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Financing Public Health Expenditure in an Aging Society: The Role of Public-Private Partnerships in Health

Lícia Laura Craveiro de Souza Queiroz^{1,*}, Diego Rodrigues Boente²

¹Fucape Business School, Rio de Janeiro, Brazil

²Fucape Business School, Vitória, Brazil

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ABSTRACT

Financing public spending on health is a challenge in an aging society. One option may be the Public-Private Partnership (PPP), which carries out long-term initiatives of great social importance. Health, very relevant to society, integrates Brazilian public accounts and is supported by the Unified Health System – SUS. The growing and significant aging of the population has been demanding more health services, with an impact on the SUS. The balance of the country's finances reinforces the need to resolve the public deficit, a situation that has afflicted Brazil for decades. The resumption of tax benefits, other financing opportunities and the reduction of tax expenditures are possible advantages of adopting PPPs, since the internalization of the proposal can be a potential gain, as it will allow investment to be deconcentrated from serving the poorest cities. populous to places less favored by the existing health network.

Keywords: Aging, Public Expending, Public-Private Partnership, Health

Introduction

The Fiscal Monitoring Report [RAF] produced by the Independent Fiscal Institution [IFI] presents some of the main economic and fiscal discussions that collaborate and guide the government in economic-financial planning in Brazil. The lower indebtedness observed in 2020 may be beneficial for the coming years, but it will not change the economy's growth prospects in the future, as the gross debt/GDP ratio of the Gross Domestic Product [GDP] is projected to be

*Correspond author E-mail address: liciaq@gmail.com

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81% by the end of 2022, still considered too high for the country (Ministry of Economy [ME], 2022).

This fiscal situation is cause for concern, because although the debt trajectory has stabilized to some extent since September 2020 (IFI, 2021), it has remained high, which makes economic stabilization difficult and requires austerity measures in public accounts, such as a reduction in the expenditure, especially discretionary, and an increase in revenue for balancing public finances.

The article will discuss the financing of public health expenditure, due to the growing population aging in Brazil. The situation is complex and a cause for concern for the governments of the federation. It is intended to present a possible alternative to public spending on health, since its viability and financing can be improved through partnerships between the public and private sectors.

To deal with public spending, it is necessary to address the projection of the federal government's primary deficit, which will be around 0.2% of the Gross Domestic Product (GDP) in 2022 (IFI, 2022). This could influence the recovery of public debt sustainability conditions, which clearly affects the central government's fiscal balance. The restructuring of this balance still depends on a clearer indication, by the government, on how the primary effort can be increased in the coming years.

The necessary stabilization for the country is also reflected in government spending, which supports various types of tax expenditures, such as the granting of benefits, subsidies and incentives, and in the country's age dynamics. In the projections of the Instituto Brasileiro de Geografia e Estatística [IBGE] (www.ibge.gov.br), extracted from the last census, the year 2042 will be the last year of positive population growth (when births exceed deaths).

Then, the Brazilian pyramid will decrease significantly until the year 2060, when there may be a stabilization and the population over 65 years old will be more than 25% of the total, with a significant decay of the young stratum, with direct effects on the Working Age Population [WAP], which will also be in decline. The projection was made before the COVID-19 pandemic and, due to the new census that started recently, there may still be effects different from those calculated by the IBGE.

According to the survey, Brazilian age strata were divided into young individuals (0 to 14 years old), individuals of working age (15 to 64 years old) and elderly individuals (over 65 years old). In 2020, the elderly population reached almost 10% of the total population. The projection for 2060 will be 25.5% in the over-65 stratum, with a significant decline in young and working-age populations. The graph below reinforces the significant aging population in Brazil and exposes the need for debates on the country's public finances.

According to the ME (2022), although GDP and revenue increase in absolute terms, public spending also follows the progression of these accounts. Thus, considering the aging of the Brazilian population as an impact factor in the increase in health expenses, it is clear that the decrease in IAP and behavioral issues of the population (decrease in the number of children per

family), produce effects that affect the GDP, in addition to tax waivers and exemptions practiced by the central government.

