The profile of health technologies incorporated in SUS during 2012-2019: who are the mainly demanders?

O perfil das tecnologias em saúde incorporadas no SUS de 2012 a 2019: quem são os principais demandantes?

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ABSTRACT Health technologies have revolutionized medical care and health management. The National Commission for the Incorporation of Technologies in the SUS (Conitec) is the Ministry of Health's body that advises on the incorporation, exclusion or alteration of new technologies in the Unified Health System (SUS). This study aimed to describe the profile of technologies incorporated in the SUS between January 1, 2012 and September 30, 2019. Data were collected on the Conitec website. Statistical analysis used Pearson's chi-square test and Fisher's exact test. The results show that 380 technologies were incorporated, with medication prevailing (46.6%). In relation to the plaintiffs, those of internal origin surpassed the others (82.4%), mainly secretariats of the Ministry of Health (p<0.001). Infectious and Parasitic Diseases (PIDs) were the most benefited (20.3%), with emphasis on HIV (Human Immunodeficiency Virus). Most of the incorporated technologies underwent public consultation (p<0.001). It is concluded that the profile of the incorporated technologies are mainly medicines, by internal demand, with indication for PIDs and, above all, for HIV. Medicines continue to be the focus of requests and internal demands have gained more space in this scenario.

KEYWORDS Unified Health Systems. Biomedical technology. Technology assessment, biomedical.

RESUMO *As tecnologias em saúde têm revolucionado a assistência médica e a gestão em saúde. A Comissão Nacional de Incorporação de Tecnologias no SUS (Conitec) é o órgão do Ministério da Saúde que assessora na incorporação, exclusão ou alteração de novas tecnologias no Sistema Único de Saúde (SUS). O presente estudo objetivou descrever o perfil das tecnologias incorporadas no SUS de 1 de janeiro de 2012 a 30 de setembro de 2019. Os dados foram coletados no site da Conitec. Na análise estatística, foi utilizado o teste Qui-quadrado de Pearson e o Teste Exato de Fisher. Os resultados demonstram que foram incorporadas 380 tecnologias, prevalecendo os medicamentos (46,6%). Em relação aos demandantes, os de origem interna superaram os demais (82,4%), principalmente secretarias do Ministério da Saúde (p<0,001). As Doenças Infecciosas e Parasitárias (DIPs) foram as mais beneficiadas (20,3%), com destaque para o HIV (Vírus da Imunodeficiência Humana). A maioria das tecnologias incorporadas passou por consulta pública (p<0,001). Conclui-se que o perfil das tecnologias incorporadas são principalmente medicamentos, por demanda interna, com indicação para DIPs e, sobretudo para o HIV. Os medicamentos continuam sendo o foco das solicitações e as demandas internas passaram a ter mais espaço nesse cenário.*

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Introduction

The Brazilian Federal Constitution of 1988 recognized health as a right for all and a duty of the State, forcing it to guarantee universal and equitable access to medicines and other health technologies[1]. Health technologies are medicines, procedures, products and protocols used in patient care[2].

The incorporation of technologies in the Unified Health System (SUS) was standardized, for the first time, in 2006, through decrees nº 152 and nº 3,323. At that time, the flow took place through the articulation between the Cabinet of Health Care (SAS), the Cabinet of Science, Technology and Strategic Products (SCTIE), the Cabinet of Health Surveillance (SVS), the National Supplementary Health Agency (ANS) and National Health Surveillance Agency (Anvisa)[3].

Also according to Conitec[3], it was up to SAS to manage the process of incorporating technologies and to SCTIE to manage the assessment of technologies of interest to SUS. Under the coordination of the SAS, the Commission for the Incorporation of Technologies of the Ministry of Health (Citec) was created, with the mission of forwarding the process of admissibility of technologies in line with the social needs in health and management of the SUS. In 2008, the coordination of Citec was transferred to SCTIE[3].

In 2011, Citec was expanded and named the National Commission for the Incorporation of Technologies in the SUS (Conitec), through Law nº 12,401/2011, which amended Law nº 8,080/1990 (Organic Law of the SUS). It is an organ of the regulatory structure of the Ministry of Health, which advises on the incorporation, exclusion or change of new health technologies in the SUS[4].

