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Supplementary Health and aging after 19 years of regulation: where are we now?

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Abstract

The present article aims to analyze the changes in supplementary health and their effects on the adherence to and maintenance within health plans of the elderly, to demonstrate the current state of the care model offered, and to begin the debate regarding the importance of changing care models and remuneration in the sector. It was observed that turnover in health plans was lower among the elderly than among the non-elderly population, with greater adherence to individual and pre-regulation plans and a very low adherence to dental plans. The elderly were also more representative over the previous year, demonstrating a greater need for permanence in times of economic crisis. Care and cost data point to the urgent need to reformulate the care practice, supported by structures that are practically non-existent in Brazilian supplemental health care today and are not funded in the sector (such as palliative care and care management physicians, among others).

Keywords: Old Age Assistence. Supplemental Health. Delivery of Health Care. Health Services for the Aged.

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INTRODUCTION

In the 1970s the development of the Brazilian supplementary health sector paralleled the development of the formal labor market, most notably through contracts with large companies. It was only in the second half of the 1980s that the expansion of health plans shifted towards individual contractual relationships[1]. With the publication of the Consumer Protection Code, sanctioned by Law No. 8,078/1990, the first guidelines to regulate health plans in Brazil were established.

Political and social pressure on the sector resulted in the approval of Law No. 9,656 in June 1998, which covered private health plans and insurance. In 2000, the Agência Nacional de Saúde Suplementar (the National Supplementary Health Agency) (ANS) was created by Law 9.961, with the purpose of regulating a sector which had expanded in a disorganized fashion.

For health plans regulated by or adapted to Law 9656/98 (known as new plans), important legal guarantees were ensured, such as: coverage of health procedures, in order to cover all the pathologies of the International Classification of Diseases (ICD-10); guarantees for beneficiaries in case of dismissal from work or retirement; rules for urgent and emergency care; guarantee of access to the supplementary system for patients with preexisting diseases or injuries, and establishment of parameters aimed at the economic and financial sustainability of health plan providers through technical reserves and financial provisions. Many of these "new guarantees" directly affected the elderly population, which has a greater burden of preexisting diseases and injuries, and is no longer directly linked to formal employment.

Health plans represent a large part of the Brazilian health system, involving about 68 million client contracts, of which 48 million are health care plans, whether with or without dental care provision (the other 20 million contracts are exclusively dental plans). The care provided to this population is provided by more than 800 beneficiary based health plan providers. The twenty-five percent of the Brazilian population with access to health care plans is unevenly distributed throughout the country, as health care coverage tends to be higher among urban residents and those from states with higher incomes, more formal and informal employment, and wider reaching health services[2].

In the first half of 2016, the revenue from health plan payments was approximately R$77 billion, while the cost of care was around R$65 billion, registering an average payout ratio of around 85% to the medical-hospital operators[3]. The average payment to medical-hospital providers is estimated at around R$260,00 per month for each beneficiary.

Analyzing the Brazilian health system as a whole, health expenditures in the country totaled R$448 billion in 2014, according to Levi and Mendes[4]. Of these, 48.3% were undertaken by the State/Union, states and municipalities, and 51.7% were carried out by the private sector. Of the R$232 billion of private health expenditures in 2014, R$127 billion were carried out through health plans. Other private health expenditures relate to medicines and direct disbursement to health professionals and services.

Figure 1 shows a comparison between health expenditure *per capita* in Brazil (US$) and other countries and life expectancy at birth. It can be seen that with *per capita* health expenditures close to those observed for Brazil, other countries achieve much more significant results in terms of life expectancy at birth, which can be understood as a proxy for identifying the quality of care in countries, in terms of the health care model and health system management.

There are other countries with higher *per capita* spending (such as the United States) and inferior life expectancy outcomes than countries with lower spending, reinforcing the need for a more efficient management and health care model.

