COVID-19 pandemic, when four ministers were appointed in 2021 alone, in stark contrast with the stability of CONASA's Executive Directorate. Such instability prevents the MPH from completing basic budgetary and planning cycles and leads to constantly shifting agendas and political teams. In this context, it is to be expected that a more stable technocratic apparatus such as CONASA's will gain relative weight and progressively absorb key functions in agenda-setting and technical approval, placing itself in a privileged position to block, dilute, or redirect ministerial initiatives.

This imbalance is reinforced by an accountability gap that further weakens inter-institutional coordination. While the MPH has been subject to transparency and access-to-information requirements since the 2004 Transparency Law, CONASA only became formally required to comply with transparency provisions in September 2024.[69] As a result, even basic information—such as the historical institutional organigram or the composition and rules of procedure of the expert bodies responsible for the NBMF—has been difficult to trace. This opacity is particularly problematic given that the Formulary is a highly sensitive policy instrument in which potential conflicts of interest among industry, prescribers, and regulators demand rigorous public oversight. In practice, the combination of weak coordination, asymmetric transparency, and limited scrutiny of conflicts of interest creates parallel decision-making circuits between the MPH and CONASA and turns the latter into a de facto veto player vis-à-vis the ministry, making it difficult to sustain a coherent and accountable long-term medicines policy.

The RPIS, by contrast, was referenced in the 2008 Constitution but formally established in 2012 to coordinate public healthcare providers with the social security institutions.[70] This entails formally aligning the agendas of the ministries of Health, Interior and Defence, on the one hand, and the three social security schemes—general, police and armed forces—on the other. However, coordination is constrained by the financial and managerial autonomy of the social security subsystems and by marked asymmetries in their purchasing power. Operated through inter-institutional agreements and specialised units within each entity,[70–72] the effectiveness of coordination is therefore largely contingent on the willingness of the actors involved.

Operationally, the RPIS has introduced mechanisms for joint procurement and for the development and interoperability of information systems, though these remain limited. The most prominent arrangement was the corporate reverse auction through the electronic catalogue; however, as noted above, this has gradually been supplanted by ad hoc purchasing.

Moreover, the model that combined joint procurement with a unified platform for the national medicines inventory was never implemented and was suspended in 2022. As a result, purchasing processes remain fragmented and no IT system provides precise data on what the Network has in stock. This affects government capacity to anticipate shortages and adopt timely responses to meet public-system needs.

Conclusions and recommendations

This Health Policy paper shows that recurrent shortages in Ecuador's public system are closely linked to fragmented medicines access policy design. In particular, inconsistencies across the policy instrument mix—financing, information, regulation, and administrative organisation—undermine the system's capacity to translate resources and formal commitments into sustained medicines availability.

In practice, this fragmentation is reflected in sharp budget contraction, erratic financing along the medicines supply chain, and the absence of robust *ex ante* needs assessment methods. It has also coincided with a shift from a centralised e-catalogue to fragmented purchasing that disperses public demand, and whit the absence of joint procurement and interoperable information systems.

Institutional arrangements further weaken policy coherence. The MPH has limited capacity to implement the Strategy amid encroachment by the Constitutional Court and CONASA. The RPIS has not fulfilled its coordinating role. Hence, the system lacks a coherent procurement system, an integrated logistics chain, and compatible inventory registers.

The lack of reliable baseline data limits evaluation and course correction, while opacity of the information systems prevails. At the same time, weak coordination, institutional layering, and veto players delay government decision-making. The resulting pattern of erratic public management undermines responsiveness to social needs

and fuels public frustration. Ultimately, inconsistencies in policy design are not merely technical; they also carry political consequences by eroding trust and stability.

Our descriptive use of budget execution and procurement records, together with the institutional analysis of policy instruments, should be interpreted with three caveats. First, procurement databases do not capture all purchases, so the figures reported are conservative. Second, our assessment relies on administrative data and lacks clinical or financial outcome indicators, which prevents us from estimating effects on health outcomes or costs. Third, out-of-pocket expenditure associated with shortages is likely underestimated. Even so, the evidence indicates that fragmented policy design is a structural determinant of access to medicines. On this basis, we propose a focused set of priorities to address failures in financing, operational coordination, and governance.