The operating framework of Conitec is based on two forums: the Conitec Plenary and the Executive Secretariat. The Conitec Plenary holds monthly meetings, in which the demands for incorporation, exclusion or alteration of technologies within the scope of the SUS are evaluated, as well as updating of the National List of Essential Medicines (Rename)[5].

The technical and scientific support necessary for the analysis of these demands is exercised by the Executive Secretariat of the commission, which is under the responsibility of the Department of Management and Incorporation of Health Technologies (DGITS) of the Secretariat of Science, Technology and Strategic Inputs of the Ministry of Health, assisted by a network of national institutions (hospitals and universities), partners of Conitec, which carry out studies on demand by DGITS[5].

DGITIS was created by Decree No. 7797, of August 30, 2012, revoked by Decree No. 9,795/2019 and amended by Decree No. 9,816/2019. Its functions are to monitor, subsidize and support Conitec's activities and demands and contribute to the promotion of access and rational use of safe and efficient technologies, among others. This department is made up of the Coordinations: General Coordination of Health Technology Management (CGGTS); Coordination of Monitoring and Evaluation of Health Technologies (CMATS); Technology Incorporation Coordination (Citec); Coordination of Management of Clinical Protocols and Therapeutic Guidelines (CCPTG) and General Coordination of Technological Innovation in Health (CGITS)[6].

Changes in the process of incorporating technologies since the creation of Conitec have been significant, changing the dynamics and quality of the entry of new products into the SUS. It is necessary to analyze their profile, as they are still recent technologies, with potential health impacts and that involve public resources needed to make them available to citizens[1].

The incorporation of technologies has been the main responsible for the increase in the costs of national health systems, especially industrialized products such as medicines. In

SUS, the annual expenditure on the purchase of health products and technologies exceeds R$ 20 billion[7].

The increase in public spending on health products is due, in part, to the formal incorporation of new technologies into the SUS. And this, consequently, can be associated with the phenomenon of the judicialization of health. Between 2010 and 2017, the Ministry of Health disbursed R$ 4.5 billion for the purchase of medicines, equipment, food supplements and coverage of surgeries and hospitalizations based on court orders. In 2016, the Ministry of Health spent R$ 654.9 million on the purchase of just 10 medicines, to serve 1,213 people[8].

The supplementary health sector in Brazil differs in its methodology for incorporating technologies. The periodic review of the ANS list has little relation to the guidelines and guidelines followed by Conitec in the process of evaluating technologies for the SUS, thus confirming the existing dichotomy between the two models. The use of a demand entry form, the request for a technical-scientific opinion from the applicants and the holding of public consultations by ANS configure the main similarities between the two processes.

However, the non-disclosure of the Health Technology Assessment reports, the lack of economic evaluations and, mainly, the lack of clarity of the criteria for the Agency's recommendation, demonstrate some of the differences of the ANS process in relation to Conitec[9].

It is essential to investigate the profile of technologies incorporated in the SUS in Brazil, since information such as these are of public relevance and serve as a parameter for managers to improve decision-making, remedy deficiencies related to the incorporation of health technologies and make efficient use of resources.

This study aimed to evaluate and describe the profile of technologies incorporated by the SUS, from January 2012 to September 2019, in addition to investigating which is the most significant demandant and which group of diseases is most covered by incorporation.

Material and methods

This is an exploratory, descriptive, retrospective study, presenting a qualiquantitative approach to the demands submitted to Conitec, from January 1, 2012 to September 30, 2019. Data collection was carried out between March and October 2019. They are secondary data, collected through document analysis, mainly in the databases available for consultation on the Conitec website (hiperlink: http://conitec.gov.br/).

The following technologies were considered: (i) medicines (conventional drugs, vaccines, chemotherapy and biologicals), (ii) procedures (surgical procedures, care procedures, imaging, laboratory and other tests), (iii) products (apparatus, equipment and inputs used in health care) and (iv) Clinical Protocols and Therapeutic Guidelines (CPTGs) (clinical protocols and therapeutic guidelines, diagnostic and therapeutic guidelines and usage protocols). The CPTGs were included as technologies due to the fact that several concepts in the international literature and the Ministry of Health consider it so[1].