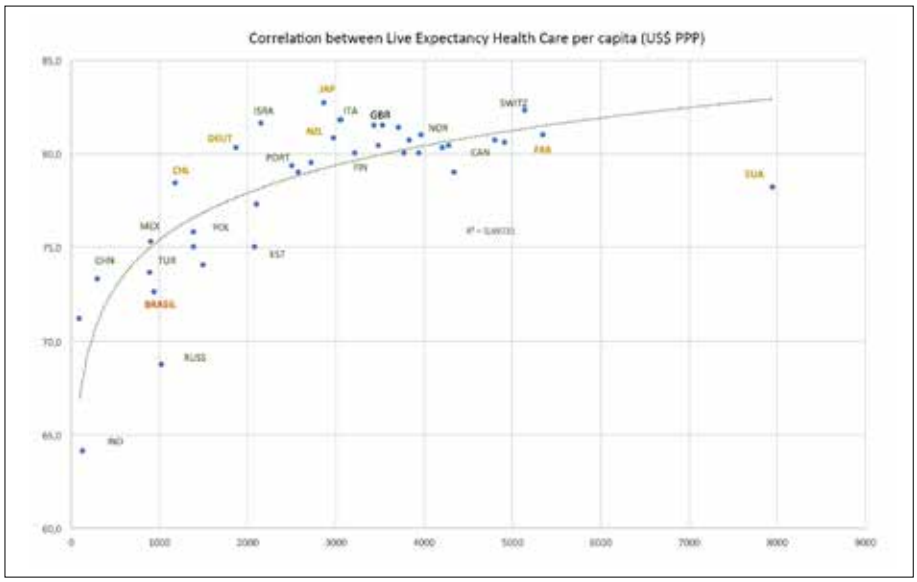

Figure 1. Life expectancy at birth v *per capita* health spending. Various countries, 2013.

Source: World Bank (accessed September 3, 2015).

Against this backdrop, the implementation of the supplementary health regulations in 1998 introduced a number of rules which required operators to control their costs more efficiently, based on the belief that it was inappropriate to apply measures prejudicial to health care, in an abusive manner, to beneficiaries. In addition, greater control of costs can be achieved through actions aimed at increasing the number of beneficiaries, dilution of risks, reduction of moral hazard, among others.

The use of regulatory mechanisms by providers seeks to prevent beneficiaries from indiscriminately using health services, reducing the burden of expenses from the provision of care in such circumstances. This can help to maintain the economic-financial sustainability of the health sector, considering a history of rising costs due to increased demand for medical care and the incorporation of new technologies. This type of action, if well organized, with coherent and well-defined guidelines, can improve the use of health services in the private sector and, consequently, the health conditions of its target population. Risks involved in the use of these mechanisms include delays in the treatment of diseases, increased cases of hospitalization and a reduction in the use of preventive procedures.

There is a tendency for elderly persons to use the health system more often, resulting in a greater financial burden when the moderating factors are applied. It is therefore important to have rules for this population, such as limits of financial exposure (payment limits) and procedures in which coparticipation does not impair but favors preventive and chronic treatment.

When individuals seek health care, what they are looking for is to a large extent the knowledge and information of health care providers. This is a relationship based almost exclusively on the patients' confidence that practitioners will treat them as best they can, based on existing pharmacology, surgical interventions, and other procedures in the area of health. The individual/patient does not have sufficient knowledge of the subject to question the expertise of the health professional. This phenomenon, which the economy calls "information asymmetry", is also true for health plan providers, who depend on the information provided by health services and by the beneficiaries themselves, in the last instance.

Another issue relating to information problems in the supplementary health sector is adverse selection. Higher values mean that individuals with lower

chances of getting sick will decide that it is not worth paying a higher value for their health insurance. As a result, as health insurance prices rise, there is an effect called "adverse selection", where "better" risks (in this case, healthier individuals) do not pay for plans. When such individuals leave the market, however, they increase the value of health insurance plans, since only those who are more likely to need health care remain as customers. Equilibrium in the market is obtained when the value of the health plan is equal to what individuals expect to spend.

The contractual modalities in the Brazilian supplementary health sector reveal the existence of three products with distinct characteristics: individual plans, collective adhesion-based plans, and collective company plans. Some aspects of regulation focus only on individual health plans, as this modality is understood to be the most fragile in terms of the balance of contractual bargaining power.

In recent years there has been a trend towards the greater participation of health plan providers in the area of collective plans, to the detriment of the individual plans market. Data analyzed in the study by Viegas[5], when comparing two moments in time, showed that there were practically no major changes in the individual plans market, whereas in the collective plan area the competition became fiercer.