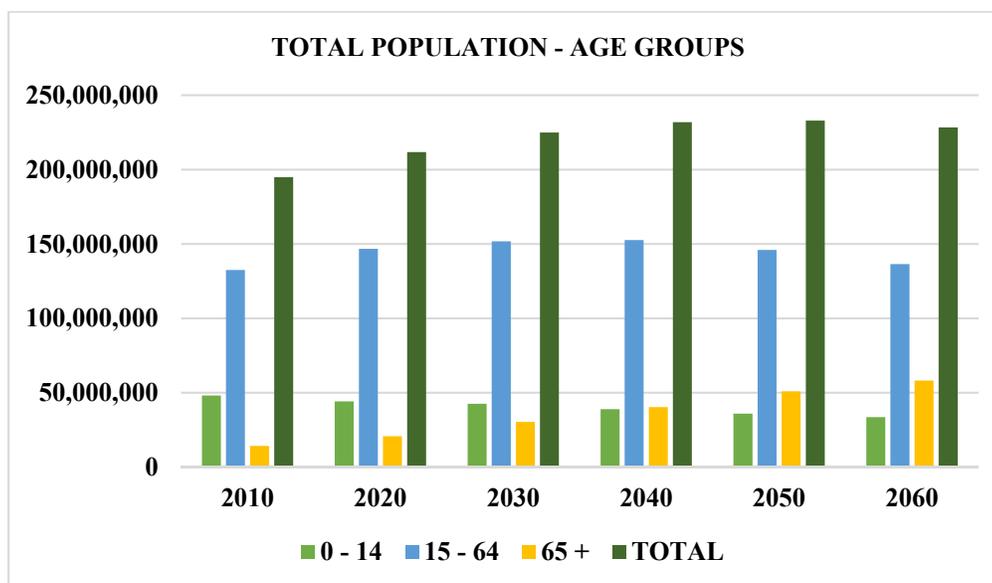


Figure 1. Brazil: age structure from 2010 to 2060 in millions of people
Source: by author (2022)

To collaborate with the improvement of public expenditure on health, the Public-Private Partnership [PPP] was thought of in the sector. The PPP is an option for carrying out initiatives centered on long-term investments of great social importance. The provision of public service of a constitutional good, such as health, justifies the relevance of studying a solution that complements the existing model in the country, although vigorous. However, as the elderly age group increases, the demand for health services increases, which highlights the need to think about a possible and sustainable solution for the coming decades.

Public expenditure financing in Brazil

The trajectory of indebtedness and the need for financing of the Brazilian public sector goes through the analysis of three major periods: 1995 to 2002, 2003 to 2008 and 2009 to 2016. The extremely beneficial external conditions of commodity prices and massive foreign capital investments in the Brazilian economy were preponderant for the considerable improvement of local fiscal indicators, such as borrowing needs and gross and net debt related to GDP. But, recently, the degradation of the country's macroeconomic situation and the need to generate a primary fiscal surplus, essential for public financing, are the intricate challenges in the management of public accounts in Brazil (Oliveira et al., 2017).

In the change in the trajectory of Brazilian fiscal results from a surplus condition until 2013, to a deficit from 2014 onwards, Freitas (2020) noted the need to reinforce the debate on the importance and necessity of adjusting public spending due to repeated deficits in the federal

public sector, due to the slowdown of the economy and large indebtedness reflected in the increase in mandatory spending, as the country went from a primary surplus of BRL 127 billion in 2011 to a deficit of BRL 116 billion in 2015. increasing difficulty in reversing the situation, limiting or cutting government spending is restricted, as the vast majority of spending is mandatory or non-contingent.

In 2016, Constitutional Amendment No. 95 [EC 95] established the New Fiscal Regime [NRF] for the Union's Fiscal and Social Security Budgets, which should be in force for twenty financial years. The NRF sets different limits for the Executive Branch, as well as for the bodies of the other Powers, the Public Ministry of the Union [MPU], the Public Defender's Office of the Union [DPU], and also, for the primary expenses of the respective member bodies and establishes details of its calculation (Secretary of the National Treasury [STN], 2016).

In the current Brazilian fiscal rules, the spending cap is, in particular, an indispensable fiscal adjustment guiding instrument. It guides the distributive function specifying the losses and gains of the multiple social segments within the public budget. Respecting the expenditure limit is a preponderant factor in the spending rule system, with budget prioritization of functions considered essential and mandatory controlled expenses (Ministry of Finance [MF], 2018).

