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# Regulating self-selection into private health insurance in Chile and the United States

Arturo Vargas Bustamante<sup>1\*</sup> and Claudio A. Méndez<sup>2</sup>

<sup>1</sup>*Health Policy and Management, UCLA Fielding School of Public Health, Los Angeles, California, USA*

<sup>2</sup>*Instituto de Salud Pública, Universidad Austral de Chile, Valdivia, Chile*

## SUMMARY

In the 1980s, Chile adopted a mixed (public and private) model for health insurance coverage similar to the one recently outlined by the Affordable Care Act in the United States (US). In such a system, a mix of public and private health plans offer nearly universal coverage using a combined approach of managed competition and subsidies for low-income individuals. This paper uses a “most different” case study design to compare policies implemented in Chile and the US to address self-selection into private insurance. We argue that the implementation of a mixed health insurance system in Chile without the appropriate regulations was complex, and it generated a series of inequities and perverse incentives. The comparison of Chile and the US healthcare reforms examines the different approaches that both countries have used to manage economic competition, address health insurance self-selection and promote solidarity. Copyright © 2015 John Wiley & Sons, Ltd.

KEY WORDS: self-selection; health reform; comparative systems; Chile; United States

## INTRODUCTION

Recent healthcare reform efforts in Chile and the United States (US) have changed the financing and organization of their respective healthcare systems (Table 1). Reform efforts in both countries were implemented 30 years apart under very different political, institutional and healthcare environments. Health system changes in both countries, however, shared similar goals. Specifically, these reforms pursued the expansion of public and private health insurance coverage, the promotion of consumer choice, health insurance market regulations to improve risk pooling and market information, among others considered under the “managed competition” framework (Enthoven, 1993). The underlying assumption of healthcare reforms in Chile and the US was that health insurance competition would improve efficiency and cost control at the same time it increased health insurance coverage.

\*Correspondence to: A. Vargas Bustamante, Health Policy and Management, UCLA Fielding School of Public Health, Los Angeles, California, USA. E-mail: avb@ucla.edu

Table 1. Health insurance systems in Chile and the US

	Chile	United States
Health insurance financing	Universal payroll tax of 7% of wages plus individual supplemental coverage. General taxation is used to subsidize public insurance.	A variable mix of employer, individual and government (federal, state and local) contributions.
Employer-provided coverage	Private employers are not responsible for financing or providing health insurance coverage to employees.	Private employers are the main providers of health insurance (48% of the US population) jointly financed with employees.
Private health insurance coverage	Approximately 18% of Chileans are enrolled in one of the existing private health insurance plans called ISAPRES ( <i>Instituciones de Salud Previsional</i> ).	Approximately 56% of US residents are covered by private health insurance, primarily from employer-provided coverage or from the federal and state health insurance exchanges.
Public health insurance coverage	FONASA ( <i>Fondo Nacional de Salud</i> ) and the military health system offer health insurance coverage to individuals not covered by ISAPRES.	Medicare, Medicaid and other public health insurance plans cover the elderly, low-income, veteran and military population, respectively.
Switching between public and private insurance	Transfers between public and private coverage are unrestricted. Those who are not enrolled in ISAPRES are eligible for FONASA coverage. Most older adults (~90%) switch back to FONASA in the old age.	Income and employment determine whether individuals are covered by public or private health insurance. Medicare and Medicaid enrollees can opt out for private coverage depending on income, type of service and place of residences.
Health insurance mandate	Health insurance coverage is considered a right. Individuals not covered by private health plans are eligible for public insurance.	Two health insurance mandates for individuals and small employers. Prisoners, undocumented immigrants, among others are exempted from the health insurance mandate.
Health insurance regulation	A government regulatory agency, <i>Superintendencia de Salud</i> , is in charge of regulating public and private health insurance.	Private health insurance is regulated by multiple state and federal agencies. Different government agencies manage and oversee public health plans.
Health care provision	Public and private providers can be accessed either through public or private insurance. Approximately 66% of care for FONASA enrollees is delivered in public facilities. Most care for ISAPRES enrollees is delivered in private facilities.	Most healthcare is delivered through a fragmented network of private (for profit and non-for profit) and public providers that are reimbursed by public or private insurers. Some integrated health systems are both insurers and providers.
Uninsured individuals	All residents in Chile are covered either by public or private health insurance plan.	Since the ACA implementation, the number of uninsured individuals declined 35% from 45 to 30 million.

