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Guest Editor
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Gabriel Martínez

Carolyn Hughes Tuohy

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Andrew Herring
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UNDERSTANDING TEN YEARS OF STAGNATION IN COSTA RICA'S DRIVE FOR UNIVERSAL COVERAGE

Jorine Muiser

University of Costa Rica
jorine.muiser@gmail.com

Andrew Herring

Harvard University
andrew_herring@student.hms.harvard.edu

Juan Rafael Vargas

University of Costa Rica
jrvargas20@gmail.com

Abstract

This study analyzes achievements and obstacles in the process of moving towards universal coverage of essential health care services in Costa Rica. It describes the country as exemplary in the region, both in terms of population health status as well as health financing indicators. Life expectancy and the level of pre-payment are both comparable to high income countries. However, the process that implied a step-by-step inclusion of socio-economic population groups into a single social health insurance fund scheme, which produced its main achievements in the period 1950 - 1970, stagnated in the early nineties. Except for a qualitative analysis of the design and current performance of Costa Rica's health financing system, this paper presents the results of a cross sectional analysis of the 2006 National Health Survey indicating that not only affluent but also marginalized groups are currently excluded from the scheme despite Costa Rica's universal coverage health policy.

— Key words: Cross-sectional models, government expenditures and health, analysis of health care markets, government policy, regulation, public health.

JEL Classification: C21, H51, I11, I18.

Introduction

Costa Rica has made itself an exception within Latin America as a middle income country that reached a remarkable health status comparable to high income countries at a relatively low cost (Bertodano 2003; Cruz Martínez 2005). The country also occupies a high position in the

UNDP Human Development Index relative to its Gross Domestic Product¹ (UNDP 2006). These achievements are attributed to Costa Rica's high investments in health and education compared to other Latin American countries after it abolished the army in 1948 (Vargas 1992). More particularly, it is related to Costa Rica's all inclusive health system (Herrero and Durán 2001). Since 1941, increasing proportions of the population contribute to and/or benefit from a social health insurance scheme that provides relatively high quality health care and reaches into the country's deepest forests. As an exemplar country with nearly 90% of its population covered by the social health insurance scheme, much can be learned from the Costa Rican experience as the rest of Latin America strives for a more complete coverage of its population.

However, in response to internal and external factors, the health system reforms needed for the system to adapt to its new socio-economic context that initiated in the 1990s are as yet to be completed. Meanwhile, macro-economic developments and a restructuring labor market further increase the pressure on the model. Consequently, researchers have started to demystify some of the achievements of Costa Rica's public health system expressing concern about growing waiting times and lists, a debilitating infrastructure, increasing problems of efficiency and equity, short-falls in medical specialists and rural health workers, high levels of evasion and, more generally, a lack of financial sustainability in view of an increasing demand and rising health care costs (Herrero and Durán 2001; Ministerio de Salud 2002; PAHO 2004).

This paper analyzes the systemic determinants (design and performance) of the coverage level achieved by Costa Rica's health financing scheme over the past decennia. For the analysis, it uses the WHO health financing framework (WHO 2000; Carrin and James 2005), designed to help countries in their pursuit to achieve universal coverage for basic health care services. It distinguishes three key functions of health system financing: revenue collection, pooling and purchasing. As our main topics of interest are coverage and its systemic determinants, this paper focuses on the design and performance of revenue collection only. The main findings of the paper are that the upwards trend in coverage levels since the 1940s stagnated in the 1990s due to a lack of incentives for people to contribute to the scheme and the provision that allows people to opt out despite the scheme being obligatory, among other things. Against the intention of the scheme, however, not only rich, but also poor people seem to make use of this option. Furthermore, the lack of efficiency in the public sector and the increase in activity on the largely unregulated private health care market seem to push increasing numbers of people out of the social health insurance scheme.

The paper is organized as follows. The first section describes the methodology used for our analysis, including the quantitative data analysis of two household surveys. The second section is a short description of the Costa Rican health and health financing system. It also describes the country's main public health policies, which contribute to explaining the stagnation in coverage of the social health insurance scheme. The third section presents findings from our qualitative and quantitative studies. The paper ends with a discussion section.

¹ It was number 48 in 2004 and as such part of the group of 'high' countries and fourth highest of Latin American country after Argentina, Chile and Uruguay (UNDP 2006).

1. Methodology

1.1 Qualitative health systems analysis

The analysis of the Costa Rican health financing scheme presented in this paper is based on the WHO health financing framework (WHO 2000). The latter describes the three key functions of health financing systems as revenue collection, pooling and purchasing. As our main topics of interest are coverage and its systemic determinants, this paper focuses on the design and performance of revenue collection only. Indicators identified to monitor revenue collection are coverage and method of finance. To measure how well a health financing scheme performs in these terms, targets were set based on evidence from different countries. These targets should not be taken rigorously but merely as indications. The indicators and targets are presented in Table 1.

In order to understand the behavior of the revenue collection function of the Costa Rican health financing scheme and to provide an explanation for the stagnation in coverage that it experienced over the last 15 years, this paper presents trends over time in population coverage for different socio-economic groups, and in public and private health expenditure. Data will be used from primary and secondary sources. The primary data are from a number of household surveys carried out in 2006. The remaining part of this section describes the methodology used to analyze these new data sets.

1.2 Quantitative analysis

The study is a descriptive, cross sectional, epidemiological study that analyzes health expenditures, health care resource utilization, and health insurance coverage patterns of the Costa Rican

Table 1
Analytical Framework

Revenue collection indicators (1.) & (2.)	Benchmark / target
1. Population coverage <ul style="list-style-type: none"> • % of the population covered by the scheme or having financial access to health care (per socio-economic group) 	Benchmark: 100% of the population for essential health care ^{1/}
2. Method of finance <ul style="list-style-type: none"> • Ratio of prepaid contributions to total health expenditure • % of households with catastrophic spending 	70% Out-of-pocket payment < 15% of total health expenditure

Note: 1/For countries that are in an initial phase of achieving universal coverage through social health insurance, the target is to first include formal sector employees and other sectors in the following years. So far, the process has taken countries between 30 and 100 years.