To understand the need to finance public finances, one must go back to 1999, when the exchange rate policy changed with the adoption of the floating exchange rate. Another measure arising from the “Plano Real” (1994), equally important, was the appearance of the inflation target system. According to Oliveira et al. (2017), in the Brazilian economy, a resolute policy of generating primary fiscal surpluses began, in order to contain the growth of the Net Public Sector Debt [DLSP] in relation to GDP until 2003. This ratio began to decrease mainly due to increase in DLSP, even though GDP continued to grow.

According to Freitas (2020), the Public Sector Borrowing Need [NFSP] is a metric followed by the International Monetary Fund [IMF] to ascertain the actual size of public sector debt. For the entity, the federal, state and municipal governments, parastatal entities, social security and regulatory agencies are part of the “public sector”. The institution classifies expenditure on consumption (goods, services, investments and public debt rollover) and interest payments as public expenditure, in order to measure the size of the public sector in a given country.

In the challenge of economic stabilization, favorable foreign investment in the country, especially in the period 2003-2008, was decisive in accelerating economic development, encouraging tax collection and allowing the generation of a primary fiscal surplus. Thus, a significant accumulation of international reserves began to be verified, as well as the reduction of the basic interest rate on the public debt. These factors were preponderant in describing the trajectory of the public deficit and the DLSP, because the international scenario greatly influenced both.

After the implementation of the “Plano Real”, the analysis of public accounts began to rely on NFSP indicators in relation to GDP, such as General Government Gross Debt [DBGG]/GDP and DLSP/GDP. The NFSP is the difference between public sector revenues and expenditures, excluding nominal interest expenditures (primary income minus nominal interest payments). The

DBGG comprises the total debts or liabilities of the federal, state and municipal governments (including direct and indirect administration and INSS) and the DLSP includes the total debts or liabilities minus the total credits or assets of the public sector (IFI, 2018).

These indicators allow the analysis of the accounts to support the discussion about the public financing, since the central government increasingly needs to seek the primary surplus to promote the country's growth, pay the public administration bills that are part of the demand for goods and services provided by the public service and make macroeconomic investments with fundraising resources that finance them (Freitas, 2020).

Financing public spending in the country is based on public debt management and its relationship with fiscal results. Thus, the IFI prepares macroeconomic analyzes on the trajectory of the Gross General Government Debt (GGDB), as a proportion between nominal GDP (denominator) and the stock of the GDPGGG (numerator), in three scenarios: baseline, optimistic and pessimistic (IFI, 2022).

According to the IFI, the projections of the central government's primary result in the baseline scenario (in % of GDP) up to the year 2031, went from a deficit from 2022 to 2024, to a surplus up to the year 2031. In the optimistic scenario, it appears deficit in 2022 and surplus until 2031 onwards. In the pessimistic scenario, there will be a deficit from 2022 to 2031 (IFI, 2022). In this way, public funding for constitutional public goods, such as health, raises concern and attention.

Population aging and reflections on public health

The discussion on population aging involves many factors, the main one being health. In the case of the Brazilian population, the stratum over 65 years of age has progressively increased with the advancement of new health techniques available, fewer children and the consequent decrease in the Working Age Population (WIP), with the number of elderly people increasing. approaching the economically active stratum and consolidating an ongoing demographic process of reducing the birth rate and increasing longevity (Queiroz, 2020, Fochezatto et al., 2020).

The development strategies used in the past by aging countries have been a factor in the active role of the State in managing the finances of countries, as in the development process of some, such as England, the United States of America, Japan and South Korea. This active performance depends on maintaining the State as the main articulator and planner of the economy, and also as a promoter of technological innovation and a booster of massive investments to improve critical, well-known and priority situations (Zagato, 2019).

It is observed in the development of China, public policy makers consider the challenges of the decrease in the birth rate and the aging of society, thinking about projections for the future. The socioeconomic implications arising from demographic changes and the need for state involvement in the advancement of individuals' aging are foreseen (Guangzhou & Wang, 2021). The authors point out that the country is watching the decline in the birth rate and aging with concern, as it has already faced unprecedented challenges in education, employment and health. The country must remove birth control if it is to succeed in slowing the aging population.

