

Health plans in Brazil: market failures, regulation and perspectives

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Introduction

The market of health plans is a strategic sector in Brazil. Nowadays, over 46 millions of Brazilians have a medical or a dental plan (*Agência Nacional de Saúde Suplementar - ANS, 2007*). This number represents 24 percent of the total resident population, 189 millions (*Instituto Brasileiro de Geografia e Pesquisa - IBGE, 2007*), that don't have to be financed integrally by the public system.

With its origins in the 1960's, this market worked with little or no regulation for almost forty years. In this meantime, a "love and hate" relationship between health plans, providers and consumers was built: providers has several demands against health plans' payment methods, but a high percentage of their revenue depends on them; the same can be said for users, who complain about the high prices, but could not have access to private health without prepaid plans.

The climax of these conflicts took place in the late 1990's, when the government, after an intense debate in the Congress and in the Senate, enacted the regulatory mark for the sector. After almost ten years since the publication of the Law nº 9.656/98, which came to regulate the operation of health plans, and seven years from the creation of the Federal Regulatory Agency for Health Plans and Insurance (ANS), many things had changed in the sector. Health plans had to adapt themselves from an almost unregulated environment to a complex, regulated environment. Things changed not only because the creation of new rules and penalties. New ideas of doing healthcare are blooming worldwide and the Brazilian market should pay an especial attention to them.

The purpose of this Paper is to examine the evolution and the perspectives for the health plans' market in Brazil. First, a historic overview, with the origins of the health plans model in Brazil and in the United States and the reasons for the conflicts between its main actors will be presented. Second, it will be discussed how the Brazil's government reacted to these problems through regulation and how they changed – and are still changing – the market. Finally, what are the perspectives for the sector and how its main actors, including the regulatory agency, should act in order to move the market to a more efficient level, with less conflicts and more quality in its principal product: health.

Chapter I. The Health Plans Market before regulation

I.1. Health Plans Market in Brazil: a brief historical overview

The private market of health plans started to raise in Brazil in the middle of the decade of 1960, in the State of São Paulo, industrial center of the country. At that time, automobile factories that desired to offer to its employees access to private health care, started to make it through accords with health services companies. These, in their turn, started to organize health care operation through own and/or health providers (Cordeiro, 1984).

As it was a not regulated market, with free access to the private initiative, the organization of these health services companies – which became the health plans companies – took place in varied business structures: anonymous societies, limited liability companies, medical work cooperatives, self-insured health plans (companies that offer health coverage directly to their employees), entities linked to philanthropic hospitals, etc. None of these companies were actually insurance companies. These corporations, with strong financial profile, normally belonging to Brazilian's powerful financial conglomerates, started its operation as health plans only after the regulation of the health insurance in 1976, when the reimbursement of medical expenditures in the form of insurances was legitimized¹.

Stimulated by the possibility of free entry and exit of firms and by the strong demand for private health care – which in part can be explained by the known problems of quality and access in the public health system - the market of health plans grew quickly, in such a way that at the beginning of the 1980's, the Brazilian Association of Group Medicine and the Unimed system (health care cooperatives) registered, together, approximately 15 million users (ANS, 2002). As this number did not consider the customers of the health insurance companies and the self-insured health plans, it is possible that the real size of this market was substantially larger.

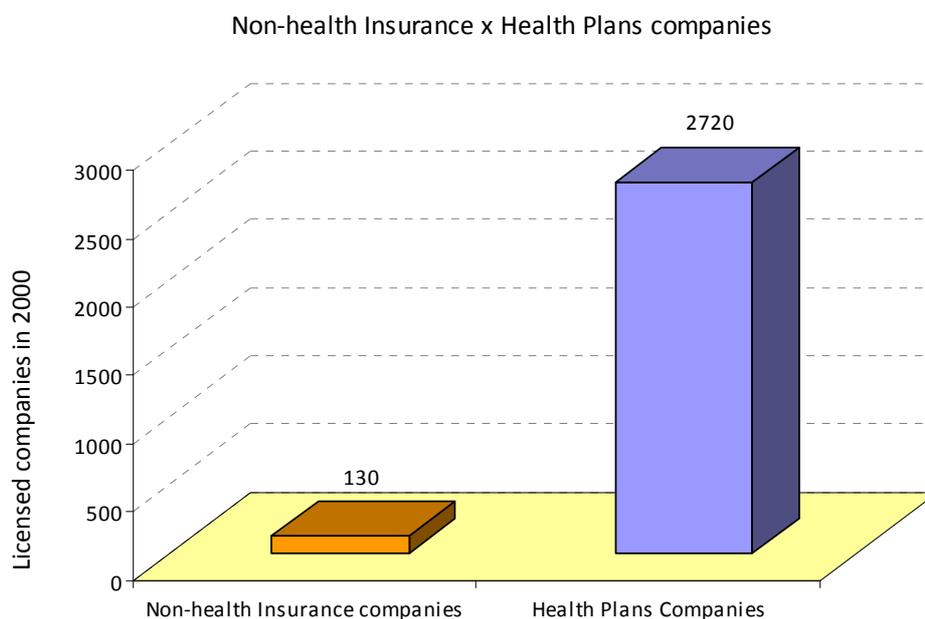
Until the mid 1980's, the commercialized plans were almost exclusively corporate plans. Only in the end of the decade, with the massive entrance of the biggest health insurers, the market started to explore the segment of individual plans.

¹ Resolution 11, CNSP (Brazilian Private Insurance Council - *Conselho Nacional de Seguros Privados*)

Market's growth was intensified in the 90's and can be explained by macroeconomic factors like the stabilization of the economy through the Plano Real, that improved the capacity of the Brazilian people in planning their expenses and investments; and by the creation of the Universal Health System², which ended the INAMPS in 1990 and left many employers with no other option than private health plans to provide private health care for their employees.

In general terms, the Health Plans Market in Brazil had developed itself for almost 40 years with little or no government's intervention. For this reason, the number of companies grew significantly, as well as the number of differentiated coverage packages offered.

According to the ANS, in 2000, there were about 2.720 health plans companies in Brazil. The number is significant: for the purpose of comparison, all other types of insurance excepting health - automobile, life, fire, transports, etc. - had about 130 insurance companies acting in the country, according to the Superintendence of Private Insurance (*Superintendência de Seguros Privados – SUSEP*). The graph below illustrates this difference:



A basic economic concept states that, in thesis, a market with a high number of companies, acting for a long time, should have evolved, through free competition, to a level of reasonable efficiency, with relative low, similar prices and reasonable quality.

² Law 8.080/88, Sistema Único de Saúde – SUS

However, as the Brazilian experience demonstrated, it didn't occur. The market of health plans has characteristic imperfections that will be discussed in the next topic.

I.2. Health Plans Market: wrong incentives, market failures

As it was previously mentioned, the Health Plans Market in Brazil grew practically without government intervention during 40 years, achieving the expressive number of 2.720 companies in 2000. Nevertheless, the high number of companies did not express efficiency.

For a better understanding of this lack of efficiency, a recollection of the health insurance origins in the United States, in the beginning of the 20th century, can be useful. According to Melissa (1998),

“Health insurance in the United States did not develop until the 1930s, primarily because primitive medical technology meant that the true costs of illness were associated not with medical expenditures, but rather with income loss due to illness and disability. Although medical technology and expenditures rose in the 1920s, results suggest that the eventual growth of the market in the early 1930s resulted not from a surge in the demand for health insurance, but rather from a push by hospitals to develop prepayment plans for hospital services”.

The type of insurance commercialized until the 1930's was a “disease insurance”, an insurance designed to pay the wage loss associated with the missed work days. People didn't get hospitalized with frequency, instead, they used to stay at home, been submitted to traditional, archaic treatments.

Only with the rise of medical technology after the 1930s, medical expenditures started to rise, generating demand for hospitalizations, expensive high-tech treatments and consequently, demand for “prepayment” health insurance. As an evolution of the disease insurance, the health insurance had the same focus: the coverage of the cost associated with a treatment. Besides the denomination had changed (from *disease* to *health insurance*), the focus was still the same.

It can be said that this focus, associated with the deep asymmetry of information between the involved agents, generated incentives for consumers, providers and health plans to behave themselves in ways that affected negatively the health market. Added to this fact are other imperfections as the inelasticity of the demand and the negative externalities, which as a whole can explain why this market hasn't been working flawlessly.

I.2.a. Users' behavior

Moral Hazard.

One of the elementary characteristics of the operation of any type of insurance or health plan is the *mutualism*. In general terms, the purchase of insurance is a form of risk transfer. By purchasing insurance, insured individuals share the costs of each other's losses. Premiums are paid to the insurer which pools the premiums into a large fund. Losses are then paid from this pool of money. The total cost of paying for losses that occur to relatively few individuals is spread among all members of the insured group. Sharing the cost among all makes the average value of the premium smaller than the cost that should be paid by some individuals at risk.

