



## Universal health coverage in Latin America 1

# Health-system reform and universal health coverage in Latin America

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This is the first in a [Series](#) of four papers about universal health coverage in Latin America

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Starting in the late 1980s, many Latin American countries began social sector reforms to alleviate poverty, reduce socioeconomic inequalities, improve health outcomes, and provide financial risk protection. In particular, starting in the 1990s, reforms aimed at strengthening health systems to reduce inequalities in health access and outcomes focused on expansion of universal health coverage, especially for poor citizens. In Latin America, health-system reforms have produced a distinct approach to universal health coverage, underpinned by the principles of equity, solidarity, and collective action to overcome social inequalities. In most of the countries studied, government financing enabled the introduction of supply-side interventions to expand insurance coverage for uninsured citizens—with defined and enlarged benefits packages—and to scale up delivery of health services. Countries such as Brazil and Cuba introduced tax-financed universal health systems. These changes were combined with demand-side interventions aimed at alleviating poverty (targeting many social determinants of health) and improving access of the most disadvantaged populations. Hence, the distinguishing features of health-system strengthening for universal health coverage and lessons from the Latin American experience are relevant for countries advancing universal health coverage.

### Introduction

Well-functioning health systems improve population health, provide social protection, respond to legitimate expectations of citizens, contribute to economic growth,<sup>1–6</sup> and underpin universal health coverage.<sup>7</sup> Political stability, committed leadership, sustained economic growth, and strong health systems are crucial for

achieving universal health coverage, which is hindered by income inequalities.<sup>8</sup>

Starting in the late 1980s, many countries in Latin America began social sector reforms to alleviate poverty and reduce socioeconomic inequalities, including reforms in the 1990s to strengthen health systems and introduce universal health coverage. Latin American countries share many economic, political, social, and cultural similarities (figure 1), but are also historically, socioculturally, and politically diverse; they gained independence from their European colonisers in the 19th century, but many suffered military dictatorships with human rights abuses and have experienced some of the worst income inequalities worldwide (appendix). The rich historical, sociocultural, and political context of Latin American countries has profoundly shaped health-system reforms and the trajectory of universal health coverage underpinned by the principles of equity, solidarity, and collective action to overcome social inequalities—a distinguishing feature of the Latin American health-system reform experience, with lessons that are relevant for countries that are progressing towards universal health coverage.

We used an analytical framework,<sup>7</sup> and data from several sources (appendix) to explore in the study countries—Argentina, Brazil, Chile, Colombia, Costa Rica, Cuba, Mexico, Peru, Uruguay, and Venezuela—how the interplay of demographic, epidemiological, economic, political, and sociocultural factors (table) has provided the impetus for these countries to strengthen their health systems and progress towards universal health coverage. We selected these countries because they have introduced health-system reforms to achieve universal health coverage and because relevant data are available. As with the other reports in the *Lancet* Latin America Series, we

### Key messages

- Latin American countries are characterised by sociocultural, economic, and political diversity, with wide socioeconomic and health inequalities.
- Costa Rica and Mexico established parliamentary democracies in early 20th Century, but beginning in the late 1950s revolutions in Cuba and Venezuela were followed by military dictatorships in most Latin American countries with widening socioeconomic disparities.
- In the 1980s, health emerged as a fundamental human right and entitlement in Latin America—regardless of social position or capacity to pay—and a democratic platform for reclaiming citizens' rights.
- Social movements, led by civil society, shaped health-system reforms in most countries, while in Mexico, Costa Rica, and Colombia rapid epidemiological transition was the critical driver.
- Latin American countries have developed a distinct approach to health-system reforms, which combined demand side changes to alleviate poverty and comprehensive primary health care to extend service access. These reforms fostered inclusion, citizen empowerment, and health equity, established legal rights to health and health protection, and achieved universal health coverage.
- Social health insurance or tax based financing have been used with different health-system, organisation, governance, and service delivery approaches to introduce explicit entitlements for health benefits.
- The Latin American countries have developed country-level and regional capacity to learn from country and regional experiences, and used this capacity to refine health-system reforms to establish context-sensitive approaches to universal health coverage to improve health outcomes.

have not analysed the English-speaking countries of the Caribbean or Haiti because these countries had a different history to the Latin American countries studied. We provide a summary of the economic, demographic, population health, and health-systems indicators for these countries and compare them with the world regions and the world averages (appendix).

The social and political orders that emerged after independence to establish democracy were diverse in the ten study countries. Various governance, political arrangements, and governments emerged after the end of military regimes in Argentina, Brazil, Chile, Colombia, Costa Rica, Peru, Uruguay, and Venezuela; at the end of state corporatism in Mexico, and after revolutions in Cuba and Venezuela, with varying amounts of citizenship and civil rights. These experiences in governance also shaped the approaches adopted for health-system reforms and universal health coverage.

This report is organised in five sections. The introduction is followed by an analysis of the contextual challenges driving change in Latin American health systems. We next analyse health-system reforms aimed at achieving universal health coverage in the study countries. We then discuss the key achievements of health-system reforms and universal health coverage in the study countries and the lessons learned. The final section discusses the future challenges for Latin American health systems. In the *Lancet* Latin America Series, Cotlear and colleagues<sup>11</sup> provide an in-depth analysis of the historical antecedents of health-system reforms and Andrade and colleagues<sup>12</sup> describe the social determinants of health in Latin America.

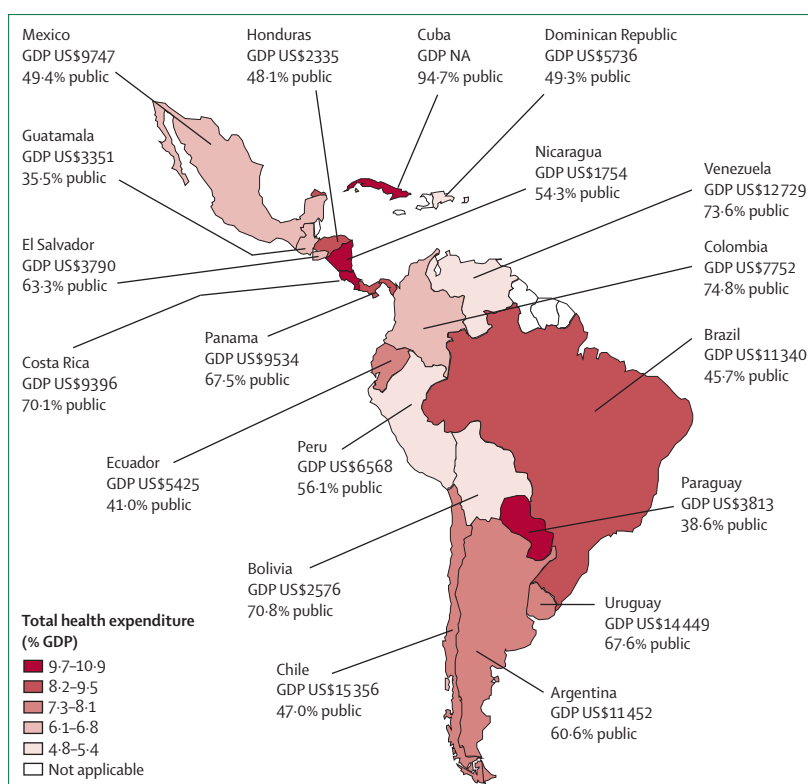
## Contextual challenges driving change in Latin American health systems

### Demographic and epidemiological context: the epidemiological transition

The decline in the total fertility rate to near or below replacement levels of 2.1 (table) and rise in life expectancy (figure 2) in Latin America brought about rapid demographic and epidemiological changes, which increased the burden of non-communicable diseases and chronic illness in health systems designed to provide episodic and acute care (figure 3). Health systems in Latin America could not effectively respond to the rapid epidemiological transition. In countries such as Mexico, Costa Rica, and Colombia, this change was the crucial driver for health-system reform, whereas in others, political, social, and economic factors, which are discussed later, were the major drivers of health-system reform and provided the impetus for universal health coverage.

### Political context: democratic deficit

Threatened by the revolutions that swept through Venezuela (1958) and Cuba (1959), beginning in the 1960s armies in most Latin American countries forcefully quashed civilian rule to establish military dictatorships.



**Figure 1: Per-person income, total health expenditure, and health expenditure from public sources**

Health expenditure from public sources is shown as a percentage of total health expenditure. Data from The World Bank.<sup>9</sup> GDP=gross domestic product. NA=not applicable.

These dictatorships lasted until around the 1980s in Brazil (1964–85), Peru (1962–63 and 1968–80), Chile (1973–90), Argentina (1966–73 and 1976–83), and Uruguay (1973–85). Costa Rica and Mexico, which had established parliamentary democracies in the early 20th century, avoided military rule (a one-party rule prevailed in Mexico until 2000), whereas in Colombia military interventions briefly overthrew governments in 1953 and 1958. The Cuban revolution, which began in 1952, established in 1959 a socialist state ruled from 1965 by one party—the Communist Party of Cuba.

The military dictatorships in Latin America undermined human rights, suppressed democratic rights of citizens, and, with the exception of Cuba, curtailed investment in the social sectors, including the publicly financed and delivered elements of health systems. Limits on citizens' entitlements disenfranchised subgroups of the population, especially the poor, and widened socioeconomic and health inequalities, prompting the civil society in countries such as Argentina, Brazil, Chile, Peru, and Uruguay to create social movements to restore democracy, address inequalities, and reclaim citizens' rights.

### Economic context: instability and persistent inequalities

In the 1970s and 1980s, uncontrollably high inflation, which exceeded 1000% in Argentina, Brazil, and Peru; boom and bust economic cycles; and recessions

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See Online for appendix

	Argentina	Brazil	Chile	Colombia	Costa Rica	Cuba	Mexico	Peru	Uruguay	Venezuela
Total population (millions)*	41.1	198.7	17.5	47.7	4.8	11.3	120.8	30.0	3.4	30.0
Life expectancy at birth (years)†										
Men	72.1	70.1	76.0	70.1	76.9	77.2	74.5	71.4	72.9	71.4
Women	79.7	77.0	82.2	77.4	81.8	81.2	79.4	76.6	80.1	77.4
Fertility rate, total (births per woman)†	2.2	1.8	1.8	2.1	1.8	1.5	2.3	2.5	2.0	2.5
Age dependency ratio (% of working-age population)*	54.4%	46.8%	45.1%	51.5%	44.5%	42.0%	54.5%	54.9%	56.4%	53.4%
GDP (constant 2005 US\$ billion)*	NA	1136.6	165.0	202.9	27.5	55.3‡	997.1	127.5	25.5	191.9
GDP per person (constant 2005 US\$)*	NA	5721.2	9447.1	4252.4	5716.0	4898.3‡	8250.9	4252.5	7497.4	6406.9
Per-person health expenditure (present US\$)†	891.8	1120.6	1074.5	432.0	942.9	606.1	619.6	289.0	1104.9	555.1
Total health expenditure (% of GDP)†	8.1%	8.9%	7.5%	6.1%	10.9%	10.0%	6.2%	4.8%	8.0%	5.2%
Out-of-pocket health expenditure (% of total)†	24.7%	31.3%	37.2%	17.0%	27.2%	5.3%	46.5%	38.4%	13.1%	57.0%
Population health coverage by subsystem§										
Public	Universal (basic services)	Universal entitlement: 80.4% exclusive coverage by unified health system	Universal entitlement for benefits of the Explicit Guarantees of Universal Access Plan	Universal coverage of Basic Health Care Plan (population health). 29.0% limited health services	Universal coverage	0%	Public health insurance ( <i>Seguro Popular</i> ) 47.0%	37.0%	45.3%	100% entitlement to primary care ( <i>Barrio Adentro</i> )
Social security	51.0%	0%	73.5% National Health Fund	39.7% general social security system. 51.4% contributory scheme	0%	100%	Institute of Social Security 37.5%. Institute of Social Security and Services 5.4%	21.0% (plus 3.0% armed forces and police)	45.0%	17.5%
Private	7.9%	19.6% Supplementary	16.3%	NA	0%	0%	4.5%	5.5%	1.8%	11.7%
Other	3.2%	0%	6.7% (army). 3.5% no insurance	3.9%	0%	0%	4.5%	37.4% without social or private insurance	Armed forces 5.3%. Police 2.3%	

Data from The World Bank.<sup>9</sup> NA=not available. \*Data from 2012. †Data from 2011. ‡Data from 2010. §Modified from data from Pan American Health Organization;<sup>10</sup> coverage levels might exceed 100% because some family members are covered by more than one scheme.

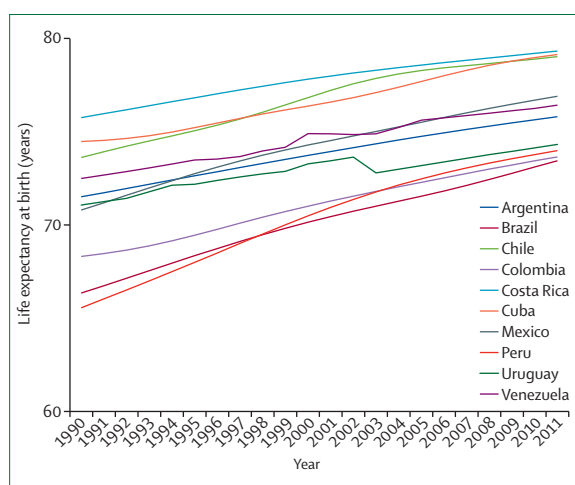
**Table: Important socioeconomic and population characteristics of the study countries**

characterised the economic situation in Latin America, placing fiscal constraints on government expenditures on health systems, with adverse outcomes for health.<sup>15</sup>

Argentina (1980 and 1982) and subsequently Peru (1980 and 1984), Costa Rica (1981, 1983, and 1984), Mexico (1982), Venezuela (1982), Brazil (1983 and 1986–87), Chile (1983), and Uruguay (1983 and 1987) defaulted on their sovereign debt, precipitating the Latin American debt crisis, which led to the intervention of the International Monetary Fund, beginning in 1982. A period of neoliberal macroeconomic reforms ensued in the late 1980s, with a common pattern of policies enshrined in the so-called Washington Consensus,<sup>16</sup> aimed at reducing government expenditures and imposing fiscal discipline (panel 1).<sup>22</sup> Although several countries resisted these reforms, the pressures were felt throughout Latin America. The economic crisis and associated high

inflation led to widening socioeconomic and income inequalities, with persistently unfavourable Gini indices (appendix), which only began to decline after 2005, possibly coinciding with social reforms aimed at alleviating poverty, such as conditional cash transfer schemes. Cuba remained a closed economy exposed only to the socialist bloc of countries. However, the break-up of the Soviet Union forced the Russian Federation to suddenly cease financing to Cuba,<sup>23</sup> precipitating severe contraction of the Cuban economy followed by decades of economic instability.