Sources: Bustamante and Mendez 2014; Kaiser Commission on Medicaid and the Uninsured 2010b; Superintendencia de Salud 2007 and U.S. Department of Health and Human Services 2015. US, United States; ACA, Affordable Care Act.

While the origin and evolution of the mixed health systems of these two countries differs substantially, Chile and the US have implemented similar policies to address self-selection into private health insurance (Table 2). The reform agenda in Chile shares many similarities with the one framed by the Obama administration. Both countries have used a combination of health insurance expansion through a public–private health insurance mix and the introduction of new market regulations for private health insurers (Kaiser Commission on Medicaid and the Uninsured 2010). These policies, however, were introduced in the US as part of the Affordable Care Act (ACA) legislation in 2010, which was democratically approved by Congress. In the case of Chile, they were introduced in a series of minor reforms that began in the 1990s until the mid 2000s, which have tried to correct different market failures related with the mixed health system that was unilaterally imposed by a military dictatorship in 1979.

Table 2. Policies implemented in Chile and the United States to address self-selection

	Chile	United States
Regulating economic competition	Enforcement of anti-trust regulations to prevent the collusion of ISAPRES	The Affordable Care Act (ACA) created new federal and state health insurance exchanges to regulate competition among private health plans for the individual market.
Consumer information	<i>Superintendencia de Salud</i> ranks ISAPRES by performance, administrative costs and other indicators to guide consumer choice.	Employers, the health insurance exchanges and different state and government agencies disseminate information about private health plans to assist consumer choice.
Essential health benefits	Plan AUGE ( <i>Acceso Universal de Garantías Explícitas</i> ) defined cost-effective health services (currently 80) that all public and private health plans are required to offer.	The ACA defined 10 categories of health services (specific number varies within each category) that any health insurance plan in the health exchanges is required to offer.
Consumer choice restrictions	Consumer choice in FONASA is determined by income and subsidized category. The number of ISAPRES and health plans has gradually declined since Plan AUGE was implemented.	Consumer choice is restricted to four different tiers where plans compete in terms of cost sharing and provider choice, not based on the number and type of health services covered by the policy.
Health plan restrictions	ISAPRES were allowed to adjust premiums based on gender until 2014. They are still allowed to adjust premiums based on age. Further government restrictions on medical underwriting are not allowed by the Constitution.	The ACA eliminated lifetime limits on health insurance coverage, prohibited insurers from rescinding coverage except in cases of fraud and banned pre-existing condition exclusions from any health insurance plan coverage.

Sources: Bustamante and Mendez 2014; Kaiser Commission on Medicaid and the Uninsured 2010b; Superintendencia de Salud 2007 and U.S. Department of Health and Human Services 2015.

The experience of Chile and its mixed market-based model has often been criticized in the health policy literature as one that enhanced social inequalities, increased administrative costs and mostly benefited the wealthier and healthier sectors of the population (Holst, Laaser and Hohmann, 2004; Homedes and Ugalde 2005; Paraje and Vasquez 2012; Vasquez, Paraje and Estay 2013). Unrestricted self-selection into public or private health insurance has translated into market segmentation and increased administrative costs (Holst, Laaser and Hohmann, 2004; Mesa-Lago, 2008; Sapelli, 2004). Chile achieved nearly universal health insurance coverage using a public–private mix; however, inequities have increased as well (Unger *et al.* 2008; Frenz *et al.* 2013).

In the US, the ACA has expanded health insurance coverage to approximately 17 million of the 45 million individuals who were uninsured in 2012 (Carman, Eibner and Paddock 2015). The full implementation of the ACA is expected to last until 2019 (Light, 2011; Marmor and Oberlander 2011). A health insurance mandate for individuals has already been implemented, and subsidized coverage is currently available through newly created health insurance exchanges. An additional component of this legislation was the expansion of public insurance eligibility under Medicaid in 29 out of 50 US states, a public program for low-income individuals (Kaiser Commission on Medicaid and the Uninsured 2010a).

This paper compares the Chilean and US models of healthcare reform focusing on how the two countries have addressed self-selection into private insurance (Tables 1 and 2). Using a most different case comparison, this study argues that Chile and the US have gradually regulated economic competition, restricted consumer choice, defined essential health benefits and disseminated information to the public to address self-selection. The first section describes the conceptual framework and describes the trade-off between economic competition and solidarity in national health systems. The second section examines healthcare reform in Chile and the US, focusing on patient self-selection incentives and policies that have been implemented to tackle this behavior. The third section implements the comparative analysis of recent reform experiences in Chile and the US. The last section provides some conclusions from the comparative analysis.

