Scoping review of the literature on the historical and economic evolution of the health systems of Chile, Uruguay, and Costa Rica

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Search Conducted in Major Scientific Journal Databases

INTRODUCTION

As part of the project Historical, Institutional, and Economic Development of Public Health Systems in Middle-Income Countries: New Horizons, Latin America in the 20th and 21st Centuries (Matus-López, 2025), we conducted a scoping review on the historical, economic, and institutional evolution of national health systems of Chile, Costa Rica and Uruguay.

The selection criteria of the cases were two. Firstly, the existence of evidence of different institutional orientations in each country. We selected a strongly market-oriented system (Chile), a universal public healthcare system (Costa Rica) and a system that transitions from the first to the second model (Uruguay). Chile initiated the creation of the National Health Service in 1952. The model was in force until 1979/1981. In that year, a pioneering reform was carried out. This reform involved the separation of functions and promotion of private insurance (then promoted by the World Bank in its 1987 report 'Investing in Health'), with a contribution obligation based on salary (solely the responsibility of the worker) and no pooling of funds. Again, since year 2005 there have been reform initiatives favoring the reunification of the system again (Illanes, 2010; Molina, 2010). In contrast, the second model follows a different logic, with the establishment of the Costa Rican Social Security Fund in 1942, based on tripartite contributions (workers, employers, and the state), and one unified solidarity fund (Botey, 2020; Mesa-Lago, 2003). The third case represents a transition from one model to another. In 1975, Uruguay's mutual health system transformed into a mixed model, organized in the private sector by Institutions of Collective Medical Assistance and in the public sector by the State Health Services Administration. In 2007, the system was reformed, creating the Integrated NHS, which unified the subsystems under a single financial manager (González and Olesker, 2009; Bernales-Baksai, 2020).

The second criterion was that results do not differ significantly from each other, ensuring current comparability. All three systems have universal coverage or coverage exceeding 95% in 2023,

and the three countries are classified by the UNDP with a Very High Human Development Index, boasting the highest life expectancies at birth in the region (UNDP 2022; PAHO 2022).

This review was carried out with the general aim of systematically mapping the scholarly literature published in indexed journals, in order to identify key concepts and trends in a complex and under-researched field (Arksey & O'Malley, 2005).

The specific objectives of this review were:

- To identify the main institutions comprising each country's health system across historical periods, including public and private actors responsible for the provision, financing, and regulation of healthcare services, and to trace their institutional evolution over time.
- To determine the legal and institutional milestones that have shaped or restructured health systems, including major laws, reforms, public policies, and relevant structural changes, with explicit reference to their dates.
- To collect and systematize quantitative information related to healthcare financing, service provision, and population coverage, with particular emphasis on statistical series, tables, and cross-country comparable data sources.
- To analyze the articles' critical appraisals or defenses of health system outcomes or reforms, identifying arguments for or against them in terms of equity, efficiency, access, quality, and sustainability.

METHOD

Sources

A scoping review of the literature on the health systems of Chile, Uruguay, and Costa Rica was conducted using the scientific journal databases Web of Science (https://www.webofscience.com), Scopus (https://www.scopus.com), and SciELO (https://www.scielo.org).

The search terms used were: public health system, health system, healthcare system, historical development, institutional development, health financing, health reform, as well as the country names: Chile, Uruguay, and Costa Rica.

WoS:	TS=("public health system*" OR "health system*" OR "healthcare system*") AND TS=("historical development" OR "institutional development" OR "health financing" OR "health reform") AND TS=(Chile OR Uruguay OR "Costa Rica")
SCOPUS:	(TITLE-ABS-KEY ("public health system*" OR "health system*" OR "healthcare system*") AND TITLE-ABS-KEY ("historical development" OR "institutional development" OR

"health financing" OR "health reform") AND TITLE-ABS-KEY (chile OR uruguay OR "Costa Rica"))