METHODS AND RESULTS

The process of population aging is, as pointed out by Beltrão, Camarano and Kanso[6], composed of two distinct and complementary phases. Initially, it is based on the narrowing of the population pyramid due to the reduction of the fertility rate and, consequently, the lower number of births; combined with aging at the top of the population pyramid, due to the reduction of mortality, reflecting increased life expectancy. If the increase in life expectancy in Brazil was initially due to the remarkable reduction of infant mortality, the reduction in the mortality of the elderly population can also be considered one of the factors for this increase, or in other words the elderly are getting older, on average.

Although the population of supplementary health beneficiaries has its own nuances, largely due to the strong interrelation between labor market participation and access to health plans, there is a significant aging of the group of elderly beneficiaries of health care plans in the supplementary sector.

Of the approximately 48 million contractual health care relationships in the Brazilian supplementary health sector, 12.6% serve the population aged 60 years or over. Of the elderly with access to the supplementary health system, 59.6% are women and 17% are 80 years of age or older, according to ANS data.

Figure 2 shows the age pyramid of the Brazilian population compared to the age pyramid of the subgroup of the population with a health plan. It can be seen that the participation of the elderly in supplementary health is significant, especially among women, who present a relative participation superior to that observed for the total population.

The age variable also defines the period when plans are contracted, with a greater trend of turnover among beneficiaries of health plans in adulthood or among those who are active in the labor market. Thus, while at the time of the creation of the ANS - and two years after the publication of Law 9,656/98, which regulated the sector - the proportion of elderly and non-elderly people linked to medical-care based health plans was similar, virtually all non-elderly beneficiaries (more than 90%) were linked to new plans, while a quarter of elderly beneficiaries (25%) were still linked to contracts from prior to the law.

Another specific feature related to the elderly population within the supplementary health sector refers to the type of health insurance plan contract. While collective contracts prevail among the non-elderly population (80.4%), regardless of the gender of the beneficiaries, among the elderly the percentage of beneficiaries with individual contracts is 36% (45% among women aged 80 or over), which also reinforces the lower mobility and turnover of contracts among the older population.