For statistical analysis, Pearson's Chi-square test was used, a priori, in which case the data were randomly selected, all expected frequencies were greater than or equal to 1 and no more than 20% of the expected frequencies were lower to 5[10].

In cases where the impossibility of this was verified, the Fisher's Exact Test was used. It is a test that calculates the exact probability, but it is limited as it cannot be applied in cases where the sample data are very large[11].

The margin of error used in deciding the statistical tests was 5.0%. Data were entered into Excel spreadsheets and the softwere used to obtain statistical calculations was IBM SPSS, version 23.

Results

According to *table 1*, a total of 380 incorporated technologies were obtained, in a period of 7 years and 9 months, with an average of 49 incorporations per year, with 2018 also being the year with the highest number of incorporated technologies, totaling 76. Among these 380 incorporated technologies, 177 (46.6%) were medicines, 93 (24.5%) were procedures, 90 (23.7%) were CPTGs, and 20 (5.3%) were products.

Regarding the plaintiffs, the internal demand (cabinets, agencies and public institutions of the three spheres of government linked to the Ministry of Health) obtained 313 (82.4%), external (individuals and/or legal entities governed by private law) 58 (15.3%) and internal and external (when the same technology is requested by an internal and external demander) 9 (2.4%) of the total incorporated technologies. For the public consultation, 281 (73.9%) technologies were submitted to this procedure, while 99 (26.1%) did not.

Table 1. Profile of technologies incorporated into SUS by Conitec from 2012 to 2019

Variable	n	%
TOTAL	**380**	**100.0**
Year of recommendation		
2012	33	8.7
2013	27	7.1
2014	54	14.2
2015	55	14.5
2016	30	7.9
2017	64	16.8
2018	76	20.0
2019	41	10.8
Type of technology		
Medicine[(a)]	177	46.6
Procedure[(b)]	93	24.5
CPTG[(c)]	90	23.7
Products[(d)]	20	5.3
Demand		
Internal[(1)]	313	82.4
External[(2)]	58	15.3
Internal and External[(3)]	9	2.4
Public consultation		
Yes	281	73.9
No	99	26.1

Source: Self elaborated based on data available on the Conitec[3] website.

(a): conventional drugs, vaccines, chemotherapy and biologicals; (b): surgical procedures, care procedures, imaging, laboratory and other exams; (c): clinical protocols and therapeutic guidelines, diagnostic and therapeutic guidelines and usage protocols; (d): devices, equipment and supplies used in health care. (1): Cabinets, agencies and public institutions of the three spheres of government linked to the Ministry of Health; (2): individuals and/or legal entities governed by private law; (3): when the same technology is requested by an internal and external demanders(s).

Table 2 analyzes the type of technology according to the applicant. It was found that the three types of demanders were able to incorporate more medicines into the SUS than the other types of technologies. In percentage terms, of all their respective incorporated demands, internal claimants had 37.4%, external 93.1% and internal and external 66.7% for medicines. However, in absolute numbers, internal claimants were higher, with 117 incorporations. The association between variables was significant (p<0.001).

Table 2. Assessment of the type of technology in relation to Conitec's applicant between 2012 and 2019

	Type of technology										
	Medicine		Procedure		CPTG		Product		Group total		
Demander	n	%	n	%	n	%	n	%	n	%	P Value
Internal[a]	117	37.4	91	29.1	88	28.1	17	5.4	313	100.0	p[(1)]< 0.001*
External[b]	54	93.1	1	1.7	-	-	3	5.2	58	100.0	
Internal and external[c]	6	66.7	1	1.7	2	22.2	-	-	9	100.0	
TOTAL	177	46.6	93	24.5	90	23.7	20	5.3	380	100.0	

Source: Self elaborated based on data available on the Conitec[3].

Internal[a]: Cabinets, agencies and public institutions of the three spheres of government linked to the Ministry of Health; External[b]: individuals and/or legal entities governed by private law; Internal e external[c]: when the same technology is requested by an internal and external demander(s); *Significant association at the 5% level; [(1)]: Using Fisher's exact test.