In the health sector, the reforms affected by the Washington Consensus were not monolithic, uniform, or unidirectional. Leaders and researchers in Latin American countries were not passive recipients of ideas—policy makers in several countries were able to develop their own direction, content, and momentum for reforms. For



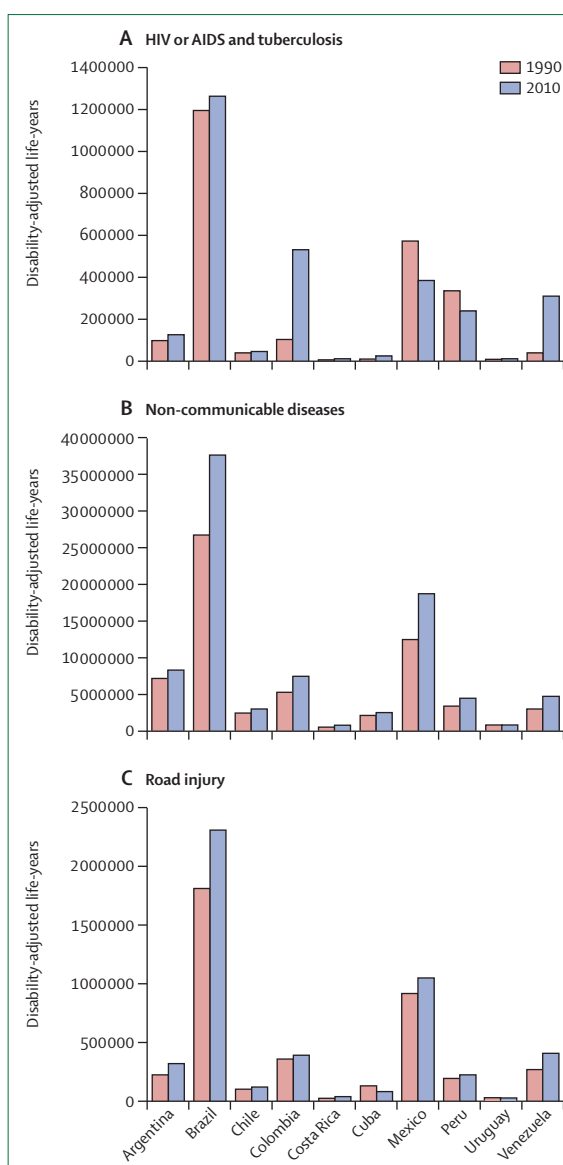
**Figure 2: Life expectancy at birth**  
Data from The World Bank.<sup>9</sup>

example, unlike Chile, where the military government introduced neoliberal market reforms, in Mexico and Costa Rica, policy innovations in health were home grown. Indeed, many ideas—for example, the importance of the epidemiological transition in Latin America and the role of health systems—and experiences emanating from Latin America were disseminated and amplified, affecting countries in the region and international agencies.

In Latin America, economic policies of the 1980s, which included in many cases social and health sector reforms, were aimed at macroeconomic stability and addressing the economic crisis, but largely did not alleviate poverty.<sup>24</sup> The impetus did not shift toward the introduction of new social policies and welfare reforms aimed at reducing poverty and inequality until the 1990s. For example, Brazil, Colombia, Mexico, and Venezuela introduced labour market and social welfare reforms.

Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Uruguay, as part of social and welfare reforms, implemented conditional cash transfer schemes to reduce poverty, empower women, and expand access to and uptake of nutrition, education, and health.<sup>25–27</sup> Several conditional cash transfer schemes, such as *Plan Nacer* in Argentina,<sup>28</sup> *Bolsa Familia* in Brazil,<sup>29,30</sup> *Chile Solidario*<sup>31</sup> and *Ingreso Etico Familiar*<sup>31</sup> in Chile, *Red Unidos* in Colombia,<sup>32</sup> *Progres*<sup>33</sup> (as of 2000 named *Oportunidades*<sup>34</sup>) in Mexico, the *Juntos* programme in Peru,<sup>35,36</sup> and the Family Allowances Programme in Uruguay,<sup>37</sup> effectively targeted women and poor populations to increase demand and use of health services, especially for maternal and child health care.<sup>12,25–27,38</sup>

Global economic expansion in 2000–08 helped to create a period of sustained economic growth in the study countries, enabling them to combine demand-side incentives, implemented primarily through conditional cash transfers, with supply-side policies to strengthen health systems to expand access for the most vulnerable populations and to introduce universal health coverage. Whereas the repeated economic crises triggered social



**Figures 3: Burden of disease in 1990 and 2010**

The burden of disease is in absolute terms and not corrected for population size. Data from Institute for Health Metrics and Evaluation<sup>33</sup> and Lim and colleagues.<sup>14</sup>

movements, which are discussed later, economic growth provided the fiscal space and budgetary flexibility to introduce health-system changes.

### Social context: emergence of social movements and citizenship

The economic crises of the 1970s and 1980s and the democratic deficit under military rule spurred social movements in several Latin American countries,<sup>39</sup> led by the civil society, which proved to be instrumental in restoring civilian rule in Peru (1980), Argentina (1983), Brazil (1985), Uruguay (1985), and Chile (1990). In some of these countries, especially Brazil, health and social

**Panel 1: The Washington Consensus**

The Washington Consensus—a term coined by the economist John Williamson<sup>16</sup>—refers to economic policy reforms, often used as International Monetary Fund conditionality for countries that need international financing,<sup>17</sup> that are designed supposedly to bring to beneficiary countries macroeconomic stability, economic growth, and integration into the global economy.

Williamson described ten elements<sup>18</sup> as characterising the Washington Consensus:

- 1 Fiscal discipline to avoid large government budget deficits.
- 2 Reordering public expenditure priorities—ie, redirecting spending from subsidies to basic health and education.
- 3 Tax reform, broadening the tax base with moderate marginal tax rates.
- 4 Liberalising interest rates—ie, market-driven financial liberalisation of capital markets.
- 5 A competitive exchange rate, managed to encourage export growth.
- 6 Trade liberalisation to reduce barriers to import and export.
- 7 Liberalisation of inward foreign direct investment—ie, reduced barriers to foreign investment.
- 8 Privatisation of state enterprises.
- 9 Deregulation to ease entry and exit of new firms into economic sectors.
- 10 Property rights, especially for the informal sector.

An important assumption underpinning the package of economic reforms that collectively characterised the Washington Consensus was that the structural adjustment of the economy would be followed by economic stability and sustained growth. In turn, economic growth would lead to rising employment in the formal sector, which would increasingly finance and maintain the existing contributory social protection systems. Hence, there would be no need for tax-based social protection systems with solidarity in functioning. Instead, the role of the state would be subsidiary to contributory insurance, and limited to providing a social protection floor for welfare and health services for the unemployed and those unable to work.

However, the promise of economic growth and expansion of the formal sector did not materialise, prompting many mainstream economists to point out the substantial negative social effects of the economic policies inspired by the Washington Consensus.<sup>19–21</sup>

The limited reach of employment-based social insurance schemes has spurred many Latin American governments to gradually expand social protection beyond schemes linked to employment status.

movements were intertwined and aimed to ameliorate the injustices that occurred under the military dictatorships, restore democracy, and address socioeconomic disparities.<sup>40</sup>

Beginning in the 1980s, in Latin America, health emerged as a fundamental human right and entitlement—regardless of social position or capacity to pay—and an important platform for reclaiming citizens' rights (panel 2).<sup>60</sup>

### Health-system reforms in Argentina, Brazil, Chile, Colombia, Costa Rica, Cuba, Mexico, Peru, Uruguay, and Venezuela

The speed and content of health-system reforms varied in the countries studied, as did the way universal health coverage was created and implemented. We discuss the similarities and distinguishing features of these reforms for each health-system function—organisation and governance, financing, resource management, and service delivery—highlighting key changes in countries with examples, and briefly describing changes in each country.

### Organisation and governance

In Latin America, there were four major areas of change in organisation and governance of health systems. The first involved reorganisation of health systems to address structural fragmentation. The second involved decentralisation of decision making to provincial, state, and municipal government levels. The third emphasised improvement of regulatory functions, and the fourth involved separation of financing (ie, purchaser) and provider functions to improve health-system efficiency.

The first area of change was particularly important in Latin America, where only Brazil, Cuba, and Costa Rica have unified health systems and most health systems are organised as several parallel subsystems. Beginning in the 1990s, countries without unified systems introduced government-financed insurance schemes and health service provision to cover poor people and informal workers. This institutional organisation further reinforced the verticalised subsystems with fragmentation of financing and service delivery and led to segregation of population groups according to employment and socioeconomic status,<sup>11</sup> and left the poorest segments without effective coverage.

This segregation, Frenk argued,<sup>61</sup> created “medical apartheid” and undermined efforts aimed at reducing inequalities,<sup>61,62</sup> because although the health-system functions were integrated within each vertical subsystem, these functions were not integrated across the health systems or among subsystems. Londoño and Frenk,<sup>63</sup> who explored the relations between populations and institutions in Latin American health systems, proposed a new organisational model on the basis of structural pluralism, which would “turn the current [health] system[s] around by organising it according to functions rather than social groups”.<sup>63</sup> For example, Chile, Colombia, and Mexico introduced organisational changes that emphasised the intrinsic value of health for citizenship, with structural pluralism to expand health service coverage to poorest population segments, but could not eliminate the differential access produced by the segregation.

The second area of change involved decentralisation of health-system functions to local levels of government. Decentralisation was motivated by the desire to strengthen local governance, delineate functions between central and local levels of government, and strengthen capabilities and performance at each level. All too often, this change was driven by civil society accompanied by strengthened monitoring and evaluation to address the inability of the centre to hold local levels of government accountable for poor performance.<sup>10</sup>

In Brazil, Colombia, Peru, Uruguay, and Venezuela, civil society provided the impetus for decentralisation, which was also used as a mechanism to deepen democratisation and citizenship by strengthening social participation (appendix). For example, in 1988, the Brazilian National Constituent Assembly identified



universal health coverage with decentralisation and community participation as a principle of equality. In 1990, the Organic Law for the Brazilian Health System defined state-level and municipality-level responsibilities in the management of the health system, the mechanisms for inter-governmental transfer of funds, and the arrangements for community participation. At each level, health conferences and structures (the National Health Council at federal level, 27 state health councils, and around 5000 municipal health councils) enable participative decision making. At the federal level, the tripartite committee (comprising representatives from associations of state secretariats [*Conselho Nacional dos Secretários de Saúde*; five state secretaries], municipal secretariats [*Conselho Nacional de Secretarias Municipais de Saúde*; five municipal secretaries], and the ministry of health [five representatives]), and at state level the bipartite committee (comprising representatives of the state and municipal secretariats, appointed by the municipal health secretaries' councils [*Conselho de Secretarias Municipais de Saúde*] from each state) enables participative decision making.

In Mexico, decentralisation was partly political, redistributing power from the centre, and partly functional, aimed at strengthening local governance and accountability. Between 1983 and 1988, Mexican states were given the choice of assuming powers through decentralisation. But the responsibility for health was devolved to Mexican states in 1996, with the introduction of the National Decentralization Agreement.<sup>64</sup>

Decentralisation brought decision making and services closer to the users, especially for rural populations, and established a voice for civil society and a crucial platform for democratisation of health (appendix) by empowering communities and increasing involvement of civil society and community organisations in decisions relating to health.<sup>65</sup> However, decentralisation also generated more complex environments for governance and performance management, because of varying capacity and wealth of different localities.

The third area of change involved the development of regulatory functions, in particular sanitary regulation, and regulation of personal health services, insurance organisation, and health-care providers. All the countries studied introduced 11 essential public health functions recommended by the Public Health in the Americas initiative<sup>66</sup> to control epidemics and implement the International Health Regulations,<sup>67</sup> strengthening in the process surveillance and response capacity to improve national, regional, and global health security.