Sources: Carrin and James (2005), Xu, Evans, et al. (2003).

population. We use data collected by the 2006 National Health Survey (ENSA 2006) and the 2006 National Healthcare Expenditure Survey (ENGAS 2006). The National Health Survey was carried out on a nationally representative sample of the non-institutionalized population of Costa Rica in two stages stratified by region and level of urbanization. The final sample was created using random proportional selection of census segments (primary sampling units) and households (secondary sampling units) with a response rate of 95%. In our analysis we make use of the entire set containing data from 7522 adults including weights.

The National Healthcare Expenditure Survey was carried out over the same time period utilizing a similar two stage stratified methodology and sampling units also on the entire non-institutionalized population of Costa Rica. Data from 2,088 households with weights are Survey of used in our analysis. Though direct linkage of these surveys does not seem possible, we use the unique data in both sets to analyze the patterns of health care utilization and expenditure of our sub groups of interest, particularly immigrants, households headed by women, low income households as well as people insured under each of the different modalities, including the not insured. In this respect, we particularly look at insurance status (being or not being insured) using the 2006 National Household Survey and at expenditure and utilization using ENGAS 2006.

As independent variables we use the population's primary socioeconomic characteristics including sex, age, and nation of birth, educational attainment, occupation, region, and degree of urbanization. Health care utilization is analyzed using self report of hospitalization, medical consultation, dental consultation and medication consumption. Healthcare expenditure is examined using self report of insurance status and out of pocket expenditure. Descriptive statistics are created to include relative frequency of distribution of the principal variables, including the calculation of differences between strata of socioeconomic status, region, degree of urbanization, and immigrant/nativity status. For bi-variate comparison of proportions between study population subgroups the Pearson's chi squared method or t test is used.

We have created a separate stratified regression model for insurance status as a binary dependent variable (insured/uninsured) by income and immigrant/native status. In all models, we control for the following covariates: age (both as a categorical and continuous variable), gender, household income stratified into quintiles, degree of poverty, occupation, degree of urbanization, geographic region, and self reported health status. We also explore the possibility of interaction between covariates and include interaction terms when needed. Only variables that have a significant influence on the dependent variable and improve the fit of the model are included in the final models. Statistical analysis is carried out with STATA 9.0 using the "svy" set of functions for analyzing complex survey data allowing for incorporation of weights and survey design characteristics into both the descriptive calculations and regression modeling.

2. Public Health Policies and Health Financing in Costa Rica

2.1 Public health policies in Costa Rica

The Political Constitution of the Second Republic of Costa Rica from 1949 defines the right to protection against the risks of illness, among other benefits, through a scheme based on social insurance (Constitución Política 1949). The 1973 General Health Act defines population health as a good of public interest; it states that it is an essential function of the State to guarantee the health of the population (CCSS 2007e). In other words, each inhabitant of Costa Rica by constitution has the right to receive public health care. On the basis of these dispositions Costa Rica as a middle income country has achieved expanding its public health services across the country, reducing child and maternal mortality rates dramatically, and structurally increasing life expectancy to a level that is common in developed countries. Most of the successes were made in the period between 1950 and 1980, when the country entered in a period of economic crisis that also affected the health sector. In the early 1990s Costa Rica managed to negotiate loans with the World Bank and the Inter-American Development Bank to finance an ambitious health sector reform program. As part of this program, the Ministry of Health became the steward of the health sector, and the social security fund introduced a quasi-market model to organize its duties as financier, purchaser and provider of most of the health care services in the country.

2.2 The Costa Rican health system

Public health financing is largely the responsibility of the Costa Rican Social Security Fund (*Caja Costarricense de Seguro Social; CCSS*). It also purchases and provides health care, via an internal market scheme, to the majority of the Costa Rican population. Other key institutions of the Costa Rican health sector are the Ministry of Health (*Ministerio de Salud; MINSA*), steward and regulator, the National Insurance Institute (*Instituto Nacional de Seguros; INS*) that finances, purchases and provides mandatory insurance covering work related health risks and road accidents and has a monopolist position with respect to voluntary additional health and non-health insurances, the National Institute for Aqueducts and Sewage Systems (*Instituto Nacional de Acueductos y Alcantarilladas; INAA*) that provides drinking water and manages the sewer system in the country with municipalities and community organizations, and the University of Costa Rica (*UCR*) that trains health professionals and carries out research and evaluations independently or at the request of a public institution (PAHO 2004). Private health care has always been available in Costa Rica, but has become a booming sector since the 1990s (Ministerio de Salud 2002). It responds to a demand from both national and international population groups; the latter mainly in the form of medical tourism.

An important change in the structure of the health sector started in 1973, when the management and operation of hospitals was transferred from the *Junta de Protección Social* (Social Protection Board) to the CCSS. Twenty years later the process was completed when also preventive care was

transferred from *MINSA* to the *CCSS*, which coincided with the start of the health sector reform. As part of the reform, the *CCSS* introduced an innovative integrated primary health care scheme based on basic health care equipment (*Equipos Básicos de Atención Integral a la Salud; EBAIS*) that were incrementally expanded over the country. By the end of 2005, the *CCSS* provided secondary and tertiary health care in 3 national general hospitals, 6 national specialist hospitals, 20 peripheral and regional hospitals and 10 clinics, while primary health care services were provided by 895 *EBAIS*.² In total 99 population catchment areas³ were covered. Illustrating its continuing ambition to increase geographical access to care across the country, the *CCSS* negotiated biannual management contracts for 2006-2007 with 134 medical units, including 103 health areas, 29 hospitals, and 2 specialized clinics (ECLAC 2006a; CCSS 2006). In 2007, the *CCSS* reported that 940 *EBAIS* were functioning in the country (CCSS 2007f).

2.3 The Costa Rican health financing scheme

The *CCSS* revenue collection function is based on monthly income-related contributions from employees, employers and the government. Calculations for these contributions follow the scheme presented in Table 2.

The contributions are mandatory by law for salaried workers, the self-employed and for (certain groups of) pensioners. There are also non-contributory regimes for certain groups of

Table 2
CCSS Contribution Scheme

Contribution as % of monthly income	Employee	Employer	Government	Total
Salaried workers	5.50	9.25	0.25	15.00
Self-employed and voluntary members	X ^a	0.00	0.25 + Y ^b	15.00
Pensioners	5.00	8.75	0.25	14.00
Members Covered by Government	0.00	0.00	Z ^c	Z

Notes: a/ X = progressive scale depending on salary to be established by the *CCSS* (X has a fixed minimum), b/ (Y = 15.00 - 0.25 - X), c/ Z = to be established by the *CCSS*.