Table 3 explains the applicants with the greatest success in incorporating technologies. It was found that public bodies stood out in number of incorporations, especially the secretariats linked to the Ministry of Health, such as the Secretariat of Sciences, Technologies and Strategic Inputs (128 technologies), the Secretariat of Health Care (124 technologies) and the Secretariat of Health Surveillance (63 technologies).

The National Association of Groups of Rheumatic Patients (Anapar) was the only institution of the group of patients that had its demands incorporated, totaling 06 technologies. All these technologies are biological medicines used in the treatment of rheumatoid arthritis, being four monoclonal antibodies (Rituximab, Tocilizumab, Infliximab and Adalimumab) and two fusion proteins (Abatacept and Etanercept).

Also according to *table 3*, several companies in the pharmaceutical industry were successful in their demands. Th e three companies that most managed to incorporate requested technologies were Roche®, GlaxoSmithKline® and Novartis®, with 05 technologies each.

The judiciary was also responsible for some embedded technologies. The Porto Alegre's Federal Court responsible for 02 technologies, Federal Court of the 4th Region – Judicial Section of Rio Grande do Sul for 01 technology and Federal court of the 6th Region – Judicial Section of Sergipe for 01 technology.

It is noteworthy that the sum of technologies exceeds the actual number of technologies incorporated due to the fact that some technologies were requested by more than one applicant.

Table 3. Ranking of individuals or legal entities, of public or private law, who were successful in incorporating requested technologies between 2012 and 2019

Demander	Number of incorporated technologies
Cabinet of Science, Technology and Strategic Supplies/MS	128
Cabinet of Health Care/MS	124
Cabinet of Health Suveillance/MS	63
National Health Surveillance Agency	14
National Association of Rheumatic Patient Groups – Anapar	6
Roche Chemicals and Pharmaceuticals S.A.	5
GlaxoSmithKline Brasil Ltda.	5
Novartis Biociências S.A.	5
AbbVie Pharmaceutical Ltda.	4
Cabinet of Health/SP	5
Janssen-Cilag Pharmaceutical Ltda.	3
Pfizer Laboratories Ltda.	3
Merck Sharp & Dohme Pharmaceutical Ltda.	3
Brazilian Society of Diabetes – SBD	3
Brazilian Society of Clinical Oncology – SBOC	3
UCB BioPharma S/A	3
Cabinet of Health/MG	3
Porto Alegre's Federal Court	2
Bristol-Myers Squibb Pharmaceutical S.A.	2
AstraZeneca Brasil Ltda.	2
Biogen Brasil Pharmaceuticals Ltda.	2
BioMarin Brasil Pharmaceutical	2
Gilead Sciences do Brasil Ltda.	2
Teva Pharmaceutical Ltda.	2
National Council of Municipal Health Cabinets – Conasems	2
Beaufour Ipsen Pharmaceutical Ltda.	1
Biotronik Comercial Ltda.	1
Coloplast do Brasil	1
Federal Court of the 4th Region - Judicial Section of Rio Grande do Sul	1
LivaNova Brasil	1
Federal court of the 6th Region - Judicial Section of Sergipe	1
Sanofi-Genzyme	1
Brazilian Society of Hemodynamics and Interventional Cardiology	1
Takeda	1
Zambon Pharmaceutical Ltda.	1
Health Ministry Cabinet	1
National Cancer Institute – Inca	1
Belo Horizonte City Hall - Risoleta Tolentino Neves Hospital	1
Pernambuco's State Cabinet of Health	1
Porto Alegre's Municipal Cabinet of Health	1

Tabela 3. (cont.)

Demander	Number of incorporated technologies
Ministry of Health	1
Cardiology National Institut	1
Brazilian Society of Urology	1
Bergamo chemical laboratory Ltda.	1
Pan American Health Organization	1
Federal University of Minas Gerais – UFMG	1

Source: Self elaborated based on data available on the Conitec[3].