The moral hazard (Pauly, 1968) originates exactly from this characteristic of the market, and is related to the incentives that individuals have to change their behaviors after the moment they purchase the insurance.

In the case of the health plans, the behavior change is clear and easy to explain. For example, the consumer, knowing that the costs will be paid for the health plan, tends to use unnecessary medical services that normally he would not use if he had to afford integrally the total expenditures. On the other hand, if the insured believes that major expenses are covered, he has less incentive to obtain preventive care.

In other words, the consumer perceives that the individual benefits are high, while the individual costs are limited; however, the consumer does not perceive, at the first sight, that the change in his behavior does not only harm the health plan. It harms all the insured group, for the costs will be spread by the health plan in the form of higher premiums.

Adverse selection

As in any economic activity, the act of purchasing a health plan demands from the consumer a financial liability, normally charged by the health plan company in the form of monthly premiums.

This fee represents an additional item in the budget of an individual. It is a resource that, if applied in a health plan, can no longer be used for another purpose, like consumption of a good or savings.

In this way, the expected tendency is that the individuals that know that their health condition needs medical care have a higher propension to purchase health plans, if compared to the individuals that know that their health condition is good (and, therefore, will prefer to give another use for their money).

This movement, named adverse selection, is the imperfection for which the market of insurances and health plans, in a general way, absorbs individuals of higher risk, those whom effectively need the coverage and whose expected loss, consequently, is higher. In an extreme situation, where the entrance of unhealthy individuals is significant and promotes very high raises of prices, the tendency is that the healthy individuals abandon the system, leaving behind only the ones that will incur in greater losses. The final result would be a process of price raises that would progress until the point where the health plans were unsustainable for all the consumers (Forns and Martinez, 1986; Pear tree, 1995).

I.2.b. Providers' behavior

Demand induction

Imperfections related to the expected behavior of users had already been mentioned. Beyond these, another imperfection can be attributed to another important vertex of this system: the provider, the one that executes the health service.

The demand induction, another characteristic observed in the Health Plans Market, was exemplified for the specific case of the dental plans for Alves and Covre (2002):

“The relation between a dentist and his patient is characterized by the asymmetry of information. Therefore, the patient has, in some degree, to trust in the treatment choice presented by the dentist. In a hypothetical situation of symmetrical information between them, the dentist would act in the optimum interest of his patient. However, in the presence of anti-symmetrical information, the dentist, when recommending a treatment for the patient based in his own economic interest, is inducing the demand. One says, in these cases, that the induced demand exists for supply, becoming a problem when the amount of consumed dental services exceeds the amount that would be consumed if the patient had the same degree of knowledge of the dentist”³

This applies not only for dentists, but for all kind of physicians and/or providers. In other words, in a disease-oriented model, as the provider knows that his earnings will be higher as higher the volume of tests and treatments get, there is a good possibility that long, costly and unnecessary treatments will be prescribed, only for profit and not for medical reasons.

I.2.c. Health Plans’ behavior

Risk Selection

The health plans’ perception that the market where they were acting was subject to imperfections as the moral hazard and the adverse selection, which can cause increase of costs and consequently, raise in prices (that in extreme conditions can drive away the healthiest users of the system), took them to take measures in the attempt to prevent these problems.

In the Health Plans Market, risk selection consists of the creation of barriers to the entrance of users, hindering the access of those considered of high risk, as elderly or chronic patients. This attempt of control generates inefficiency in the allocation of resources, once values that

³ Free translation from Portuguese original version.

would be destined to the payment of medical procedures are used in administrative expenditures, as specialized staff in fraud detection and medical records analysis, with the objective to exclude potential patients.

As risk selection hinders the access for the ones who more need health care, it has a perverse effect, with negative impact in the health of these individuals and in the lives of all the ones that depend on them financially. Once the negative effects of this practice are not restricted only to the directly involved individuals, the resultant social cost is high.

I.2.d. Inelasticity of the demand for health

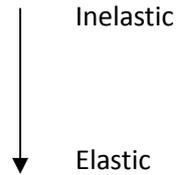
Normally, when the price of a good falls, the quantity consumers' demand for it rises; if the price rises, they demand less. The price elasticity of demand measures the responsiveness of a change in quantity demanded for a good (or service) to a change in price. It is the ratio of the relative (or percent) change in quantity demanded to the relative change in price.

For example, if for some good the price decreases 10% and the quantity demanded increases 20%, the price elasticity of demand for that good will be 2. When the price elasticity of demand of a good is greater than one in absolute value, the demand is said to be elastic – it is highly responsive to changes in price. Demands with an elasticity less than one in absolute value are inelastic – the demand is weakly responsive to price changes. Demands with elasticity equals to zero are perfectly inelastic; in other words, it doesn't matter the price of the good, the demand will still be the same. Demands with an elasticity tending to infinite are perfectly elastic; in other words, even the smallest variation of price can lead consumers to reject the good or service completely.

Phelps (1997) was one of the first authors to study the price elasticity of demand in the health insurance market. Using data from North-American, Canadian and British companies, he achieved the following results:

Health service	Price elasticity of demand
Hospitalization	0,15
Surgery	0,15
Consults	0,3
Dental	0,4

Source: Phelps (1997)



The results are interesting: they not only clearly indicate that the demand for health care is considerably inelastic, but also suggest that the higher the price associated with the treatment, the higher the inelasticity. It also ratifies the focus in illness (cost) of the model: individuals demand health insurance not to primarily maintain or improve their health condition – above all other reasons, they demand health insurance to avoid the financial impact of the treatment of an illness.

For individual plans, there is also a component that can cause even higher levels of inelasticity: the *waiting period*. The waiting period is the time between the purchase of the plan and the beginning of the full coverage, and it's used by the health plans in order to avoid the negative effects of adverse selection. It's reasonable that health plans protect themselves against users that waited for the appearance of an illness to look for a plan (something that is contrary to the concept of *mutualism*). However, it doesn't seem to be reasonable that a user already covered by a plan can't change the health plan company without being subject to a new waiting period. That's what happens today in the Health Plans Market in Brazil.

Once users can't freely move from one company to another, competition is artificially restricted, affecting demands' elasticity. The economic effects are predictable: the higher the inelasticity, the higher the prices that can be charged by companies, the less are the incentives for competition in quality.

1.2.e. Externalities

Sometimes, an economic activity has consequences that are experienced by individuals not directly related with it. These consequences are known as externalities, and are common in virtually any area, including health plans. An externality can be either positive or negative, depending on its side effects. For the Health Plans Market, they are quite visible.

For example, if a consumer with a contagious disease has his treatment refused or interrupted by the health plans company, the negative effect of this act will not be perceived only in this individual. His disease will probably be spread to other individuals, from these individuals to others, and so on. The government or even other health plans will have additional losses, for these individuals will demand health services, public or private. Moreover, if his disease affects his work condition, the company that employs him will have productivity losses. In this case, we had a negative externality.

On the other hand, if a health plan has programs not only to recover the health condition of its patients, but primarily to improve the existing good health condition of all of its consumers, the positive effects (externalities) will not only be perceived by the health plan and its clients, but also by the companies that hire them, the people who lives with them and depend on them financially, and the government (that will spend less with health care).

1.2.f. Solvency problems and externalities

If there's one thing that can be said about the competition before regulation and especially before economic stabilization, is that health plans didn't have many incentives to develop their financial and technical skills.

First of all, price competition was made without a decent technical support. That means that a large amount of companies – especially the small ones, which could not afford the best professionals – used to estipulate their prices just with the observation of the competitor's price, without the knowledge if it was under or above its costs. If the competitor was charging R\$ X for its plan, the company would charge R\$ X – 1.

In health plans, this can be very dangerous for the firm's solvency. One thing known about health plans and insurance markets is that the price – or premium – charged must equals the operational costs. Once these costs cannot be exactly determined – they depend on the probability of an event occur – they are not easy to measure. Actuarial analysis, sometimes complex and expensive, is necessary in order to obtain, with some reliability, the price to be charged.

Before the stabilization of the economy in 1994 with the Plano Real, this kind of behavior was not a serious issue. With an inflation rate up to 2,490.99% per year (measured by the IPC/FIPE in 1993) and the operational characteristics of the health plans' cash flow (normally companies have 2 or 3 months between the perception of the revenue and the payment to providers), the disequilibrium between price and actuarial cost was hidden by artificial, inflationary gains.

After 1994, with economic stabilization, things changed considerably. When companies didn't observe the actuarial equilibrium, they obviously started to present financial problems. In order to solve these problems, there were few possibilities available: price raisings and reduction of the providers net were the most used. The impact of price raisings, in an economy that was for the first time in many decades experiencing low inflation rates, was drastic and generated complains from consumers. Furthermore, the reduction of the network of providers was perceived as a kind of misleading advertising; after all, once consumers buy plans because of the quality of the hospitals and physicians of the network, it's not reasonable that some of those were excluded after the purchase. These problems placed public opinion against the health plans.