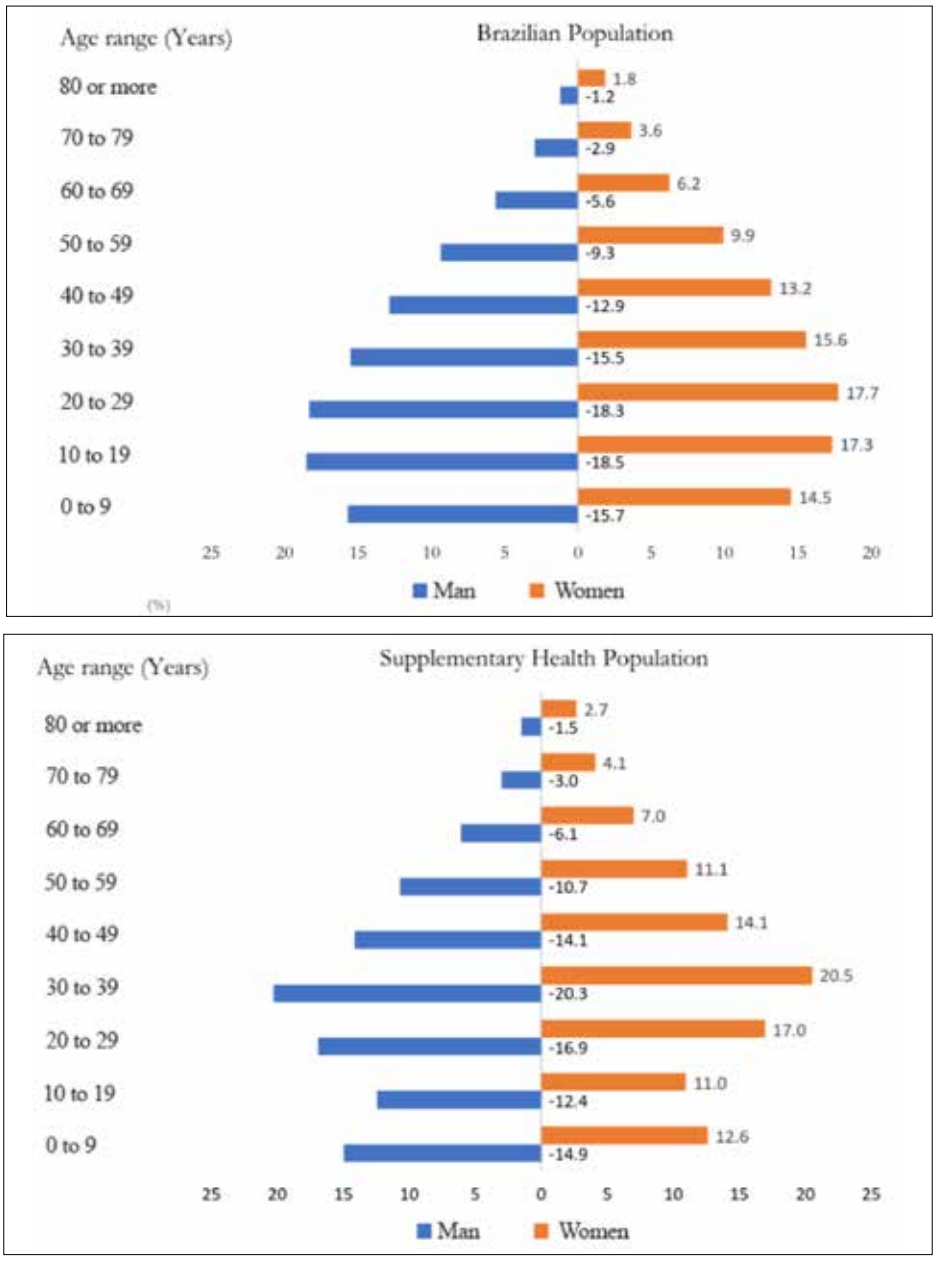

Figure 2. Age Pyramids Brazil and Supplementary Health.

Source: ANS.

With regard to exclusively dental plans, of the more than 21 million contractual relationships, only 5.5% were related to individuals over 60.

In terms of the presence of the elderly population in the client portfolios of health care providers categorized by type of provider, an expressive aging of client bases in the individual or self-management sector can be observed. These plans, which are linked to a closed population, usually composed of active or inactive employees of the same company, tend to be more affected by the aging process of the Brazilian population, as well as by human resources policies that reduce the effect of turnover of beneficiaries between plans. Among the other modalities, the presence of the elderly tends to be stable, with health insurers identifying a reduced elderly participation.

When analyzing the number of elderly beneficiaries distributed among the over 800 health

care plan providers, there is significant concentration in just a few operators: half of the elderly beneficiaries are distributed among only 30 operators; while 90% of the elderly are found in 289 providers, equivalent to approximately one third of the providers with beneficiaries.

The efforts of the elderly population to maintain their health plans can be seen over time. This is partially explained by the lower turnover and a greater concentration in individual plans, and is influenced by the perception of an increased risk of becoming ill. It is demonstrated by the decrease in the total number of beneficiaries in supplementary health, and the increased presence of the elderly in recent years.

Supplementary health accounted for 40.9% of hospitalizations in Brazil (7,833,282 hospitalizations) in 2016, according to data from ANS and the Ministry of Health (MH). In an approximate calculation, the average cost of a hospitalization in supplementary health was R$6,011.00.

According to data from the Observatório Anahp (Anahp Observatory) 2016[7], the average expenditure on hospitalizations in those aged over 60 years was 2.6 times greater than the 0 to 14-year-old age group in the year 2014.