The countries studied have also introduced regulations to improve the quality of drugs used in health systems.<sup>10</sup> However, in Latin America, effective regulation of health insurers and providers in public and private sectors has been challenging. Private insurers practise so-called cream-skimming by enrolling low-risk high-income population segments, with adverse effects on equity, cost, service

### Panel 2: Health as a human right and citizens' entitlement

In Argentina and Costa Rica, the constitutions do not stipulate a right to health, but constitutional courts have used international treaties (Universal Declaration of Human Rights and International Covenant on Economic, Social, and Cultural Rights) and provisions for other rights (right to life in Article 21 of Costa Rica's constitution) to establish a right to health.<sup>41</sup>

Cuba established health as a legal right after the 1959 revolution, guaranteeing free universal health coverage delivered by the Cuban National Health Service, which was established in the 1970s.<sup>42-44</sup>

Chile, starting in 1980 with Article 19 of the Political Constitution drawn up by the military dictatorship, guaranteed right to health protection and established the state's duty to ensure free and equal access to health actions as prescribed by law,<sup>45</sup> whereby citizens can choose between public or private health systems. The neoliberal Pinochet health reforms<sup>46</sup> created a dual health system with profound divisions in financing, benefits, and conditions of affiliation between the public social insurance system (*Fondo Nacional de Salud*) and private insurers (*Isapre*). To reduce inequities, the 2005 Health Guarantees Law 19.966 (*Acceso Universal con Garantías Explícitas [AUGE]*) introduced enforceable rights to health services for 40 diseases, with administrative and judicial mechanisms,<sup>47</sup> which was increased to 80 in 2013.<sup>48</sup>

In Brazil, the 1988 Constitution, shaped by a democratic struggle and the Movement for Sanitary Reform (*Movimento de Reforma Sanitária*) established "health as a fundamental right and a responsibility of the State", with provisions to create a unified national health system.<sup>49</sup>

In 1991, the new Colombian Constitution established a series of rights and a Constitutional Court to protect individual rights.<sup>50</sup> In an important decision in 2008, the Constitutional Court upheld the right to health, directing the Colombian State to unify contributory and subsidised insurance schemes and achieve universal health coverage.<sup>51</sup>

In 1999, Articles 83 and 84 of the Venezuelan Constitution affirmed health as a fundamental human right guaranteed by the state.<sup>52</sup>

Peru introduced Comprehensive Health Insurance in 2002, after the transition to a democratic government, with legal entitlement to health insurance and health-care services for poor and uninsured populations. Health is not a constitutional right in Peru.<sup>53</sup> Social movements are fighting for expanded access and reduced user fees<sup>54</sup> and educating citizens on their rights to quality services.<sup>55</sup>

Article four of the Constitution of Mexico established health as a right for all citizens,<sup>56</sup> but this right was not fully realised until 2003 when the Mexican Congress approved revisions to the General Health Law to establish the System of Social Protection in Health, with the popular health insurance programme *Seguro Popular* expanding coverage to almost 52 million people by 2012.<sup>57</sup>

In 2005, the Government of Uruguay recognised health as a "legal right and a public good", establishing the basis for universal health coverage and national health insurance, with a National Health Fund that pools payroll contributions and subsidies.<sup>58</sup> In 2008, Law 18211 created an integrated national health system of public and private providers, guaranteeing access to comprehensive care for all citizens.<sup>59</sup>

quality, and appropriateness in Argentina, Brazil, Chile, Colombia, Mexico, and Peru.<sup>68-70</sup> Regulation of public insurers and providers has been hampered by bureaucracy and rigid public sector laws that have hindered effective management and competition (panel 3).<sup>78,79</sup>

The fourth area of change, which involved the separation of purchaser and provider roles, was perhaps the most controversial, because many members of the public and health-care professionals associated it with privatisation of health systems. The nature and extent of

### Panel 3: Regulation of health-care insurers and providers

Argentina has one of the most fragmented health systems in Latin America, with more than 500 private health-care insurers, national social insurance organisations, and provincial health insurance organisations regulated by provinces, which are responsible for health service provision. Argentina has almost 16 000 health-care providers, including 3000 with inpatient facilities. The ministry of health is responsible for regulating the health system and ensuring quality standards, but effective regulation has proved challenging because provinces and *obras sociales* (a health insurance fund for workers) struggle to coordinate referrals between levels, contain health-care costs, and improve quality.<sup>71,72</sup>

Brazil has introduced regulations to strengthen coordination and management of the unified health system to improve accountability, quality, efficiency, and access. These regulations have established bipartite and tripartite management committees; defined the roles and responsibilities of different levels of government in financing and delivery of health care; and codified inter-governmental funds transfers for health. Regional health networks and referral management centres have been set up to moderate access to hospitals. Contracting has been introduced between federal and state levels and between states or municipalities and private health-care providers.<sup>73</sup>

After 1990, the democratic government in Chile introduced regulations, with a Superintendent to supervise the private insurers and providers while maintaining the public-private mix in the health system.<sup>74</sup> Regulations introduced as part of the 2005 health reforms that ensured universal access with explicit

guarantees (*Acceso Universal con Garantías Explícitas* [AUGE]) mandated public and private social health insurers to provide a defined package of health services, with regulation of quality and co-payment levels,<sup>75</sup> and replaced the Superintendent for the private sector with one for the whole health system, with a mandate to regulate and supervise insurers and providers in both the private and public sectors, protecting rights and promoting quality and safety in health care.<sup>76</sup>

In the 1960s, Costa Rica established a social security system, with an integrated health-care provider network underpinned by comprehensive primary health care to achieve universal health coverage. The ministry of health provides regulatory oversight for the health system, using general health law to regulate the quality and safety standards of health-care infrastructure, providers, and health technologies. The Costa Rica Social Insurance Institution enlists public and private health-care providers using management contracts that state volume, content, and quality of services; these are overseen by management committees that were established in 1998–99, but increasing the quality of services has proved challenging.<sup>10</sup>

With *Seguro Popular*, Mexico introduced contracting with both private and public sector providers, with regulations to improve service quality.<sup>77</sup> In 2009, Peru introduced the Universal Health Insurance Law, with regulations created in 2010 to establish a minimum insurance plan for citizens enrolled in private and social insurance systems, and the National Superintendent for health appointed to monitor the quality of insurance plans and health services provided.<sup>53</sup>

separation of financing and provider functions varied within countries, from organisational changes to better define financing and provision responsibilities, to contracting between public and provider sectors, to outright market reforms with competition involving insurers and health-care providers and privatisation.

In Colombia, Costa Rica, and Peru, the separation of purchaser and provider functions enabled the introduction of contracting between insurers and providers, with incentives to improve performance. In Mexico, a major aim was to introduce portability between the different public insurers and their respective facilities, although the portability between different public insurers and their respective health-care facilities in Mexico is limited to emergency obstetric services. Although Cuba maintained a publicly funded and provided integrated health system, Chile and Venezuela were subjected to radical market reforms by military dictatorships, with subsidies to encourage enrolment with private insurers, competition, and privatisation. Civilian governments in Chile and Venezuela subsequently tried to restore the imbalance between the private and public sector insurers and providers. Brazil developed different forms of contracting, whereby providers were paid for services used or private providers were contracted by states to provide

health-care services.<sup>80,81</sup> Cotlear and colleagues<sup>11</sup> discussed the adverse consequences of the segregation created by segmented insurance systems in Latin America.

### Health-system financing

With the exception of Brazil, Cuba, and Costa Rica, achievement of universal health coverage has been hampered by inequitable health financing and employment-based social insurance schemes, which have created parallel schemes and segmented the population into three categories: (1) the poor, unemployed, and employed without social security; (2) the salaried working population with social security; and (3) the rich with private insurance.<sup>82</sup> Furthermore, problems with quality and waiting times for health services has forced all three groups to pay out of pocket to access health care. Hence, health-system financing reforms have emphasised extension of social protection to the disenfranchised populations, namely poor people, non-salaried and self-employed workers (eg, artisans and agricultural workers), unemployed people, and rural citizens.<sup>10</sup> Too often, civil society provided the impetus for expanding social protection by rightly claiming their constitutional and legal rights for health and by fighting to reduce social disparities.

#### Panel 4: Expanding insurance coverage for uninsured citizens through budget transfers

The Brazilian unified health system is financed by Federal Government transfers (20.5% of the Federal revenue), municipalities (at least 15% of the municipalities' revenue), and states (at least 12% of the states' budget), in line with Law 141 enacted in 2012, which regulates implementation of constitutional amendment 29 (EC29) and requires minimum growth in the federal contribution to health to the nominal change in the previous year's GDP.

Chile increased public spending in 1990–2000 to eliminate user fees, introduce free primary health care for all FONASA beneficiaries, and reduce hospital and specialist waiting lists through opportunity of care and complex benefits programmes.<sup>83</sup> In 2004, Law 19.966 established the Universal Access Plan (*Acceso Universal con Garantías Explícitas* [AUGE]), with explicit guarantees for predefined health disorders, universal coverage for all citizens, and access to quality services and financial protection to ensure equity.<sup>84</sup> In 2000–11, on average, real health spending in Chile increased annually by 8.3%.<sup>85</sup> The share of public health spending rose from 46.2% of total in 2000 to 56.1% in 2012, with a three-times increase in budget and municipal contributions, whereas out-of-pocket expenditures declined from 48.8% in 2000 to 37.1% in 2012.<sup>48,86</sup> Citizens reporting no insurance enrolment fell from 11% in 2000 to 3% in 2011, and in 2011 the population enrolled with FONASA increased to 80.1%.<sup>86</sup>

In 1993, after the Constitution of Rights in 1991, Colombia introduced a universal health insurance scheme consisting of a contributory scheme (*Plan Obligatorio de Salud*) financed by a payroll tax on formal-sector workers, a tax on employers, and a subsidised scheme (*Plan Obligatorio de Salud Subsidiado*) for low-income or informal-sector workers financed by government transfers. Coverage of the insured population increased from 15.7% in 1993 to 88.2% in 2009, although a two-tier system exists.<sup>87</sup> The Colombian Government is introducing health-system reforms to address inequities and to achieve universal health coverage.

In Costa Rica, government budget transfers subsidise the contributory regimen, which is compulsory for workers employed

in the formal sector, including employer contributions, a voluntary health insurance regimen for independent workers, and a non-contributory regimen for poor households. The Costa Rica Social Security Fund pools funding from all sources (employees, employers, and the state) and covers the whole population.<sup>88</sup>

The Cuban health system is publicly funded. Private health care is outlawed. Out-of-pocket expenditures are around 10% of total health expenditures, the lowest in Latin America.<sup>89,90</sup>

In 2003, Mexico increased public funding to establish *Seguro Popular*—a new public insurance scheme for poor families—expanding insurance coverage and access to health care for almost 52 million Mexican citizens. A special fund covers catastrophic illness and complex disorders such as paediatric cancers.<sup>87,91</sup>

Since the 1990s, Peru has attempted to achieve universal health coverage and decentralisation with social participation.<sup>92</sup> In 2009, the Framework Law on Universal Health Insurance mandated gradual expansion of comprehensive health insurance to all citizens, subsidised by government transfers, with basic services that were gradually increased to align with the social security package.<sup>93</sup> The Peruvian health system is funded from three sources: private (mostly out of pocket; 35%), social security contributions by employers (31%), and the government budget (31%).<sup>10</sup> Total health expenditures as a proportion of GDP increased from 2006 (figures 4A and 4B).

In Uruguay, in 2008, new laws helped to create an integrated health-care delivery system, with a national health fund that pools health insurance contributions from workers with government budget transfers for the unemployed and the poor. Government funding for health rose from US\$190 million in 2005 to \$690 million in 2011,<sup>10</sup> with higher total and per-person health expenditures (figures 4A and 4B).<sup>95</sup>

Venezuela has a fragmented health financing system, with private and public funding. Since 1999, government health financing and total health expenditures have increased, with expanded coverage of poor populations, but private expenditures remain high (figures 4A and 4B).

#### Resource management

Argentina, Brazil, Colombia, Costa Rica, Mexico, Peru, Uruguay, and Venezuela have introduced reforms to strengthen health-system financing by pooling funds from many sources. These countries have used government revenues to expand health insurance or financing coverage and health benefits for non-salaried workers and for people who are poor, live in rural areas, or are unemployed (panel 4).

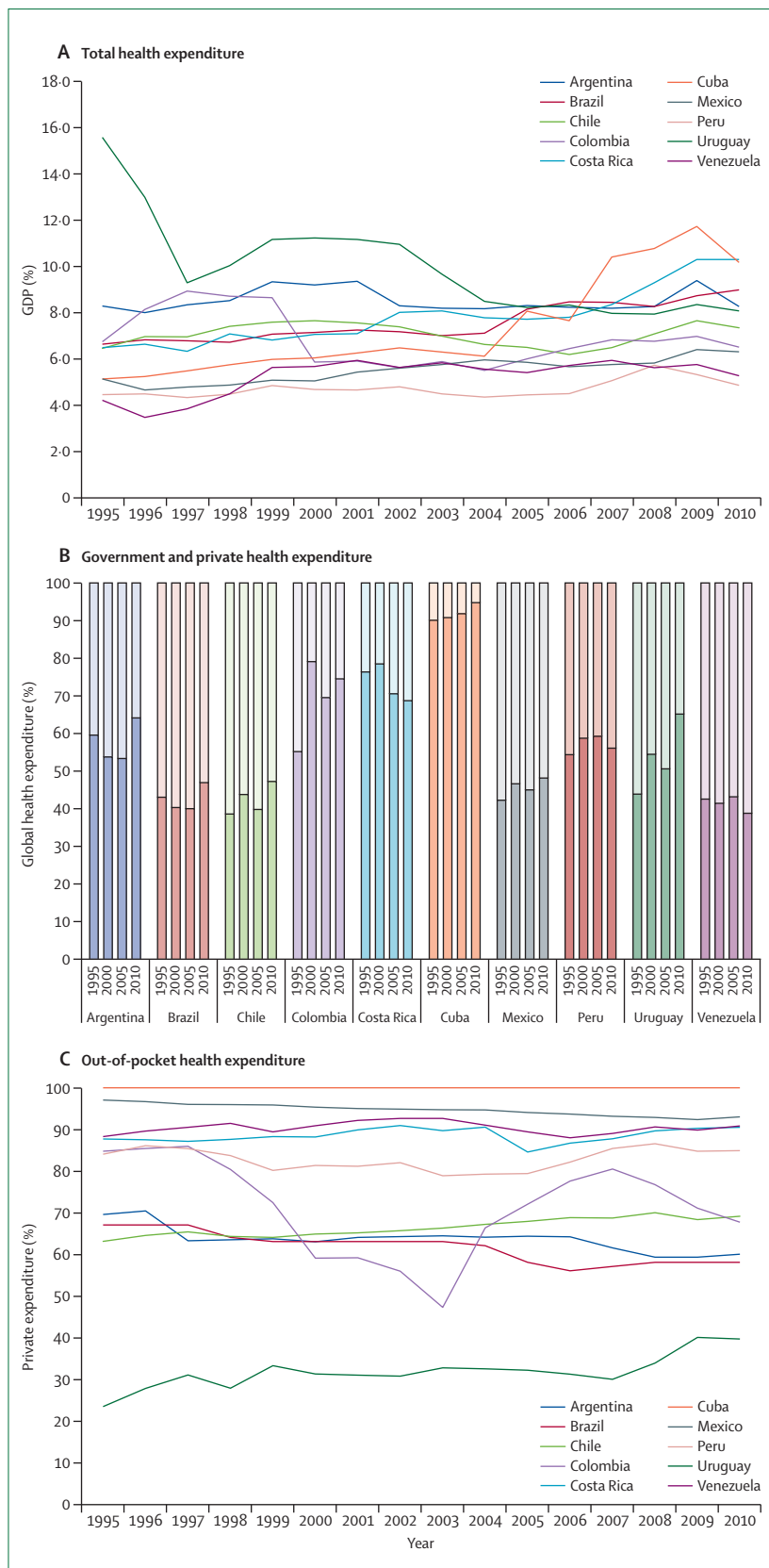
Between 1995 and 2010, in all study countries except Uruguay, total health expenditures increased as a proportion of gross domestic product (figure 4A). In the same period, the proportion of total health expenditures that were from public (ie, government) sources rose steadily, but private expenditures exceeded 50% of the