## CONCEPTUAL FRAMEWORK

### *Solidarity and competition in national health systems*

The main virtue of health insurance is the reduction of risks associated with uncertain and costly individual health expenses through risk pooling. Public and private health insurers (for-profit and non-for-profit), however, have different incentives to promote risk pooling. Private insurers, particularly those insuring individuals, would seek to cover their costs by collecting premiums that match individuals' expected expenses. In a free market, private insurers would charge higher prices to individuals who are expected to represent higher risks (Pauly, 2005). This financing mechanism, however, is inequitable. Public insurers and large collectives (e.g., employer-provided health insurance), by contrast, could pool risks of uncertain individual health expenditures through solidary transfers across sick and healthy, low-income

and high-income, young and older individuals. National health insurance has the greatest risk pooling potential because it can aggregate individual risks of entire nations. The scope of these solidary transfers in society would reflect “the social welfare vision of universal benefits” shared by citizens of a particular country (Dixon, Pfaff, and Hermesse 2004).

Economic competition represents the opposite of solidarity because individuals pursue their own self-interest to maximize individual utility (Dixon *et al.* 2004). Unrestricted competition among health insurers would lead to a “market failure” known as self-selection that occurs when individuals choose health insurance plans based on expected utilization (Glied, 2001). In other words, when sick and older individuals with high expected health care utilization purchase more generous health insurance policies, while healthy and younger individuals with low expected health care utilization purchase less generous health insurance policies. The reduction in solidary transfers in society that arises from this selection process can leave health plans that cater to vulnerable populations underfunded.

A theory that tried to reconcile the opposite forces of solidarity and economic competition was the concept of “managed competition” (Enthoven, 1993). This framework suggested that when competition was properly “managed” or regulated, it could lead to more efficient healthcare provision, improved healthcare quality, increased choice and more transparency in cross-subsidies across health insurance funds (Enthoven, 1988). According to this market-based theory, market failures could be corrected through a mix of regulations (e.g., not allowing patient or treatment exclusions and health insurance mandates), payment mechanisms (e.g., incentives for cost-effective treatments, pay-for-performance to providers and demand subsidies) and dissemination methods (e.g., providing information to consumers) (Enthoven, 1993). More recently, the concept of “managed consumerism” has emphasized the role of patients as drivers of “consumer-driven” healthcare (Robinson, 2005). Under this updated framework, consumer choice became the main instrument to incentivize quality of care among healthcare providers.

While the managed competition model has been popular as a model of recent health care reform efforts, in practice it has been challenging to implement. Countries with professional bureaucracies such as Switzerland, Germany, the Netherlands and Israel that implemented different variations of the managed competition model have struggled to enforce health insurance mandates and have failed to control increasing healthcare costs. A constant across these countries is that consumer choice has not translated into more cost-effective healthcare systems. Self-selection has not been prevented because research shows that health plan switching continues to occur among young, healthy and higher-income individuals (Schut and Hassink 2002; Dixon *et al.* 2004; Okma *et al.* 2010; Okma, Marmor, and Oberlander 2011; Okma and Crivelli 2013). From an equity perspective, solidary transfers in society have diminished. Economic rents from private health insurance collusion, high administrative costs, weak market regulations and noneconomic consumer choices are additional pervasive behaviors from market competition, which violate the basic assumptions of this model (Dixon *et al.* 2004; Okma and Crivelli 2013).

Compared with alternative frameworks of healthcare organization and financing, such as single-payer systems, healthcare systems that have embraced managed

competition are more costly to operate and regulate, while healthcare quality and outcomes are not necessarily better (Dixon *et al.* 2004; Okma *et al.* 2010; Okma and Crivelli 2013). Political realities, however, are likely to preserve mixed health systems in many countries. For instance, in 2014, Swiss voters rejected the creation of a single-payer system in spite of the high cost and selection issues in their current health system (Millman, 2014).

## CROSS-COUNTRY COMPARISON

The healthcare systems of Chile and the US have significant private health insurance sectors compared with other countries (Table 1). In 2010, private health insurance plans covered approximately 17% of the population in Chile, and 56% of the US population (The Commonwealth Fund 2013; Bustamante and Mendez 2014). These two cases have often been used in the literature as examples of how unrestricted private health insurance competition has translated into increased self-selection and reduced solidarity (McPake and Mills 2000; Sapelli and Vial 2003). This study uses the “most different” case study method to compare the health systems of Chile and the US because both health systems differ in their evolution, organization and characteristics. These two countries, however, are similar in two essential aspects, the “causal variable of interest” (i.e., fragmented public–private health insurance systems) and the outcome (i.e., self-selection) (Seawright and Gerring 2008). Recent reform efforts in Chile and the US have also addressed self-selection regulating economic competition, restricting consumer choice, defining essential health benefits and disseminating information to the public (Table 2).