Table 4 shows that medicines were not only the technologies that most went through public consultation (44.1%), but also those that failed to undergo this procedure the most (53.5%). Public consultation is an important tool to promote democratization and transparency in the choice of technologies for the SUS, as it allows society to participate in this choice process. However, in some cases, such as the extreme need for some medications, for example, these technologies are exempt from public consultation.

Table 4. Incorporated technologies that underwent public consultation by Conitec between 2012 and 2019

	Type of technologies										
	Medicine		Procedure		CPTG		Product		Group total		
Public consultation	n	%	n	%	n	%	n	%	n	%	P-value
Yes	124	44.1	50	17.8	88	31.3	19	6.8	281	100.0	P(1)<0,001*
No	53	53.5	43	43.4	2	2.0	1	1.0	99	100.0	
TOTAL	177	46.6	93	24.5	90	23.7	20	5.3	380	100.0	

Source: Self elaborated based on data available on the Conitec[3].

*Significant association at the 5.0% level.

(1)Using Pearson's Chi-square test.

According to *table 5*, the group of 'some Infectious and Parasitic Diseases (IPDs)' prevailed, with 77 technologies, followed by 'endocrine, nutritional and metabolic diseases', with 42 technologies and, in third, the group 'others' , with 39 technologies.

Table 5. Type of technology incorporated by Conitec by disease category (ICD-10)* between 2012 and 2019

Type of technology/ Disease category (ICD-10)	Medicines	CPTG	Procedures	Products	Total
Some infectious and parasitc diseases (a00-b99)	51	16	9	1	77
Neoplasms (c00-d48)	15	10	8	3	36
Blood and hematopoietic organ diseases and some immune disorders (d50-d89)	4	5	2	1	12
Endocrine, nutritional and metabolic diseases (e00-e90)	20	16	4	2	42
Mental and behaviour disorders (f00-f99)	8	0	7	0	15
Diseases of the nervous system (g00-g99)	12	6	2	0	20
Diseases of the eye and adnexa (h00-h59)	1	4	3	0	8
Diseases of the ear and mastoid process (h60-h95)	1	0	0	0	1
Circulatory diseases (i00-i99)	4	3	1	2	10
Respiratory diseases (j00-j99)	8	0	4	0	12
Diseases of the digestive system (k00-k93)	2	3	3	0	8
Skin and subcutaneous tissue diseases (l00-l99)	10	2	0	0	12
Diseases of the musculoskeletal system and connective tissue (m00-m99)	23	9	0	0	32
Diseases of the genitourinary system (n00-n99)	2	1	1	1	5
Pregnancy, childbirth and puerperium (o00-o99)	1	2	0	0	3
Certain conditions arising in the perinatal period (p00-p96)	0	0	0	0	0
Congenital malformations, deformations and chromosomal abnormalities (q00-q99)	1	1	2	0	4
Other unspecified abnormalities (r00-r99)	0	0	0	4	4
Injuries, poisoning and some other consequences of external causes (s00-t98)	2	1	1	0	4
External causes of morbidity and mortality (v01-y98)	0	5	0	0	5
Factors influencing health status and contact with health services (z00-z99)	7	3	15	6	31
Special Purpose Codes (u00-u99)	0	0	0	0	0
Others (rare diseases without ICD, multiple diseases and other situations without ICD)	5	3	31	0	39
TOTAL	177	90	94	20	380

Source: Self elaborated based on data available on the Conitec[3].

(*): International Classification of Diseases-10.

Among the most benefited PIDs, HIV (Human Immunodeficiency Virus) had the highest number of incorporations aimed at its treatment, totaling 19 technologies, corresponding to 21.1% of the total incorporated technologies for this group of diseases. It is noteworthy that the totalization of technologies for diagnosis exceeded the amount of technologies for the group 'Some Infectious and Parasitic Diseases' because some technologies were indicated for more than one disease framed in this group.

Discussion

According to the data from this study, 2018 was the year with the highest number of incorporations, but nothing was found in the literature to justify this higher number of incorporated technologies. However, the CPTGs (Complementary Material) had a massive incorporation that year, totaling 33, even surpassing the number of incorporated drugs, leveraging the total number of technologies incorporated in that year. These official

SUS documents aim to ensure better health care, as they are drawn up based on scientific evidence. These are technologies that need to be updated every two years or when there is inclusion, change or exclusion of technologies, causing the need to update health care practices[12].