If taken to the limit, the problems with inconsequent price competition can cause solvency problems, which can lead firms to bankruptcy. This situation was not unusual early after the economic stabilization – not only in the Health Plans Market, but also in several other markets. In general, firms that were specialized in inflationary gains and not in their “real” business, suffered with economic stabilization, and many of them had to run out of business.

If toys companies and clothes factories close their doors, it means that lots of people will lost their jobs and will have to relocate themselves in the work market. It's not a desirable situation, but it's a consequence of market evolution. If a health plan runs out of business, not only its employees will lose their jobs. Also, many people with delicate health conditions sometimes hospitalized or in the middle of long, expensive treatments, will lose the service that pays their medical bills. Once these individuals cannot easily relocate themselves in other health plans companies or in the public system, this situation represents a high social cost and a serious negative externality. In this case, “market evolution” doesn't seem to

justify the losses.

I.2.g. Abuses against consumers

The imperfections of the Health Plans Market can be translated by the various problems claimed by consumers. In the later 1990s, a report from the Paraná's Consumer Defense and Protection Foundation (Procon/PR) indicated that the main issues faced by consumers were:

Demand	Occurrences
Contracts (rescission/non-accomplishment)	1.320
Charge	587
Price Readjustment	399
Waiting periods	336
Contracts alterations/substitutions	229

Refusal of attendance, abusive readjustment of fees, exclusion of basic procedures and coverages, limitation in the use of the services, hospitalization interruptions, arbitrary and unilateral rescission of contracts, lack of transparency, bankruptcy etc., were commonly reported by users and providers.

Consumers, without a reasonable explanation from the health plans company, couldn't have access to its services. Sometimes, even when they had access, it was a question of time (more specifically, "age"), to have their contracts rescinded without previous advice. It often used to happen at the moments when the health care was more needed – in the occurrence of a disease or in older ages.

Also, there was an enormous diversity of contracts, most of them with partial, incomprehensive coverages. Depending on the consumer's profile, companies intended to offer contracts that would exclude procedures related to the diseases with more chance to occur. Also, it wasn't rare to have contracts with lack of information and transparency that confused consumers which, in many cases, were buying a service without knowing exactly what they were going to get.

The limitation and exclusion of procedures could be justified not only by the risk selection, but by the demand induction practiced by some providers. In order to avoid raises in their

costs, firms used to establish utilization limits. For example, if some client was hospitalized, the health plan would only pay for the first 30 days; if a physician ordered 10 tests in a month, the health would only pay for the first 3 procedures. These practices were abusive and illogic: a health plan should not limit efforts to recover a patient's health.

I.3. Partial conclusions

Health insurance, as an evolution of the disease insurance, was designed to focus the adverse medical condition and the financial loss associated with the medical expenditures. This focus – cost and illness – generated wrong incentives for all the actors of the market: users, health plans and providers.

Indeed, as users are the weakest vertex of the system, they were the most affected by market's imperfections and Health Plans' policies as risk selection and abusive price adjustments. They were also the most affected by Health Plans' solvency problems.

The public opinion had a perception that health plans contracts were complex, not transparent, and built to restrict consumers' utilization. When a market with decades of free competition doesn't prove to be efficient, there is demand for regulation, and that was exactly the case of the Health Plans Market. Two challenging paths would have to be passed through regulation: the first one, related with short-term policies, to attack imperfections directly and quickly; the second, related with long-term policies, to change the focus of the system, from disease to health.

II.1. The Regulatory Mark

As seen in the previous chapter, the Health Plans Market in Brazil, after many years of free competition, didn't achieve reasonable levels of efficiency; on the contrary, its failures, which most of times negatively affected consumers, had put public opinion against health plans companies and in favor of government interference. There was a clamor for regulation.

The government's response to this clamor came in two different laws: the first one, Law 9.656, enacted in June 3rd, 1998, focused on the Health Plans Market regulation; the second one, Law 9.961, enacted in January 28th, 2000, created the Regulatory Agency, ANS.

One would ask why the Law that regulated the market was a year and a half older than the Law that created the regulatory agency. This can be explained by the government's vision of how the Health Plans Market should be regulated.

Some of the failures mentioned in the previous chapter are associated with health issues, like demand induction, risk selection and adverse selection. For this reason, the government assumed that they should be regulated by its Health Ministry.

Other failures or characteristics are related to financial issues, linked to the misuse of consumers' resources, like companies' lack of solvency (bankruptcy problems) and abusive price risings. Once they were considered financial issues, the government assumed that they should be regulated by its Finance Ministry.

These assumptions can be noticed in the first version of the Law 9.656/1998, which had established that the Health Plans Market would be regulated by these two different Ministries.

It did not take much time for the government to learn that the Health Plans Market was so large and complex that the regulation should be managed by only one, integrated regulatory agency. That's why the Law 9.961/2000 was enacted, creating the Federal Regulatory Agency

for Health Plans and Insurance (ANS).

II.2. Regulation and market failures

Rulemaking refers to the process that regulatory agencies - as ANS - use to create or promulgate regulations. In general, legislatures first set broad policy rules by passing laws (for this particular case, Law 9.656/1998), then agencies create more detailed regulations through rulemaking.

The Law 9.656/1998 created several rules to be observed for the health plans; ANS has been creating additional, detailed rules, since its creation. According to Montone (2003), these rules can be summarized in six main dimensions:

1. Plans' coverage and conditions of access (product regulation);
2. Rules for entry, operation and exit of the market (prudential regulation);
3. Price regulation;
4. Supervision and regulation effectiveness;
5. Communication and information;
6. Compensation to the SUS.

This Paper will not discuss in details all the dimensions above; instead, it will focus the ones which came to minimize the failures mentioned previously: dimensions 1, 2, 3 and 5.

II.2.a. Product Regulation

In general terms, this dimension is associated with the rules that came to minimize the quality problems presented by health plans' services. The primary objective of the regulation was to reduce risk selection and other abusive mechanisms adopted by health plans. This effort can be found in several items, as will be evidenced bellow.

Unilateral Rescission. A common artifice used by health plans to exclude from its portfolios of users the elderly and the ill, unilateral rescission in individual plans was prohibited, unless in case of frauds.

Renovation Abuses. Regulation made illegal some renovation practices, as additional fees and new waiting periods.

Preexisting Illnesses. Regulation made illegal the exclusion of procedures related to preexisting illnesses after 24 months of the purchase of the health plan. The health plans are enforced to prove, through medical exams, that the consumer had the adverse medical condition before the purchase of the plan; otherwise, they could not be excluded.

Emergency/Urgency Procedures. Emergency and urgency procedures must be covered after 24 hours of the purchase of the plan (Law defined as emergency any situation that could cause the death or permanent damage to the patient; urgency was defined as any risky situation caused by accidents or during the pregnancy period).

Access Obstruction. No one can have his access to a plan obstructed, despite of his age or medical condition. Although health plans companies cannot reject users, they still have the alternative to overcharge patients with preexistent adverse medical condition.

Provider Substitution. In order to exclude a provider from its network, a health plan has to substitute it for another provider with similar quality and communicate its clients with 30 days of antecedence (this measure came to forefend the cost reduction through provider network reduction).

Reference Plan. Regulation created the reference plan, a standard contract where no limitations or coverage exclusions were allowed (this effort was taken not only to avoid risk selection through partial coverages, but to standardize minimum aspects that all health plans companies should guarantee for their consumers).

Standardized Products Segmentation. Regulation defined standards that health plans should observe when designing coverage packages. For example, if a company wanted to offer a hospitalization coverage, it had to observe some minimum aspects to obtain ANS's approval.

Products Registration. In order to sell or operate plans, Health Plans must register them in

ANS.

Roll of Medical and Dental Procedures. ANS created a list of medical and dental procedures that health plans had been imposed to attend, depending on the coverage package sold.

Incentives to Health Promotion and Illnesses Prevention Programs. Health Plans companies which have health promotion and illnesses prevention programs approved by ANS, have extended their deadlines to fulfill some of the solvency rules.

II.2.b. Prudential regulation

ANS's rulemaking defined all the rules for entry, operation and exit in the market. The basic goal of these regulations is to keep in the market only Health Plans with strong financial capacity: *solvency* is the key word.