### *The case of Chile*

Chile was one of the first countries in the Americas that introduced social health insurance. This system evolved progressively into a social health insurance system until it was abruptly changed during the military regime of Augusto Pinochet in 1981 (Jost, 2001). Pinochet’s advisors who were trained at the University of Chicago under the principles of free-market competition designed this reform, which introduced free choice and a mixed public–private health insurance system to Chile (Mesa-Lago, 2008). Importantly, these reforms were implemented in a top-down authoritarian way that prevented any political discussion or dissent against them (Bustamante and Mendez 2014).

Soon after a mixed health system was adopted, Chileans were allowed to opt out to the private sector from FONASA (*Fondo Nacional de Salud*), the main public health plan that was created in 1979 by merging public healthcare providers, with the single exception of the military health system (Sapelli and Torche 2001). With the creation of ISAPRES (*Instituciones de Salud Previsional*), a new health insurance market composed of private managed care organizations rapidly emerged to compete for enrollees with FONASA (Barrientos and Lloyd-Sherlock 2000). Initially, some of these private health plans either established partnerships or were



partly owned by US managed care organizations (Perez-Stable, 1999; Iriart, Merhy, and Waitzkin 2001).

Under the reformed healthcare system, employer contributions were eliminated to encourage consumer choice and labor flexibility. Employees were allowed to channel their mandatory payroll contributions of 7% to either FONASA, or the ISAPRE of their choice. The newly created private health plans offered subscribers both outpatient and inpatient care on a cost-sharing basis using their own facilities or under contract with private (profit and non-for-profit) and public providers (Cruz-Saco and Mesa-Lago, 1998). Choice was not restricted to those who remained under FONASA, because enrollees were allowed to receive care from different public, private and non-for-profit providers, on a cost sharing basis (Sapelli and Torche 2001).

In the last two decades, Chile has been able to reach universal health insurance coverage with a mixed public and private health system. Self-selection into private insurance, however, is still prevalent, and it has translated into high health spending inequities and reduced solidarity (Homedes and Ugalde 2005; Bustamante and Mendez 2014). The expected economic competition between ISAPRES and FONASA did not materialize. On the contrary, the population was segmented in two groups, one of individuals who were profitable for private health plans and another of individuals either who were unable to afford private coverage or who were excluded from private plans when they became unprofitable. Several studies have documented how private health plans have been more likely to “cherry pick” high-income and low-risk individuals to minimize their financial exposure through price discrimination and indirect experience rating (Jost, 2001; Sapelli, 2004; Homedes and Ugalde 2005). ISAPRES adjusted their premiums based on age and gender, which translated in higher premiums for women and older adults. In 2014, however, premium adjustment based on gender was outlawed (Table 2).

As a public entity, FONASA was made responsible of providing coverage to all individuals not covered by an ISAPRES. With a pool of members that has consistently been older, poorer and sicker, FONASA was unable to compete with ISAPRES in similar circumstances. Since its creation, FONASA has traditionally catered to older, sicker and less affluent individuals because of medical underwriting at ISAPRES and the strategic behavior of enrollees. This selection process has translated into significant health financing inequities. For instance, FONASA insures five times more individuals than the ISAPRES system; however, ISAPRES spends twice as much on its average members than FONASA does on its most costly enrollees (Superintendencia de Salud 2007). In addition, FONASA has experienced other restrictions that have not applied to ISAPRES such as public budget restrictions, the responsibility to implement new coverage expansion programs and other government-agency regulations (Bastias *et al.* 2008).

Until the late 1990s when it was first possible to identify individuals who were enrolled in ISAPRES, individuals used public and private healthcare facilities strategically (Sapelli and Vial 2003). Even nowadays, a regular practice for ISAPRES enrollees has been to switch to FONASA in the old age. FONASA insures approximately 90% of individuals over 65 years of age (Superintendencia de Salud 2007). This behavior has undermined solidarity in the Chilean health system and has adversely reduced risk pooling because individuals who switch do not contribute



to FONASA's funding during their healthy years, but use its services in the old age when healthcare utilization is more intensive.