The study showed that drugs were the most incorporated type of technology. In the study by Nunes et al.[13] on the incorporation of medicines by Conitec, between 2012 and 2015, it was found that medicines already had a greater number of incorporations in relation to other types of technologies in that period. According to the same authors, this fact is not surprising, as research and innovation related to this type of technology also dominate the market and the scientific community.

In Brazil, research in this area is still insufficient, making the national scientific community having to resort to research from other countries with greater expertise. This makes local production unfeasible and makes the purchase of health products more expensive, as there is a need to import them. In addition, developed countries usually have a well-developed local pharmaceutical industry, which encourages the production of research and development[14].

The internal plaintiffs had superiority in relation to the others. The study by Caetano et al.[1] on the incorporation of new drugs by Conitec, between 2012 and 2016, obtained numbers similar to those in the present study. Domestic demand was 77 (82.8%), while external demand was 16 (17.2%). Despite being a study focused only on medicines, this fact demonstrates the tendency for agencies and institutions linked to the Ministry of Health to be responsible for a significant part of the technologies incorporated in the SUS.

This superiority is due to the new public policy for technology management from Conitec, which gained the credibility of the secretariats linked to the Ministry of Health[15].

All three types of claimants managed to incorporate more medicines than the other types of technologies, reinforcing the importance that demanders attach to this type of technology. In addition, internal claimants outnumbered all other demanders in terms of incorporation, in all types of technologies.

This fact differs from what was found by Lima[16], who researched Conitec's demands between 2012 and 2014. At the time, industry demands prevailed, that is, external demand, in technologies such as medicines and products. Therefore, this period evaluated in this study, with a predominance of internal applicants, represents a positive aspect, considering that there was an attenuation of the influence of the pharmaceutical industries, driven by economic interest, in the face of the public consumption market[16].

Several external applicants were successful in their demands. Like Anapar, which was the most successful, with four monoclonal antibodies and two fusion proteins used in the treatment of rheumatoid arthritis.

This is due to the fact that biological drugs, such as monoclonal antibodies and fusion proteins, have caused a real therapeutic revolution in several areas, including rheumatology[17].

Rheumatoid arthritis is a systemic inflammatory disease that affects mainly the joints, but it can also affect the lungs, heart and other organs. It is estimated that this disease affects 0.2 to 1% of the population in Brazil. This represents 2 million people and, despite its low prevalence, it is a disease that requires adequate treatment because it causes physical limitations to patients[18].

Anapar was founded on April 26, 2006, in the city of Rio de Janeiro (RJ). Its function is to provide the integration of groups and associations of Brazilian Rheumatic Patients already established, support the creation of new groups, fight for the defense of patients' rights and seek public health policies that allow better living conditions for these patients[19].

Among the external demanders, the pharmaceutical industry was the most prevalent, despite not having so many technologies

incorporated individually in relation to other groups. Roche®, GlaxoSmithKline® and Novartis® stood out the most, with 5 technologies each, including medicines, being fusion proteins, monoclonal antibodies, antiretrovirals, antiviral vaccines, vasodilators, immunomodulators and cholinergics.

The three companies are multinationals of foreign origin. According to data from the Evaluate group, which is a leader in market analysis in the biotechnology and pharmaceutical sectors, Roche® will be the leader in the biologicals market by 2022. The analysis highlights that the laboratory has the most valued pipeline, that is, its product portfolio is more acceptable to customers and is estimated to reach the level of R$43 billion in 2022. Roche®'s investments in research and development are likely to exceed Novartis®'s, and that products from that, in 2022, represent 10% of the fifty best-selling products in the world[20].

This superiority in the number of applicants from the pharmaceutical industry among external applicants is attributed to the need for infrastructure and technical capacity to develop scientific, technical and economic studies, which are mandatory in the technology submission process with Conitec[21].