Source: CCSS (2007).

² In 2007 the *CCSS* reports to have signed contracts with 940 *EBAIS*.

³ Each *EBAIS* attends on average 3,500 inhabitants. A population catchment area generally coincides with a clinic that coordinates the work of all the *EBAIS* in that zone. Each clinic has more than one *EBAIS* and each community health center has one. Apart from the clinics and health centers there are around 1800 periodical visit centers that cover far away zones with little population where it has been impossible or not considered necessary to establish a health center.

pensioners, family members of directly contributory members who are entitled to receive the Family Allowance, as well as pregnant women, children and the indigent population who are covered by the government.

As the CCSS is a single health insurance fund, pooling refers to the process of funds distribution across the country. While resource allocation has been improved with the introduction of the management contracts (*compromisos de gestión*) in 1997 (Rosero Bixby 2004), these are as yet not functioning optimally everywhere, and there are still disadvantaged areas in terms of coverage and quality of services (PAHO 2003). Allocation takes place on the basis of a quasi-market scheme whereby the CCSS purchasing department enters into contracts with the semi-autonomous CCSS establishments or, in a limited number of cases as yet, with private providers. While the budgets that are part of the management contracts include 10% for incentives to increase quality and efficiency at the level of the establishment, the payment of health professionals continues to be based on salaries that do not include incentives to encourage efficient behavior.

3. Understanding Ten Years of Stagnation, Exploring Future Trends

Costa Rica's health system is designed to provide access to its services to the whole population without distinction in insurance status, nationality or capacity to pay (Herrero and Durán 2001). However, as it is based on social health insurance, difficulties may arise to guarantee the constitutional right to health care for all. Social health insurance schemes are based on mandatory contributions from parties and generally exclude those from access to the services who do not comply with the legal requirements. The principle of universal access to health care, or health care to all without distinction free at the point of use, is more easily attainable in tax based systems. Social health insurance schemes generally deal with the problem of uncovered population groups (those who do not register or purchase an insurance card). Therefore, this section will seek for answers to questions like: "Who do and who do not contribute to the fund?" "Why do or do they not contribute?" and "How are the health care needs met for those who do not contribute to the system?"

3.1 Population coverage

3.1.1 Near-universal coverage

The CCSS was founded in 1941 and transformed into an autonomous institution that finances health care and retirement benefits for the Costa Rican population in 1943. It started as a limited service bound for urban workers, mostly government employees. In 1961, the government ambitiously committed itself to pursue universal coverage of the scheme within a period of 10 years. In most Latin-American countries, social health insurance remains limited to government employees and/or formal sector workers. Generally, separate health care services are financed from general taxation and provided by the government for people who do not fall in those categories. In

addition, the rich have the option to purchase private health insurance or to buy the services directly out-of-pocket. Many Latin American health systems are thus fragmented (San Sebastián, Hurtig, Rasanathan 2006). As a consequence, there are significant differences in the quality and quantity of services available to different population groups.

Hence, Costa Rica is an exception to this rule, supported by the constitution, offering social health insurance to all. The scheme achieved near-universal coverage 30 years after the adoption of the Universal Coverage Act, a process that consisted in the enactment of consecutive laws facilitating different socio-economic groups to be included step-by-step. Table 3 illustrates the sequence of this process: for example, the self-employed were allowed to voluntarily participate as of 1978 and obliged to do so since 2004. As of 1984 the lowest income groups are included through contributions paid from government funds.

Full universal coverage has so far not been achieved in Costa Rica; since the 1990s around 87% of the population is covered by the CCSS scheme and after that no significant progress was made, as is illustrated in Figure 1. From a comparative perspective, however, such a coverage level is high. For example, in Argentina, coverage of social health insurance was 63% in 1991 and in

Table 3
Consecutive Acts to Achieve Increasing Membership

1941	Foundation of the CCSS; mandatory memberships for salaried workers in urban areas
1956	Free coverage for family members of directly insured people
1961	Universal Coverage Act, <i>Ley de Cobertura Universal</i> (commitment to achieve it in 10 years)
1962	Extension of social health insurance over rural areas
1968	Higher contribution levels to increase funds available and expand the benefit package
1975	Mandatory protection for self-employed (this was reversed between 1978 - 2004)
	Breach of the maximum contribution levels to the social health insurance
1976	Pensioners are obliged to contribute to the social health insurance fund
1984	Inclusion of the lowest income groups through coverage by government
	Introduction of Collective Insurance Agreements, <i>Acuerdos de Seguro Colectivo</i> (groups of more than 50 persons)
2000	Workers Protection Law (<i>Ley de Protección al Trabajador</i>) makes health insurance mandatory for the self-employed
2004	Reestablishment of mandatory protection for self-employed

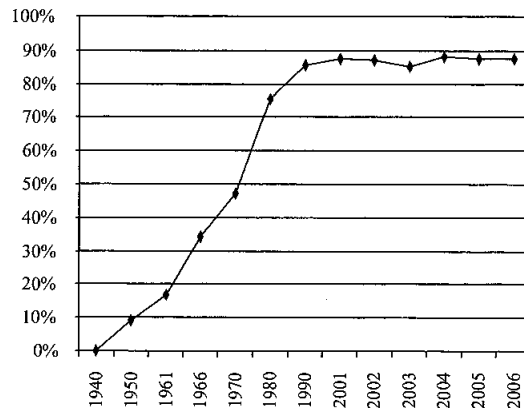
Source: CCSS (2006a), CCSS (2007d).

Mexico it was 40% in 2003 (Lloyd-Sherlock 2006). Colombia achieved an increase in coverage from 27 to 63% between 1993 and 2003 after it reformed its health financing scheme to pursue universal coverage (Hsiao and Shaw 2007).

The achievements of the CCSS scheme are more alike to those of the German statutory health insurance scheme. This covered nearly 88% of the population in 2003. But the Costa Rican and German schemes differ importantly in that in the latter, the around 10% of the population not covered by social health insurance took out private health insurance, including 4% civil servants with free governmental care and complementary private insurance. Furthermore, nearly 2% of the population was covered by other, sector-specific governmental schemes (military, police, social welfare and assistance for immigrants seeking asylum) and only 0.2% of German residents, about 170,000 mainly self-employed workers both rich and poor, had no prepaid coverage for health care (PAHO 2004), compared to nearly 13% (569,578 persons)⁴ in Costa Rica. Alternatively, the Netherlands implemented an important reform program in 2006 that made social health insurance mandatory for all without distinction. During the first year of operations, around 280,000 people were not insured in this country, a finding that for sure needs further follow-up (WHO 2007a).