We propose three strategic priorities to address these failures. First, to reinforce financial planning, the government should develop a robust *ex ante* methodology to estimate medicines procurement needs and secure stable budget allocations aligned with the epidemiological profile and consumption patterns. Second, to consolidate purchasing and information systems, it should re-establish a centralised joint-procurement mechanism to reduce reliance on ad hoc practices and implement a unified national information technology platform for the medicines inventory to enable real-time monitoring and early shortage detection. Third, to clarify governance and accountability, it should ensure stability in the leadership of the MPH by reducing ministerial turnover to support consistent implementation, medium-term planning, and continuity of strategic reforms; resolve the mandate ambiguity between the MPH and CONASA to ensure clear government leadership; limit judicial overreach by embedding technical, evidence-based indicators in policy design; and strengthen therapeutic committees through training and professional stability while ensuring national oversight of their decisions.

Ecuador's difficulties in sustaining access to essential medicines do not stem from a lack of strategies or legal frameworks. Rather, poorly aligned instruments, limited operational capacity, and inconsistent oversight constrain sustained availability. Strengthening state capacity is essential to implement decisions, coordinate institutions, and generate timely information across the supply chain. The priority is to rebuild coherence, restore leadership, and ground policy in transparent, evidence-based instruments so commitments translate into guarantees in practice.

Contributors

Alejandro Hernández-Luis led the conceptualisation of the study, developed the methodology, and managed the project. Alejandro Hernández-Luis drafted the original manuscript and contributed to subsequent revisions. Guillaume Fontaine contributed to the methodological development, provided supervision throughout the project, and co-drafted the original manuscript; Guillaume Fontaine also contributed to manuscript revisions. José Luis Morales co-drafted the original manuscript, led the visualisation of figures and tables, and contributed to manuscript revisions. All authors reviewed and approved the submitted version of the manuscript and agree to be accountable for all aspects of the work. Alejandro Hernández-Luis made the decision to submit the manuscript.

Use of artificial intelligence

The authors used generative artificial intelligence (ChatGPT, OpenAI) to support English-language editing and improve clarity in selected passages of the manuscript. The authors reviewed and edited all AI-assisted text and take full responsibility for the content.

Declaration of interests

Alejandro Hernández-Luis reports paid consultancy work for the Pan American Health Organization (PAHO/WHO), supporting Ecuador's Ministry of Public Health, within the past 36 months, outside the submitted work. This manuscript is based exclusively on publicly available sources, all of which are cited; it does not use any non-public data, consultancy deliverables, or materials produced under that contract. Guillaume Fontaine and José Luis Morales declare no competing interests.

Acknowledgements

This work was supported by IP1167, The Comparative Policy Lab of FLACSO-Ecuador, which covered the open access article processing charge (APC) only. The funder had no role in the study design; data collection, analysis, or interpretation; writing of the manuscript; or the decision to submit.

Appendix A. Supplementary data

Supplementary data related to this article can be found at https://doi.org/10.1016/j.lana.2026.101399.