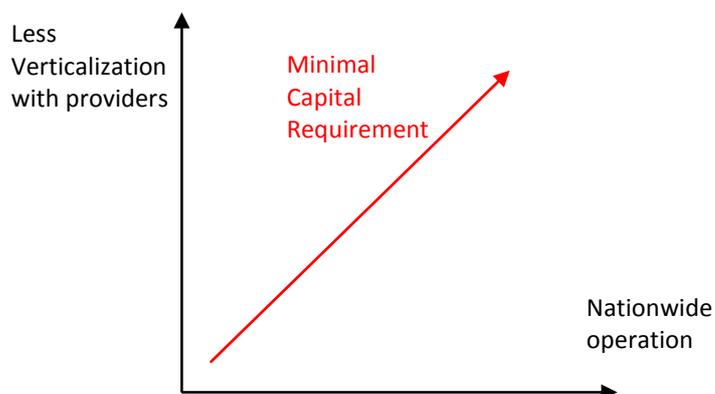
The solvency of a health plan corresponds to its ability to pay claims. A health plan is insolvent if its assets are not adequate (over indebtedness) or cannot be disposed of in time (illiquidity) to pay the providers. The solvency of health plans or its financial strength depends chiefly on whether sufficient actuarial provisions have been set up for the obligations entered into and whether the company has adequate equity.

The main items of prudential regulation are the enforcement of financial disclosure through financial reports, the requirement of minimal capital and actuarial provisions, and the creation of new forms of direct and indirect intervention on health plans.

Accounting Standards and Financial Disclosure. Regulation defined standards for accounting and reporting, in order to allow comparison and improve financial disclosure in the Health Plans Market.

Capital Requirements. This rule should be understood as an entry rule. Health plans must present minimal capital levels, which can vary according to the health plans' local of operation, its level of verticalization with providers and its business structure. In general terms, when the verticalization is lower, the required capital is higher; when the operation is

local (restricted to a municipality), the required capital is lower. Currently, the minimal capital requirement for a health plan with no verticalization and national operation is R\$ 4.500.000,00, while the required capital for a strongly verticalized, local health plan, is R\$ 66.150,00. The graphic below illustrates the idea behind this rule.



Actuarial Provisions. As in any insurance company, health plans' activity involves risks related to the probability of an event – the need for health care – occurs. In its accounting, health plans should consider the risks of its activity, adjusting the way its revenues and costs are perceived. This adjustment can be done in the form of actuarial provisions. ANS regulations defined some provisions to be observed by health plans. Two of them are basic: “*Risk Provision*” and “*Incurred but Not Reported Claims Provision - IBNR*”.

The risk provision came to force companies to retain a specific amount of its revenues, monthly. The logic is that if a health plan charges its users in the beginning of the month, this revenue cannot be fully earned in the first day of the month, because there is still a entire month of coverage to run. In average, in the end of the month, half of the revenue should be retained and provisioned with assets. This provision is very similar to the insurance market's provision for unearned premiums.

The IBNR Provision came to force health plans to estimate the amount of claims that already happened, but were not reported to the company. This can be done using data from previous periods to estimate how long a provider takes to report the health plans a claim.

In both cases, the provisions required more liabilities and consequently, demanded a stronger financial structure (for provisions must be supported by assets).

Solvency Margin. Solvency margin is the amount by which the assets of a health plan must exceed its liabilities; in other words, is another equity rule. This value is related to the higher of a percentage of net premium or net claim: in general terms, the higher the amount of premiums and claims, the higher the solvency margin must be. Unlike the Capital Requirement, the Solvency Margin should not be understood as an entry rule, but as an operational leverage rule, linked closely with the scale of operation of a Health Plan.

Intervention. Depending on the financial problem presented by a health plan, ANS can proceed with different types of intervention: Recuperation Plan (an indirect intervention where the health plan must present measures to reestablish a reasonable financial and patrimonial structure); Special Direction Regimes (a direct intervention where an indicated technician works inside the health plan in order to monitor accurately its financial situation); and Extrajudicial Liquidation (a direct intervention where ANS, knowing that the health plan cannot recover its solvency, begins the liquidation of its assets and liabilities).

Exit rules. In general terms, regulation stated that a health plan can only exit the market if: i) it doesn't have users and ii) it doesn't have unsolved debts with providers. In a situation of insolvency, health plans cannot require concordat; ANS might take the most applicable measure, which can be liquidation, transference of users to another health plan, or intervention.

II.2.c. Price regulation.

The control of prices is done in diverse ways, according with the type of contract (collective or individual) and the moment when the contract was firmed (before or after the Law 9656/98).

For collective plans, Health Plans can adjust prices following what is accorded in contract; for individual plans purchased before January 1999, companies can adjust prices only if the methodology is clearly indicated through contractual clauses. For all other situations, Health Plans have to observe the prices stipulated by ANS.

Price adjustments for age groups also have to observe the limits established by regulation. The last age group (individuals over 59 years age) can be charged at a maximum of six times the first age group (individuals between 0 and 18 years age).

II.2.d. Communication and information

As one of the basic issues of the Health Plans Market is the deep information asymmetry between the actors, is noticeable the ANS's has been making several efforts to enhance the communication between the actors and to provide more information about the sector.

ANS Call Center. ANS provides, free of charge, a contact phone which any person can call to ask questions about health plans and contracts, or even make denouncements.

Product Information System and Health Plans Information System. ANS has elected the Internet as the communication channel to be used by health plans to provide information about its contracts, medical procedures and financial reports. Most of this information is available at the ANS's website, www.ans.gov.br.

Research and Publications. ANS has been publishing several papers, books, consumer's guides and periodic information, which can be accessed in its website.

Supplementary Health Information Exchange. One of the most audacious projects of the ANS is the creation of a national standard set of information exchange between health plans and providers, known as *TISS (Troca de Informação em Saúde Suplementar)*. The TISS project was developed from August 2003 until July 2004 and sponsored by the Interamerican Development Bank.

Inspired by the United States' *Health Insurance Portability and Accountability Act*, the project has great potential not only to help cost reduction for health plans and providers (as it will significantly simplify the billing process), but to allow, for the first time in Brazil's history, the collection of standardized epidemiologic data that will subsidize both government and private sector with information to manage new, more efficient ways of doing health care, improve quality and results. Still in its intermediary levels of implementation, TISS will be

discussed again in the next Chapter, related to the perspectives for the market.

The Qualification Program. In general lines, this Program consists of the evaluation of the health plans in four distinct dimensions: medical, economic, structural and user's satisfaction. The central idea of the Program is to move the market for a model focused in health care. As its results are public, health plans have incentives to obtain higher grades and increase the quality of their services in terms of health care. The indicators that evaluate the medical dimension for example, are not quantitative, but qualitative, such as the indicators mentioned in the III.2.b section of this Paper.

However, according to Alves (2005), the present methodology should be reviewed in some aspects: the combination of indicators used by ANS can attribute the same rating for insolvent companies (that don't even fulfill ANS's prudential regulations) and companies with strong financial capacity, when it should not rate positively companies that are not applying to essential rules.

Overall, the Qualification Program can be viewed as an important step for the development of better standards of quality in the market. As the TISS, this Program is still in progress and will be discussed again in the next Chapter.

II.3. Market movements after regulation

As previously mentioned, health plans faced a deep change in its market, from a low regulated to a heavily regulated environment. Common practices to drop or shift costs to users and providers were made illegal; moreover, the prudential regulation required new financial management skills and a stronger financial structure.

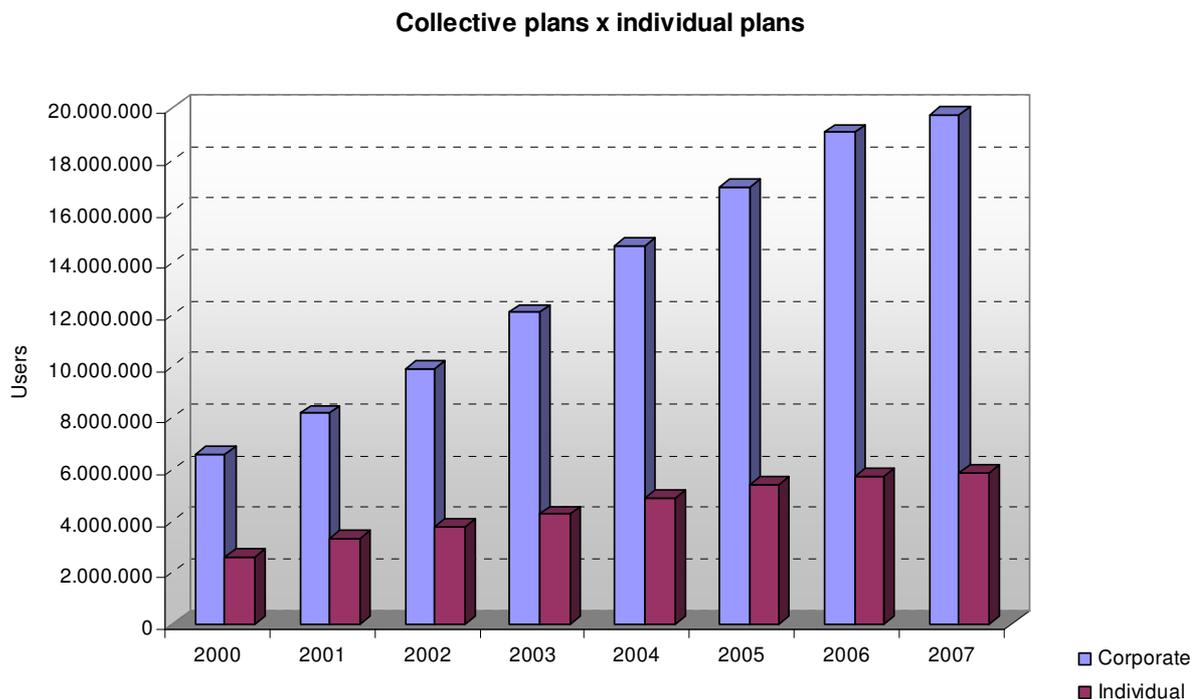
Since 2000, ANS has been collecting data from health plans: number of users, number of licenses required, type of medical procedures executed, financial reports, etc. The analysis of this data – especially data associated with movements of users under different types of contracts and health plans licenses – is helpful and can provide a lot of information to be used in the process of understanding the regulation impacts.