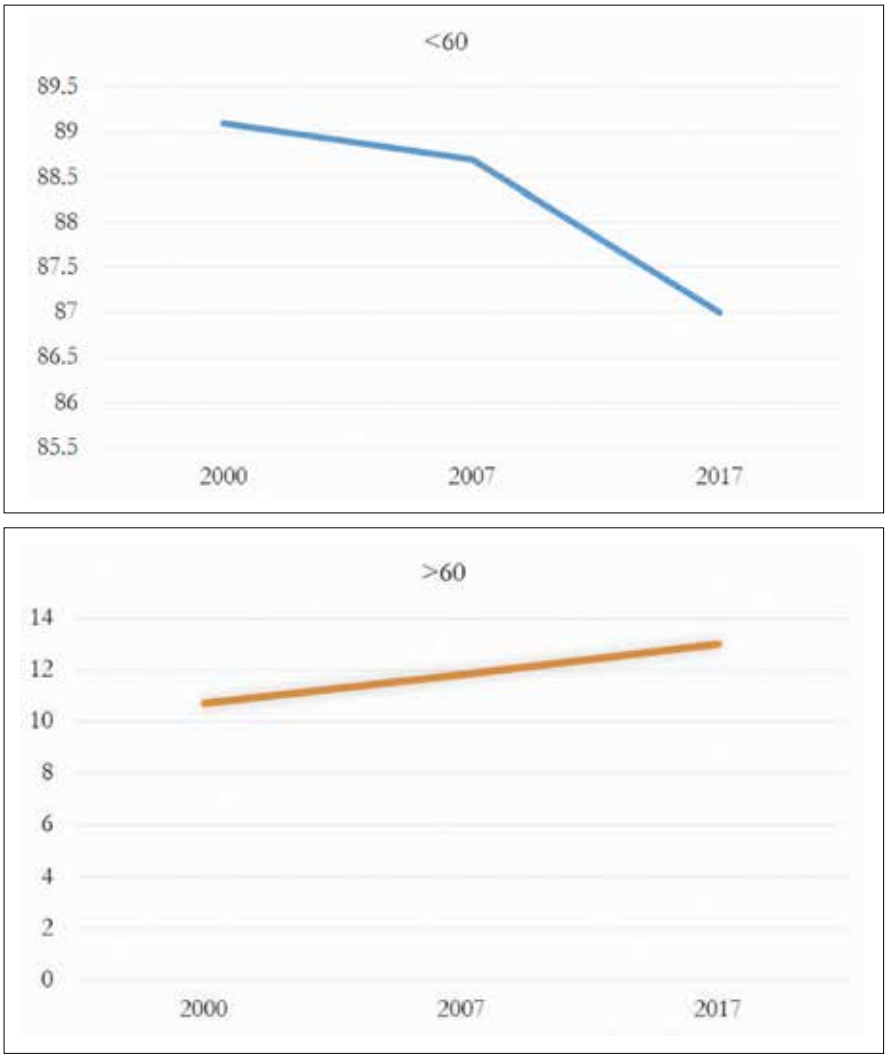

Figure 3. Evolution in number of non-elderly and elderly persons with health plan contracts. 2000-2017.

Source: SIB/ANS.

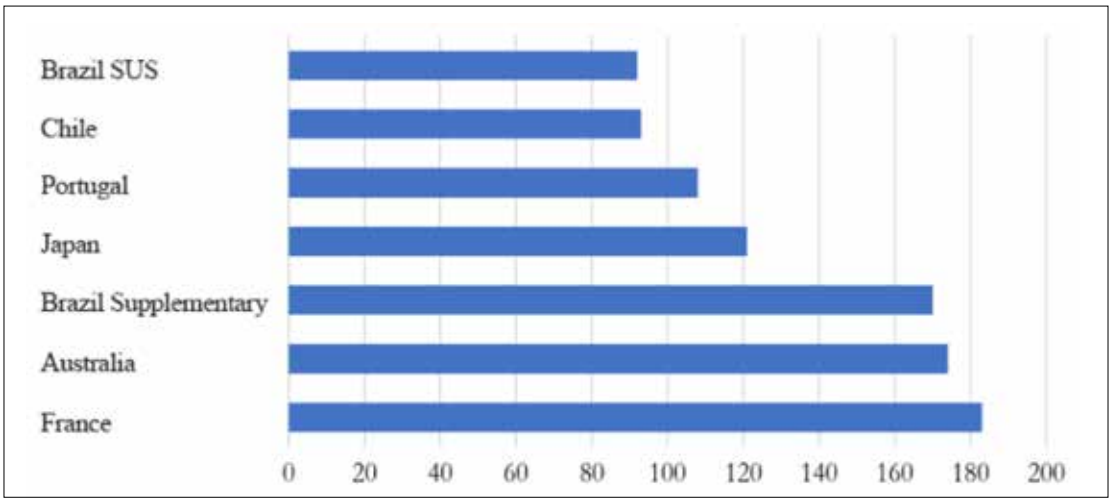

Figure 4. Hospitalizations per thousand OECD and Brazil, 2015-2106.

Source: OECD, MS, ANS.

The exchange of supplementary health information (TISS/ANS) was established as a mandatory standard for the electronic exchange of health care data for the beneficiaries of plans, among supplementary health agents. The objective is to standardize administrative actions, subsidize actions of economic, financial and care monitoring and evaluation among private health care plan providers and to create an Electronic Health Record.

