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Territorial dynamics of highly complex health services in the Belém Metropolitan Region, Brazil: is specialized health care subsidized by the SUS?

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Abstract *This article presents an analysis of the territorial dynamics of the specialized healthcare network, focusing on medium and high complexity care in hospitals in the municipalities that make up the Belém Metropolitan Region. The analysis is based on secondary data from DATASUS available on the National Health Facility Registry (CNES) up to January 2022. The findings show that the private network accounts for the largest proportion of services in the region; however, the service capacity of the SUS is greater than that of the private sector due to the large volume of services outsourced to private facilities via public-private partnerships, with philanthropic hospitals allocating the largest proportion of services to public patients. This should not be confused with universal coverage, as public patient access to private services may be restricted by legal and institutional barriers depending on the form of access (open-door or closed-door).*

Key words *Territoriality of health, High-complexity health care, Specialized services, Health geography, SUS*

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Introduction

This article presents an analysis of the distribution of the specialized health care network in the municipalities that make up the Belém Metropolitan Region (BMR)[1] in the state of Pará. The region has a population of 2,529,178 inhabitants (IBGE, 2020) and concentrates 2,268 (around 30%) of the state's 7,828[1] health facilities. This analysis will help provide a deeper understanding of the territorial dynamics of the specialized health care network in the BMR. Data from the National Health Facility Registry (CNES)[2] reveal greater availability of public beds even though the hospital network has a higher number of private facilities, especially in the municipalities outside Belém, the state capital, where, curiously, more than 85% of hospital beds are public.

The findings reveal a widely distributed private hospital network in the BMR, particularly in the municipalities outside Belém, with the data from the country's national health information system DATASUS[1] showing that the private network has received substantial government funding for beds and services allocated to public patients and limited coverage of highly complex care, especially in the municipalities outside the capital. Private hospitals that registered partnerships with the public health system, the *Sistema Único de Saúde* (SUS) or Unified Health System, in the CNES (2022)[1] allocated part of their services to the SUS. This may partially explain low patient coverage in the private network in the BMR due to substantial funding of more costly highly complex services allocated to the SUS.

To investigate the coverage of medium to highly complex care services in Belém and the other municipalities that make up the BMR (Ananindeua, Marituba, Benevides, Santa Bárbara do Pará, Santa Isabel do Pará, and Castanhal) we used data on the public and private hospitals from Ministry of Health platforms[1]. We analyzed data from the DATASUS available in the CNES[2] showing the number of hospitals up to January 2022[1]. This data includes facility location, type of facility (public or private), level of service complexity and specialized services provided, surgical procedures, tests, number of general beds and intensive care beds by specialty, among others, specified as SUS and non-SUS services. The hospitals were identified using the official acronyms adopted by the institutions.

The above data were used to create a geographic information system to assist in data analysis. Maps of the BMR hospital network showing information on the number of specialties, highly complex surgeries, level of complexity, distribution of SUS and non-SUS general beds, the composition of the high-capacity hospital network, and the distribution of specialized services were created based on the data from the CNES-DATASUS[1] (Figures 1, 2 and 3).

Territorial dynamics of the specialized health care network

Specialized care is defined as a set of high-cost high-technology procedures that provide access to cutting edge care[3]. The specialized service network functions as a strategic "territory" within the SUS that can only be properly understood by considering the current design of primary health care, which is responsible for redesigning the provision of medium and highly complex care services. In any given health region, specialized care is distributed across various points of the territory in coordination with other levels of care. Unlike primary care, which is decentralized across a broad network of primary care centers aggregated with the family health strategy, thus facilitating patient access[4], specialized services are provided across different levels of care on a regional basis (2012).

Highly complex care services are concentrated in hospitals – facilities that perform procedures involving an *imminent risk of death*. Hospitals are therefore the kingpin in the spatial distribution of health services, taking into account level of technology and the population flows and urban transformations that affect the functioning of these facilities. Hospitals can be categorized according to the type of services they deliver and administration (public or private). Public hospitals are funded solely by the government at either municipal, state, or federal level, while private services are paid for individually by clients or collectively by health insurance companies, cooperatives, or philanthropic organizations[5]. Partnerships between the public and private sector in which private hospitals allocate a proportion of beds and outpatient and other more complex services to the SUS are common[5].