References

1 World Health Organization. *Access to Medicines: Making Market Forces Serve the Poor*. Geneva: World Health Organization; 2017 [cited 2025 May 22]. Available from: https://www.who.int/publications/m/item/access-to-medicines-making-market-forces-serve-the-poor.
2 Bigdeli M, Jacobs B, Tomson G, et al. Access to medicines from a health system perspective. *Health Pol Plann*. 2013;28:692–704. https://doi.org/10.1093/heapol/czs108.
3 Detiček A, Locatelli I, Kos M. Patient access to medicines for rare diseases in European countries. *Value Health*. 2018;21(5):553–560. https://doi.org/10.1016/j.jval.2018.01.007.
4 Fontaine G, Hernández-Luis A, Milán T, Rodrigues de Caires C. *Tackling Corruption in Latin America: an Institutional Approach*. Cham: Palgrave Macmillan; 2023.
5 Olsson S, Pal SN, Dodoo A. Pharmacovigilance in resource-limited countries. *Expert Rev Clin Pharmacol*. 2015;8(4):449–460. https://doi.org/10.1586/17512433.2015.1053391.
6 Beran D, Ewen M, Laing R. Constraints and challenges in access to insulin: a global perspective. *Lancet Diabetes Endocrinol*. 2016;4(3):275–285. https://doi.org/10.1016/S2213-8587(15)00521-5.
7 Schünemann HJ, Reinap M, Piggott T, et al. The ecosystem of health decision making: from fragmentation to synergy. *Lancet Public Health*. 2022;7(4):e378–e390. https://doi.org/10.1016/S2468-2667(22)00057-3.
8 Kruk ME, Gage AD, Arsenault C, et al. High-quality health systems in the Sustainable Development Goals era: time for a revolution. *Lancet Glob Health*. 2018;6:e1196–e1252. https://doi.org/10.1016/S2214-109X(18)30386-3.
9 Acosta A, Vanegas EP, Rovira J, Godman B, Bochenek T. Medicine shortages: gaps between countries and global perspectives. *Front Pharmacol*. 2019;10:763. https://doi.org/10.3389/fphar.2019.00763.
10 Coube M, Nikoloski Z, Mrejen M, Mossialos E. Inequalities in unmet need for health care services and medications in Brazil: a decomposition analysis. *Lancet Reg Health Am*. 2023;19:100426.
11 Zhu DT, Tamang S, Humphreys K. Promises and perils of the FDA's over-the-counter naloxone reclassification. *Lancet Reg Health Am*. 2023;23:100518.