Despite its limitations as a new database with a reputation for underreporting, the TISS/ANS database, which is available from 2015, allows certain important inferences about the use of procedures in supplementary health care for the elderly. The TISS Data Detail database (D-Tiss) is available at www.ans.gov.br in an updated June 2017 version and was analyzed using Tableau software.

Of hospitalizations performed between June 2015 and December 2016 among the population aged over 60 years, the mean age was 75 years (25th percentile =66 years and 75th percentile =82 years) and 54% of such hospitalizations involved women. The mean age of hospitalizations in those under 59 years was 31.5 years (P25: 21 years and P75: 45 years). In supplementary health, 30% of hospitalized patients were over 60 years of age, while in the Sistema Único de Saúde (the Unified Health System) (SUS) this percentage was 25%.

When analyzing the distribution of hospitalizations according to the International Classification of Diseases (ICD), and according to the procedures performed during hospitalization (Figure 5), what is most striking is the number of diseases that are not identified. How can planning, organization, training, and the management of a population with new characteristics be carried out without information as basic as the reason for hospitalization? This finding is a reflection of the current care model, which is disorganized and random, with very little health management. How can a model be designed for this new demographic-epidemiological configuration without detailed knowledge of this population?

A review of the culture of some institutions is also required, such as the Medical Council itself (in this case, Rio de Janeiro-CREMERJ), which filed a lawsuit against the mandatory completion of this information (ICD), preventing better health management in the Brazilian supplementary health system.