II.3.a. Collective plans x Individual plans

The study of the movement of users between collective and individual plans can be very useful to understand how the market reacted to product regulation.

Two important items of the product regulation are related only to individual contracts: price control (only for plans purchased after January 1st, 1999) and prohibition of unilateral rescission. For the collective plans, ANS can only monitor price changes. The assumption is that consumers of individual plans have less bargain power than employers; therefore, they need more legal protection. As price adjustments and unilateral rescission were tools frequently used by health plans, in that point regulation seemed to create an incentive for health plans to be more intensive in collective plans than in individual plans.

The numbers collected by ANS ratify this perception. The following graphic shows the evolution of users for the *new* plans (contracts firmed after January 1st, 1999).



Numbers indicate that collective plans are growing faster than individual plans. The impact of regulation is clear; however, it can't be said that this behavior was fully induced by it. Available data from IBGE shows that the proportion of formal work is increasing since 2002 (73% in August 2002 to 76% in August 2007), meaning that more people are able to join corporate plans.

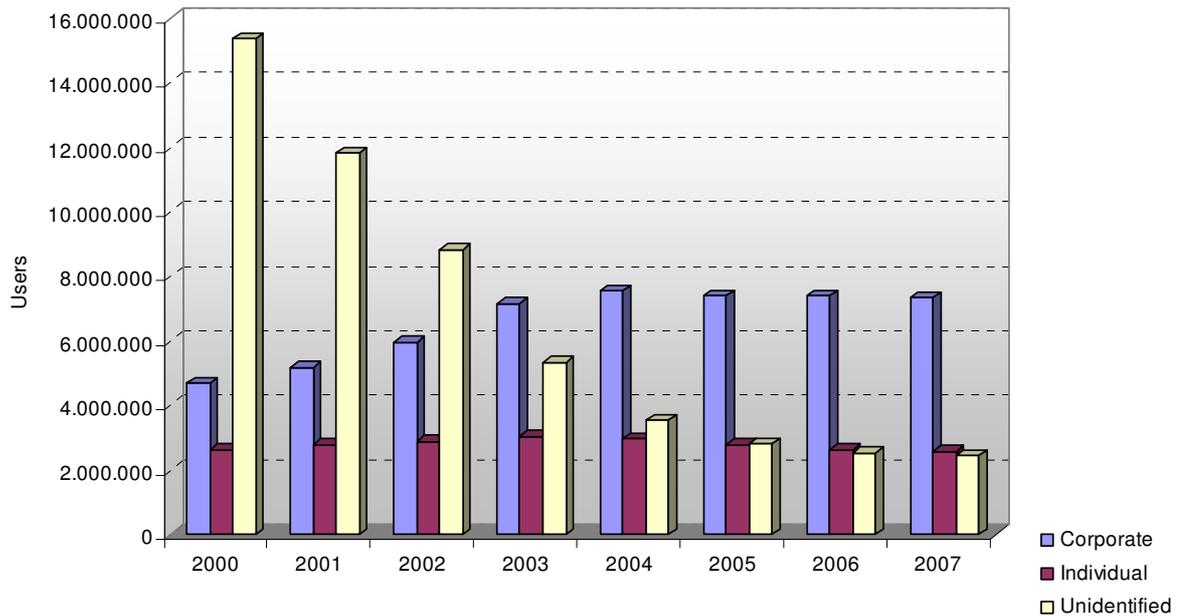
Another point of view is that since the beginning of regulation, real wages decreased in the period, while the prices of individual plans rose (more comprehensive coverages and more rights were translated in higher prices), repelling users from this segment (Ocké-Reis, 2006).

No matter the point of view, it is clear that health plans are focusing the collective plans. Entire sectors, as the insurance companies, decided to abandon the individual plans segment. More than that: through its brokers, health plans are encouraging the purchase of collective plans by associations, labor unions and other type of organizations that are not truly employers.

This phenomenon, reported as the artificial “collectivization” of plans, is concerning ANS due to the fact that more and more consumers are purchasing collective plans, instead of individual plans (Montone, 2003). Stimulated by health plans’ price policies, collective plans, in average, are cheaper than individual plans at the moment of the purchase. But as price readjustment is not controlled and unilateral rescission is allowed, users of these contracts are in a more fragile position, if compared with users of individual plans.

The data available for the *old* plans (contracts firmed before January 1st, 1999) is less accurate (the number of unidentified contracts is high). The graphic bellow shows the evolution of these plans:

Corporate plans x individual plans



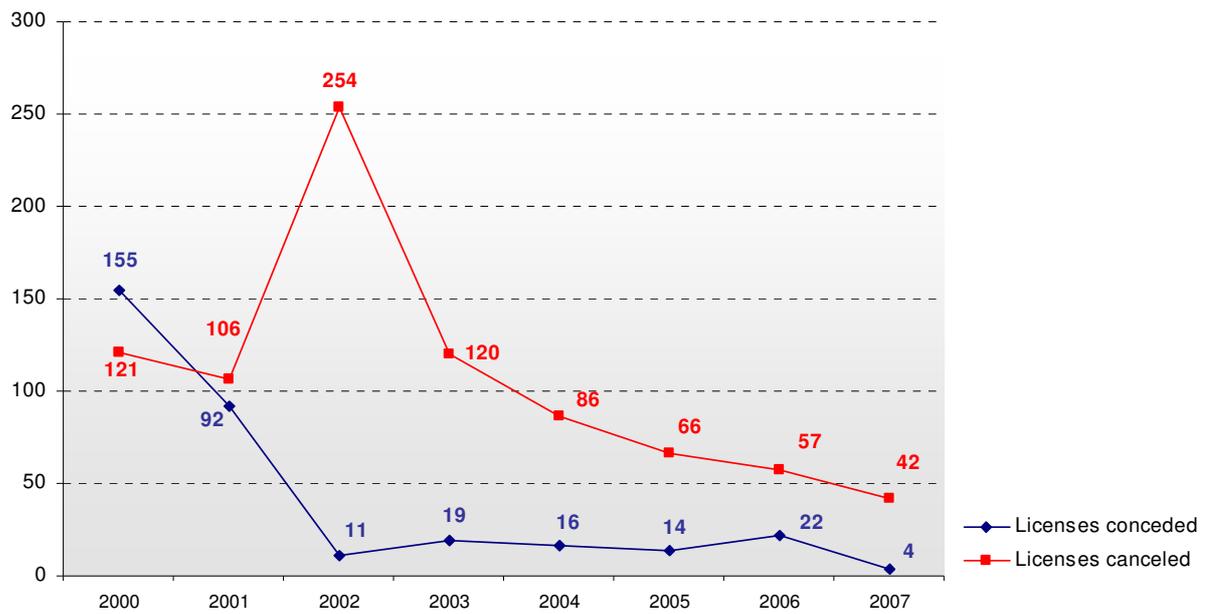
In the last three years, the numbers seem to have stabilized. As these contracts had not been sold since 2000, it is natural to expect reduction in the number of users. However, it's interesting to observe that only the unidentified contracts presented a high reduction – both corporate and individual, especially after 2004, didn't change significantly.

The maintenance of *old* individual contracts could be explained by regulation effects, once price control was established only for the *new* individual contracts. Nevertheless, health plans, even for old contracts, cannot rise prices if the methodology is not clear in the contract. As the majority of these contracts don't have this information, health plans are unable to do that; as a matter of fact, they have to observe the percentages authorized by ANS. Therefore, for this particular case, it seems that the maintenance of users in old individual plans is not caused by health plans' behavior, but by users will, as these plans are usually cheaper than the new plans and are also protected by regulation against unilateral rescission.