### *The case of the United States*

By contrast with the Chilean case, the evolution of the US healthcare system has been more organic and linked to its political process of gradual expansion of public coverage to specific populations (Light, 2011). A fragmented health system of public health insurers currently covers the elderly, low-income and veteran populations through Medicare, Medicaid and the Veteran's Administration, respectively (Table 1). Until recently, the rest of the US population was either covered by employer-provided private health insurance or they remained uninsured (The Commonwealth Fund 2013).

The passing of the ACA was the most ambitious healthcare legislation approved by the US Congress since 1965. This legislation did not radically transform the organization of the fragmented public and private health system; however, it introduced new regulations, financial mechanisms and incentives to expand health insurance coverage and changed the operation of the private health insurance market (Hurst, 1992; Light, 2011; Marmor and Oberlander 2011; U.S. Department of Health and Human Services 2015). When fully implemented, the ACA is expected to offer affordable health insurance coverage to approximately 32 million of the 45 million individuals who were uninsured in 2012 (Congressional Budget Office 2012). The full implementation of the ACA was projected to last until 2019.

The ACA allowed individuals without employer-provided coverage to either purchase private health insurance in either state or federally administered health insurance exchanges, join their parent's private insurance if they were under 26 years of age or enroll in Medicaid (Kaiser Commission on Medicaid and the Uninsured 2010b; Chen, Bustamante, and Tom 2015; U.S. Department of Health and Human Services 2015). Subsidized coverage became available through tax credits in the health insurance exchanges, and Medicaid's eligibility was expanded (U.S. Department of Health and Human Services 2015). To incentivize enrollment either into the exchanges or Medicaid, two health insurance mandates were introduced. A health insurance mandates for individuals that have been in place since 2014, and a mandate for small businesses that was delayed until 2016 (Kaiser Commission on Medicaid and the Uninsured 2010a; Jones, Bradley, and Oberlander 2013). When this second mandate gets implemented, small employers (50 employees or more) would have to offer health insurance to their employees or pay a penalty that would be used to finance subsidies in the exchanges.

Since the passing of the ACA in 2010, it has faced strong opposition from the Republican Party at the federal and state levels. Different court cases have challenged its legality, particularly the health insurance mandate, the subsidies in the federal health insurance exchanges and the Medicaid expansion (Carman *et al.* 2015). The ruling from the US Supreme Court that upheld the ACA in 2012 made the Medicaid expansion (up to 133% the Federal Poverty Level) voluntary for US state governments. Approximately half of US states (21 out of 50) decided not to expand Medicaid, although some of these states could ultimately choose to expand it in the future (Kaiser Commission on Medicaid and the Uninsured 2014).

According to the Congressional Budget Office, approximately 3 million fewer individuals would have insurance as a result of the court's decision (Congressional Budget Office 2012). In addition to low-income populations in states where the Medicaid program will not be expanded, gaps in health insurance coverage are likely to remain particularly among US immigrants. The ACA excluded undocumented immigrants from all its programs (Zuckerman, Waidmann, and Lawton 2011). Documented immigrants with 5 years or less of US residence will continue to be excluded from Medicaid coverage (Zimmermann and Tumlin, 1999; Kaiser Commission on Medicaid and the Uninsured 2006; Vargas Bustamante and Chen 2014).

## COMPARATIVE ANALYSIS

### *Restricting self-selection in Chile*

With the advent of democracy in Chile, policy makers acknowledged that the fragmented health insurance market and the lack of adequate regulations undermined solidarity across health insurance funds and promoted the regressive financing of health insurance (Mesa-Lago, 2008). New policies were implemented to reduce self-selection and improve the functioning of the private health insurance market through reduced health plan heterogeneity, dissemination of information about the performance of private health plans and the definition of essential health benefits (Jost, 2001; Sapelli and Vial 2003; Holst, Laaser and Hohmann, 2004; Sapelli, 2004).

Reform of the mixed health system inherited from the military regime began with transition to democracy in the 1990s when the *Superintendencia de ISAPRES* later renamed *Superintendencia de Salud* was created to regulate all health insurance plans (Bustamante and Mendez 2014). This agency used a "managed consumerist" approach to improve the transparency of the private marketplace by providing information directly to consumers about the performance of ISAPRES, which would allow them to make more informed choices (Robinson, 2005). The Chilean constitution, however, limited the scope of regulations that the *Superintendencia* could implement to minimize self-selection through exclusionary clauses, pre-existing conditions and treatment denials. Even if more market transparency made health plan failures more transparent, market segmentations remains heavily skewed in favor of ISAPRES (Superintendencia de Salud 2007).