The discussion to what extent full universal coverage should be the target for Costa Rica or whether nearly universal coverage is also acceptable, may be valid, particularly when the not insured would exclusively be people from higher echelons of society who choose voluntarily not to participate in the scheme. In this respect, also the costs for a country like Costa Rica of an

Figure 1
Coverage of Social Health Insurance as % of Total Population, 1940 – 2006



Sources: CCSS (2006a), CCSS (2007b), CCSS (2007d), PAHO (2004).

⁴ Total population in 2006: 4,381,369 (CCP 2007).

ambitious target as full universal coverage should be taken into account. However, there can be no doubt that social health insurance schemes enhance equity only in the way that tax based systems do through full universal coverage. Furthermore, the inclusion of the rich in the scheme increases not only the amount of funding available for the scheme, but also the political interest of these, generally more powerful groups in society, to invest time and money in the scheme. In the discussion section of this paper, we will briefly get back to this point.

3.1.2 Who are the insured?

Currently, the *CCSS* uses various insurance modalities to cover its beneficiaries as listed in Table 4. In addition, the institution is currently negotiating a new modality to cover temporary migrants from Nicaragua and Panamá that arrive in the country every year to harvest coffee (ECLAC 2006a). While this effort manifests the *CCSS*' intentions to cover certain groups of temporary migrants, it remains likely that there are other migrant groups, refugees and marginalized workers in the informal sector who are not insured.

Table 5 shows *CCSS* membership data in the period 1970-2006 by modality. In 2006, 87.5% of the Costa Rican population was covered by the health insurance fund, including 26.2% directly active members, 11.5% people plus their families covered by the government on the basis of their poverty status, 6.3% pensioners and 43.6% family members of contributing members (*CCSS*, 2007b).

The data show that *CCSS* affiliates grew consistently until the late 1990's, but that ever since only small increases were achieved in terms of directly paying affiliates: the Economically Active Population, both salaried and self-employed. If we confront these data with a study by ECLAC, we find that there have even been losses in coverage over the last decade. The study found, among other things, that 60% of the self-employed were affiliated voluntarily to the health insurance fund in 1998 (Herrero and Durán 2001).

Table 4
***CCSS* Insurance Modalities**

-
- Salaried workers
 - Pensioners and retired people of any of the state systems
 - Head of household insured at the cost of the Government
 - People who affiliate voluntarily as an individual or collective
 - Independent workers who contribute individually or collectively
 - Family members of direct insured people entitled to receive the Family Allowance
 - Population in condition of poverty
-

Source: *CCSS* (2007d).

Table 5
CCSS Membership, 1970 – 2006 (%)

	1970	1980	1990	2002	2006
Contributory coverage	47.2	75.7	85.6	86.8	87.5
Active affiliates who are directly insured	11.7	23.1	24	23	26.2
<i>Direct affiliates, salaried</i>	<i>11.70</i>	<i>19.30</i>	<i>18.00</i>	<i>18.60</i>	n.a
<i>Direct affiliates, self-employed</i>	<i>0.00</i>	<i>3.80</i>	<i>6.00</i>	<i>4.40</i>	n.a
Affiliates covered by the government and families	0	0	9.2	12.9	11.5
Pensioners that benefit from a national pension plan	0.2	3	4.6	6.4	6.3
Family members of directly insured members	35.2	49.6	47.8	44.5	43.6
Not insured	52.8	24.3	14.4	13.2	12.5
Economically Active Population (EAP)					
Coverage of total EAP	n.a	n.a	n.a	52.5	57.8
Coverage of salaried EAP	n.a	n.a	n.a	61.8	64.3
Coverage of the non-salaried EAP	n.a	n.a	n.a	36.5	48.1

Source: CCSS (2006a), CCSS (2007b), CCSS (2007d), PAHO (2004).

A household survey carried out by the Ministry of Health to measure health care needs in 2004, found CCSS membership data as presented in Table 6. According to this survey, the percentage of directly contributing members to the CCSS was 18.8% in 2004 compared to 23.8% according to the CCSS (CCSS 2007d). As in surveys people often underreport insurance, this difference may not be significant. But in any case, in terms of financing, a percentage of directly contributing members between 20 and 25% of the total population, taking into account that the total population does have access to the services, may be considered low. The phenomenon could be explained, partially, by the generous design of the scheme that considers a number of non-contributing regimes, as mentioned above.

The Family Allowance is provided to the spouse, partner,⁵ children, direct brothers and sisters, father and mother and other minors of an active directly insured member, as long as they

⁵ If partners are not married, they should have lived together under the same roof for at least 1 year.

Table 6
CCSS Membership Findings by the 2004 National Health Care Needs Survey

	Not able to satisfy basic needs (%)	Able to satisfy basic needs (%)	Total
Not insured	22.5	16.9	20.5
Members covered by the government	18.5	11.9	16.2
Others (students, refugees)	1.9	1.3	1.7
Family of Pensioners	1.5	2.9	2
Not contributing Pensioners	1.6	2.3	1.8
Contributing Pensioners	1	2.9	1.7
Family of directly insured members	36.4	37.8	36.9
Directly insured – self-employed	3.2	5.2	3.9
Directly insured – collectives	1.8	1.8	1.8
Directly insured – salaried	11.2	16.5	13.1
Unknown	0.4	0.5	0.5

Source: Ministerio de Salud (2004).

are his or hers economically dependents. The benefit is also provided to children, direct brothers and sisters and other economically dependent minors over 18 years of age in case they are involuntarily unemployed, incapable to work, studying (up to the age of 25 years), or taking care of one of their parents older than 65 years or severely disabled. It should be noted that lately the CCSS employs, maybe more strictly than before, the right to determine the relationship and the economic dependency of the person applying for the Family Allowance. If no dependency exists, the person will be obliged to purchase its own insurance card and the CCSS will retroactively charge any services provided unjustifiably (CCSS 2007). The latter, however, is theoretical as the CCSS has no capacity to follow-up on unpaid bills. Furthermore, no compensation policy exists for the CCSS to recover the costs of services provided to non-contributing members that do not belong to one of the non-contributing regimes. This is different from the Netherlands, where emergency care for the not insured, including for people who live in the country without a legal status, is paid for by the government. Furthermore, there is a special compensation fund for primary care providers to cover the costs of unpaid provided medically essential care, and hospitals, among other health institutions, annually negotiate a provision within their budget with the respective health insurance fund to cover the costs of dubious debtors. Uninsured patients who can not pay their bill in these institutions can also be covered through this provision (WHO 2007a).