The situation of public finances in Brazil has also been impacted by the effects of aging individuals. The elderly population has grown at a higher rate than the young population, due to factors such as a decrease in fertility levels that are below the population replacement rate (Fochezatto et al., 2020).

This phenomenon is characterized as a demographic bonus and is being finalized in Brazil, more evident in the more affluent classes of the population, also observed in rich countries. There is a decrease in birth rates and an increase in longevity, with an impact on the workforce and reflections on public spending, requiring the country to make a macroeconomic effort such as the GDP of rich countries, which imposes greater control of public accounts in the country (Queiroz, 2020).

The economic effects of population aging are a topic that is still little studied in developing countries, more researched in developed countries. In Brazil, the state of Rio Grande do Sul has the highest rates of population aging and the change in the age pyramid modifies the consumption profile of the economy, influencing other related variables, such as health for example (Fochezatto et al., 2020, Queiroz, 2020).

Health treated as a macroeconomic priority ensures positive effects for the country, with better living and working conditions for the population, reinforcing the need for alignment between public health policies and the phenomenon of aging of individuals (Weiller, 2019).

The role of public-private partnerships in health

Public-Private Partnerships [PPPs] are used to reinforce public initiatives focused on infrastructural investment and the restructuring of public service delivery models. The normative framework of PPPs are investments to create or develop capital goods, that is, capital expenditures, such as public hospitals, for example. These investments should be used in the health area, given the governments' lack of financial capacity to expand the care network for the elderly population.

PPPs are a pragmatic and practical way of carrying out public investment projects, justifiable because they are relevant to the provision of services to the community and represent large and complex investments. Thus, as in partnership models there is a tenuous limit on the transfer of risks to the private partner, in projects below a certain amount of investment or in transactions below a certain amount, there are other types of contract that may prove to be more appropriate (Azevedo, 2008).

PPPs are based on the transfer of risks by the public sector to the private sector, as the cost of capital for the latter may eventually be higher than that borne by the public sector.

However, there is a difference between the economic efficiency of the private sector in relation to the public sector, which is concerned with the utility of the population, regardless of who produces and provides the service and finances the investment. The private one focuses on the utility, and also on the risk of the transaction (Azevedo, 2008). For the author, PPPs are a comprehensive choice, based on the financing and management capabilities of the private sector, which take the form of deals and contracts to carry out public initiative projects, necessary for

the community and socioeconomic development, with financing and provision of effective services, focusing on quality.

Thus, PPPs must deal with project risks, as partnerships have budgets and prior financing of investments, typical of the private sector. This provision tool commonly brings long-term multi-year agreements to the public treasury, so it is important to prevent its use from being just a simple deferral of expenses and/or transfer of costs. It is equally relevant, as long as they do not put pressure on the public accounts, even if there are some budget restrictions, in order to attend to and protect the sustainability of Public Finances.

The concept of PPPs indicates excessive facilities for private capital, as it compromises the very essence of the public service, and may allow and favor a type of public policy that could deviate from the universal sense and be a more exclusive situation, which would represent the commodification of services typical public ones or that should be exceptionally promoted by the private sector, in an interesting opportunity for the State (Santana, 2006). However, the authors indicate that PPPs can have many uses with long-term infrastructure projects, which require large investments and usually do not attract the private sector, and the State, with certain guarantees, should be able to attract investment.

PPPs can have a double objective: “positive collaboration” and “private sector management efficiency”, which means having a certain demand originating from a type of contract, and with the absence of financial resources from the State, actions of that society needs. Thus, the areas of health and basic sanitation, public security, housing, among others, will be covered (Santana, 2006).

Article 4, item III, of Law No. 11,079, of 2004, defines the areas where the use of PPPs is prohibited. This legal device illustrates how the State defines the types of public service to receive investment, not from the perspective of nature, but by a certain classification of services subject to investment.

The motivation for creating the PPP is the fact that the Brazilian State does not have the resources for large investments in the public sector, nor the ballast for large infrastructure projects that are so necessary and important for economic growth, especially in view of the difficulty in keeping up with the progression the increase in the aging of the population, which impacts investments in the provision of health services.