During the military regime, employer-provided health insurance was eliminated under the assumption that a broader pool of individuals would be able to purchase health insurance coverage. Eliminating employer contributions was expected to increase job flexibility and allows self-employed uninsured individuals to purchase individual coverage. Shopping for health insurance coverage became the sole responsibility of individual consumers, who were able to enroll in the health plan of their choice. Previous research, however, argues that this policy proved to be a big mistake (Bustamante and Mendez 2014). The fragmentation of the private health insurance market reduced the possibilities of creating robust risk pools that could provide bargaining power to negotiate lower prices and more comprehensive coverage with private health insurers and providers.

Individual health insurance coverage, however, triggered health plan and individual self-selection. When ISAPRES were created in Chile, they started to offer a wide range of health plans and additional elective coverage that made it difficult for consumers to understand and compare among health insurance options (Cruz-Saco and Mesa-Lago, 1998). Because health insurance contracts could include multiple combinations of services, exclusions and cost sharing agreements, private plans used these mechanisms to attract profitable members and exclude enrollees who became too costly. To address this fragmentation of health insurance plans, government regulators aimed at reducing the number of health plans available in the marketplace through the definition of essential health benefits.

The implementation of plan *Acceso Universal de Garantías Explícitas* (AUGE) introduced a minimum healthcare package of essential health services that all public and private health plans had to provide and issued regulations on the packaging of additional elective coverage (Frenz *et al.* 2013). With the implementation of this reform, the number of health plans available in Chile declined from 40 586 in 1989 to 6914 in 2005 (Superintendencia de Salud 2007). The implementation of plan AUGE initially included 56 essential health benefits that were cost-effective (Dannreuther and Gideon 2008). Over time, Plan AUGE has added 24 additional health benefits as Chile has become more affluent.

The reduction in health plan heterogeneity contributed to the consolidation of ISAPRES from 16 in 1999 to nine ISAPRES open to the public in 2006 (Superintendencia de Salud 2007). Collusion practices of the bigger five ISAPRES that concentrate 98% of the private health insurance market have regularly been scrutinized and addressed by anti-trust regulators in Chile (Mesa-Lago, 2008). Closer scrutiny from government regulators, stringent regulations and restrictions on health plan heterogeneity have limited the tools previously used by private health plans to encourage enrollee selection (Table 2). If present trends continue, more convergence between public and private health plan offering could be expected, because the number of elective treatments available through ISAPRES would decline.

A second component of plan AUGE was to reform the financing of FONASA to offer health insurance coverage to all remaining uninsured individuals. Because Chile has a widespread value added tax, all residents contributed to the funding of four different income categories under FONASA, which subsidized enrollees accordingly. The new benefit packaging offered similar benefits to all FONASA enrollees; however, cost sharing and provider choice were used to differentiate across enrollees in the four categories (Bastias *et al.* 2008). For instance, when FONASA enrollees use private services, copayments are determined based on their income category (Bustamante and Mendez 2014).

Increased market transparency, more government scrutiny, reduced consumer choice and universal coverage have been positive outcomes of recent healthcare reform efforts in Chile; however, self-selection remains widespread. Individuals and health plans continue to behave strategically by enrolling in the ISAPRES system when they are healthy and young, and shifting to FONASA when they are older and sicker (Sapelli and Vial 2003). The unrestricted transfer between public and private health plans has encouraged this opportunistic behavior.

Future healthcare reform efforts in Chile could consider the creation of additional regulations and fees to restrict these transfers, like in the German healthcare system, where it is increasingly difficult to return to the public system for those individuals who voluntarily opt out for private coverage (Bärnighausen and Sauerborn 2002; Nuscheler and Knaus 2005). The Chilean government could consider an opting in fee for those enrollees who want to return to FONASA after contributing all their productive lives to an ISAPRES. Additional policies to regulate choice and promote competition among ISAPRES could be considered to reduce the inequitable financing of the Chilean health system.

### *Restricting self-selection in the United States*

A health insurance mandate is one of the most effective ways of preventing self-selection according to the “managed competition” theory (Enthoven, 1993). Before the ACA was approved in 2010, widespread selection issues and exclusion practices in the US health system were in big part because of the voluntary nature of health insurance coverage. Health insurers lacked information on the real motives that individual shoppers had to buy insurance, especially if they were not young or sponsored by an employer. They ignored whether prospective enrollees were behaving opportunistically. Health insurers thus charged a high-risk premium on these policies and applied several exclusions.