total health expenditures in Brazil, Chile, Mexico, and Venezuela, and exceeded 30% in Argentina, Peru, and Uruguay (figure 4B). With the exception of Uruguay, in all the study countries private expenditures were accounted for mostly by out-of-pocket expenditures (figure 4C).

#### Health service delivery

Before the 1980s, Latin American health systems focused on sanitary measures to control infections, with weak primary health care that emphasised a selective set of services and a biomedical orientation. Affected by structural adjustment policies that constrained public expenditure and health policies that favoured employment-based insurance and basic packages of health services, the 1980s





and the early 1990s witnessed the emergence of selective primary care<sup>65</sup> in Latin America (eg, in Argentina,<sup>96</sup> Chile,<sup>97</sup> Colombia,<sup>98</sup> and Peru<sup>92</sup>).

#### Universal health coverage through comprehensive primary health care

Health-system reforms in Latin America were strongly affected by the Alma Ata Declaration, which identified primary health care as the vehicle for achieving “health for all by the year 2000”.<sup>99</sup> The declaration called for universal access on the basis of need, health equity, community participation, and intersectoral approaches to health<sup>100</sup>—principles that resonated with the right to health movements in several of the countries studied. However, introducing comprehensive primary health care in hospital-centric health systems with a curative focus and dominated by selective primary health care proved challenging (panel 5).

Social movements—supported by strong civil society, community organisations, and health professionals—that sought to achieve human rights, including for health, citizenship, participative democracy, and equity, played an important part in shaping primary health care in Latin America. Starting with the 1990s, a comprehensive primary health-care model underpinned by biopsychosocial approaches began to emerge in the Latin American countries studied. What followed was the development of comprehensive primary health care<sup>116</sup> that incorporated public health interventions<sup>117</sup> and asserted a rights-based approach to health, citizen participation, community empowerment, and intersectoral collaboration,<sup>117</sup> and positioned primary health care as the platform for achieving equity and universal health coverage (panel 5).<sup>12</sup>

#### Health-system reform and progress towards universal health coverage in Latin America: key achievements and lessons learned

The countries studied established health as a citizen’s right or, in the case of Mexico, “the right to the protection of health”, and introduced health-system reforms with diverse organisational, governance, financing, and service delivery arrangements to expand access to health services, improve health outcome, and increase financial risk protection. A period of economic expansion, and in several study countries the era of stability after military dictatorships that reduced military expenditures, created the fiscal space for governments to increase health-system budgets.

In the countries studied, the journey to universal health coverage followed three paths. In the first path, funding from many sources was pooled and an integrated health-care service network developed to create a unified health system with equal benefits for citizens, as

**Figure 4: Health expenditure**

(A) Total health expenditure as a percentage of GDP. (B) Government and private health expenditure as a percentage of total health expenditure; dark shading shows government health expenditures and light shading shows private health expenditures. (C) Out-of-pocket expenditure as proportion of private expenditure. Data from WHO.<sup>94</sup> GDP=gross domestic product.

### Panel 5: Comprehensive primary health care: the platform for universal health coverage

In the 1970s, Brazil had a segregated health system—the rich and salaried workers had access to private hospitals in urban settings, whereas limited public services existed for the poor and unemployed.<sup>101</sup> Preventive health care was financed by social security.<sup>49</sup> The 1988 constitution established a unified health system for all citizens, with the principles of universalism, equity, integration, and democracy.<sup>102</sup> From 1994, the family health programme (*Programa Saúde da Família*), the community health agents' programme, and the per-person payments to municipalities (*Piso Asistencial Básico*) provided increased funding and expansion of comprehensive primary health care to the poorest regions. By 2010, the unified health system covered 75% of the population and 94% of the municipalities.<sup>103</sup> In 2012, 33 400 family health teams covered 100 million Brazilian citizens (54.8% of the population) and 257 000 health community agents covered 119 million people (65.4% of the population),<sup>12</sup> and achieved improved health outcomes, including for infant mortality<sup>104</sup> and chronic illnesses.<sup>105</sup>

Chile began to expand primary health care in the 1950s. From the 1990s, increased investments helped to further develop primary health care based on Alma Ata principles and to eliminate direct fees for beneficiaries of the public health insurance fund. A division of primary health care was created within the health ministry to expand rural health services and to transform municipal health facilities into family care centres (comprising doctors, nurses, health technicians, dentists, psychologists, and nutritionists), which provided integrated family and community health programmes and served as reference centres for smaller community family health centres.<sup>106</sup> Primary health-care workers were granted public sector employee status, with centrally managed pay and career opportunities.<sup>107</sup> The *Acceso Universal con Garantías Explícitas* (AUGE) reforms of 2005 reinforced primary health care as the centre of health-care networks. By 2012, an extensive primary health-care network covered the entire country.<sup>108</sup>

Soon after the Alma Ata Declaration, Costa Rica introduced comprehensive primary health care managed by the health ministry, which targeted lower income groups, rural households, and informal sector workers. In the 1990s, primary health-care services were transferred to the Costa Rica Social Insurance Fund to create an integrated health-care network. Population coverage of primary health care increased from 25% in 1996 to around 90% in 2005,<sup>88</sup> with universal health coverage achieved shortly after. Costa Rica has placed primary health care at the core of health service networks to achieve impressive health outcomes and progressive health-system financing, in which the poorest 20% of the population benefit from 30% of the health expenditures and the richest 20% (who earn 48% of national income) from 11%.<sup>88</sup>

Comprehensive primary health care underpins the Cuban health system. Polyclinics serve as a hub for primary

health-care networks, which comprise 20–40 neighbourhood-based family doctor and nurse offices and provide care for 30 000–60 000 people,<sup>109</sup> managing around 80% of health problems.<sup>110</sup> The scope of primary health care was expanded in 2008 and includes health promotion, disease prevention, diagnostic services, emergency care, maternal and child health, chronic illnesses (eg, mental illness and cardiovascular disease), elderly care, long-term care, and cancer control.<sup>111</sup>

In Mexico, ambulatory health-care services were expanded with the introduction of *Seguro Popular*, which in 2012 included a benefits package of 284 cost-effective primary-care and secondary-care interventions and was free for beneficiaries at the point of delivery.<sup>112</sup> Ambulatory services for *Seguro Popular* are offered through primary-level and secondary-level hospitals and clinics. Additionally, mobile health teams, health promoters, and community health coordinators provide outreach services. The Mexican Social Security Institution for Workers and Civil Servants also offer a comprehensive package of personal and primary health-care services to their beneficiaries.<sup>113</sup>

The Peruvian health system is fragmented: the public sector serves the poor and indigent populations through ministry of health and regional health bureaus; the social security system caters for the salaried workers and their families, the military, and the police; and the private sector serves the wealthier population. In 2011, the health ministry introduced the Comprehensive Family and Community Care Model, with disease prevention, health promotion, and rehabilitation services to expand coverage, and incentives to encourage primary health-care physicians to work in poor and remote areas.<sup>10</sup>

In Uruguay, in 2008, Law 18211 increased health-system financing by the government and created the Integrated National Health System, which is responsible for organising and managing the public-private health-care delivery network. The health-system changes have prioritised primary health care on the basis of Alma Ata principles and elimination of copayments to expand access.<sup>114</sup>

In 1999, Venezuela introduced laws to create an integrated public health system underpinned by primary health care and suspended user fees for emergency services in public health-care providers. In 2003, Venezuela developed a new model (*Barrio Adentro*), in which primary health-care centres and teams provide comprehensive integrated care to families within a catchment area. The new model involves community participation in the design and implementation of primary health-care services and public health interventions, and emphasises population health, equity, and intersectoral action with interventions such as secure housing and income support. *Barrio Adentro* has expanded primary health-care access to the poorest populations and improved their health outcomes.<sup>115</sup>

exemplified by Brazil, Costa Rica, and Cuba (panels 4 and 5). The second path, as exemplified by Argentina, Chile, Colombia, Mexico, Peru, Uruguay, and Venezuela, led to

the development of parallel insurance and service delivery subsystems for different population groups with differential benefits, leading to segregation by employment

### Panel 6: Latin America: a pioneer in health-system reform and cooperation

#### Health as a citizen's right

In all the study countries, health is established as a legal or constitutional right, with mechanisms to enforce citizens' rights to health or to the protection of health.

Beyond developing services and integrating populations within health insurance schemes, health systems have enabled democratisation of health and created an intrinsic value in building citizenship. By helping to develop citizenship, health systems emerged as a unifying value and an institute for society—an especially important achievement in Latin America, which is characterised by unequal societies.

#### Diversity in organisation and governance

In the study countries, organisation of the health system has emphasised structural pluralism.<sup>63</sup> With the exception of Cuba, the countries studied retained a public-private mix in financing and service provision, but have strengthened the public sector.

Brazil and Costa Rica developed unified financing of the health system, with mixed provision of health-care services delivered by public and private sectors.

In Brazil, Cuba, Uruguay, and Venezuela, decentralisation accompanied community participation to increase accountability and responsiveness to local populations and engage them in decision making.

#### Cooperation and learning for health equity

An important, but not well publicised, feature of the health-system reforms in Latin America was the strong south-south cooperation for achieving health equity<sup>18</sup>—for example, among Argentina, Bolivia, Brazil, Cuba, Ecuador, and Venezuela; between Brazil and Lusophone Africa; and between Mexico and many countries globally. This cooperation helped to exchange knowhow to affect health reforms worldwide.

The experience with health-system reforms that emphasised health equity and efforts in building south-south cooperation has positioned Latin America as a leader for experience sharing. Cooperation among countries in Latin America has moved beyond exchange of experience and knowledge to include provision of health human resources by Cuba to Brazil and Venezuela for expansion of access to primary health-care services in return for payments to the Cuban Government, although bringing health workers from other countries is likely to be too costly for many Latin American countries. Research is needed to document systematically the positive and negative effects of transfer of human resources on the recipient and originating countries.

status. The third path, followed by all the study countries except Venezuela, made explicit the entitlements of citizens to specific health services (panels 4 and 5).<sup>11</sup>

Latin America has emerged as a pioneer in introducing a distinct combination of health-system reforms—some home grown, others inspired by the Washington Consensus—ahead of Africa and Asia, including in many countries a wave of equity-oriented rights-based health-system reforms to rectify the undesired consequences of earlier policies. In most of the countries studied, civil society played a crucially important part in shaping the reforms, opposing governments when policies adversely affected citizens and catalysing change when the right policies were introduced.

The countries studied developed country-level and regional capacity to learn from country and regional experiences, and used this capacity to refine health-system reforms to develop context-sensitive policies and learn from successes and failures to improve health outcomes (panel 6).

#### Expanded coverage of social protection and health insurance

The study countries introduced health financing and organisational reforms to strengthen health systems and to progress towards universal health coverage; in particular, Brazil, Chile, Colombia, Costa Rica, Cuba, and Mexico have achieved universal health financing with meaningful access to an expanded package of health services. The efforts in many countries to establish a payer system to overcome fragmentation and segregation in financing have to be combined with organisational reforms to overcome the fragmentation in service delivery.

Between 1995 and 2010, almost all of the study countries increased total health expenditures in absolute terms and as a proportion of gross domestic product, with a greater proportion of total health expenditures coming from public sources (figures 4A and 4B). Increased health financing has enabled expansion of health insurance coverage for poor and rural populations. However, private health expenditures, most of which are out of pocket, remain high (figure 4C).

#### Expanded coverage of health services on the basis of comprehensive primary health care

A distinguishing feature of the health-system reforms in Latin America was the strong focus on development of comprehensive primary health care on the basis of Alma Ata principles as the platform of primary health care and the vehicle for achieving universal health coverage, reducing inequities, and democratising health through participation. The countries studied expanded coverage of primary health-care services and prioritised targeting of the poorer population segments through supply-side (expanded coverage, scale up of services, and defined or guaranteed health benefits packages) and demand-side interventions (conditional cash transfers to expand access), particularly for immunisation and antenatal care (figures 5A and 5B).