12 Guzman TC, Máttar S, Alvis-Guzmán N, De La Hoz F. The high price that Colombia has paid for its lack of biotechnological sovereignty. *Lancet Reg Health Am*. 2023;vol. 24:100560.
13 Lal A, Lim C, Almeida G, Fitzgerald J. Minimizing COVID-19 disruption: ensuring the supply of essential health products for health emergencies and routine health services. *Lancet Reg Health Am*. 2022;6:100129.
14 Fontaine G. The contribution of policy design to realist evaluation. *Evaluation*. 2020;26(3):296–314.
15 Fontaine G, Hernández-Luis A, Milán T, Rodrigues de Caires C. *Tackling Corruption in Latin America: An Institutional Approach*. Cham: Palgrave Macmillan; 2023.
16 Hood CC, Margetts HZ. *The Tools of Government in the Digital Age*. 2nd ed. Basingstoke (UK): Palgrave Macmillan; 2007.
17 Instituto Nacional de Estadísticas y Censos (INEC). *Ficha metodológica del indicador de gasto de bolsillo [Methodological sheet of the out-of-pocket expenditure indicator]*. Quito: INEC; 2025 [cited 2025 Jul 26]. Available from: https://www.ecuadorencifras.gob.ec/cuentas-satelite-de-salud/.
18 Corporación Financiera Nacional. *Ficha sectorial: farmacéuticos [Sectoral report: pharmaceuticals]*. Quito: Corporación Financiera Nacional; 2017 [cited 2025 Jun 06]. Available from: h. tt. ps://www.cfn.fi. n.ec/bibliotecainfo/#.. ~:text=Ficha%20Sectorial%20Farmac%C3%A9uticosn.
19 Corporación Financiera Nacional. *Ficha sectorial: Farmacéuticos [Sectoral report: pharmaceuticals]*. Quito: Corporación Financiera Nacional; 2020 [cited 2025 Jun 06]. Available from: https://www.cfn.fin.ec/wp-content/uploads/downloads/biblioteca/2020/ficha-sectorial-2-trimestre-2020/Farmaceutico.pdf.
20 Corporación Financiera Nacional. *Ficha sectorial: Farmacéuticos [Sectoral report: pharmaceuticals]*. Quito: Corporación Financiera Nacional; 2022 [cited 2025 Jun 06]. Available from: https://www.cfn.fin.ec/wp-content/uploads/downloads/biblioteca/2022/fichas-sectoriales-4-trimestre/Ficha-Sectorial-Farmac-utico.pdf.
21 Corporación Financiera Nacional. *Ficha sectorial: Farmacéuticos [Sectoral report: pharmaceuticals]*. Quito: Corporación Financiera Nacional; 2023 [cited 2025 Jun 06]. Available from: https://www.cfn.fin.ec/wp-content/uploads/downloads/biblioteca/2023/fichas-sectoriales-4-trimestre/Ficha-Sectorial-Farmaceutico.pdf.
22 Servicio Nacional de Contratación Pública (SERCOP). *Acceso público a medicamentos de calidad: las compras públicas como mecanismo para garantizar el derecho a la salud [Public access to quality medicines: public procurement as a mechanism to guarantee the right to health]*. Quito: Servicio Nacional de Contratación Pública; 2015 [cited 2025 Jun 09]. Available from: https://portal.compraspublicas.gob.ec/sercop/wp-content/uploads/2015/12/Revista_SICM-01-12-2015_1.pdf.
23 Agencia Nacional de Regulación, Control y Vigilancia Sanitaria (ARCSA). Base de datos de permisos de funcionamiento vigentes y cancelados [Database of active and cancelled operating permits]. Guayaquil: Agencia Nacional de Regulación, Control y Vigilancia Sanitaria [cited 2025 Jul 24]. Available from: https://www.controlsanitario.gob.ec/base-de-datos/; 2025.