II.3.b. Health Plans licenses

As mentioned before in this Paper, after regulation Health Plans had new entry and exit rules. The prudential regulation had an important participation in this process. The graphic bellow illustrates the number of licenses conceded and canceled by ANS since 2000.

Health Plans Licenses



The numbers reveal that since the beginning of regulation, there are more health plans exiting than entering the market, with a peak value of cancellations in 2002. It's not a coincidence that in this particular year the prudential regulation started to be required by ANS; in fact, it seems to be the greatest responsible for most of licenses' cancellation.

Many Health Plans, mainly the smallest ones, did not demonstrate capacity to fulfill the basic prudential regulation. For these companies, there were few alternatives: the transference of users for other health plans and the posterior requirement of license's cancellation; mergers with stronger health plans; or ANS's intervention, through extrajudicial liquidation or special direction regimes.

It's important to stress that new rules like IBNR and Solvency Margin will be required by ANS after January 2008 for all health plans⁴. Moreover, all health plans will have to present financial assets to support the existing and the new actuarial provisions⁵. These rules are known to be more severe than the previous ones, meaning that Health Plans Market can experience a new "boom" of licenses cancellation in the next few years. It can't be forgotten that more cancellations and fewer licenses mean also market concentration, what leads to another question: is higher concentration desirable for this market?

⁴ RN 160/2007. Until this normative, only a few non-verticalized Health Plans and Insurers had to observe IBNR and Solvency Margin.

⁵ RN 159/2007.

II.4. Partial Conclusions

Regulation changed in the market in different ways, as the table below illustrates summarizes:

	Before regulation	After regulation
Products	<ul style="list-style-type: none"> - Non standardized, partial coverages - Risk selection - Free determination of price adjustments - Free determination of waiting periods 	<ul style="list-style-type: none"> - Complete, standardized coverages - Risk selection made illegal - Unilateral rescission made illegal - Definition and limitation of waiting periods - Price control
Health Plans	<ul style="list-style-type: none"> - No specific regulation (only the legislation associated with its legal form of business) 	<ul style="list-style-type: none"> - License requirement - Accounting standards - Capital requirements - Actuarial Provisions - Intervention

Product regulation came to stop on the short-term, the abuses associated with risk selection. It sure succeeded in this point – at least for the individual plans – as consumers now can purchase a plan with the certainty to have more comprehensive coverages, controlled prices and contractual stability. Data from the Brazilian Association for Defense of Consumers shows that the percentage of complaints against health plans, when compared to all other services (banking, telecommunications, etc.), decreased in the last four years:

Year	% of complaints (health plans)
2003	10%
2004	5%
2005	4%
2006	1%

Source: Pro teste

The “collectivization” of plans remains as the great challenge to overcome. Direct regulation over the collective plans and/or incentives for individual plans commercialization must be considered. It cannot be ignored that in an extreme situation, if collective plans continue to

grow and individual plans to diminish, very few points will remain for ANS's product supervision. Its own existence could be questioned by the public and the government.

Prudential regulation certainly slowed down the growth in the number of companies willing to participate in the market. One would say that these measures created barriers to the entrance of new players, affecting negatively the competition that the market should have. However, as it was mentioned in the previous chapter, *mutualism* is one of the basic needs that any insurance-based market should have to operate in a safe way. If mutualism means large number of insureds and large number of insureds means large companies, these companies must have sufficient financial and patrimonial capacity to deal with the risk associated with a large scale, health plans activity. This is one of the expected long-term effects of prudential regulation: higher capital requirements and higher actuarial provisions will undoubtedly move the Health Plans Market to a more concentrated status. However, it doesn't mean that market's efficiency will be harmed.

Other important long-term effects are expected from the rules that introduced the TISS and the Qualification Program. The TISS can improve significantly the flow of information between health plans, providers and users; the Qualification Program can induce health plans to embrace a health-oriented model. Both are closely linked with new ideas that are changing the perspectives for the Health Plans Market.

III.1. Long-term health policies and Porter's concept of *value competition*

As previously commented in Chapter II, the regulation of the Health Plans Market came to attack, primarily, problems related to the erratic behavior of health plans, especially risk selection.

However, the problems experienced in the market were not caused only by health plans; as it was shown in Chapter I, the present model, focused in costs and disease, with deep information asymmetry, created wrong incentives for all actors, including users and providers.

Evidences from foreign countries, as the United States, show that even a more mature, regulated market presents the same problems as the Brazilian market. Michael Porter's (2006) recent work, *Redefining Health Care*⁶, precisely diagnostics the problems with the United States market, a disease-oriented system:

- Competition to shift costs;
- Competition to increase bargain power;
- Competition to restrict choices;
- Competition to restrict services to reduce costs.

The problems are essentially the same observed in Brazil: restriction in choices and services due to risk selection, cost shifting to reduce costs (the goal is not to improve health and control costs, the goal is to transfer costs to other players, as users or providers), and competition to increase bargain power, especially in price negotiation. According to Porter, this kind of competition, named *zero-sum competition*, must be replaced for *competition on results*, or *value competition*, where *value* means health condition in its full concept.

This notion is closely linked with the partial conclusions of the previous chapters. In other

⁶ Porter, M. & Olmsted Teisberg, E.. *Redefining Health Care: Creating Value-Based Competition on Results*. Harvard Business School Press (2006)

words, the Health Plans Market should change its perspective and focus: from short-term to long-term, from disease to health. Nevertheless, changing concepts established decades ago won't be a trivial task; it will demand strong efforts from all involved agents: health plans, providers, users and government. In the United States things have just started to change in the direction of value competition, but there is too much to be done.

The same thing can be said for Brazil; however, this country will face an additional difficulty: due to the current stage of prudential regulation, there are still many companies not fulfilling minimal requirements associated with capital and provisions. According to the ANS (2006), 47% of the health plans (746 companies), with 17% of users, didn't prove the fulfillment of prudential rules as Capital Requirement and Actuarial Provisions. In thesis, long-term efforts are harder for markets in poor financial condition than for solvent markets, as usually relevant, initial investments are necessary for projects that may take several years to generate profits.

III.1.a. Long-term policies between health plans and users

Nowadays, short-term perspectives make most health plans act purely as payers, with intense administrative and financial functions, and great incentives to select risk. According to Porter, in a health-oriented model, these companies should change its operations to provide both users and physicians with information and support, allowing them to make the best available choices.

One would say that health plans would never adopt this position, because they have low incentives for that. First of all, users can move between health plans at any time (especially collective plans); second, companies that contract health plans are always seeking lower prices, giving little attention to the quality of the service. In this way, policies directed to support choice and improve information would not have the desired results, being more productive to control costs and to select risks. Because users have high churn rates, health plans tend to think in short-term perspectives, avoiding investments in information.

However, this situation can be changed: if users are induced to firm long-term contracts, information and choice support policies would be more attractive for health plans. A new

model with differentiated and attractive conditions for long-term contracts should be considered.

As long-term relationships become usual, health plans will have to participate intensively in users' choices. The reasoning behind a health-oriented model instead of a disease-oriented is that a health plan should always incentive its users and doctors to find the best providers for a given medical condition, no matter if it belongs or not to a predefined network and no matter where it is geographically located (Porter & Olmsted, 2006). The best provider will perform a service faster, with more quality (which means less errors, less unnecessary procedures and fewer complications) than an ordinary provider. Supposing that a day in a hospital in the United States can cost more than U\$ 5,000.00⁷, transport expenditures, especially for elective surgeries, could be easily surpassed by costs associated with unnecessary hospitalization days. In fact, rather than rise health plans' costs, a highly qualified provider can reduce them: for example, United Resource Networks (URN), a North-American health organization, has found that about 25% of cost savings came from fewer complications.

Only health plans will have the knowledge to help users find the best providers. A provider known by its excellence in diagnosis will not necessarily be the best provider to continue with the treatment. The best local provider for a given medical condition may not have half of the efficiency of a provider located in other state or country. An ordinary user will probably ignore this information, but the health can use it to optimize his choices.

This transformation has a lot of implications in the current model adopted by health plans, either in Brazil, and either in the United States. Currently, most health plans are organized in networks contracted in a cost reduction perspective. These networks are usually local, with few nationwide options. Several health plans are verticalized with providers (also in a cost reduction perspective). Procedures made out of the predefined network of providers are not encouraged by most health plans, with the argument that these providers would charge higher prices and, therefore, increase costs. As mentioned before, this argument may not be valid.

⁷ Hospital bills spin out of control (USA Today, April 2004)

In a long-term relationship, health plans will have to deal in a more intense way with disease management and prevention services, for all its users. Nowadays, companies focus only the unhealthy users of its portfolios, giving few or no attention to the healthy users. By giving attention to healthy users (with prevention programs, for example), it is possible to reduce the number of future unhealthy users; moreover, even the future unhealthy users would be in a better condition, because their medical condition will be monitored since the previous, healthy status (health plans and physicians will have more information about these users and will be able to treat them better).