For maternity services in the countries where series data exist (Brazil, Colombia, Mexico, and Peru), our analysis shows that antenatal coverage (at least four skilled antenatal care visits and skilled birth attendance) increased for the poorest groups, with a narrowing of the difference between the poorest 20% and richest 20% and similarly between the poorest 40% and the richest 40% (figures 6A and 6B). The improvements in mean level and equity for all countries for both indicators were achieved by increasing access to the poorest segments of the population (ie, access was already high at upper levels of the income distribution and did not change much in the period analysed). However, despite improvements, there is still opportunity for further improvements in all countries, particularly in Peru and Colombia (figures 6A and 6B).

The content of services and benefits were augmented (eg, in Brazil, Chile, Colombia, Peru, and Mexico) to meet the demands of epidemiological transition, especially for the poorest population segments. The unified health systems of Brazil, Costa Rica, and Cuba, which have

comprehensive and integrated primary health care, provide effective participative models for management of communicable diseases, maternal and child health, and non-communicable diseases.

### Improvements in health outcomes

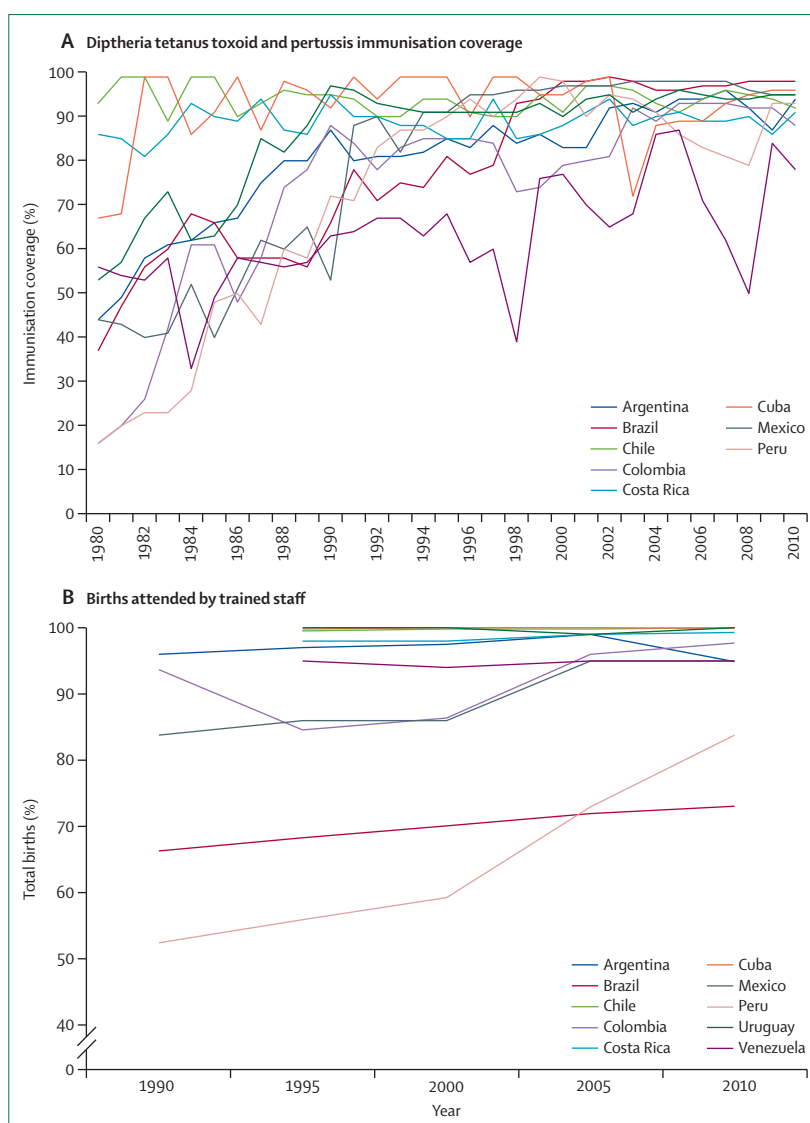
Along with economic development and rising incomes, improvements in health systems and universal health coverage have contributed to improved health outcomes for women (reduced maternal mortality ratio) and children (reduced under-5 and infant mortality rates; figure 7) and for communicable diseases such as malaria, neglected tropical diseases, and tuberculosis, which predominantly affect the poor.<sup>132,133</sup>

### Improvements in financial protection

Several studies that have investigated health-system financing in Latin America,<sup>134–138</sup> including in relation to universal health coverage,<sup>139</sup> have shown the benefits of universal health coverage in providing financial risk protection during illness. In Brazil, Costa Rica, and Mexico especially, expansion of universal financial coverage and health services has led to reduced catastrophic health expenditures among the poor.<sup>136,139</sup>

However, in this study, with the exception of Cuba, private and out-of-pocket expenditures of countries were high at 25–60% of total health expenditures (figures 4B and C) and have hardly changed between 1995 and 2010; in Cuba, out-of-pocket expenditures are less than 10% of the total health expenditure and, because there is no private insurance, these expenditures are personal expenditures for health items. In the other nine countries, with the exception of Uruguay, the out-of-pocket expenditures are for private health care and cost sharing.

High out-of-pocket expenditures create risks for catastrophic health expenditures and impoverishment for individuals who do not have social insurance or public health insurance. For example, a cross-country study<sup>140</sup> of Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Mexico, Nicaragua, and Peru that used 2003–08 household survey data showed that the amount of catastrophic health expenditure varied from less than 1% of households in Costa Rica, where social security covers most of the population, to 2–5% in Colombia, Bolivia, Brazil, Mexico, and Peru, and 7–11% in Argentina, Dominican Republic, Ecuador, Guatemala, and Nicaragua. Depending on the indicator used, catastrophic health spending was 10–15% in Nicaragua, Guatemala, Dominican Republic, Argentina, and urban Chile. Households without any form of private or social insurance were at greater risk of catastrophic health expenditures. The same study<sup>140</sup> also identified that rural or poor households and those with children or elderly members were especially at risk of suffering catastrophic health expenditure—groups that should be targeted when designing universal health coverage policies to improve equity of health financing and financial protection.<sup>136</sup>



**Figure 5: Health service coverage**

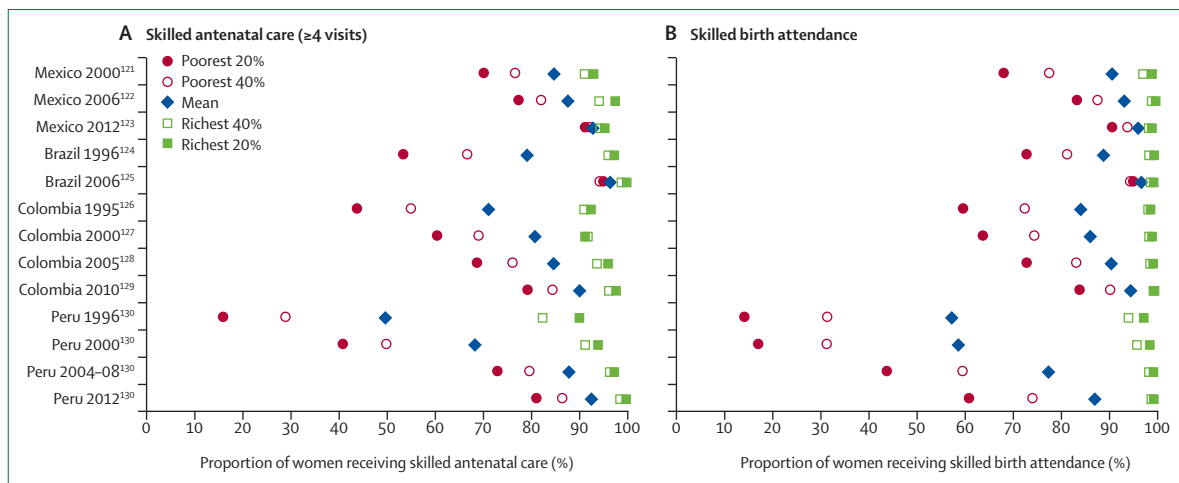
(A) Percentage of diphtheria tetanus toxoid and pertussis immunisation coverage among 1-year-olds.

(B) Proportion of births attended by trained staff. Data from WHO.<sup>119</sup>

However, Mexico's experience suggests that although overall out-of-pocket expenditures might not decline rapidly with universal health coverage, because of many factors—one of the most likely being that families were underspending on health before universal health coverage—the risk of catastrophic or impoverishing health expenditures is substantially reduced.<sup>77</sup>

### Improvements in satisfaction with health systems

Limited systematic data are available on satisfaction with health systems in Latin America. Analysis of data from the Latin America Public Opinion Surveys<sup>141</sup> in nine of the ten study countries (no data were available for Cuba) suggests that in 2007 around 25–50% of the population accessing health services were not satisfied with their



**Figure 6: Coverage of maternal health services**

Data are from 1995 to 2012 or the nearest year. Grouping of poorest and richest population segments represents the framework proposed by WHO and the World Bank Group.<sup>120</sup> Countries are ranked from highest to lowest mean level of skilled birth attendance for the latest year.

health services (figure 8). These levels were similar to those noted in 2003. However, caution should be exercised when assessing the available evidence on citizen satisfaction with health systems because this is a relative indicator that is shaped by general society's perceptions and several other factors, and in the context of Latin America more by health service access than broader changes in health financing and other health resources<sup>142</sup> or health outcomes.<sup>143</sup>

### Future challenges for Latin American health systems

Undoubtedly, in the Latin American countries studied, health-system reforms have fostered inclusion, citizen empowerment, and health equity; established legal rights to health and health protection; and achieved universal health coverage. Civil society played a prominent part in securing citizens' rights and the right to health. In most of the countries studied, these reforms were motivated by social justice and equity and the desire for democracy and citizens' rights in those countries in which there were military dictatorships and human rights abuses. However, in Mexico, the demographic and epidemiological transition and the segregation of health insurance were the crucial motivators.

The sustained economic growth in the 2000s provided fiscal space for the governments in Latin America to introduce social reforms, including conditional cash transfers that, between 2003 and 2008, lifted almost 60 million people out of poverty,<sup>144</sup> increased health expenditures, broadened health insurance, and expanded service coverage for poor populations. These reforms have better empowered citizens, ensured entitlement to health services, and expanded health insurance coverage. Higher financing for health was made possible by increased funding from public sources, including central government transfers and contributions from state governments where these exist (eg, Brazil, Chile, and Mexico) and municipalities

in all cases. Most of the study countries introduced comprehensive primary health care to improve access to health services for many millions of people, with improved health outcomes and financial risk protection. Yet, these achievements remain fragile and inequities remain. As with other countries in Latin America, the study countries face six major future challenges.

The first challenge is the socioeconomic inequalities in health outcomes. Despite the dramatic reductions in poverty, inequities persist in Latin America, the most inequitable region in the world, where there are high levels of corruption,<sup>145</sup> large income gaps between the rich and poor, disparities in social determinants of health, and differences in the quality of public and private health sectors. In spite of substantial improvements in access to health services and narrowing of the gaps between the rich and the poor, inequalities still exist (figures 6A and 6B). In 2011, around 177 million people in Latin America and the Caribbean lived below the poverty line, almost 70 million of whom lived in extreme poverty.<sup>146</sup> The disparities, which threaten universal health coverage efforts and democratic stability, are a stark reminder of the unfinished agenda of the inequalities in social determinants of health and health outcomes. Yet, there is limited research funding<sup>147</sup> to systematically and more precisely estimate the effect of the health-system reforms and universal health coverage on different socioeconomic groups.

The second challenge relates to organisation of health systems. Latin American health systems have intrinsic weaknesses, with fragmentation of organisation and service delivery, segmentation of financing, and a poorly regulated private sector, presenting challenges to the development of equitable and efficient health systems. With the exception of Brazil, Costa Rica, and Cuba, mixed health financing and delivery means fragmentation and segregation of health systems by employment groups. The experience of Turkey, which has successfully



established a general health insurance by merging five social insurance schemes,<sup>7</sup> offers learning opportunities for these countries.