24 Organisation for Economic Co-operation and Development (OECD). *Health at a glance 2023: OECD indicators*. Paris: OECD Publishing; 2023. https://doi.org/10.1787/7a7afb35-en [cited 2025 Jul 24]. Available from: https://www.oecd.org/en/publications/health-at-a-glance-2023_7a7afb35-en/full-report/pharmacists-and-pharmacies_521be7d5.html.
25 Banco Central del Ecuador (BCE). *Boletín Anuario No. 47*. Quito: Banco Central del Ecuador; 2025 [cited 2025 Jul 25]. Available from: https://contenido.bce.fin.ec/documentos/informacioneconomica/PublicacionesGenerales/ix_InformacionEstadistica.html.
26 Superintendencia de Competencia Económica. *Informe de estudio de mercado al sector de seguros con cobertura de asistencia médica y de medicina prepagada. Versión pública. [Market study report on the insurance sector with medical assistance and prepaid medicine coverage. Public version]*. Expediente Nro. SGE-IGT-INAC-3-2023. Quito (EC): Superintendencia de Competencia Económica; 2025.
27 El Comercio. El abastecimiento de fármacos ha caído desde el 2018 en hospitales del Ecuador. Quito: El Comercio [cited 2025 Nov 03]. Available from: https://www.elcomercio.com/sociedad/iess-hospitales-farmacos-enfermedades-pandemia/.
28 La Hora. *Moreno redujo 77% presupuesto para medicinas de 2018 a 2021*. Quito: Diario La Hora; 2021 [cited 2025 Nov 03]. Available from: https://www.lahora.com.ec/archivo/Moreno-redujo-77-presupuesto-para-medicinas-de-2018-a-2021-20210819-0078.html.
29 Asamblea Nacional del Ecuador. Comisión de Salud continúa con las comparecencias sobre el desabastecimiento de medicamentos. Quito: Asamblea Nacional [cited 2025 Nov 03]. Available from: https://www.asambleanacional.gob.ec/es/noticia/76505-comision-de-salud-continua-con-las-comparecencias-sobre.
30 GK. *Desabastecimiento de medicamentos en Ecuador. Esto sabemos*. Quito: GK; 2022 [cited 2025 Nov 03]. Available from: https://gk.city/2022/05/27/desabastecimiento-medicamentos-ecuador/.
31 SWI swissinfo.ch. Crisis en clínicas de diálisis de Ecuador: la deuda estatal angustia a miles de pacientes [Crisis in Ecuador's dialysis clinics: state debt distresses thousands of patients]. Bern: SWI swissinfo.ch [cited 2025 Nov 03]. Available from: https://www.swissinfo.ch/spa/crisis-en-clínicas-de-diálisis-de-ecuador:-la-deuda-estatal-angustia-a-miles-de-pacientes/89427935.
32 El Comercio. Solca de Quito se suma a la suspensión de la atención a pacientes del IESS [Quito's SOLCA joins suspension of care for IESS patients]. Quito: El Comercio [cited 2025 Nov 03]. Available from: https://www.elcomercio.com/actualidad/quito/solca-quito-suspende-atencion-iess/.
33 Observatorio de Derechos y Justicia; Pan American Development Foundation. *Corruption in Times of COVID-19: The Other Pandemic in Ecuador*. Quito: ODJ; PADF; 2021 [cited 2025 Nov 03]. Available from: https://share.google/b50GYv0AfpXdDBqfa.
34 Ortiz-Prado E, Izquierdo-Condoy JS, Vasconez-Gonzalez J. Corruption in healthcare: global perspectives and the recent escalation of violence in Ecuador's public medicine procurement system. *Front Public Health*. 2023;11:1259124. https://doi.org/10.3389/fpubh.2023.1259124.