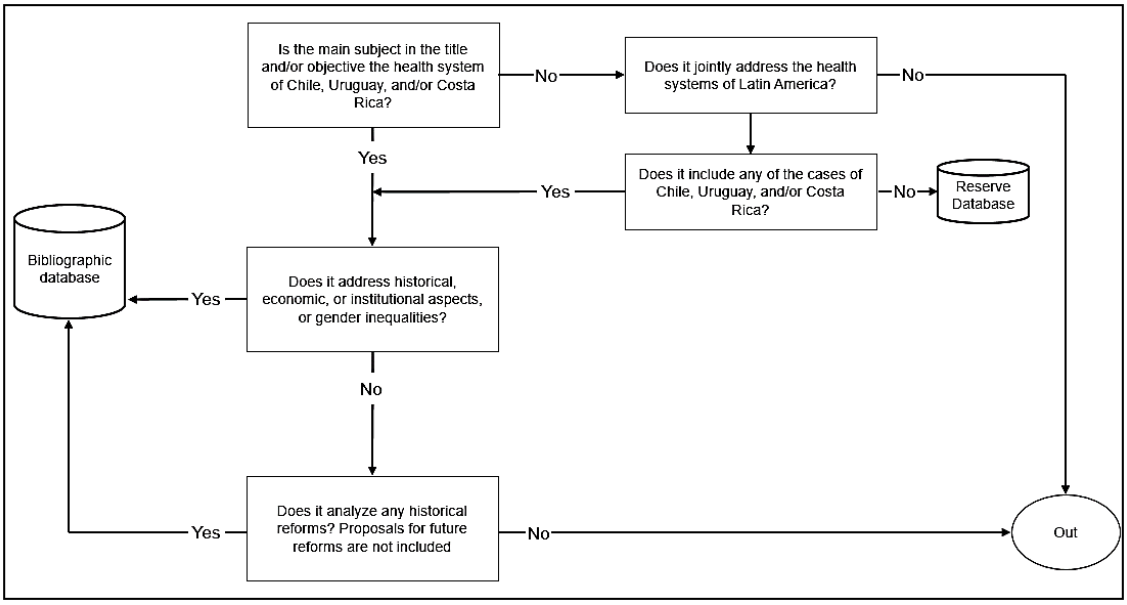
SCIELO: ("public health system*" OR "health system*" OR "healthcare system*") AND ("historical development" OR "institutional development" OR "health financing" OR "health reform") AND (chile OR uruguay OR "Costa Rica"))
("sistema" AND "salud*") AND ("historic*" OR "institucional" OR "financiamiento") AND (Chile OR Uruguay OR "Costa Rica")

Screening

First, duplicate articles were removed. Second, titles and abstracts were screened, and documents falling outside the geographical scope were excluded—specifically, those that did not explicitly, though not necessarily exclusively, address Chile, Uruguay, or Costa Rica. Third, titles and abstracts were screened again to exclude documents that did not fall within the thematic scope. This included studies that did not focus on the historical, economic, or institutional development of health systems, or on gender inequalities in access to and delivery of healthcare services.

Most exclusions corresponded to studies dealing exclusively with clinical or biomedical aspects, such as the treatment of specific diseases, risk factors, therapeutic interventions, clinical outcomes, or epidemiological studies focused on particular pathologies (Figure 1).

Figure 1. Decision Tree: Inclusion Criteria



In the Web of Science search, 37 articles were identified. Of these, two were excluded for being out of scope in terms of geographic context, and 14 were excluded for being thematically irrelevant. In Scopus, 49 articles were identified. Of these, 42 were excluded as duplicates from the previous search, and three for being thematically irrelevant. In SciELO, 33 articles were

identified, with nine duplicates from previous searches and 14 excluded for thematic reasons (see methodological note for article details). In summary, 42 articles were included for full-text analysis. For each article, information was extracted corresponding to the four predefined objectives.

RESULTS

The general analysis revealed three key findings. First, there is a low representation of studies on Uruguay (Aran & Laca, 2011; Drechsler & Jütting, 2010; Mitjavila et al., 2002; Setaro Montes de Oca, 2014; Bernales-Baksai, 2020) and Costa Rica (González et al., 2001; Macq et al., 2008; Soors et al., 2014; Spigel et al., 2020), in contrast to the predominance of studies focusing on Chile (Bernales-Baksai, 2020; Bossert et al., 2000; Cid & Uthoff, 2017; Cid et al., 2024; Dannreuther & Gideon, 2008; Frenz et al., 2013; Frenz et al., 2014; Gomes-Temporão & Faria, 2014; González et al., 2021; Herrera & Sánchez 2014; Herrera, 2014; Jiménez de la Jara, 2001; Labra, 2002;

Lenz-Alcayaga & Páez-Pizarro, 2021; Mardones-Restat & de Azevedo, 2006; Mardones, 2004; Massad, 1996; Mondschein et al., 2020; Navarrete et al., 2013; Paredes-Fernández et al., 2021; Rotarou & Sakellariou, 2017; Urriola et al., 2016; Valdivieso, 2000; Vergara-Iturriaga & Martínez-Gutiérrez, 2006; Villarroel et al., 2025; Viveros-Long & 1986; Waitzkin & Modell, 1974; Zúñiga Fajuri, 2007).