The generosity of the *CCSS* scheme also manifests itself in the pure fact that access to the services is often provided to people who do not contribute to the system. The issue is discussed later in the paper.

3.1.3 Who are the not insured?

Except for being generous for contributing and non-contributing members, the *CCSS* scheme, which in principle is mandatory, also offers people the possibility to opt out, as in Germany but unlike the Netherlands. The opting-out represent the group the *CCSS* denominates the Not Insured, who are defined as residents with capacity to pay who choose not to contribute to the social health insurance fund (*CCSS* 2007). The group supposedly chooses to buy health care directly from public or private providers, or via an *INS* private health insurance plan and supposedly represents the non-poor. As Table 3 shows, in 2006 the *CCSS* reports a proportion of not insured people of about 12.5%. In 1998, about 10% of the national population was found not to be insured (Herrero and Durán 2001) which would indicate a slight increase in the proportion of not insured over the last decade.

The household survey carried out by the Ministry of Health referred to above found that around 20.5 % of the population was not insured in 2004. More importantly, however, it reports that this group of not insured people included 22.5% of respondents that said not to be able to satisfy their basic needs, while 16.9% reported to be able to do so (Ministerio de Salud 2004). In other words, the survey found that in 2004 there were more people uninsured who considered themselves as poor than those who said to be non-poor. This finding goes against the intention of the *CCSS* to cover all the poor people, either as contributing or non-contributing members.

Tables 7 and 8 present data from the 2006 National Health Expenditure Survey (*ENGAS* 2006). *ENGAS* found 20.4% of respondents to be not insured, while the National Health Survey carried out in the same year found 13.3% of the population to be not insured (*ENSA* 2006). Table 7 furthermore shows that a greater part of the not insured were people living in poverty (25.5%) or extreme poverty (33.2%), than those who were not living in poverty (18.7%).

Table 7
Insurance Status of Adult Residents of Costa Rica by Place of Birth in %

Insurance status	Costa Rican-born	Nicaraguan-born	Total
Insured	55.4	81.3	79.6
Not Insured	44.6	18.7	20.4

Source: *ENGAS* (2006).

Table 8
Insurance Status of Adult Residents of Costa Rica by Level of Poverty in %

Insurance status	Extreme poverty	Poverty	Not living in poverty
Insured	66.8	74.5	81.3
Not insured	33.2	25.5	18.7

Source: ENGAS (2006).

In order to further explore the ENGAS 2006 data and to get a better understanding of the socio-economic groups that are actually making up the not insured, a logistic regression analysis was carried out. The analyses found that people living in extreme poverty are 38% more likely to be uninsured than their more fortunate counterparts. Further analysis indicated a correlation between low socioeconomic status and risk of not being insured. In addition, Nicaraguan immigrants, who currently make up over 6% of the national population, are over three times more likely to be uninsured than Costar Rican nationals.

Within this context it is relevant to mention that in Germany, refugees and asylum seekers receive assistance from the Government including health care and in the Netherlands, special provisions exist to cover the health care needs of these groups, as well as for the not insured. According to the Social Development and Family Allowance Act of Costa Rica, benefits like coverage for health care by the State due to a person's poverty status, are reserved for Costa Ricans only.⁶

3.1.4 Searching for financial sustainability

The CCSS is conscious about the high level of evasion by users of its services, and of the risk that this implies for its financial sustainability. According to the study cited earlier, in 1998 around 30% of the occupied work force did not contribute to the Social Insurance fund and nearly 40% of the work force in the private sector employed one or another mechanism of contributory evasion (Herrero and Durán 2001). The CCSS found that in 2005 around 25% of salaried workers registered themselves as self-employed sub-declaring their salary, while 90% of the self-employed who registered for the CCSS declared a salary under the legal minimum (CCSS 2006a).

⁶ *Ley de desarrollo social y asignaciones familiares*, [http://www.supen.fi.cr/aplicaciones/Normativa_Nueva.nsf/0/943592EB6CF6BC1806256CF7007AA2DA/\\$file/Ley+5662.pdf](http://www.supen.fi.cr/aplicaciones/Normativa_Nueva.nsf/0/943592EB6CF6BC1806256CF7007AA2DA/$file/Ley+5662.pdf)

The institution also estimated that in 1998 the total evasion represented around 20% of de its annual regular income. Of this proportion, around 71% corresponded to payments of salaried workers and not insured employers, while around 29% to the sub-declaration of salaries. While in the public sector failure in payment converts into a debt, in the case of evasion in the private sector, foregone income is lost. The problem of late payment is yet considered less serious than evasion, but it should be monitored as well as between 1995 and 1997 alone it increased from 2.8 to 7% (Herrero and Durán 2001).

The above clarifies that the CCSS deals with a problem of deficient coverage: around 30% of the work force does not contribute to the health insurance fund while it does benefit from its services (Herrero and Durán 2001). This problem is not new to the CCSS, but as both the demand for and the cost of health care are on the increase, its impact in terms of the financial soundness of the scheme augments. In order to control the problem, the Legislative Assembly approved the Worker's Protection Act, *Ley de Protección al Trabajador*, (2000), and consequently the CCSS adopted its Regulations on the Affiliation of Independent Workers, *Reglamento para la Afiliación de los Trabajadores Independientes*, (2004) and on Health Insurance, *Reglamento del Seguro de Salud*, (2006). The Workers Protection Act makes contribution to the pension fund mandatory for independent workers; the Regulations on the Affiliation of Independent Workers do the same for the health insurance fund. The Health Insurance Regulations concretely describe the rules and restrictions for entitlement to the CCSS health benefits. According to these acts and regulations, all self-employed, including those who earn a salary as well, are required to register for the CCSS scheme and to declare their monthly income, including earnings in the form of salaries and other forms of income. Furthermore, everyone who requests healthcare is since then obliged to present evidence of the modality under which he or she is insured. In the case of emergencies, people are attended first, but should comply with the legal requirements afterwards. Those without an insurance card will get billed and those who can not pay the bill are supposedly followed up by the legal system. However, the capacity to effectively follow-up on these cases remains low in Costa Rica and, as mentioned earlier, no compensation policies exist to cover the costs of services provided by the CCSS in these circumstances.