In Ireland, PPPs are part of public sector policy. It was a response to the wave of PPPs developed in the UK. The Irish used the British model UK Private Finance Initiative, which has risk allocated and transferred in relationships between stakeholders, with accountability, risk management between public and private and close cooperation between sectors. Ireland, following the example of the United Kingdom, has implemented PPPs in various sectors such as health, transport and housing (Caperchione et al., 2017).

In the Brazilian case, there is the case study of Teresina (PI), which reinforces the idea of public governance with PPPs, in a positive relationship between society and the State, encouraging public managers to act correctly to meet the collective and social interest.

In this way, the efficiency of public management will be confirmed in the political and social spheres and the PPP will fulfill its role (Menezes, 2021). The author studied the public lighting project structured by Teresina with the support of BNDES and private partners, in which the population considered parking and public lighting projects a priority, confirmed by the adhesion of seven consortia of national and foreign investors, which demonstrates the need to establish public policies in the local interest.

Another example of public-private partnership was the National Program for Technical Education and Employment [PRONATEC]. Costa (2020) states that the project was designed as an integrator of educational policy for professional education in Brazil, possible thanks to the arrangement between the public and private sectors, with public funding and management based on business administration.

However, it is important to understand other factors that are related to the problem of financing public accounts. There is an intense and extensive debate in society on how to face the challenges of population aging, which may imply the adoption of an inclusive model of economic and social development that favors education, health and other public goods, especially in serving the population elderly (Oliveira, 2016).

Population policies to encourage births and encourage international immigration should also be studied, due to their relevance to socioeconomic development. It is also necessary to think about public policies to stimulate the growth of the Working Age Population (WIP), encouraging economic growth and being able to support the elderly portion of society (Oliveira, 2016).

The article studies the role of PPPs in providing public health services in the country. In the Brazilian case, there is the current health support model that is the Unified Health System [SUS]. The SUS is one of the largest and most complex public health systems in the world, from a simple service such as a medical consultation, through the Primary Care Program, to more complex ones, such as organ transplants, with full, universal and affordable access. free for the entire population of the country.

The PPP for health in Brazil would be like a supplementary model to the actions already carried out by the SUS, as there is no competition, but a model complementation and possible reduction of the public funding that sustains the SUS.

Although still little carried out, the first PPP in health created in Brazil was the Hospital de Subúrbio (HS) in Bahia, in 2009/2010. It is characterized by an integral PPP model in which the concessionaire is responsible both for building and administrative management and for medical care to users, with operations commanded by the company Prodal Health S.A., in partnership with the Brazilian company Promédica, specialized in health services, and the French Dalkia, specialized in facilities services and infrastructure projects (Almeida, 2017).

The winner of the bidding received a concession to operate for ten years and renewable for another 10, invested around BRL 36 million in the implementation of the Hospital, in addition to the BRL 54 million financed by the public agent. At the end of the contract, all assets that form part of the site's structure reverted to the Government of the State of Bahia. The project has been recognized as a successful undertaking for its quality of care, lower costs and the first “public”

institution in the North and Northeast to receive the Certificate of the National Accreditation Organization [ONA], level 2, (Almeida, 2017).

Although not exactly a PPP, but the existing partnership between the Brazilian Company of Hospital Services [EBSERH] (www.gov.br/ebserh/pt-br), a parastatal with full capital of the Union, active in federal university hospitals as provider of comprehensive health care services, exclusively to those within the scope of the SUS, demonstrates the viability of actions between public and private in health, with the need to improve this type of partnership.

According to WHO - World Health Organization (<http://www.who.int>), in 2019, Brazil spent about 8.2% of its Gross Domestic Product (GDP) on health, which corresponded to 4.4% private spending and 3.8% public spending. In 2022, it reached only 3.96% in this item. Therefore, as much as the country provides a universal health system for the population, most of the item still comes from private spending. However, less than a third of the Brazilian population has access to supplementary health. Thus, it is clear that the SUS is vital for health actions in the country.

Health is a constitutionally listed public good that is indispensable to the development and life of Brazilians. Population aging and the natural human desire to live longer and better r arouse interest in thinking about the feasibility of accessing full and comprehensive care to the population throughout the national territory. For this, it is necessary to understand the resources that are available for health financing in addition to the SUS and its democratization throughout Brazilian society.