The importance of disease management can be evidenced by the data available in the United States. According to Hoffman and Rice (1996), users with chronic conditions represent 75% of total health care expenditures. While individuals over the age of sixty-five often present some chronic condition, 75% of users with chronic conditions are under age sixty-five (and therefore, more suitable for prevention programs).

Some health plans developed creative prevention programs. Discovery Health, a leading health plan in South Africa, has a program – Discovery Vitality – that encourages its users to have a healthy lifestyle. It offers access not only to physicians and providers, but to fitness centers, nutritionists, check up exams and several activities that help people to maintain, improve and have a better knowledge about their health status. Users who join and follow the program win points that can be converted in travels, shopping and other benefits provided by Discovery's partners. The result of this initiative is positive: according to the financial report for the 6 months ended in December 2006, the Vitality Program exceeded expectations, with operating profit growing by 63%, while the operating profit for all Discovery's business increased by 40%. Also, the market share achieved by Discovery Health in South Africa is impressive: the company is four times larger than its closest competitor, with a growth six times bigger than its competitors' average, data that reflects its strong performance⁸.

In Brazil, Intermédica, one of the biggest health plans of the country, monitors chronic patients since 1996 and has prevention programs since 1982. In 2003, 44.000 of its users had participated in courses related to health maintenance. With these programs, the company

⁸ <http://www.discovery.co.za>

experienced reduction of up to 80% in the expenditures with chronic patients (Paduan, 2004).

These cases illustrates how long-term policies and a health oriented model can create incentives for innovation and give health plans a great opportunity to increase its market share and profits – especially for the companies who move first.

On the other hand, some could say that all the measures needed for establishing a successful long-term relationship with users, (like eliminating the boundaries of providers networks, creating disease prevention and health promotion programs, collect and provide information to users and providers etc.), would be unfeasible for small and local health plans, mainly in Brazil. This can be partially true: small and local health plans will face more difficulties than nationwide, large health plans, but it doesn't mean that they will have to run out of business. Small companies could, for instance, celebrate cooperation agreements with larger companies, to share information and access to providers; they could also turn themselves into information, service and health providers for largest health plans, experiencing better results.

Once again, it cannot be forgotten that one of the premises for a successful health plan operation is that the company must have large number of users to be able to properly mitigate the actuarial risk (mutualism). In other words, health plans activity is not an appropriate task for very small companies.

III.1.b. Long-term policies between health plans and providers

As previously mentioned, nowadays providers have great incentives to induce demand: they are paid for procedures made, no matter the quality of the service offered, and users have few or no information to know who and where is the best provider for their medical condition.

Changing this model is an enormous challenge: since the beginning, health plans were designed in a pay-for-procedure logic. It is clear that this reimbursement system didn't create incentives for provider's efficiency: in fact, efficient providers often receive less than

inefficient ones, because as discussed before, they usually spend less time and procedures to heal a patient. According to Porter and Olmsted (2006), health plans should negotiate with its providers new terms of payment, which can identify and reward the most efficient providers.

Information will have a fundamental role in this process. With the correct information, health plans could create new ways to measure the efficiency of providers. Instead of procedures and cost, providers could be evaluated by its quality, which should be revealed by health indicators. Several initiatives in this direction are taking place in Brazil and worldwide.

For example, the OECD Health Care Quality Indicators Project, initiated in 2004, is one of them. Five priority areas (Cardiac Care, Diabetes Care, Primary Care and Prevention, Mental Health, and Patient Safety) had quality indicators recommended by Expert Panels. For cardiac intervention, for example, there are three quality indicators: in-hospital mortality rate, one year mortality rate after intervention, and number of re-operations within six months of discharge. The indicators used don't privilege the number of procedures made; in fact, they discourage them.

If used by health plans, these indicators would be helpful in pointing out the best providers for cardiac intervention. Moreover, quality ranges could be created from the observed scores, so that providers with top performances could be rewarded with extra payments, or bonus. The worst providers would not be rewarded and if the scores were made public, they could even lose future patients (after all, no user or physician would choose a weak provider); on the other hand, the best providers would have the demand for its services increased, and more demand means more revenue.

A leading private hospital in Brazil, Albert Einstein, is already changing its operations, aiming increases in productivity and quality. Only the services in which the hospital has excellent standards will continue to be offered: oncology, cardiology, neurology and transplants; other small services, like tonsil surgeries, will be discontinued (Paduan, 2004). Albert Einstein's case is a good example of how private health companies can focus segments where they have competitive advantage.

The expected movement in a market rewarded by its efficiency and with easy information access is that only the best providers would be able to stay in business. Of course there would be intensive pressures from several providers in order to prevent pay-for-quality initiatives; however, once the information about its services would be public, users and other players would quickly understand that only bad providers would stand against a model based in quality.

Another aspect that should be changed in the relationship between providers and health plans is the current excess of paperwork and bureaucracy for billing and administrative transactions. Either in Brazil, either in the United States, almost every single health plan has its own billing forms, with its own billing codes and information. A single provider has to deal with countless formularies to charge the health plans, with no integration between their systems. It's not difficult to imagine the amount of mistakes, as well the amount of resources misallocated in administrative functions that this process generates. Some authors, as Himmelstein (2004), point that the United States wastes more on health care bureaucracy than it would cost to provide health care for all of the uninsured.

A model where standardized, electronic data is used by health plans and providers, with integrated systems, is feasible and should be settled. Some very important and promising steps to alter this situation were already taken by governments, like United States' HIPAA and Brazil's TISS. The HIPAA (Health Insurance Portability and Accountability Act), enacted by U.S. Congress in 1996, includes a section, entitled Administrative Simplification, that requires efficiency improvements in healthcare delivery by standardizing electronic data interchange.

The TISS, according to ANS,

“aims integrating healthcare information nationwide (Brazil); therefore it was developed (...) using the same unique identifiers and other standard sets proposed by the Ministry of Health, such as unique identifiers of providers (...) the TISS's project focus is not only on the patient billing but also on epidemiological information. Standardization of health will certainly produce stimulus to innovation, increase competition, reduce risks, promote interoperability among

*information systems and diffuse equal outcomes to consumers*⁹.

Due to its innovative characteristics, both programs are facing problems of interpretation and/or implementation. In the United States, for example, some providers apply HIPAA regulations overzealously, keeping medical information confidential and not allowing access even to patient's relatives¹⁰. In Brazil, data from ANS reveals that health plans will face great difficulties to develop standardized electronic data exchange systems: in 2006, 44% percent of health plans companies (1.108 companies) were not able to send to ANS most of the required electronic information¹¹.

However, these problems must be overcome, once both regulations can potentially make agents move into a system with standardized information, reducing administrative costs for providers and health plans, as well as creating opportunities for health plans and regulatory agencies to develop appropriate policies to incentive innovation, improve health indicators and overall quality of the market.

III.2. New regulation issues

Rulemaking activity is dynamic – government continuously studies and applies new regulations, or alter the existing ones, when considers that an issue needs to be solved. Among the new regulations that were still not enacted, but will surely have great impact in the market, are the portability of waiting periods and the opening of the Brazilian reinsurance market.

III.2.a. Portability

The portability of waiting periods, in other words, the possibility to migrate from one health plan to another without the necessity to fulfill new periods, is one of the main struggles of the ANS.

As discussed in Chapter I, the waiting period is the time between the purchase of the plan

⁹ Röttsch et al. (2005)

¹⁰ Keeping Patients' Details Private, Even From Kin (New York Times, July 2007)

¹¹ Results from the second stage of the Qualification Program.

and the beginning of the full coverage, and it's used by the health plans in order to avoid the negative effects of adverse selection. However, it is difficult to find an argument for why users already covered by a plan can't change their health plan company without being subject to a new waiting period. This distortion restricts competition, affects demands' elasticity and consequently gives health plans more room to raise prices.

It is patent that regulation cannot allow undistinguished portability. If users purchase cheap, few comprehensive plans, it's not reasonable to allow them to move to expensive, more comprehensive plans. This would create incentives for "rental" health plans (health plans that would exist only to consumers fulfill their waiting periods paying low fees) and adverse selection. Therefore, it's clear that only users in plans with similar quality and comprehensiveness should be allowed to move freely to another health plan. For the new plans, as coverages were already standardized by law, the task would be easy; still, for the old plans, as coverages are not standardized, portability would be unfeasible.

The regulation of portability can substantially reduce the inelasticity of the demand. According to Montone (2003), *"the development of mechanisms that allow to the consumer higher mobility would improve competition, being basic factor of price and quality control"*¹². In other words, companies would be forced to control its prices and improve the quality of its services in order to retain its clients.