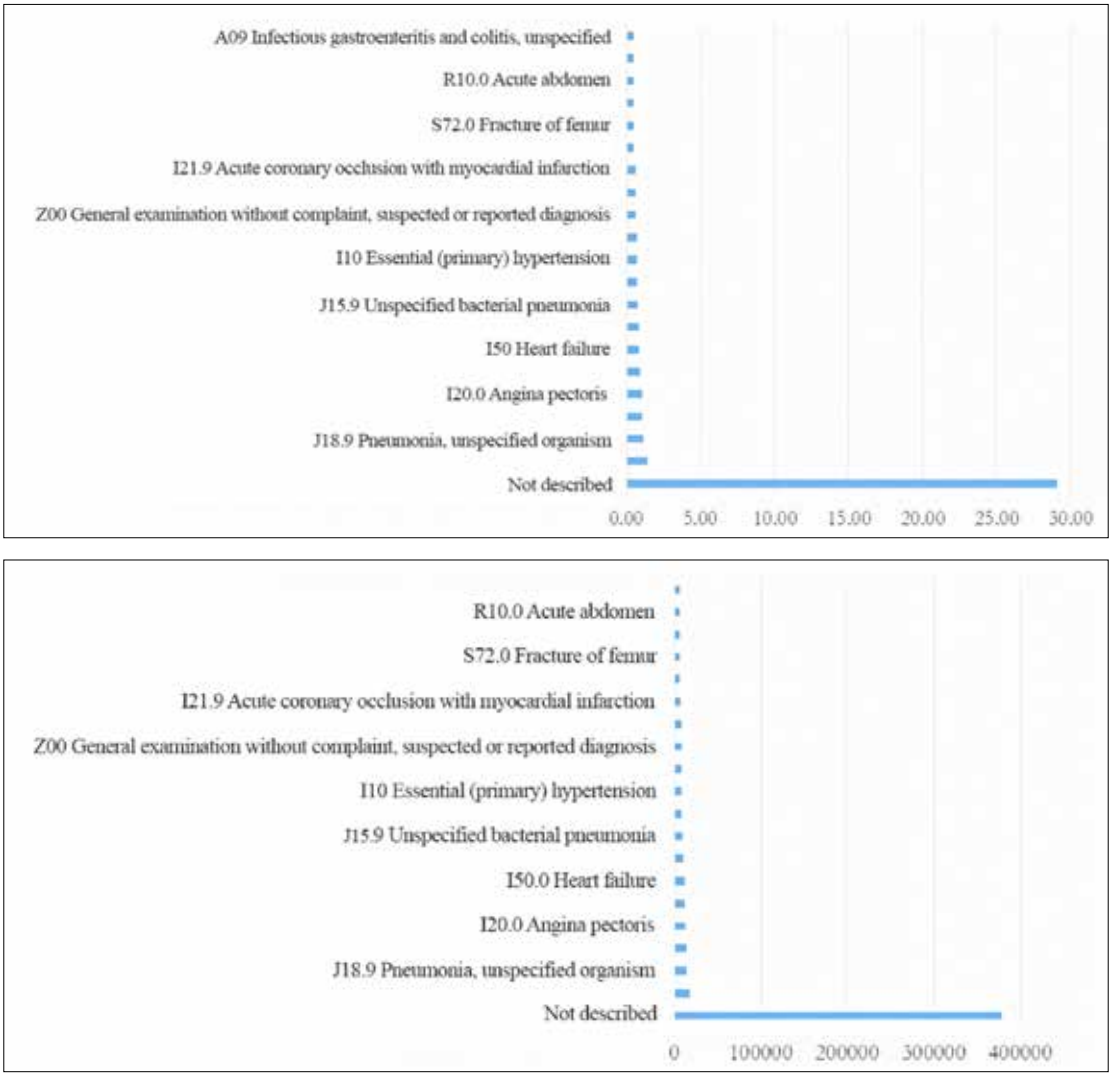

Figure 5. Distribution of ICDs and procedures in elderly hospitalizations in supplementary health.

Source: DTISS database.

DISCUSSION

The relationship between health plan providers and elderly consumers has always been one of great mistrust. The policy of most providers is to try to reduce the "weight" of this segment in their client portfolios. The elderly, on the other hand, complain of the cost, difficulties in receiving care and a refusal to cover many of the tests requested - there is no other commercial relationship in which the seller and customers have such antagonistic positions[8].

One of the most important points for discussion, and an issue that must be tackled urgently is how is care provided to the elderly in supplementary health care? Is it appropriate? Is it quality care? Is it effective? Can costs be reduced?

The health system in Brazil must adjust to the different demographic and epidemiological profiles resulting from the increase in the elderly population. The magnitude of the increase in health expenditures on the elderly population will depend, above all,

on whether these additional years are healthy and free from illness and dependence[9]. Prevention and maintenance of health, independence and autonomy, as well as the slowing of diseases and frailties in the older population, will be the major health-related challenge of an aging population. Thus, any social and health policy for the elderly must take into account the promotion of health and the maintenance of functional capacity[10].

We grow old. This is an achievement. We have changed our epidemiological profile, but we have not changed our health practices. We are still organized as we were in the 1970s, for the treatment of acute infectious contagious diseases. The elderly are not a problem for the health system if such a system is organized in the right way. The care and remuneration models must change. How to deal with population aging without structures such as transitional care, palliative care, long-stay beds and day care centers for the elderly?

How to tackle this change in epidemiological profile without proper professional training (the search for medical specialists and other health professionals is obviously shaped by the offer of better remuneration) and without further training for the professionals who are already qualified? How to carry out follow-up treatment of chronic diseases through episodic and punctual visits to emergency units, without sufficient organization for the continuity of care?

How to grow old, and subsequently die from chronic conditions, without a societal debate about dignified death? Do all elderly people wish to die in the ICU, isolated from family life, with mechanical breathing apparatus and undergoing chemotherapy in the last days of life, as is the reality today? Not to mention the inefficiency generated by this model, which is obviously extremely costly and unsustainable.

As a first step, it would be easier to try to avoid the "problem" by maintaining things as they are. But this will not be possible for long, since aging is a reality and we are not preparing ourselves in a timely manner or as a society.

Two simple indicators that have been followed by the ANS since October 2016 go some way to summarizing this reality and the changes that need to be made. One of these is the ratio of consultations with specialists/generalists. This indicator demonstrates the serious disorganization in elderly care in supplemental health. The elderly, more than anyone, need centralized, hierarchical care, which is oriented or navigated by a generalist (general practitioner, family doctor or geriatrician). In supplementary health today this indicator is distorted: where more consultations with generalists than with specialists are expected, there are many more visits to specialists - more than 50:1, in the first surveys, while in the British National Health System this same ratio is 1:1511. Another indicator is cases of emergency care treatment, which is one of the first sectors to undergo change when establishing a more appropriate organization of the health system.

CONCLUSION

It can be seen that it is possible to have more suitable care for the elderly, which is both more effective and cheaper. But for this we need to change the way we structure our care model from the outset, something that must be accompanied by changes in the remuneration model (which today is fee-for-service, which reinforces production by volume, not by quality or necessity). We want a more generous health model in which everyone wins, including the health professional (efficient performance needs to be encouraged). We can wait no longer.

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