The ACA introduced two health insurance mandates for individuals and employers that could potentially improve the functioning of the US health insurance market and may reduce self-selection over time (Kaiser Commission on Medicaid and the Uninsured 2010b). With the introduction of an individual health insurance mandate, most adults in the US who were eligible for ACA-related coverage were required to have insurance. Those who purchased insurance and were healthy and uninsured began contributing to health insurance funds to avoid paying a penalty that was expected to increase over time. New contributions from healthy and young individuals increased intra-personal transfers and reduced coverage costs and the need for exclusionary policies (Chen *et al.* 2015).

A new set of rules in the private health insurance marketplace eliminated lifetime limits on health insurance coverage, prohibited insurers from rescinding coverage except in cases of fraud and banned pre-existing condition exclusions from health plan coverage (Kaiser Commission on Medicaid and the Uninsured 2010). In addition, young adults were allowed to remain under their parent’s health insurance until age 26 (Chen *et al.* 2015). In contrast with Chile, where all salaried employees were able to choose between public and private coverage, in the US, competition in the private sector was restricted to the provision of employer-provided health insurance coverage and within the health insurance exchanges (Jost, 2012).

As in the Chilean case with Plan AUGE, the ACA defined a comprehensive list of essential health benefits that all providers had to offer, which improved comparability across health plans (Table 2). Competition among plans was simplified using four “metallic” tiers (Bronze, Silver, Gold and Platinum) that corresponded to similar levels of cost sharing and provider choice across all private health plans (Kaiser Commission on Medicaid and the Uninsured 2010b). Bronze plans were more

affordable, but had fewer network provider choices (e.g., physicians, laboratories and hospitals) and higher cost sharing. By contrast, Platinum plans were more expensive, but patients had more provider choice and cost sharing was lower.

The ACA did not eliminate employer-provided health insurance coverage as in Chile (Table 2). Increasing healthcare costs encouraged employers to reduce self-selection among employees of the same organization by introducing new plan offerings and choice restrictions. The bargaining power of large employers with private health insurers was also preserved. Employers representing collectives of employees were still able to negotiate better terms from private health insurers, transferring a share of these savings to their employees. For those who were self-employed or who worked with small employers with low bargaining power, the government-managed exchanges aggregated health risks into bigger pools that ultimately translated into more affordable health insurance coverage. These clearinghouses prevented self-selection by reducing choice and promoting solidary transfers in society.

By contrast with Chile where self-selection is due to unrestricted switching between public and private coverage, in the US, selection between public and private plans remained restricted (Table 2). Public plans primarily served two vulnerable groups, the elderly and low-income populations through Medicare and Medicaid, two government-run plans that provide health insurance coverage to older adults and low-income individuals, respectively. These plans traditionally operated as single-payer public insurers. In the last two decades, however, opt-out options into private managed care organizations among Medicare and Medicaid enrollees have become widespread.

### *Comparing self-selection regulations in Chile and the United States*

Self-selection into public or private health insurance in mixed systems can increase healthcare inequities and costs. Recent healthcare reform experiences in Chile and the US suggest that the strategic behavior of health insurance enrollees is one of the main challenges faced by mixed health systems. In an unrestricted free-market environment, private plans (as profit-maximizing entities) will “cherry pick” the most profitable patients, leaving taxpayers to subsidize enrollees who would enroll into public insurance plans or who would remain uninsured. Chile and the US offer important lessons on how to address self-selection into private insurance.

While self-selection is unlikely to disappear in fragmented health insurance system, both Chile and the US have introduced regulations and restrictions to consumer and health plan choice to minimize it (Table 2). The US has been the most radical of the two countries because the ACA has prohibited individual and group health plans from placing lifetime limits on health insurance coverage, and insurers are no longer allowed to rescind coverage and cannot exclude coverage of pre-existing conditions. The “managed consumerism” approach implemented in Chile, however, has been less effective because it primarily promotes transparency in the private marketplace and attempts to use consumer choice as a tool to improve the private health insurance performance. The ongoing strategic behavior of enrollees in the Chilean health system suggests that a more radical approach like the one implemented in the US could be considered to address self-selection and health financing inequities.