Other incentives to control and sanction abuse are the establishment of a minimum monthly contribution rate that also applies to those who supposedly earn less than the minimum income. Furthermore, employers and the self-employed who do not pay their contributions (timely) or give false declarations are sanctioned with a fine, while employers who do not pay their employer part of the contribution are obliged to directly pay for the costs of services provided to their employees. The Health Insurance Regulations also give a clear description of the benefits covered by the CCSS (CCSS 2007).

Another important step to address the problem of evasion and late payment by employers and employees was the introduction of the Central Revenue Collection System (*Sistema Centralizado de Recaudación, SICERE*) in 2000. It was introduced as part of the Workers Protection Act to facilitate employees and employers to register for the CCSS via the internet. As the Act sets individual accounts, it provides an incentive for workers to record their wages correctly; the recorded wages also form the basis for the calculation of retirement payments. In 2003, other measures to improve the CCSS administration were implemented: employees in charge of revenue collection were made accountable for their work, targets were set to recuperate debts, a call center

was opened and businesses who failed to contribute for their employees were closed. In 2005, 130 new inspectors were hired making a total of 220 persons. According to the CCSS, the measures resulted in a reduction of late payments in 2005 with 8.4% (CCSS, 2006). In order to encourage employers to pay timely, the CCSS started to publish monthly reminders in the mass media as well, and since April 2007, it offers employers with longstanding debts tailor-made financial arrangements (CCSS, 2007a). More recently, the CCSS launched the Strategic Contributory Coverage and Inspection Program (*Programa Estratégico de Cobertura Contributiva e Inspección, PRECIN*). It follows the CCSS long-term strategic plan for 2025 and implies the assignment of 60 additional inspectors for 2007 and 30 more for 2008 and 2009 respectively.

The above demonstrates that, different from how it is stated in the Constitution, the CCSS has made access to its services subject to the verification of rights. It also restricts the benefits covered on the basis of the Health Insurance Regulations and the Official List of Medication (*Lista Oficial de Medicamentos LOM*). This list is part of the CCSS medication policy, which is in use since 1989. In this context, two things are to be highlighted. On the one hand, as restrictions to certain benefits and medications are in principle unconstitutional, including for non-Costa Ricans as the constitutional right is given to habitants of the country, assertive Costa Ricans and non-Costa Ricans are found to succeed when they claim their unrestricted right to health care with the Constitutional Assembly, either directly or with the help of the national ombudsman. On the other hand, there are groups of less assertive Costa Ricans and non-Costa Ricans who may run an increasing risk of exclusion, when CCSS employees indeed implement the new rules and regulations as strictly as is formulated. However, if we confront this information with data from the 2004 Ministry of Health survey and ENSA 2006, we find that compared to the proportion of not insured people (around 500,000 persons), relatively few people in Costa Rica are actually refused health services due to not being insured. However, the number of people not attended due to other reasons (for example, because they did not get an appointment) constitutes a greater reason for concern.

According to the survey of the Ministry of Health of 2004, 1.9% of the population (representing 80,500 persons considering total population)⁷ was not attended in a public health establishment for a variety of reasons in 2004, and 0.2% ($\approx 8,473$ persons) due to not being insured. In a separate question, 6.0% ($\approx 254,211$ persons) of the total population said not to be attended in an *EBAIS* when they sought care, and 1.9% ($\approx 80,500$ persons) due to not being insured.

According to ENSA 2006 in that year, 3.5% ($\approx 153,347$ persons) of the interviewed said not to be attended when they were in need of a medical consult in an *EBAIS*, clinic or hospital. The questionnaire offered 11 optional reasons for not being attended; 67.3% ($\approx 105,152$ persons) said that they could not get the appointment and 5.5% answered that they were not attended because of not being insured. The latter would represent 0.2% or around 8,763 persons if extrapolated to the total population.⁸

⁷ Total population in 2004: 4,236,857 (CCP 2007).

⁸ Total population in 2006: 4,381,369 (CCP 2007).

3.2 Method of finance

3.2.1 Proportion of prepaid contributions to total health expenditure

According to the WHO framework for health systems financing, the ratio of prepaid contributions to total health expenditure is a key performance indicator. Prepaid contributions provide protection against the financial risks of illness. This is contrary to out-of-pocket payments that make people financially vulnerable to illness. In the case of low income groups particularly, out-of-pocket payments can imply catastrophic health expenditure and lead to household impoverishment. Based on evidence from various countries, it has been established that ratios of prepaid contributions to total health expenditure between 70 and 90% provide an acceptable level of financial protection to the population. In addition, the ratio of out-of-pocket payments should be d" 15%. However, as these percentages present national averages, it is also important to monitor the indicator with regard to different socio-economic groups.

Apart from prepaid contributions from workers and private employers, the *CCSS* also receives regular funds from the government (*Constitución Política* 1949), including 0.25% of the salary of each insured worker, the employer contribution for civil servants, and the costs of covering the indigent, pregnant women and children. The government is not obliged to compensate the *CCSS* for losses due to bad debtors or of other kinds.

Over the past decennia, the debt of the government to the *CCSS* increased dramatically. This was partly due to its disagreement about the amount charged by the *CCSS* for the coverage of some non-contributory regimes, and partly to the fact that the government had yet to comply with its commitment to transfer the amount corresponding to the salary costs of those employees that were handed over from the Ministry of Health to the *CCSS* during the 1990 health sector reforms (ECLAC 2006a). However, in 2007 the *CCSS* managed to negotiate an arrangement with the government to repay its debt of more than 300 million dollars within a period of 15 years (*CCSS* 2007g).

3.2.2 Public and private health expenditure

Table 9 shows health expenditure data for Costa Rica between 1996 and 2005. Social security expenditure also includes all governmental subsidies as mentioned above. According to these data, social security expenditure increased relative to total government health expenditure and private health expenditure decreased. Out-of-pocket payments increased relative to private health expenditure. Total health expenditure (including social security expenditure) as a percentage of Gross Domestic Product (GDP) remained stable and total government health expenditure as a percentage of total health expenditure slightly increased. Across the border, these data do not show important changes over the reported period.