This study showed that the judiciary, in a smaller number, also requested and had their demands accepted, which suggests that they are looking for solutions to the recurring problem of judicialization of various technologies not available until then by the SUS.

In recent years, the Ministry of Health has spent R$ 4.5 billion on medicines and other health technologies, complying with court orders. The incorporation of new technologies may be motivated by the phenomenon of judicialization as a way to improve the forecast of health expenses[22].

Judicialization in the health area is not only taking place in Brazil, but also in Latin American countries and several other countries in which the right to health is the legal foundation of their public health systems. With the institution of Conitec, there was an attempt to change this panorama. It disciplined the process of assessment and incorporation of health technologies in the SUS, providing evidence-based decision-making, transparency in the administrative process for the incorporation of health technologies and the establishment of mechanisms for social participation[23].

It is routine for the Executive Secretariat of Conitec to send information and technical clarifications regarding the incorporation of technologies in the SUS to various citizens, agencies and institutions, providing interaction with the Public Prosecutors, the Federal Attorney General (AGU) and the Judiciary. This activity translates into a contribution, as: (i) it provides clarification to the Public Prosecutor's Office on the availability of health technologies by the SUS, thus preventing the filing of new lawsuits; (ii) provides technical support to AGU for the defense of the Union in lawsuits; and (iii) provides technical support to judges so that they can have information that allows them to make decisions in requests for the granting of injunctions in lawsuits[24].

An important fact is that almost 74% of all technologies went through public consultation. This represents an important step to strengthen social participation in the processes of incorporating technologies into the SUS, as it allows society to contribute with criticism, opinions about the aforementioned technology, which can affect its acceptance or not. This procedure became mandatory after the creation of Conitec, in 2011.

The decree No. 7,646/2011, which regulated the processes for evaluating applications for incorporation into the SUS, establishes that all recommendations issued by the Plenary are subject to public consultation. However, article 29 of this Decree provides for the possibility of a simplified administrative process in cases of relevant public interest, without detailing, however, in which situations this applies[25]. This justifies the fact that there is no public consultation in all technology assessment processes by Conitec.

This research showed that the category of diseases most benefited from incorporations was 'Some Infectious and Parasitic Diseases', with an emphasis on HIV. It seems to be paradoxical when trying to prioritize the most prevalent diseases in Brazil, which are chronic non-communicable ones, such as hypertension, diabetes, chronic obstructive pulmonary disease, asthma and cancer. However, infectious diseases are still a public health problem in Brazil. Although the proportion of total deaths caused by them has fallen from 50% to 5% over the last eighty years, this reduction has been more pronounced in some infectious diseases than in others[26].

Brazil faces the persistence of emerging diseases, as exemplified by the most important one, introduced in the 1970s, the HIV, which demands the continuous need for health care and the availability of high potency antiretrovirals[27]. Therefore, the volume of technologies incorporated into this category is justifiable, since it is necessary not only to ensure the eradication of some diseases, but also to control the number of cases of emerging and re-emerging diseases.

Conclusions

The process of incorporating technologies into the SUS through Conitec brought relevant aspects, especially modernization, transparency and social participation. Such factors positively influence the final result. There was an important advance in the renewal of technologies incorporated in the SUS, mainly medications, through a more transparent process.

In addition, the study allowed to demonstrate the relevance of medicines not only for public health in Brazil, but also for public expenditure, which make up an important portion of expenditure. Understanding these expenses is important to enable decision-making by managers, as well as direct, in a balanced way, the incorporation of technologies in the SUS. In this context, it is suggested that investments in the area of research and development of health products be stimulated to make national production viable and, consequently, reduce acquisition costs by the SUS, and promote access to the greatest possible number of patients.

It is concluded that the profile of the incorporated technologies are mainly medicines, by internal demand, with indication for PIDs and, above all, for HIV. Medications continue to be the focus of requests, however internal demands have gained more space in this scenario, above all demands coming from divisions of the Ministry of Health.

Collaborators

Rodrigues Filho FJ (0000-0003-0886-1633)* contributed to the development of the research and article. Pereira MC (0000-0002-1672-8202)* contributed to the research and article guidance. ■

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