III.2.b. The opening of the reinsurance market

Reinsurance is the insurance for insurers. Basically, insurers demand reinsurance for the same reason individuals demand insurance: to avoid risks that they cannot or do not wish to afford themselves. In Brazil, most health plans companies do not have access to reinsurance, due to law restrictions (only health plans classified as insurance companies have access to the reinsurance market); moreover, the reinsurance market is still a state monopoly with low penetration in health reinsurance.

This antiquated regulatory framework is about to change: after almost 70 years being held by the state-controlled reinsurer monopolist, IRB – Brasil Resseguros S.A., the Brazilian

¹² Free translation from Portuguese original version.

reinsurance market is close to its long waited opening. The insurance regulatory and supervising agencies - CNSP and SUSEP - published, on October 17, 2007, the drafts of implementing regulations to Supplemental Law 126/2007 (“Reinsurance Law”). It’s expected that in one or two years, the Brazilian reinsurance market will be effectively opened to national and foreign companies, and all health plans companies will have access to it.

Among the reasons why a health plans company would demand reinsurance, three are clear:

- Avoid risk volatility;
- Avoid capital requirements;
- Obtain access to world-class expertise in health risk management.

Risk volatility. The most common type of reinsurance used to avoid risk volatility in health plans is the stop-loss reinsurance. In this contract, usually a predefined range of the medical expenditures with an individual is assumed by the reinsurer. The numeric example below is a good way to understand how the stop-loss reinsurance works.

(R\$)	Cost	Stop-loss range	Recuperation	Health Plans' cost
Patient #1	10.000,00	40.000,00 - 80.000,00	-	10.000,00
Patient #2	70.000,00	40.000,00 - 80.000,00	30.000,00	40.000,00
Patient #3	100.000,00	40.000,00 - 80.000,00	40.000,00	60.000,00

As the total cost associated with the first patient is lower than the range covered by the reinsurance, the health plan assumes it integrally (R\$ 10.000,00). The cost associated with the second patient is R\$ 70.000,00 – the reinsurer assumes the exceeding R\$ 30.000,00. For the third patient the cost is R\$ 100.000,00: the insurer assumes the amount between R\$ 40.000,00 and R\$ 80.000,00 (R\$ 40.000,00); the first R\$ 40.000,00 and the exceeding R\$ 20.000,00 (R\$ 100.000,00 – R\$ 80.000,00) is assumed by the health plan, in a total of R\$ 60.000,00.

In thesis, this type of reinsurance can prevent financial problems associated to risk volatility, as it permits health plans to avoid unexpected losses. Also, less unexpected losses can lead to lower prices.

Capital Requirements. The risk transferred to a reinsurer is not considered for prudential rules as capital requirement. In thesis, if the health plan transferred part of its risk to another company, it does not need to have equity for that. This can be an important alternative for smaller health plans achieve the fulfillment of the prudential rules. For larger health plans, this freed-up capital can be used as an additional source of resources.

Expertise. Reinsurance is usually a global business, being done by multinational corporations. These companies have a broad and deep understanding of markets and their products, as well as data from a wide range of the insured population. Health plans can learn with reinsurer's knowledge in underwriting, claims management and product innovation, and apply this knowledge to create new and more efficient ways of doing health care.

III.3. Partial Conclusions

The perspectives for the Brazilian Health Plans Market are promising: new ideas and ways of doing health care are springing up worldwide, presenting long-term solutions that can dramatically change the behavior of a sector that was stagnated in terms of innovation.

At the same time, new regulations associated with the portability of waiting periods and the opening of the reinsurance market, once enacted, will alter significantly the competition framework of the market, forcing health plans to innovate and differentiate its services through quality and efficiency.

Current regulations are already forcing the market to break old paradigms of a competition based in short-term perspectives, cost shifting and abuses against consumers. In Brazil, the prohibition of unilateral rescissions left for health plans no other option then developing new mechanisms of care management, at least for the chronic patients. The implementation of systems as the TISS will propitiate the development of new ways to manage health, and the Qualification Program is inducing health plans to begin to think in terms of health outcomes.

In terms of long-term policies, there still much to be done. The incentive for long-term contracts is the first critical point to be equated. Without this, it will be difficult to make health plans change its short-term thinking and embrace policies focused in health.

Resistance to changes must be anticipated: although it is likely that changes will improve market's efficiency, every group of actors will find a different reason to resist to them. ANS, as the regulatory agency of this market, will have to embrace its fundamental and central role in minimizing these conflicts.

Final considerations

This work examined the Health Plans Market at three different moments: the forty previous years to the regulation, the first years of the regulation and the years to come. The forty years without regulation, in a market with strong incentives for inefficient behaviors of all its agents, generated a framework characterized for deep market imperfections and abuses against consumers. In this context, ANS appeared as the government's response for the society's demand for regulation. In its first years, the Agency attacked critical points and considerably diminished consumers' claims to the sector. For a relatively new agency, the results are positive.

The new challenge is to modify the logic of the sector, moving the market from a disease-oriented model to a health-oriented model, through incentives for long-term relationships between health plans, users and providers. In order to do that, some key points should be considered by the health plans and by the regulatory agency.

The health plans will have to improve significantly the way they manage information and find new ways to measure providers' efficiency. According to the regulatory agency, most health plans still have low knowledge about epidemiology and other basic tools of health management. It will take some years, more investment in education and information for these companies to achieve good standards. Fortunately, the opening of the reinsurance market can be a great opportunity for health plans to acquire world class know-how about health management.

Fidelity programs that simultaneously incentive long-term relationships with users and induce them to have healthier lifestyles should be developed. Nowadays, no health plan in Brazil has this kind of initiative. With the increase of the portability of waiting periods, the demand will be more elastic; health plans that do not innovate in this aspect will lose its clients.

ANS should increase its supervisory function and eliminate from the market health plans that can't fulfill basic rules, as capital and provision requirements. Insolvent health plans create problems for providers and users, harm the trust in the system, retard and compromise the

implementation of long-term policies focused in the improvement of quality. Only companies with good financial capacity should be allowed to remain in the market.

Long-term relationships between health plans and users should be encouraged. Most of the high churn rates in health plans are induced by brokers that focus only their commissions and employers that focus only lower prices, instead of quality. The regulation of insurance brokers is already done by SUSEP; ANS should work politically to change the regulatory framework and regulate health plans brokers. Employers should be educated about the benefits of a long-term relationship with a health plan and how a high quality plan, even more expensive, can increase firm's productivity and reduce costs associated to missed work by unhealthy employees.

The implementation of the TISS Program must be concluded, and the resistance of some actors anticipated. For example, physicians are already complaining about the investment that will be necessary for the computerization of clinics in 2008, when the TISS schedule intends to eliminate paper transactions between health plans and physicians (Betini, 2007). The same behavior should be expected from some small health plans and providers.

The confidentiality of part of the data that TISS intend to turn accessible to health plans is also a polemic issue. Physicians and Consumer's Protection Organizations argues that health plans cannot have access to information that can reveal the disease of a patient. However, in a health-oriented model, health plans will have to access more information about their patients. The answer may not be the limitation of information access; instead, regulation must define severe penalties to avoid the misuse of information.

The Qualification Program should be extended beyond ANS's boundaries and become a market program. Studies like Wedig and Tai-Seale (2002) and Jin and Sorensen (2005) suggest that information about health plans quality can influence consumers' decision. A government organization should not influence consumers' choices directly. In the United States, health plans ratings are done by private, independent companies, as the National Committee for Quality Assurance – NCQA. It cannot be forgotten that any rating activity is subject to errors, either for manipulation of the data informed by companies (fraud), and either for miscalculations of the rating agency. Errors caused by miscalculations can ruin the

reputation of a rating agency: if it is a private organization, it can be sued or lose its clients for other rating organizations; however, if a regulatory agency has its credibility affected, its entire rulemaking activity can be harmed.

The evaluation of health plans is a good start, but ANS should incentive and participate in the creation of independent, transparent, rating organizations to evaluate not only health plans, but providers, physicians and brokers, actors that currently are not subject to its direct regulation. In this model, ANS's role would still be crucial, determining minimal indicators to be observed, as well as monitoring the reliability of the data used.

Finally, ANS should have in mind that a health-oriented model will not content all the actors of the market. Physicians' Unions have high incentives to protect inefficient professionals, and a model focused in quality, which can end with the "pay-for-procedure" logic, will not be supported. Weak providers or providers that are unsure about its level of quality will find incentives to stand together against measurement based in health outcomes. Health plans without technical capacity to work in an environment where information management will be crucial will resist and argue that the costs to manipulate electronic data can't be afforded. Consumers' protection organizations will not accept any mechanism that enforces long-term contracts between users and health plans.

Once again, efforts in education and information will be necessary, not being discarded a more intense use of the media. The society must understand and support the idea that only a revolution in information and a change in the logic of the market can create the correct incentives for all its actors. In a health-oriented system, all actors will be better off in financial terms and – the most important – consumers will be better off in terms of health.

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