Another constant in the two case studies was the simplification of health plan offerings (Table 2). Chile and the US realized that unrestricted economic competition among insurers generated incentives for product differentiation. Increased health plan heterogeneity was more likely to mislead individuals and increase selection instead of promoting efficiency, healthcare quality or cost control as predicted by the managed competition model. Healthcare reform efforts in both countries have restricted consumer choice by establishing a minimum threshold of essential health benefits that all public and private health insurance plans have to provide (Table 2). In Chile under plan AUGE, these requirements reduced by approximately 82% the number of health plans available in the private marketplace. Similarly, the ACA introduced health insurance exchanges where plan competition was restricted to four different tiers, where plans competed in terms of cost sharing and provider choice, not based on the number and type of health services covered by the policy.

Health insurance expansion also helped to tackle self-selection by improving risk pooling and by increasing contributions into health insurance funds. Chile and the US expanded health insurance to large numbers of uninsured individuals using public health plans. In the case of Chile, plan AUGE created new subsidized categories under FONASA, which were funded through general taxation. In the US case, public plans for the elderly and low-income individuals continued to operate, while the latter program was expanded. In addition, public subsidies and limits on cost-sharing became available to low-income individuals who purchase private health insurance coverage in the health insurance exchanges (U.S. Department of Health and Human Services 2015). These examples show that the requirement of universal coverage is one way that solidarity can be increased in mixed health systems, even if higher-income populations are still allowed to opt out into private health insurance coverage.

Interestingly, universal health insurance was approached differently in Chile and the US. Chile followed a more traditional expansion of health benefits as a social right, using plan AUGE and FONASA to increase health insurance coverage, and funding these additional benefits through general taxation. By contrast, the US introduced a health insurance mandate that attempted to penalize uninsured individuals who did not purchase coverage through the health insurance exchanges or who enrolled in Medicaid. In the US, however, millions of workers will remain uninsured either because they are ineligible (e.g., undocumented immigrants) or because they will not be able to enroll in Medicaid in certain US states. The approach followed in Chile to achieve universal health insurance could potentially be more effective, because it had fewer restrictions and better funding mechanisms (general taxation) to promote solidarity in the health system. The implementation of the more punitive approach in the US is more cumbersome, and it remains unclear whether it would be effective at encouraging health insurance coverage in the long term.

Another important difference between Chile and the US was the participation of employers and employees in health insurance financing (Table 2). Chile eliminated employer contribution and the responsibility to provide health insurance coverage to employees in an attempt to reduce labor market distortions and procure voluntary health insurance enrollment. From an economic perspective, it makes no difference whether employees or employers pay for healthcare because wages would adjust accordingly. In practical terms, however, eliminating employer participation in the



marketplace reduced the bargaining power of employers with private health insurers. In the US, by contrast, big employers continued to receive tax benefits if they offered health insurance to their employees, encouraging employers to provide coverage and bargain with private health insurers for better prices. In the case of self-employed individuals and small employers, the new health insurance exchanges aggregated healthcare risks and improved coverage for individuals who lacked bargaining power before the ACA implementation.

## CONCLUSIONS

This study shows how two countries with mixed health systems, Chile and the US, have gradually restricted economic competition and have expanded health insurance coverage. Healthcare reform efforts in both countries have increased government involvement in the regulation of the health insurance marketplace to improve solidarity and reduce self-selection. Even though private organizations are likely to remain heavily involved in the health systems of Chile and the US in the foreseeable future, the policies that have been implemented in the two countries suggest that healthcare delivery is increasingly directed by government planners and less by market forces. While the motivations of government policies in Chile and the US were similar, the specific mechanisms to address self-selection differed in both cases. Future research should investigate if institutional legacy could partly explain the different approaches implemented by policy makers in each country.

The experience of Chile and the US shows that regulating private markets is complex and requires effective government regulation and expertise, particularly in the case of economic competition across plans and in the design of cross-subsidies to ensure solidary transfers. The experience of Chile and the US also shows how the “managed competition” model has been evolving from a more market-based approach into a more regulated system that could resemble a social health insurance model with a fragmented mix of public and private insurers.

While the managed competition model can be attractive in theory, in practice, it has been difficult to implement and has not always delivered its expected benefits. Most supporters of mixed health systems forecast that increased consumer choice would translate into more efficient health systems with reduced healthcare costs and increased quality of care. In reality, countries that have implemented different versions of the managed competition model have experienced high administrative costs, increased self-selection and reduced solidarity in their respective health systems. Countries considering the managed competition model to reform their national health systems should learn from the experience of Chile and the US where regulating the private insurance marketplace has been cumbersome and expensive.

## CONFLICT OF INTEREST

The authors have no competing interests.



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