Public-private sector partnerships result from the formation of a universal health system[5] made up of public and private institutions that contract a diverse range of physical and human resources from different sources[6], meaning that genuinely public or private facilities do not exist. According to Bahia[7] (2008), the type of facility (public or private) is not necessarily determined

by the source of funding or existence of outsourcing. There is a wide variety of public-private partnership arrangements in health facilities for contracting services, equipment, and staff. Thus, this broad range of transactions cannot be classified as exclusively public or private.

To avoid ambiguities regarding the type of service, public services were considered to be hospital beds, equipment, and specialties paid for or owned by the government, including private services outsourced by the SUS (outsourcing via contracts and agreements setting out coverage parameters and service remuneration is only permitted when public provision is insufficient to meet demand)[5,6,8]. Outsourced private services were therefore also considered public, with public-private partnerships accounting for a large share of SUS services[9]. The study also included mixed services grouped according to categories in the CNES[1], with services registered in the SUS category being considered public and other services not specified as state services being classified as private or non-SUS. The SUS network in the BMR includes both public facilities and private facilities, meaning it was necessary to include outsourced beds and services[10]. The categorization of public and private provision was performed based on the data from the CNES updated to January de 2022, which distinguishes between private services and outsourced services as follows: non-SUS and SUS[1,3,5,8].

In this medical-hospital context, which includes limited-access highly-specialized resources, we chose the tests and services most commonly provided in the region's hospitals[1], selecting the following specialties: organ and tissue transplantation; neurosurgeries; cardiovascular surgery; reconstructive surgeries; thoracic surgery; vascular surgery; hemodialysis; cancer center; pneumology; urology; nuclear medicine; traumatology and orthopedics; urgent and emergency care; and laparoscopy and endoscopy.

Territorial dynamics of the specialized health care network in the BMR

According to the data from the CNES[1], Belém's public and private hospitals provide up to 14 of the medium to highly complex specialties selected in this study, while the hospitals in the municipalities outside the capital provide up to nine (Figure 1).

Highly technical services, such as specialized surgeries – cardiac, neurological, and thoracic surgeries, among others – were provided by both public and private hospitals. In the latter, a large part of these procedures were paid for by the government (Figure 1). Although the availability of highly complex surgery was higher in hospitals in Belém, only a small proportion of these facilities provide these services, with provision being even more insufficient in the municipalities outside the capital. The data show that Belém has five public and five private hospitals that perform neurosurgeries, with three of the latter providing neurosurgical services to the SUS. Heart surgery was performed by two public hospitals and five private hospitals, with two of the latter providing this service with funding from the SUS. Thoracic surgeries were performed by three public hospitals and two private hospitals. In one of the latter these interventions were paid for by the SUS. Only two hospitals in the BMR performed neurosurgeries (one public and one private outsourced by the SUS). Heart surgery was only performed by private hospitals with public-private partnerships, while thoracic interventions were performed exclusively by the SUS in a public hospital in Ananindeua[1].

The data reveal that there are more private hospitals than public in the BMR. However, the data from the CNES[1] show that a large percentage of the specialized services provided by the private network are allocated to the SUS via public-private partnerships. The situation with regard to highly complex services is as follows (Figures 2 and 3): Belém has 40 hospitals, while the municipalities outside the capital have 18. The latter are concentrated in Ananindeua (10), with Castanhal and Marituba having five and two hospitals respectively, and Santa Isabel do Pará one. Benevides and Santa Bárbara do not have any hospitals. Despite the higher number of private hospitals, the data show that a large volume of private services are outsourced to the SUS, especially in philanthropic hospitals. In addition, public hospitals have a high capacity and high concentration of highly complex specialties[1,10].

To better understand the CNES data, it is important to bear in mind that the capital's hospital network is made up mostly of private hospitals, with 23 of Belém's 40 hospitals being private and only 17 public. According to CNES data up to January 2022, the capital had 5,201 general beds: 3,019 in public hospitals; and 2,182 in private hospitals. However, 511 private beds were reserved for the SUS, resulting in a total of 3,530 public beds, meaning that around 68% of the capital's hospital beds are effectively public and 32% are effectively private[1] (Figure 2).