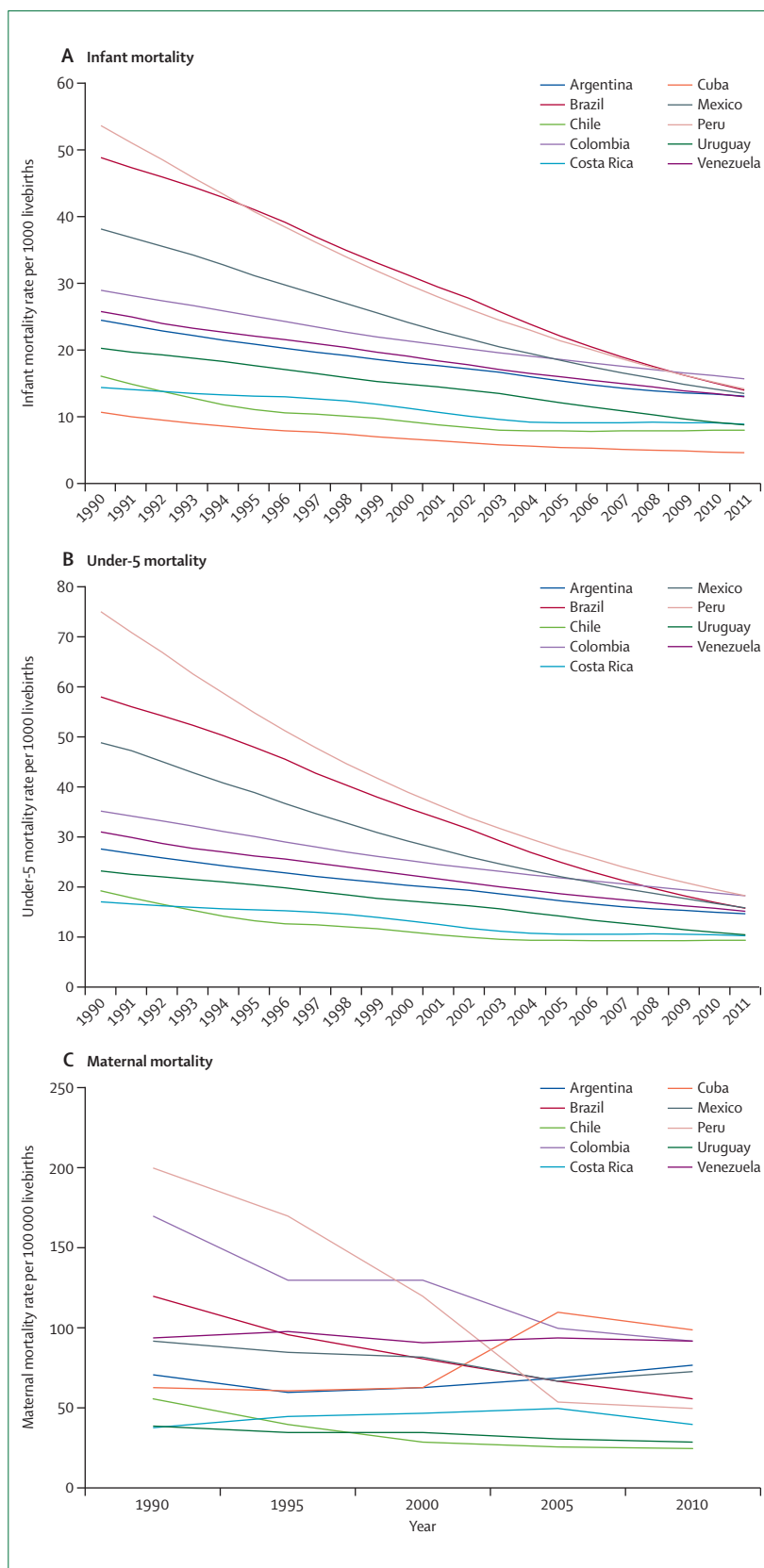
Health-system reforms in the Latin American countries studied have strengthened the public sector and improved regulations to moderate private sector expansion, but effective regulation of health insurers and health-care providers in both the public and private sectors remains a major challenge, especially in relation to service quality. The differences in service quality of private and public health-care providers have hindered the development of effectively functioning mixed national health systems.

Decentralisation has improved citizen participation in health systems, but has also generated more complex environments for governance and performance management, because of the varying capacity and wealth of different localities. If not effectively managed, decentralisation could further fragment decision making, widen inequalities between municipalities,<sup>148</sup> and risk politicisation of health decisions.

The third challenge is that of persistently inequitable financing. Although coverage of health financing has increased substantially, private health expenditures (figure 4B), comprising mostly out-of-pocket expenditures (figure 4C) remain high. Reducing out-of-pocket payments should be a priority for Latin American countries. Brazil, Costa Rica, and Mexico, which have reduced catastrophic health expenditures, provide useful role models for other Latin American countries.<sup>135,136</sup>

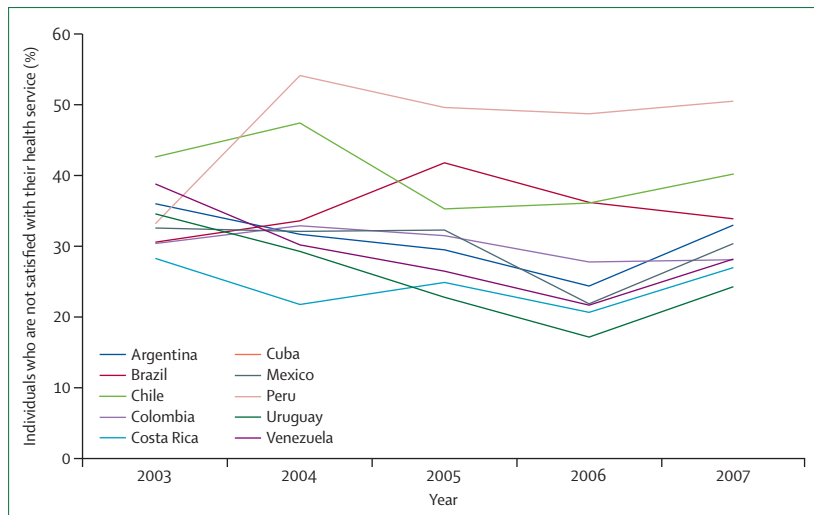
The fourth challenge relates to the development of health services that can meet the emerging health needs brought on by social and demographic transitions. The population of Latin America is ageing, owing to increasing life expectancy at birth (figure 2) and falling crude birth rates, resulting in a rapidly rising total dependency rate.<sup>149</sup> A consequence of the demographic transition is the emergence of a triple disease burden because of the unfinished agenda of maternal and child deaths and infectious diseases (eg, dengue fever, malaria, and drug-resistant tuberculosis), rapidly increasing chronic diseases—the major cause of disease burden in Latin America—including cancer and mental illness, and high mortality and disability from external causes (eg, traffic accidents and violent deaths related to illicit drugs; figure 3).<sup>133</sup> Health systems in the study countries must transition from being providers of acute, episodic care to offering care based on a lifecycle approach that responds to the nature of chronicity.

The fifth challenge relates to rapid urbanisation in Latin America,<sup>150</sup> which is creating large conurbations and increasingly dispersed rural communities with unmet health needs. By 2025, six of the 30 largest cities in the world are projected to be in Latin America (Bogota,



**Figure 7: Mortality rates**

(A) Infant mortality rate and (B) under-5 mortality rate per 1000 livebirths. Data from UNICEF.<sup>131</sup> (C) Maternal mortality rate per 100 000 livebirths. Data from WHO.<sup>9</sup>



**Figure 8: Proportion of individuals who are not satisfied with their health service**  
Data from *Latinobarómetro*.<sup>141</sup>

Buenos Aires, Lima, Mexico City, Rio de Janeiro, and Sao Paulo). Health systems will need to be strengthened to meet the needs of urban populations living in crowded settings, the rural poor, and hard-to-reach populations.

The sixth challenge is sustainability of health-system investments to achieve and maintain universal health coverage. The economic crises of the 1970s and 1980s were sources of major dissatisfaction for the population and triggered social movements that shaped health reforms. The global economic crisis, which began in 2008, has not spared Latin American countries. Once the engine of global economic growth, the emerging countries of Latin America face reduced economic growth, inflationary pressures, and declining value of their currencies. Against a backdrop of economic instability and faltering growth, Latin America faces the challenge of sustaining the gains in relation to universal health coverage. However, recent and historical experience shows that investing in health promotes economic growth.

Although economic crises test the resilience of health systems and the resolve of political leaderships, they also create unique opportunities. For Latin America, with distinct experience and achievements in health-system reform, the opportunity lies in showing the world that leadership matters most in times of crisis by accelerating economic and social reforms to further reduce socio-economic disparities and make universal health coverage a reality for all Latin American citizens.

#### Contributors

RA designed the study, led the analysis, and wrote the first draft and subsequent drafts with input from DC (overall), LOMdA and JBdP (Brazil), PSC-FS (Cuba), PF (Chile), OG-D and FMK (Mexico), PG (Peru), FR (Uruguay), CM (Venezuela), and GA, TD, and AW (equity analysis for Brazil, Peru, Mexico, and Colombia). RA is the guarantor.

#### Declaration of interests

We declare no competing interests.

#### References

- Atun R. Health systems, systems thinking and innovation. *Health Policy Plan* 2012; **27** (suppl 4): iv4–8.
- McKee M, Suhrcke M, Nolte E, et al. Health systems, health, and wealth: a European perspective. *Lancet* 2009; **373**: 349–51.
- Atun RA, Gurol-Urganci I. Health expenditure: an ‘investment’ rather than a cost? Working Paper 05/01. Royal Institute of International Affairs. International Economics Programme. Chatham House, London, 2005. <http://www.chathamhouse.org/publications/papers/view/108071> (accessed March 24, 2013).
- Sachs J. Macroeconomics and health: investing in health for economic development. Report of the Commission on Macroeconomics and Health. Geneva: World Health Organization, 2001.
- Schultz TW. Nobel lecture: the economics of being poor. *J Polit Econ* 1980; **88**: 639–51.
- Atun RA, Fitzpatrick SB. Advancing economic growth: investing in health. The Royal Institute of International Affairs. Chatham House; London, 2005. <http://www.chathamhouse.org/sites/default/files/public/Research/International%20Economics/investhealth.pdf> (accessed March 24, 2013).
- Atun R, Aydın S, Chakraborty S, et al. Universal health coverage in Turkey: enhancement of equity. *Lancet* 2013; **382**: 65–99.
- Stuckler D, Feigl A, Basu S, McKee M. The political economy of universal health coverage. November 2010. <http://www.pacifichealthsummit.org/downloads/UHC/the%20political%20economy%20of%20uhc.PDF> (accessed Sept 26, 2014).
- The World Bank. Indicators. <http://data.worldbank.org/indicator> (accessed Sept 16, 2013).
- Pan American Health Organization. Health in the Americas: regional outlook and country profiles. Scientific and Technical Publication No.636. Washington, DC: Pan American Health Organization, 2012.
- Cotlear D, Gómez-Dantés O, Knaul FM, et al. Overcoming social segregation in health care in Latin America. *Lancet* 2014; published online Oct 16. [http://dx.doi.org/10.1016/S0140-6736\(14\)61647-0](http://dx.doi.org/10.1016/S0140-6736(14)61647-0)
- Monteiro de Andrade LO, Filho AP, Solar O, et al. Social determinants of health, universal health coverage, and sustainable development: case studies from Latin American countries. *Lancet* 2014; published online Oct 16. [http://dx.doi.org/10.1016/S0140-6736\(14\)61646-9](http://dx.doi.org/10.1016/S0140-6736(14)61646-9).
- Institute for Health Metrics and Evaluation. Global Burden of Disease. Global, regional, and national incidence and mortality for HIV, tuberculosis, and malaria during 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013. <http://www.healthdata.org/gbd> (accessed Dec 10, 2013).
- Lim SS, Vos T, Flaxman AD, et al. A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990–2010: a systematic analysis for the Global Burden of Disease Study 2010. *Lancet* 2012; **380**: 2224–60.
- World Bank. Health, Nutrition and Population Division. HNP. Protecting pro-poor health services during financial crises. Lessons from experience. Washington, DC: The World Bank, 2009.
- Williamson J, ed. Latin American adjustment: how much has happened? Washington, DC: Institute for International Economics, 1990.
- WHO. Trade, foreign policy, diplomacy and health. Washington Consensus. <http://www.who.int/trade/glossary/story094/en/> (accessed Sept 10, 2013).
- Williamson J. Did the Washington Consensus fail? Outline of speech at the Center for Strategic and International Studies Washington, DC, November 6, 2002. <http://www.petersoninstitute.org/publications/papers/paper.cfm?ResearchID=488> (accessed Sept 10, 2013).
- de la Torre A, Caicedo FV. 2010. The Washington Consensus: assessing a damaged brand. <http://www.cgdev.org/content/publications/detail/1424155> (accessed Jan 14, 2014).
- Rodrik D. Goodbye Washington Consensus, hello Washington confusion? *J Econ Lit* 2006; **44**: 973–87.
- Stiglitz JE. Globalization and its discontents. New York: WW Norton, 2002.
- Williamson J. Democracy and the Washington Consensus. *World Dev* 1993; **21**: 1329–93.
- Ritter ARM. Shifting realities in special period Cuba. *Lat Am Res Rev* 2010; **45**: 229–38.
- Stiglitz JE. Whither reform? Towards a new agenda for Latin America. *CEPAL Rev* 2003; **80**: 7–38.