35 GK; Periodismo de Investigación. Ecuador: los largos tentáculos de la corrupción en la pandemia. Contra la Corrupción [cited 2025 Nov 03]. Available from: https://contralacorrupcion.mx/ecuador-los-largos-tentaculos-de-la-corrupcion-en-la-pandemia/.
36 Ministerio de Salud Pública (Ecuador). *Resolución No. MSP-MSP-2022-0012-R*. Quito: Despacho Ministerial; 2022 [cited 2025 Nov 01]. Available from: https://www.salud.gob.ec/wp-content/uploads/2022/06/MSP-MSP-2022-0012-R.pdf.
37 Ministerio de Salud Pública (Ecuador). *Resolución No. MSP-MSP-2025-0003-R. Quito: Despacho Ministerial* [citado 2025 Nov 01]. Available from:; 2025. https://www.salud.gob.ec/declaratoria-de-emergencia-compra-de-medicamentos/#:~:text=MSP%2DMSP%2D2025%2D0003,Adquisici%C3%B3n%20de%20Medicamentos%20por%20Emergencia.
38 Primicias. Cuatro hospitales del Ministerio de Salud tienen menos del 30% de abastecimiento de medicamentos [Four Ministry of Health hospitals have less than 30% medicines availability]. Quito: Primicias [cited 2025 Nov 03]. Available from: https://www.primicias.ec/sociedad/ecuador-hospitales-ministerio-salud-abastecimiento-medicamentos-insumos-108158/.
39 Asamblea Nacional (Ecuador). Plenary Resolution RL-2019-2021-033. Quito: National Assembly; [year] [cited 2025 Nov 01]. Available from: https://www.registroficial.gob.ec/segundo-suplemento-al-registro-oficial-no-25-3/.
40 Asamblea Nacional. *Plenary Resolution RL-2021-2023-136*. Quito: Asamblea Nacional; 2023 [cited 2025 Jul 16]. Available from: http://archivo.asambleanacional.gob.ec/uploads/r/archivo-biblioteca-juan-leon-mera-3798/1/4/2/1423bac633f5457076189629bda7175719d17a3e4033e1c6df05745341a0bb68/AN-2021-2023-136R20230214.pdf.
41 Contraloría General del Estado. *Reporte de control público: gestión de insumos médicos y medicamentos en el Ministerio de Salud Pública (MSP) y el Instituto Ecuatoriano de Seguridad Social (IESS) [Public control report: management of medical supplies and medicines in the Ministry of Public Health and the Social Security Institute]*. Quito: Contraloría General del Estado; 2022 [cited 2025 Jul 16]. Available from: https://www.contraloria.gob.ec/SalaDePrensa/NoticiasPorSectores/24182.
42 Ávila R. *¿Salud o negocio? El derecho a los medicamentos [Is it health or business? The right to medicines]. Observatorio de Financiamiento para el Desarrollo. Nota técnica No. 3*. Quito: Observatorio de Financiamiento para el Desarrollo; 2023.
43 Ministerio de Salud Pública. *Caso Mediveza: presunta falsificación de 18 toneladas de medicamentos [Mediveza case: alleged falsification of 18 tons of medicines]*. Quito: Ministerio de Salud Pública; 2018 [cited 2025 Jul 14]. Available from: https://www.salud.gob.ec/caso-mediveza-presunta-falsificacion-de-18-toneladas-de-medicamentos/.
44 Agencia Nacional de Regulación, Control y Vigilancia Sanitaria (ARCSA). Más de 4000 medicamentos falsificados y adulterados fueron detectados en farmacia de Guayaquil [Over 4000 falsified and adulterated medicines detected in a Guayaquil pharmacy]. Guayaquil: ARCSA [cited 2025 Jul 03]. Available from: http://