The publication years range from 1974 to 2025, with a concentration of articles between 2000–2002 and 2019–2021, though not directly linked to the COVID-19 pandemic. There is also little author repetition: no author appears in more than two documents, and most are co-authors of a single article. Notably, several authors have held high-level political positions in public health administration.

a) Health system institutions

In the case of Chile, the most frequently mentioned institutions are the National Health Fund (FONASA) (27 mentions), the Ministry of Health (MINSAL) (24 mentions), and the Private Health Insurance Institutions (ISAPRE) (23 mentions). The Health Superintendency (SUPER) is also referenced in 11 articles. For Costa Rica, the Costa Rican Social Security Fund (CCSS) is the most prominent (4 mentions), followed by the Ministry of Health (2 mentions). In Uruguay, the most frequently cited institutions are the Collective Medical Care Institutions (IAMC) (4 mentions),

the Ministry of Health and the State Health Services Administration (ASSE) (3 mentions each), and FONASA (3 mentions).

b) Key reforms shaping the institutional framework

In Chile, the most frequently cited milestones are the dictatorship-era reforms, which created FONASA and ISAPRE between 1979 and 1985 (13 mentions); the AUGE reform and creation of SUPER between 2005 and 2007 (12 mentions); and the modernization reforms of the mid-1990s (3 mentions). In Costa Rica, key milestones include the founding of CCSS in 1948 (3 mentions), the strengthening of social insurance in the 1970s (2 mentions), and primary care reforms in the 1990s (3 mentions). For Uruguay, the cited milestones are the creation of ASSE in 1987 (3 mentions), the consolidation of IAMC in the early 1980s (2 mentions), and the reform that established the Integrated National Health System (SNIS) between 2005 and 2007 (4 mentions).

c) Quantitative data on financing, production, and coverage

In all cases, the data presented are fragmented or limited to specific years, or at best, short periods. Beyond widely used indicators such as mortality or GDP, there is little long-term data on financing, service use, or health coverage. In Chile, relevant contributions include Vergara-Iturriaga & Martínez-Gutiérrez (2006), offering figures on beneficiaries by insurance system and the evolution of public and private health expenditure (1984–2003), Lenz-Alcayaga & Páez-Pizarro (2021), with revenue and expenditure data for FONASA and ISAPRE (2000–2018), and Labra (2002), presenting data on health financing sources for the years 1989, 1992, and 1998.

For Costa Rica, no study presents tables or figures covering financing, coverage, or service use for periods longer than five years. In Uruguay, the work by Mitjavila, Fernández & Moreira (2002) stands out with data on health spending for five years between 1987 and 1995 and a detailed breakdown by source for 1995.

d) Defense or critique of system performance or reforms (in terms of health and coverage)

Studies on Chile emphasize structural segmentation and inequality, noting that those with the greatest needs are often not those receiving the most care. The efficiency and integration of care levels, as well as regulatory weaknesses in the AUGE reform, are also criticized. However, AUGE is recognized for expanding coverage and improving service guarantees.

In Costa Rica, evaluations are mostly positive, highlighting solidarity and equity in access. Criticisms center on inefficiencies associated with CCSS's public monopoly.

Studies on Uruguay view the 2007 SNIS reform favorably, praising its redistributive orientation, benefits integration, and governance model. The reform is credited with reducing out-of-pocket expenditures and enhancing structural equity. Uruguay is presented as a successful mixed model, with strong public regulation and broad complementary private coverage.

DISCUSSION

The literature review provides valuable insights but also reveals several limitations. The main limitation is that much of the relevant research is not published in internationally indexed journals. Case study research—especially on countries other than the United States or major European nations—has limited visibility in the scope of these journals. A considerable body of work exists in non-indexed journals or repositories not fully covered by Web of Science, Scopus, or SciELO. Additionally, important books on the historical development of health institutions—such as Illanes (2010) or Molina (2010) in Chile, or Botey (2010) in Costa Rica—are excluded. Also absent are institutional reports and monographs, such as those published by ECLAC or United Nations, including Titelman (2000) for Chile, Labadie et al. (1994) for Uruguay, Rodríguez (2005) for Costa Rica, or Mesa-Lago (2005) for the region. Despite these limitations, the review provides relevant information consistent with findings in broader sources. First, it confirms the prominence of research on the Chilean model, likely due to its distinctive characteristics globally, such as the separation of functions and the prominent role of private insurers. While Chile's population and health sector are larger than those of Uruguay or Costa Rica, the scale of scholarly attention exceeds these differences. Second, the results align with expectations, albeit with gaps in periods and areas. For Chile, both the neoliberal reform under the dictatorship (from 1979) and the AUGE reform in democracy (from 2005) are frequently mentioned. The main institutions discussed reflect the current configuration: FONASA, ISAPRE, and the Health Superintendency (SUPER) created in 2007. However, there is limited reference to the original National Health Service (SNS), established in 1952 and active until 1979.

In Costa Rica, the CCSS dominates the system and time period, with reforms focusing on primary healthcare in the 1990s and some efficiency improvements. Despite the public monopoly, there is scant discussion of the private sector’s evolution and reforms toward greater public-private collaboration.

In Uruguay, studies mainly focus on the 2007 reform and emphasize its achievements in terms of equity compared to the previously segmented model. However, little attention is given to the pre-reform context.

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