- 25 Rawlings LB, Rubio GM. Evaluating the impact of conditional cash transfer programs: lessons from Latin America. World Bank Policy Research Working Paper 3119. Washington, DC: The World Bank, 2003.
- 26 Cecchini S, Madariaga A. Conditional cash transfer programmes: the recent experience in Latin America and the Caribbean. Santiago, Chile: Economic Commission for Latin America and the Caribbean (ECLAC), 2011. [http://www.cepal.org/publicaciones/xml/6/45096/cue95\\_conditionalcashtransfer.pdf](http://www.cepal.org/publicaciones/xml/6/45096/cue95_conditionalcashtransfer.pdf) (accessed June 7, 2013).
- 27 Cecchini S, Veras-Soares F. Conditional cash transfers and health in Latin America. *Lancet* 2014; published online Oct 16. [http://dx.doi.org/10.1016/S0140-6736\(14\)61279-4](http://dx.doi.org/10.1016/S0140-6736(14)61279-4).
- 28 Gertler PJ, Martinez S, Celhay P. Impact evaluation of maternal child provincial health investment project in Argentina. *Plan Nacer*. Washington, DC: The World Bank, 2011.
- 29 *Bolsa Familia* Program. Decreto n° 5.209, de 17 de setembro de 2004 - Regulamenta a L- 010.836-2004 - Programa Bolsa Família. <http://www.dji.com.br/decretos/2004-005209/2004-005209.htm> (accessed June 7, 2013).
- 30 Rasella D, Aquino R, Santos C, Paes-Sousa R, Barreto M. Effect of a conditional cash transfer programme on childhood mortality: a nationwide analysis of Brazilian municipalities. *Lancet* 2013; **382**: 57–64.
- 31 Solidario C. Ley que establece un sistema de protección social para familias en situación de extrema pobreza denominado “Chile Solidario”, N° 19.949 de 2004. Santiago de Chile. <http://www.bcn.cl/lc/Instituciones/ulp> (accessed June 7, 2013).
- 32 Lavinás MH, Székely M. Mi Familia Progresá (MIFAPRO). Ejercicio de Apreciación Sustantiva. Guatemala City: United Nations Development Programme, 2011.
- 33 Gertler P. Do conditional cash transfers improve child health? Evidence from PROGRESA's control randomized experiment, health, health care, and economic development. *Am Econ Rev* 2004; **94**: 336–41.
- 34 Fernald LC, Gertler PJ, Neufeld LM. Role of cash in conditional cash transfer programmes for child health, growth, and development: an analysis of Mexico's *Oportunidades*. *Lancet* 2008; **371**: 828–37.
- 35 Perova E, Vakis R. Welfare impacts of the “Juntos” program in Peru: evidence from a non-experimental evaluation. Washington, DC: The World Bank, 2009.
- 36 Jones N, Vargas R, Villar E. Cash transfers to tackle childhood poverty and vulnerability: an analysis of Peru's *Juntos* programme. *Environ Urban* 2008; **20**: 255–73.
- 37 Borraz F, González N. Impact of the Uruguayan conditional cash transfer program. *Cuad Econ* 2009; **46**: 243–71.
- 38 Lagarde M, Haines A, Palmer N. The impact of conditional cash transfers on health outcomes and use of health services in low and middle income countries. *Cochrane Database Syst Rev* 2009; **4**: CD008137.
- 39 Eckstein S, ed. Power and popular protest: Latin American social movements. Berkeley: University of California Press, 2001.
- 40 Escobar A, Alvarez SE. The making of social movements in Latin America: identity, strategy, and democracy. Boulder, CO: Westview Press, 1992.
- 41 Matsuura H. The effect of a constitutional right to health on population health in 157 countries, 1970–2007: the role of democratic governance. The program on the global demography of aging. PGDA Working Paper No. 106; 2013. Harvard School for Public Health. [http://www.hsph.harvard.edu/pgda/wp-content/uploads/sites/1288/2013/10/PGDA\\_WP\\_106.pdf](http://www.hsph.harvard.edu/pgda/wp-content/uploads/sites/1288/2013/10/PGDA_WP_106.pdf) (accessed Dec 26, 2013).
- 42 De Vos P. “No one left abandoned”: Cuba's national health system since the 1959 revolution. *Int J Health Serv* 2005; **35**: 189–207.
- 43 Aitsiselmi A. An analysis of the Cuban health system. *Public Health* 2004; **118**: 599–601.
- 44 Cooper RS, Kennelly JF, Orduñez-García P. Health in Cuba. *Int J Epidemiol* 2006; **35**: 817–24.
- 45 Ministerio Secretaría General de la Fija el texto refundido, coordinado y sistematizado de la Constitución Política de la República de Chile. <http://www.leychile.cl/Navegar?idNorma=242302> (accessed Dec 26, 2013).
- 46 Unger J-P, De Paepe P, Cantuarias GS, Herrera OA. Chile's neoliberal health reform: an assessment and a critique. *PLoS Med* 2008; **5**: e79.
- 47 Sojo A. Health benefits guarantees in Latin America: equity and quasi-market restructuring at the beginning of the Millennium. *Estudios y Perspectivas Series*. Mexico City, Mexico: ECLAC, 2006. <http://www.eclac.org/cgi-bin/getProd.asp?xml=/publicaciones/xml/1/25601/P25601.xml&xsl=/mexico/tpl-i/p9f.xsl&base=/tpl-i/top-bottom.xsl> (accessed Dec 28, 2013).
- 48 Ministerio de Salud. Gobierno de Chile. Normativas del AUGE (*Acceso Universal Garantías Explícitas*) 2013. [http://web.minsal.cl/AUGE\\_NORMATIVA](http://web.minsal.cl/AUGE_NORMATIVA) (accessed Sept 26, 2014).
- 49 Cohn A. La reforma sanitaria brasileña: la victoria sobre el modelo neoliberal. *Med Soc* 2008; **3**: 87–99.
- 50 Constitución Política de Colombia de 1991. <http://www.alcaldiabogota.gov.co/sisjur/normas/Norma1.jsp?i=4125> (accessed Sept 26, 2014).
- 51 Corte Constitucional de Colombia. Sentencia T-760/08 <http://www.corteconstitucional.gov.co/relatoria/2008/t-760-08.htm> (accessed Sept 26, 2014).
- 52 Muntaner C, Salazar RM, Rueda S, Armada F. Challenging the neoliberal trend: the Venezuelan health care reform alternative. *Can J Public Health* 2006; **97**: 119–24.
- 53 Frencke P. Peru's comprehensive health insurance and new challenges for universal coverage. UNICO studies Series 11. Washington, DC: The World Bank, 2013. [http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/02/04/000333037\\_20130204132205/Rendered/PDF/750090NWP0Box30r0Universal0Coverage.pdf](http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/02/04/000333037_20130204132205/Rendered/PDF/750090NWP0Box30r0Universal0Coverage.pdf) (accessed June 8, 2013).
- 54 Frencke P. El Seguro Integral de Salud: una historia política.” En *La política y la pobreza en los países andinos*, ed. Kristen Sample y Gustavo Guerra-García. Lima: IDEA Internacional y Asociación Civil Transparencia, 2006.
- 55 Langer A, Nigenda G, Catino J. Health sector reform and reproductive health in Latin America and the Caribbean: strengthening the links. *Bull World Health Organ* 2000; **78**: 667–76.
- 56 Tribunal Electoral del Poder Judicial de la Federación. Political Constitution of the United Mexican States. <http://portal.te.gob.mx/en/consultations/political-constitution-united-mexican-states> (accessed June 8, 2013).
- 57 Frenk J, Gómez-Dantés O, Knaut FM. The democratization of health in Mexico: financial innovations for universal coverage. *Bull World Health Organ* 2009; **87**: 542–48.
- 58 Aran D, Laca H. The health system of Uruguay. *Salud Publica Mex* 2011; **53** (suppl 2): s265–74 (in Spanish).
- 59 República Oriental del Uruguay. Poder Legislativo. Ley No 18.211. Sistema nacional integrado de salud. <http://www.parlamento.gub.uy/leyes/TextoLey.asp?Ley=18211&Anchor=>(accessed Jan 5, 2014).
- 60 Sojo A. Condiciones para el acceso universal a la salud en América Latina: derechos sociales, protección social y restricciones financieras y políticas. *Ciênc Saúde Coletiva* 2011; **16**: 2673–85.
- 61 Frenk J. La salud en transición. *Nexos* 1988; **XXII**: 25–30.
- 62 Dachs JN, Ferrer M, Florez CE, Barros AJ, Narváez R, Valdivia M. Inequalities in health in Latin America and the Caribbean: descriptive and exploratory results for self-reported health problems and health care in twelve countries. *Rev Panam Salud Publica* 2002; **11**: 335–55.
- 63 Londoño JL, Frenk J. Structured pluralism: towards an innovative model for health system reform in Latin America. *Health Policy* 1997; **41**: 1–36.
- 64 Homedes N, Ugalde A. Why neoliberal health reforms have failed in Latin America. *Health Policy* 2005; **71**: 83–96.
- 65 Ramírez NA, Ruiz JP, Romero RV, Labonté R. Comprehensive primary health care in South America: contexts, achievements and policy implications. *Cad Saude Publica* 2011; **27**: 1875–90.
- 66 Pan American Health Organization/WHO. Public health in the Americas: conceptual renewal, performance assessment, and bases for action. Washington, DC: Pan American Health Organization/World Health Organization, 2002.
- 67 WHO. International Health Regulations 2005. Geneva: World Health Organization, 2005. <http://www.who.int/ihr/publications/9789241596664/en/> (accessed Sept 26, 2014).
- 68 Barrientos A, Lloyd-Sherlock P. Health insurance reforms in Latin America: cream skimming, equity, and cost containment. In: Haagh L, Helgo CT, eds. Social policy reform and market governance in Latin America. London: Macmillan, 2003: 183–99.

- 69 Arrieta A. Health reform and cesarean sections in the private sector: the experience of Peru. *Health Policy* 2011; **99**: 124–30.
- 70 Drechsler D, Jütting J. Different countries, different needs: the role of private health insurance in developing countries. *J Health Polit Policy Law* 2007; **32**: 497–534.
- 71 Barrientos A, Lloyd-Sherlock P. Reforming health insurance in Argentina and Chile. *Health Policy Plan* 2000; **15**: 417–23.
- 72 Cortez R, Romero D. Argentina. Increasing utilization of health care services among the uninsured populations: the *Plan Nacer* Programme. Universal Health Coverage Series; UNICO Studies Series No 12. Washington, DC: The World Bank Human Development Network, 2013. [http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/01/31/000425962\\_201301311151019/Rendered/PDF/749560NWP0ARGE00Box374316B00PUBLIC0.pdf](http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/01/31/000425962_201301311151019/Rendered/PDF/749560NWP0ARGE00Box374316B00PUBLIC0.pdf) (accessed Dec 30, 2013).
- 73 Gragnolati M, Lindelow M, Couttolenc B. Twenty years of health system reform in Brazil: an assessment of the Sistema Único de Saúde. Directions in development. Washington, DC: World Bank, 2013.
- 74 de la Jara JJ, Bossert T. Chile's health sector reform: lessons from four reform periods. *Health Policy* 1995; **32**: 155–66.
- 75 Bitran R. Explicit health guarantees for Chileans: the AUGE benefits package. Universal Health Coverage Series; UNICO Studies Series No 21. Washington, DC: The World Bank Human Development Network, 2013. [http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/02/01/000356161\\_20130201171654/Rendered/PDF/749580NWP0CHIL00Box374316B00PUBLIC0.pdf](http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/02/01/000356161_20130201171654/Rendered/PDF/749580NWP0CHIL00Box374316B00PUBLIC0.pdf) (accessed Dec 30, 2013).
- 76 Ministerio de Salud (MINSAL). Ley 19.937 que modifica el D.L. No 2.763, de 1979, con la finalidad de establecer una nueva concepción de la autoridad sanitaria, distintas modalidades de gestión y fortalecer la participación ciudadana (2004). <http://www.leychile.cl/Navegar?idNorma=221629> (accessed Jan 5, 2014).
- 77 Knaul FM, González-Pier E, Gómez-Dantés O, et al. The quest for universal health coverage: achieving social protection for all in Mexico. *Lancet* 2012; **380**: 1259–79.
- 78 Homedes N, Ugalde A. Twenty-five years of convoluted health reforms in Mexico. *PLoS Med* 2009; **6**: e1000124.
- 79 Frenk J, Sepúlveda J, Gómez-Dantés O, Knaul F. Evidence-based health policy: three generations of reform in Mexico. *Lancet* 2003; **362**: 1667–71.
- 80 Jack W. Public intervention in health insurance markets: theory and four examples from Latin America. *World Bank Res Obs* 2002; **17**: 67–88.
- 81 Clark MA. Health sector reform in Costa Rica: reinforcing a public system. Woodrow Wilson Center workshops on the politics of education and health reforms. Washington, DC, 2002. [http://www.wilsoncenter.org/sites/default/files/Clark\\_Paper.pdf](http://www.wilsoncenter.org/sites/default/files/Clark_Paper.pdf) (accessed Sept 16, 2013).
- 82 Madies CV, Chiarveti S, Chorny M. Insurance and coverage: two critical topics in health care reforms. *Rev Panam Salud Publica* 2000; **8**: 33–42 (in Spanish).
- 83 Méndez CA, López JJ. Community participation in health: the challenge in Chile. *Rev Panam Salud Publica* 2010; **27**: 144–48 (in Spanish).
- 84 Gobierno de Chile. 2004. Ley 19.966 Régimen de Garantías en Salud. Santiago de Chile, Chile, 2004. <http://www.leychile.cl/Navegar?idNorma=229834&idParte=0> (accessed July 6, 2014).
- 85 Health Data OECD. How does Chile compare. 2014. <http://www.oecd.org/els/health-systems/Briefing-Note-CHILE-2014.pdf> (accessed Sept 26, 2014).
- 86 Frenz P, Delgado Becerra I, Villanueva Pabón L, Kaufman JS, Muñoz Porras F, Navarrete Couble MS. Universal health coverage assessment based on national socioeconomic characterization surveys. *Rev Med Chil* 2013; **141**: 1095–106 (in Spanish).
- 87 Ruiz Gómez F, Zapata Jaramillo T, Garavito Beltrán L. Colombian health care system: results on equity for five health dimensions, 2003–2008. *Rev Panam Salud Publica* 2013; **33**: 107–15.
- 88 Torres FM. Costa Rica case study: primary health care, achievements and challenges with the framework of the social health insurance. Universal Health Coverage Series; UNICO Studies Series No 14. Washington, DC: The World Bank Human Development Network, 2013. <https://openknowledge.worldbank.org/bitstream/handle/10986/13279/74962.pdf?sequence=1> (accessed Dec 31, 2013).
- 89 Gutiérrez SMB, Mizota T, Rakue Y. Comparison of four health systems: Cuba, China, Japan and the USA, an approach to reality. *Southeast Asian J Trop Med Public Health* 2003; **34**: 937–46.
- 90 World Bank. Data. Cuba. <http://data.worldbank.org/country/cuba> (accessed June 16, 2013).
- 91 Knaul FM, Arreola-Ornelas H, Méndez-Carniado O, et al. Evidence is good for your health system: policy reform to remedy catastrophic and impoverishing health spending in Mexico. *Lancet* 2006; **368**: 1828–41.
- 92 Iwami M, Petchey R, and the Local Committees for Health Administration. A CLAS act? Community-based organizations, health service decentralization and primary care development in Peru. *J Public Health Med* 2002; **24**: 246–51.
- 93 Levino A, Carvalho EF. Comparative analysis of health systems on the triple border between Brazil, Colombia, and Peru. *Rev Panam Salud Publica* 2011; **30**: 490–500.
- 94 WHO. Global health expenditure database. <http://apps.who.int/nha/database> (accessed Sept 26, 2014).
- 95 Filardo Z. El Reforma del Sistema de Salud del Uruguay. Efectos Fiscales de Largo Plazo. Universidad de la Republica, August 2013. <http://www.ccee.edu.uy/jacad/2013/file/ECONOMIA/Reformas%20del%20sistema%20de%20saludo%20de%20Uruguay.pdf> (accessed Jan 5, 2014).
- 96 Ortiz-Andrellucchi A, Peña Quintana L, Albino Beñacar A, Mönckeberg Barros F, Serra-Majem L. Child subnutrition, health and poverty, integral intervention programme. *Nutr Hosp* 2006; **21**: 533–41 (in Spanish).
- 97 Jiménez J, Romero MI. Reducing infant mortality in Chile: success in two phases. *Health Aff (Millwood)* 2007; **26**: 458–65.
- 98 Vega Romero R, Carrillo Franco J. APS y acceso a universal a los servicios de salud en las condiciones del SGSSS de Colombia. “El caso de Salud a su Hogar” en Bogotá. *Rev Gerenc Políticas Salud* 2006; **5**: 38–52.
- 99 WHO. Declaration of Alma-Ata. International Conference on Primary Health Care, Alma Ata, USSR; Geneva; Sept 6–12, 1978.
- 100 WHO. Primary health care: a framework for future strategic directions. WHO/MNC/OSD/03.01. Geneva: World Health Organization, 2003.
- 101 Mahmood Q, Muntaner C. Politics, class actors, and health sector reform in Brazil and Venezuela. *Glob Health Promot Educ* 2013; **20**: 59–67.
- 102 Victora CG, Barreto ML, do Carmo Leal M, et al, and the Lancet Brazil Series Working Group. Health conditions and health-policy innovations in Brazil: the way forward. *Lancet* 2011; **377**: 2042–53.
- 103 Couttolenc B, Dmytraczenko T. Brazil's primary care strategy. Universal Health Coverage Series; UNICO Studies Series No 2. Washington, DC: The World Bank Human Development Network, 2013. [http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/01/31/000425962\\_20130131142856/Rendered/PDF/749570NWP0BRAZ00Box374316B00PUBLIC0.pdf](http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/01/31/000425962_20130131142856/Rendered/PDF/749570NWP0BRAZ00Box374316B00PUBLIC0.pdf) (accessed Dec 31, 2013).
- 104 Aquino R, de Oliveira NF, Barreto ML. Impact of the family health program on infant mortality in Brazilian municipalities. *Am J Public Health* 2009; **99**: 87–93.
- 105 Rasella D, Harhay MO, Pamponet ML, Aquino R, Barreto ML. Impact of primary health care on mortality from heart and cerebrovascular diseases in Brazil: a nationwide analysis of longitudinal data. *BMJ* 2014; **349**: g4014.
- 106 Manuel A. The Chilean health system: 20 years of reforms. *Salud Publica Mex* 2002; **44**: 60–68.
- 107 Ministerio de Salud (MINSAL) de Chile. Ley 19.378 que establece el Estatuto de Atención Primaria de la Salud (1995). <http://www.leychile.cl/Navegar?idNorma=30745> (accessed Dec 31, 2013).
- 108 Ministerio de Salud (MINSAL) de Chile. En el camino a Centro de Salud Familiar. Santiago, 2008. <http://buenaspracticassaps.cl/wp-content/uploads/2014/07/MINSAL-2008-En-el-camino-a-Centro-de-Salud-Familiar.pdf> (accessed Sept 26, 2014).
- 109 WHO. Cuba's primary health care revolution: 30 years on. Geneva: World Health Organization, 2008. <http://www.who.int/bulletin/volumes/86/5/08-030508/en/index.html> (accessed May 10, 2013).
- 110 Dresang LT, Brebrick L, Murray D, Shallue A, Sullivan-Vedder L. Family medicine in Cuba: community-oriented primary care and complementary and alternative medicine. *J Am Board Fam Pract* 2005; **18**: 297–303.
- 111 Romero T. Changing the paradigm of cancer control in Cuba. *MEDICC Rev* 2009; **11**: 5–7.