controlsanitario.gob.ec/mas-de-4000-medicamentos-falsificados-y-adulterados-fueron-detectados-en-farmacia-de-guayaquil/; 2023.
45 Ortiz-Prado E, Galarza C, Cornejo León F, Ponce J. Acceso a medicamentos y situación del mercado farmacéutico en Ecuador. *Rev Panam Salud Publica*. 2014;36(1):57–62 [cited 2025 Jul 14]. Available from: https://journal.paho.org/sites/default/files/14–OPIN–Ortiz-Prado–57-62.pdf.
46 Servicio Nacional de Contratación Pública (SERCOP). Política de publicación: guía de usuario (OCDS). Quito: SERCOP [date unknown] [cited 2025 Nov 02]. Available from: https://datosabiertos.compraspublicas.gob.ec/PLATAFORMA/documentos/politica-publicacion-SERCOP-OCDS.pdf.
47 Peters BG. *Policy problems and Policy design*. Cheltenham (UK): Edward Elgar Publishing; 2018.
48 Hood C. *The tools of government*. London: Macmillan; 1983.
49 World Bank; World Health Organization. *Budget execution in health: from bottlenecks to solutions*. Washington (DC): World Bank Group; 2025 [cited 2025 Aug 25]. Available from: http://documents.worldbank.org/curated/en/099030625172546489.
50 Hanson K, Brikci N, Erlangga D, et al. The Lancet Global Health Commission on financing primary health care: putting people at the centre. *Lancet Glob Health*. 2022;10(5):e715–e772. https://doi.org/10.1016/S2214-109X(22)00005-5. Epub 2022 Apr 4. Erratum in: *Lancet Glob Health*. 2023 Apr;11(4):e504. https://doi.org/10.1016/S2214-109X(23)00035-9.
51 Ministerio de Economía y Finanzas (Ecuador). Ejecución Presupuestaria [database on the Internet]. Quito (EC): Ministerio de Economía y Finanzas [cited 2025 Jul 12]. Available from: https://www.finanzas.gob.ec/ejecucion-presupuestaria/; 2025.
52 Servicio Nacional de Contratación Pública (SERCOP). Open data – public procurement platform. Quito (EC): SERCOP [cited 2025 Jul 12]. Available from: https://datosabiertos.compraspublicas.gob.ec/PLATAFORMA/datos-abiertos.
53 Ministerio de Salud Pública; Consejo Nacional de Salud (CONASA). *Política nacional de medicamentos [National medicines policy]*. Quito: Ministerio de Salud Pública; 2017 [cited 2025 Jun 19]. Available from: https://www.salud.gob.ec/wp-content/uploads/2017/03/Politica-Nacional-de-Medicamentos-con-acuerdo.pdf.
54 Consejo Nacional de Salud (CONASA). *9na revisión: registro Terapéutico del Cuadro Nacional de Medicamentos Básicos (CNMB) [9th revision: therapeutic Register of the National Essential Medicines List]*. Quito: CONASA; 2014. Available from: https://www.salud.gob.ec/wp-content/uploads/downloads/2014/10/Registro-Terapeutico-del-CNMB-9na-revision.pdf.
55 Consejo Nacional de Salud (CONASA). *10ma revisión del Cuadro Nacional de Medicamentos Básicos (CNMB) [10th revision of the National Essential Medicines List]*. Quito: CONASA; 2019. Available from: https://www.conasa.gob.ec/wp-content/uploads/Decima_revision_Cuadro_Nacional_de_Medicamentos_Basicos.pdf.
56 Consejo Nacional de Salud (CONASA). *11ra revisión del Cuadro Nacional de Medicamentos Básicos (CNMB) [11th revision of the National Essential Medicines List]*. Quito: CONASA; 2022. Available from: https://www.salud.gob.ec/cuadro-nacional-de-medicamentos-basico-cnmb/.
57 World Health Organization. *The selection and use of essential medicines 2023: web annex A: World Health Organization model list of essential medicines: 23rd list (2023)*. Geneva: World Health Organization; 2023. (WHO/MHP/HPS/EML/2023.02). [cited 2025 Jun 22] Available from: https://iris.who.int/handle/10665/371090.
58 World Health Organization. Essential medicines. Geneva: World Health Organization [cited 2025 Jun 22]. Available from: https://www.who.int/es/news-room/fact-sheets/detail/essential-medicines.
59 Corte Constitucional del Ecuador [Constitutional Court of Ecuador]. *Sentencia No. 679-18-JP/20 y acumulados [Judgment No. 679-18-JP/20 and consolidated cases]*. Quito: Corte Constitucional del Ecuador; 2020 [cited 2025 Jul 21]. Available from: http://esacc.corteconstitucional.gob.ec/storage/api/v1/10_DWL_FL/e2NhcnBldGE6J3RyYW1pdGUnLCB1dWlkOidiY2FlZGMxZC1lNTM3LTQzMmYtOGE1Zi0xOGIyZjc3YjBlZTcucGRmJ30=.
60 Organization of American States (OAS). Protocolo adicional a la Convención Americana sobre Derechos Humanos en materia de derechos económicos, sociales y culturales: "Protocolo de San Salvador" [Additional Protocol to the American Convention on Human Rights in the area of economic, social and cultural rights: "San Salvador Protocol"]. Washington (DC): Organization of American States [date unknown] [cited 2025 Jul 18]. Available from: https://www.oas.org/es/sadye/inclusion-social/protocolo-ssv/docs/protocolo-san-salvador-es.pdf.