Table 9
Public and Private Health Expenditure, 1996-2005

	1996	2000	2005
Total health expenditure (THE) as % of gross domestic product (GDP)	6.7	6.5	6.7
Total government health expenditure (incl. –social security expenditure) as % of THE	76.2	77.2	77.1
Private health expenditure (PHE) as % of THE	23.8	22.8	22.9
Total government health expenditure (TGHE) as % of total government expenditure	21.7	21.7	20
Social security expenditure as % THE	86.4	89.6	90
Out-of-pocket payments as % of PHE	87.5	87.9	88.7
Prepaid payments as % of PHE	2.7	2.3	2.1
External resources as % THE	1	1	0.2
Total health expenditure per capita at exchange rate	221	264	306
Total health expenditure per capita at international dollar exchange rate	419	498	630

Source: WHOSIS (2007).

Comparing absolute numbers, public health expenditure increased from 124,609 to 487,780 million colons, which represents an increase with a factor of 3.9, and private health expenditure from 38,997 to 145,270 million colons, representing an increase with a factor of 3.7 over the same period (WHOSIS 2007).

Table 10 provides detailed private health expenditure data calculated on the basis of Table 9. Based on these numbers, the proportion of prepaid contributions in 2005 in Costa Rica was $77.1 + 0.5 = 77.6\%$ (including private pre-paid plans as calculated in Table 10). This is fair in view of the WHO target of 70-90%. The ratio of out-of-pocket payments, however, is above the target of 15%.

Table 10
Private Health Insurance Indicators

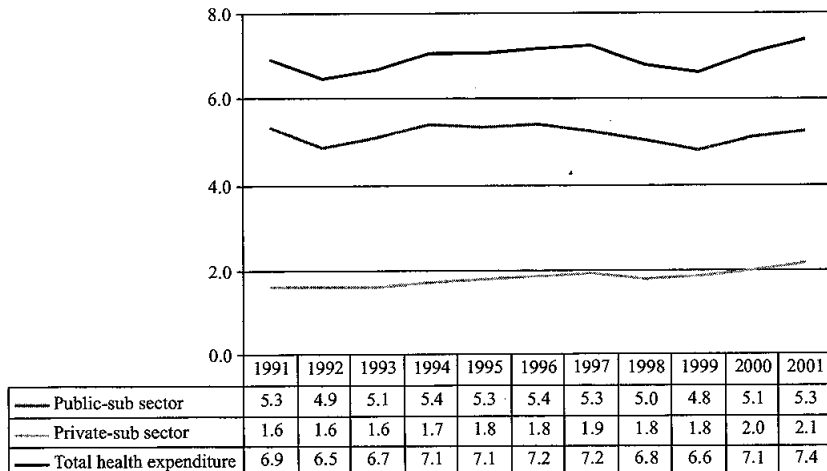
	1996	2000	2005
Out-of-pocket payments as % of THE	20.8	20	20.3
Prepaid payments as % of THE	0.6	0.5	0.5

Source: Elaboration by authors based on WHOSIS (2007).

With respect to private health insurance, 2% of all households in Costa Rica purchased such a plan in 2006 (ENGAS, 2006). As mentioned earlier, in Germany this is about 10% of the population. Private health plans in Costa Rica generally provide voluntary additional coverage for dental services (2.5%), medical consults including emergencies (59.9%), laboratory services, including blood, urine, etc. (36.1%) and diagnostic tests, including x-rays, scans, etc. (1.5%). It seems that people who purchase these services from private providers continue to make use of secondary and tertiary health care provided by the public scheme. The reason why the proportion of people purchasing private plans is small is related to the fact that until shortly, *INS* has had the monopoly to sell these and other private insurance plans. However, actually the institution is preparing itself for the opening of the insurance market. The *CCSS* pension fund will not be affected by this move, but there will no longer be a monopoly by *INS* on private health insurance, among others.

Figure 2 illustrates trends in public sector, private sector and total health expenditure between 1991 and 2001 as a percentage of Gross Domestic Product (GDP). The data are from another source than the tables above and cover an earlier period of time. It shows stable public sector health expenditure at 5.3% of GDP, but a substantial increase in private sector health expenditure from 1.6 to 2.1% of GDP. According to these data, the full increase in health expenditure as a % of GDP was produced in the private sector. The relative increase from 6.9 to 7.4% in GDP can be translated in a relative decrease in public sector expenditure from 76.8 to 71.0% of total health expenditure and a relative increase from 23.2 to 29.0% in private sector expenditure (Ministerio de Salud, 2002). In other words, the relation public to private health expenditure changed from 77/23 to 71/29 between 1991 and 2001.

Figure 2
Health Sector Expenditure as % of GDP, 1991 - 2001



Source: Own calculations, Ministerio de Salud (2002).

According to the Pan-American Health Organization (PAHO), the proportion of public to private health expenditure was 60/40 in 2004 (PAHO 2007a). This differs strongly from the data produced by the WHO National Health Accounts network that found a relationship of 77/23 for that year. Differences may relate to how the expenditure data are calculated. However, it should be noted that the PAHO data would indicate a huge increase in private health expenditure. It would relate to the findings of ENSA who reports that in 2006 31.3% of all households reported to have utilized a private health care provider in a period of three months. Furthermore, 26.4% of all households said to have used a private dentist in that same period (ENGAS 2006). Another survey carried out by the UCR found that in 2007 only 44.0% of the population had not paid a private doctor during a year (56% did) and of the population with a monthly income equal or below 150,000 colons only 46.8% had not purchased health care from a private provider (UCR 2007).

3.2.3 Understanding the increase in private sector activity

The increase in private sector activity has been explained by a number of factors, generally embedded in the health sector reforms that were initiated in the 1990s (PAHO/WHO, 2003; Homedes and Ugalde, 2002). For example, related to these reforms the CCSS started to increase allocating funds to the private sector contracting integrated health services. It also began to purchase diagnostic and treatment programs from cooperatives. *INS* also increased purchasing services on the private market, but these services should be counted as public expenditure as they form part of a public scheme.