- 112 Bonilla-Chacín ME, Aguilera N. The Mexican social protection system in health. Universal Health Coverage (UNICO) Studies Series No 1. Washington, DC: The World Bank, 2013. <http://documents.worldbank.org/curated/en/2013/01/17286333/mexican-social-protection-system-health> (accessed June 8, 2014).
- 113 Frenk J, González-Pier E, Gómez-Dantés O, Lezana MA, Knaul FM. Comprehensive reform to improve health system performance in Mexico. *Lancet* 2006; **368**: 1524–34.
- 114 Pan American Health Organization. Uruguay. [http://www.paho.org/hq/index.php?option=com\\_docman&task=doc\\_view&gid=25190&Itemid=](http://www.paho.org/hq/index.php?option=com_docman&task=doc_view&gid=25190&Itemid=) (accessed July 7, 2014).
- 115 Mahmood Q, Muntaner C, del Valle Mata León R, Perdomo ER. Popular participation in Venezuela's *Barrio Adentro* health reform. *Globalizations* 2012; **9**: 815–33.
- 116 Bursztyn I, Kushnir R, Giovannella L, et al. Notes for studying primary care within the context of segmented health systems. *Rev Salud Publica (Bogota)* 2010; **12** (suppl 1): 77–88 (in Spanish).
- 117 Nelson J, Kaufman RR. Woodrow Wilson Center update on the Americas. The politics of health sector reforms: cross-national comparisons. Washington, DC: Woodrow Wilson Centre, 2003.
- 118 Muntaner C, Armada F, Chung H, et al. Venezuela's *Barrio Adentro*: participatory democracy, south-south cooperation and health care for all. *Soc Med* 2008; **3**: 232–46.
- 119 WHO. Global Health Data Repository. Diphtheria tetanus toxoid and pertussis (DTP3). Data by country <http://apps.who.int/gho/data/node.main.A827?lang=en> (accessed June 16, 2013).
- 120 WHO and the World Bank Group. Monitoring progress toward universal coverage at country and global levels: framework, measures and targets. Geneva: World Health Organization.
- 121 Encuesta Nacional de Salud Mexico 2000 (ENSA 2000). I. Vivienda, población y utilización de servicios de salud. [http://ensanut.insp.mx/informes/ENSA\\_tomo1.pdf](http://ensanut.insp.mx/informes/ENSA_tomo1.pdf) (accessed July 10, 2014).
- 122 Encuesta Nacional de Salud y Nutrición 2006 (ENSANUT 2006). <http://ensanut.insp.mx/informes/ensanut2006.pdf> (accessed July 10, 2014).
- 123 Encuesta Nacional de Salud y Nutrición 2012 (ENSANUT 2012). <http://ensanut.insp.mx/informes/ENSANUT2012ResultadosNacionales.pdf> (accessed July 10, 2014).
- 124 Brasil Pesquisa Nacional de Demografia e Saúde 1996. <http://dhsprogram.com/pubs/pdf/FR77/FR77.pdf> (accessed July 10, 2014).
- 125 PNDS 2006. Pesquisa Nacional de Demografia e Saúde da Criança e da Mulher. [http://bvsms.saude.gov.br/bvs/publicacoes/relatorio\\_pnds\\_2006.pdf](http://bvsms.saude.gov.br/bvs/publicacoes/relatorio_pnds_2006.pdf) (accessed July 10, 2014).
- 126 Colombia National Demographic and Health Survey 1995 (in Spanish). <http://dhsprogram.com/publications/publication-FR65-DHS-Final-Reports.cfm> (accessed Sept 30, 2014).
- 127 Colombia National Demographic and Health Survey 2000 (in Spanish). <http://dhsprogram.com/publications/publication-FR114-DHS-Final-Reports.cfm> (accessed Sept 30, 2014).
- 128 Colombia National Demographic and Health Survey 2005 (in Spanish). <http://dhsprogram.com/publications/publication-FR172-DHS-Final-Reports.cfm> (accessed Sept 30, 2014).
- 129 Colombia National Demographic and Health Survey 2010 (in Spanish). <http://dhsprogram.com/publications/publication-FR246-DHS-Final-Reports.cfm> (accessed Sept 30, 2014).
- 130 The World Bank. MEASURE DHS: Demographic and Health Surveys. Peru [http://microdata.worldbank.org/index.php/catalog/dhs#\\_r=1411894184948&collection=&country=&dtype=&from=1890&page=1&ps=&sk=Peru&sort\\_by=nation&sort\\_order=&to=2014&topic=&view=s&vk=](http://microdata.worldbank.org/index.php/catalog/dhs#_r=1411894184948&collection=&country=&dtype=&from=1890&page=1&ps=&sk=Peru&sort_by=nation&sort_order=&to=2014&topic=&view=s&vk=) (accessed July 10, 2014).
- 131 UNICEF. Despite major progress, the full potential of immunization is not close to being realized. <http://www.childinfo.org/bluebook/profiles.html> (accessed Sept 16, 2013).
- 132 WHO. Global Health Observatory Data Repository. Tuberculosis. <http://apps.who.int/gho/data/node.main.1315?lang=en> (accessed Sept 26, 2013).
- 133 Lozano R, Naghavi M, Foreman K, et al. Global and regional mortality from 235 causes of death for 20 age groups in 1990 and 2010: a systematic analysis for the Global Burden of Disease Study 2010. *Lancet* 2012; **380**: 2095–128.
- 134 Escobar M-L, Griffin CC, Shaw RP, eds. The impact of health insurance on low- and middle-income countries. Washington, DC: The Brookings Institution Press, 2011.
- 135 WHO. The World Health Report—health systems financing: the path to universal coverage. Geneva: World Health Organization, 2010. <http://www.who.int/whr/2010/en/index.html> (accessed June 7, 2013).
- 136 Knaul FM, Wong R, Arreola-Ornelas H, Méndez O, and the Network on Health Financing and Social Protection in Latin America and the Caribbean (LANET). Household catastrophic health expenditures: a comparative analysis of twelve Latin American and Caribbean Countries. *Salud Publica Mex* 2011; **53** (suppl 2): s85–95.
- 137 Knaul FM, Wong R, Arreola-Ornelas H. Household spending and impoverishment. Financing health in Latin America series, volume 1. Cambridge, MA: Harvard University Press, 2012.
- 138 Berman P, Arellanes L, Henderson P, Magnoli A. Health care financing in eight Latin American and Caribbean nations: the first Regional National Health Accounts Network. Partnerships for Health Reform and Latin America and Caribbean Regional Health Sector Reform Initiative. Washington, DC: USAID, 1999.
- 139 Giedion U, Alfonso EA, Díaz Y. UNICO Studies Series 25. The impact of universal coverage schemes in the developing world: a review of the existing evidence. Washington, DC: The World Bank, 2013.
- 140 Knaul FM, Wong R, Arreola-Ornelas H, et al. Household catastrophic health expenditures: a comparative analysis of 12 Latin American and Caribbean countries. Chapter 3. In: Knaul FM, Wong R, Arreola-Ornelas H, eds. Financing health in Latin America. Cambridge, MA: Harvard Global Equity Initiative, Fundación Mexicana para la Salud, IDRC, and distributed by Harvard University Press, 2012.
- 141 Latinobarómetro. Latinobarómetro 1995–2011. <http://www.latinobarometro.org/latOnline.jsp> (accessed Nov 18, 2013).
- 142 Savedoff W. A moving target: universal access to healthcare services in Latin America and the Caribbean. Working Paper #667. Washington, DC: Inter-American Development Bank, 2009. <http://www.iadb.org/res/publications/pubfiles/pubWP-667.pdf> (accessed Aug 10, 2014).
- 143 Kim MK, Blendon RJ, Benson JM. What is driving people's dissatisfaction with their own health care in 17 Latin American countries? *Health Expect* 2013; **16**: 155–63.
- 144 World Bank. Prime time focus on conditional cash transfer programs in Latin America. <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/LACEXT/0,,contentMDK:22370391~pagePK:146736~piPK:146830~theSitePK:258554,00.html> (accessed Sept 26, 2014).
- 145 Transparency International. Corruption perception index 2012. <http://www.transparency.org/cpi2012/results> (accessed Aug 10, 2014).
- 146 Comisión Económica para América Latina y el Caribe. Panorama social de América Latina, 2011. <http://www.eclac.org/publicaciones/xml/1/45171/PSE2011-Panorama-Social-de-América-Latina.pdf> (accessed Sept 12, 2013).
- 147 The Mexico Statement: strengthening health systems. *Lancet* 2004; **364**: 1911–12.
- 148 Leite VR, De Vasconcelos CM, Lima KC. Federalism and decentralization: impact on international and Brazilian health policies. *Int J Health Serv* 2011; **41**: 711–23.
- 149 Leeson GW. The demographics of population ageing in Latin America, the Caribbean and the Iberian Peninsula, 1950–2050. Research Report. Oxford: Oxford Institute of Population and Ageing, Oxford University, 2011. [http://www.ageing.ox.ac.uk/files/larna\\_demographics.pdf](http://www.ageing.ox.ac.uk/files/larna_demographics.pdf) (accessed Sept 26, 2014).
- 150 United Nations. América Latina: urbanización, pobreza y desarrollo humano. <http://www.unic.org.ar/prensa/archivos/urbanizaciondatoslatam.pdf> (accessed Dec 22, 2013).