61 United Nations General Assembly. *Work of the Statistical Commission pertaining to the 2030 Agenda for Sustainable Development: resolution adopted by the General Assembly on 6 July 2017 (A/RES/71/313)*. New York: United Nations; 2017 [cited 2025 Aug 4]. Available from: https://undocs.org/en/A/RES/71/313.
62 World Health Organization. *Harmonized monitoring and evaluation indicators for procurement and supply management systems. Early-warning indicators to prevent stock-outs and overstocking of antiretroviral, antituberculosis and antimalaria medicines*. Geneva: World Health Organization; 2011 [cited 2025 Aug 5]. Available from: https://www.who.int/publications/i/item/9789241500814.
63 World Health Organization. *WHO pharmacovigilance indicators A practical manual for the assessment of pharmacovigilance systems*. Geneva: World Health Organization; 2019 [cited 2025 Aug 5]. Available from: https://iris.who.int/bitstream/handle/10665/186642/9789241508254_eng.pdf?sequence=1&isAllowed=y.
64 Wirtz VJ, Hogerzeil HV, Gray AL, et al. Essential medicines for universal health coverage. *Lancet*. 2017;389(10067):403–476. https://doi.org/10.1016/S0140-6736(16)31599-9.
65 Asamblea Nacional Constituyente. *Constitución de la República del Ecuador [Constitution of the Republic of Ecuador]*. Montecristi: Asamblea Nacional Constituyente; 2008 [cited 2025 Aug 08]. Available from: https://www.asambleanacional.gob.ec/sites/default/files/documents/old/constitucion_de_bolsillo.pdf.
66 *Congreso Nacional. Ley orgánica del sistema nacional de salud [Organic law of the national health system]*. Quito: Congreso Nacional; 2002 [cited 2025 Jul 21]. Available from: https://www.gob.ec/sites/default/files/regulations/2021-08/Documento_Ley%20Org%C3%A1nica%20del%20Sistema%20Nacional%20de%20Salud.pdf.
67 Consejo Nacional de Salud (CONASA). *Plan estratégico institucional 2023–2025 [institutional strategic plan 2023–2025]*. Quito: Consejo Nacional de Salud; 2023:22 [cited 2025 Aug 07]. Available from: http://www.conasa.gob.ec/wp-content/PEI/PEI_2023_2025.pdf.
68 Official Register of the Republic of Ecuador. Executive decrees 1272/2012, 814/2015, 1293/2017, 901/2019, 1018/2020, 1251/2021, 1271/2021, 1286/2021, 17/2021, 485/2022, 15/2023 and 305/2024 on the appointment of Ministers of Public Health. Quito: Office of the President of the Republic of Ecuador; 2012–2024.
69 National Health Council (CONASA). Institutional information in the national transparency portal. Quito: ombudsman's office of Ecuador. Available from: https://transparencia.dpe.gob.ec/entidades/1153.
70 Ministerio de Salud Pública (MSP); Ministerio del Interior; Ministerio de Defensa; Instituto Ecuatoriano de Seguridad Social (IESS); Instituto de Seguridad Social de las Fuerzas Armadas (ISSFA); Instituto de Seguridad Social de la Policía Nacional (ISSPOL). *Convenio marco interinstitucional ... para integrar la Red Pública Integral de Salud (No. 000011) [Inter-institutional framework agreement ... to integrate the Comprehensive Public Health Network]. Quito: Ministerio de Salud Pública* [cited 2025 Jul 21]. Available from: 2012. https://aplicaciones.msp.gob.ec/salud/archivosdigitales/documentosDirecciones/dnn/archivos/CONVENIO%20MARCO%20RED%20PUBLICA%20DE%20SALUD.pdf.
71 Ministerio del Interior; Ministerio de Defensa; Instituto Ecuatoriano de Seguridad Social (IESS); Instituto de Seguridad Social de las Fuerzas Armadas (ISSFA); Instituto de Seguridad Social de la Policía Nacional (ISSPOL); Ministerio de Salud Pública (MSP). *Convenio marco interinstitucional ... para integrar la Red Pública Integral de Salud (No. 000017) [Inter-institutional framework agreement ... to integrate the Comprehensive Public Health Network]*. Quito: Ministerio de Salud Pública; 2015 [cited 2025 Jul 21]. Available from: https://es.scribd.com/document/621282660/Convenio-Marco-Interinstitucional-RPIS-Acuerdo-Inter.
72 Ministerio de Defensa Nacional, Ministerio del Interior, Instituto Ecuatoriano de Seguridad Social (IESS). Instituto de Seguridad Social de las Fuerzas Armadas (ISSFA); Instituto de Seguridad Social de la Policía Nacional (ISSPOL); Ministerio de Salud Pública (MSP). Convenio marco interinstitucional ... (CONV-00006-2025-ABR-09) [Inter-institutional framework agreement]. Quito: Ministerio de Salud Pública [cited 2025 Jul 21]. Available from: https://www.salud.gob.ec/wp-content/uploads/2025/04/CONV-00006-2025-ABR-09.pdf; 2025.