However, the bulk of private sector activity is taking place in the area of ambulatory services including consults and dental care that are directly purchased by households. The trend is related, among other things, to the 'medicina mixta' scheme that was introduced in 1989. It implies that insured people can directly purchase medical consults from private providers, while the CCSS covers the costs of drugs, laboratory tests and exams. Similarly, already since 1974, employers make increasing contributions to the private sector through the so-called 'medico de empresa' scheme. This scheme allows employers to hire a private health care provider for their company while the CCSS continues to cover drugs, tests and additional exams. The costs of the two schemes for the CCSS are limited: in 2006 the CCSS spent 54.1% of its budget on hospitalization, 23.8% on external consults, 21.2% on Health Areas, 0.7% on dental care, and only 0.1% on both the "medicina mixta" and the "medicina de empresa" scheme (CCSS 2007h). This suggests that most people, who purchase care in the private sector, also purchase their medical tests and drugs there. It should be noted that, one third of the public health workers in Costa Rica also operate private practices (Clark, 2002). This is legal and aims to free public sector resources for poorer people, but enhances supplier induced demand in the private sector as well as irregular referrals from public to private services. Another well known phenomenon in Costa Rica is the "biombo". It implies that people with capacity to pay skip waiting lists and times to be quickly attended by their preferred public health worker (ECLAC 1998).

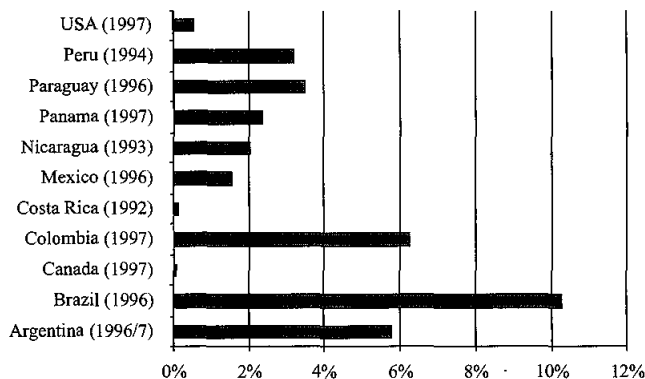
The problem of increased private sector activity within the context of Costa Rica, where access to these services depends on income, is that it reduces equity. Efficiency is also affected due to risk selection and supplier induced demand. Both are common phenomena on an unregulated private health care market as in Costa Rica. Risk selection means that providers select low risk, high income patients through the design of their service packages, for example. Supplier induced demand means that health care providers who are paid on the basis of fees for services create demand to increase their income (Carrin and Hanvoravongchai, 2003; Liu, 2003). Except for the developments mentioned above, various authors also blame the increase in private health expenditure on the lacking capacity of the public sector to provide quality services in due time (PAHO/WHO, 2003; Herrero and Durán 2001).

3.2.4 Proportion of households with catastrophic spending

The second key indicator used to measure the performance of health financing schemes in terms of method of finance is the percentage of households materializing catastrophic health expenditure. The latter is defined as household health expenditure $\geq 40\%$ of the effective household income after subsistence expenditure or food. (Xu, Evans, et.al, 2003).

In a multi-country analysis the authors found that catastrophic health expenditure was caused by a triad of factors, including poverty, access and utilization of health services and the lack of financial protection. The relative weight of these factors was respectively 0.2:1.6:2.2. In general terms, catastrophic health expenditure varied between 0 and 10% between the countries that were part of the study. Figure 3 shows data for the included (Latin) American countries. In

Figure 3
Catastrophic Health Expenditure



Source: Xu, Evans, et.al. (2003).

Costa Rica, based on a The National Household Survey 1992 (2,472 households), catastrophic health expenditure was found to occur in 0.12% of all households. Table 11 shows the outcome of a more recent study based on data from 2004.

The figures presented refer to the definition of catastrophic health expenditure as household health expenditure above 40% over non-subsistence household income. As the methodology used in this study is different from the one applied by Xu and Evans, the data may not be comparable. However, the finding may indicate an increase in catastrophic health expenditure in Costa Rica between 1992 and 2004. Furthermore, according to the latter study, catastrophic spending would be highest in the two poorest quintiles of the population. This could be related to the increase in the provision of private health care which apparently is purchased, against intentions, by poorer families as well.

Table 11
Catastrophic Health Expenditure by Income Quintiles

Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	All Quintiles
5.33%	2.78%	0.68%	0.63%	0.50%	1.97%

Source: Briceño, Elizondo-Lara, González Zúñiga, 2007.

4. Discussion

In the above analysis we found that *CCSS* coverage is relatively high but not fully universal. While the not insured are supposedly the non poor, we found that there are also poor groups excluded from the scheme, including Costa Rican and non-Costa Rican habitants of the country. Apparently, the opting-out provision implies a risk that not only the targeted group makes use of it. Poor families may opt out to be able to use the monthly *CCSS* fee for other priorities, thus risking their financial protection.

Evasion in Costa Rica is historically high. This is at least partly due to the fact that the right to health care is constitutional. Assertive Costa Ricans can claim their right with the Constitutional Assembly and do not have a sufficient incentive to fully contribute to the *CCSS*. This design related issue may also explain part of the stagnation in *CCSS* coverage since the 1990s.

The *CCSS* scheme has historically been generous, but is transforming into a less generous scheme. The aim is to improve financial records, but it increases the risk of poor and less assertive people to be excluded from the scheme. So far, the number of people that is denied services due to not being insured is small, but performance should be closely monitored as the new design of the *CCSS* scheme may affect the level of financial protection offered to the poor.

There is an increasing interest among rich and poor groups to purchase health care on the private market. This process is facilitated by different health sector and *CCSS* reforms, but is also due to the lack of efficiency and quality perceived by consumers of the *CCSS* services. If this trend continues, it may affect the financial sustainability of the health insurance scheme and the level of financial protection it provides.

The stagnation of *CCSS* coverage, clearly, is not due to a lack of rules and regulations. Neither can it be explained only by the weak capacity of the *CCSS* to follow-up on these. Foremost, there seems to be a lack of political willingness amongst Costa Ricans to invest time and money in improving the institution. In order to regain this willingness, particularly from richer and more powerful social groups, additional investments are needed so that *CCSS* records in terms of quality and efficiency can be improved.

Whether full universal coverage is desired in Costa Rica or not is a question for the stakeholders. Both have their costs and benefits that need to be weighed. However, if Costa Rica wants to maintain its high population health status, the opting out provision should be accompanied by measures that guarantee that no poor groups will recur to it. Furthermore, appropriate private health insurance should be made available to the rich to offer them financial protection as well. Alternatively, Costa Rica may consider a *CCSS* scheme based on full universal coverage for a basic package of services, complemented by private health insurance for additional care packages, as is currently the case in the Netherlands.

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