In order to maintain the SUS, more than 4.7% of real GDP must be applied as public expenditure by the year 2030, according to an analysis by the Institute of Studies for Health Policies [IEPS]. In the last ten years, total health spending has reached around 9.6% of GDP, but only 3.96% accounts for government spending in 2022, already stable for years. The rest, most of it, corresponds to private spending by the population. According to the IEPS, the SUS may be underfunded if public spending or some supplementary solution does not increase significantly in the coming years (Rocha et al., 2019).

The graph below shows a comparison of Brazil with other countries in terms of health expenditure on share of total government expenditure.

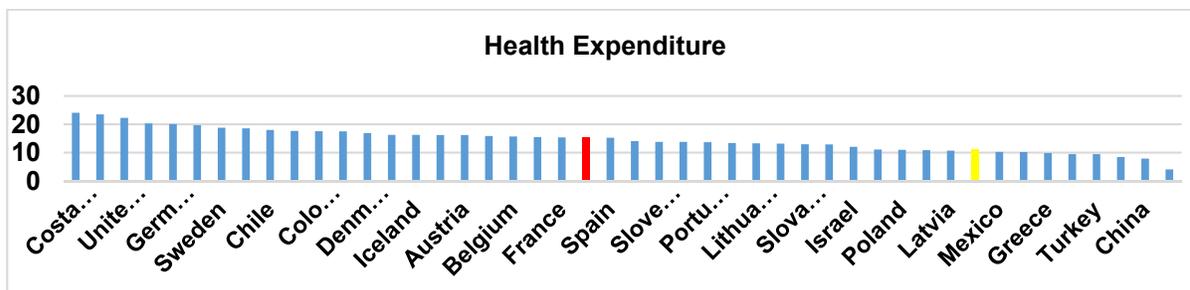


Figure 2. Health expenditure

Source: OECD (2021)

The meaning of the results is very relevant, since the lower the GDP growth, the lower the country's capacity to respond to the financing needs of public health expenditures of an aging population, such as Brazil (Rocha et al., 2019).

Opportunities for improving health services may be possible through PPPs compared to the traditional model of governance, with accountability and risk management (Pineiro et al., 2018). The implementation stages of a PPP, such as setting goals, continuous monitoring and encouraging external transparency are factors, according to the authors, that bring less risk to the private partner in the division of resources in the project in the hybrid governance model, with encouragement to private initiative to form the partnership. In addition, the increasing demand for the SUS and public hospitals in the country can act as a boost to the PPP, as well as the increased demand for health services by the population and the need to efficiently and effectively manage the public resources of the SUS (Pineiro et al., 2018).

In the United Kingdom, the Department of Health (National Healthcare Service [NHS]) has about 16% of PPPs in the health area, mainly construction or renovation of hospitals and non-assistance services. The country has one of the longest ongoing PPPs. This suggests that well-crafted contracts allow projects to be implemented within the stipulated schedule and budget, and as deadlines are long, there is a concrete possibility of obtaining high quality services (Hees & Hees, 2022).

The British model prioritized infrastructural and logistical health services, while Portugal implemented the provision of medical services and hospital management. In addition to the United Kingdom and Portugal, other countries also entered into PPP contracts. Since 2007, around 130 contracts of this type have been signed in the European Union, approximately 30 million euros (Hees & Hees, 2022).

Recommendations

The article studied the financing of public health expenditure due to the Brazilian aging, its impact on health, and the role of public-private partnerships in the sector.

The suggested proposal for the adoption of PPP in addition to the existing health model does not conflict with the current legal framework and can be effective, since the limit of 5% commitment of Current Net Revenue [RCL] is provided for in Law No. 11079/2004. It also meets the control, inspection and transparency requirements as required by the Fiscal Responsibility Law [LRF] and related legislation, since there is no special treatment for this type of financing via PPP.

Advantages of adopting PPPs were presented, such as the resumption of tax benefits and other financing opportunities, with a reduction in tax expenses (IFI, 2018). The internalization of the proposal can be a potential gain, as it would allow the investment to be decentralized from the service of the most populous cities to the less favored places by the existing health network.

Although there are limitations and implementation risks, the results can be promising with the partnership between public power and private initiative, as seen in successful cases inside and

outside the country, less pressure on public finances, greater fiscal balance and improvement for society.

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Conflict of Interests

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