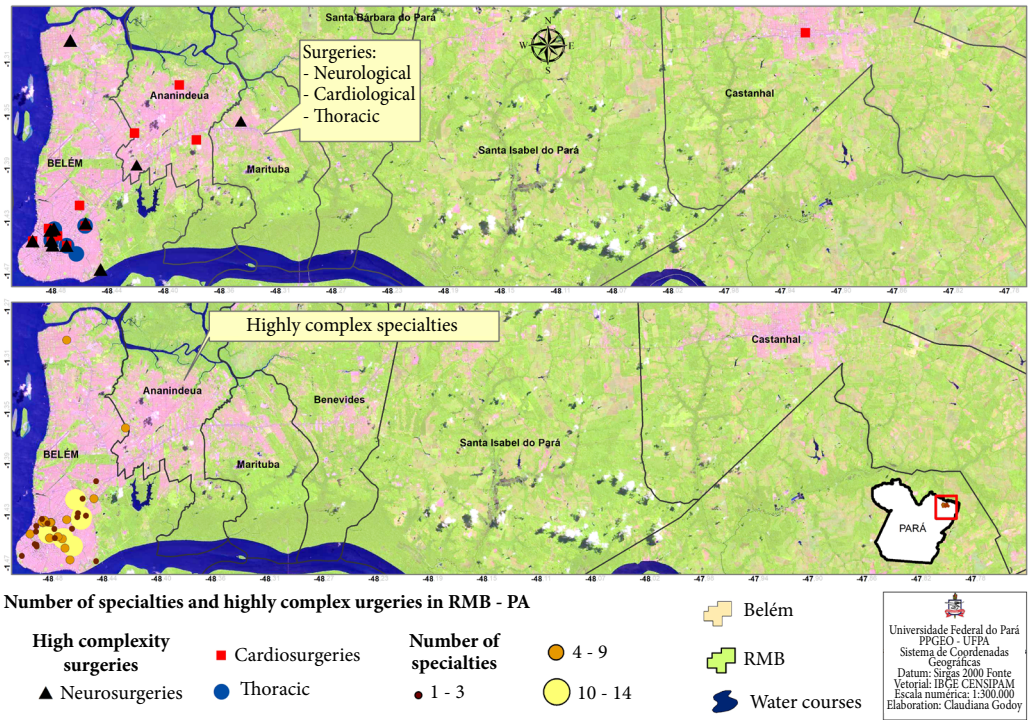

Figure 1. Map of specialized health care services in the BMR up to January 2022.

Source: Authors based on data from DATASUS-CNES.

Twelve of the 18 hospitals in the muncipalities outside Belém (Ananindeua, Marituba, Santa Isabel, and Castanhal) are private and only six are public, together providing a total of 1,776 beds: 618 in public hospitals; and 1,158 in private hospitals. However, 931 private beds (80%) were outsourced by the SUS, meaning that only 227 were effectively private. In theory this means that 1,549 (or 87%) of the region's beds are effectively public[1]. This data is presented in Figures 2 and 3.

The public and private sector: is specialized health care subsidized by the SUS?

The labyrinthine arrangement of the BMR's specialized health care network is characterized by a complex relationship between the wide distribution of private facilities and significant outsourcing of these resources to the public sector, which, while increasing the coverage of public services, limits the access of private care patients to specialized care. While the private sector accounts for a large share of the specialized health care network, these services are limited to hospitals that provide more complex services, such as neurological and heart surgery, with a large proportion of beds, equipment, and specialized services being reserved for the SUS via public-private partnerships[7]. The CNES data reveal that a large proportion of specialized services provided on the SUS are outsourced to the private sectors, with service availability being higher in the SUS. However, this does not necessarily mean that SUS patients are wholly benefitted by these services as these resources may often be diverted to private patients.

To obtain a better understanding of the private-public composition of the provision of health services to SUS patients in private hospitals, we investigated the functioning of high-capacity hospitals. We used the definition of large hospital adopted by the Ministry of Health, which classifies facilities according to number of beds. In this classification, large hospitals are those with an operating capacity of between 150 and 500 beds, with hospitals above this capacity being classified

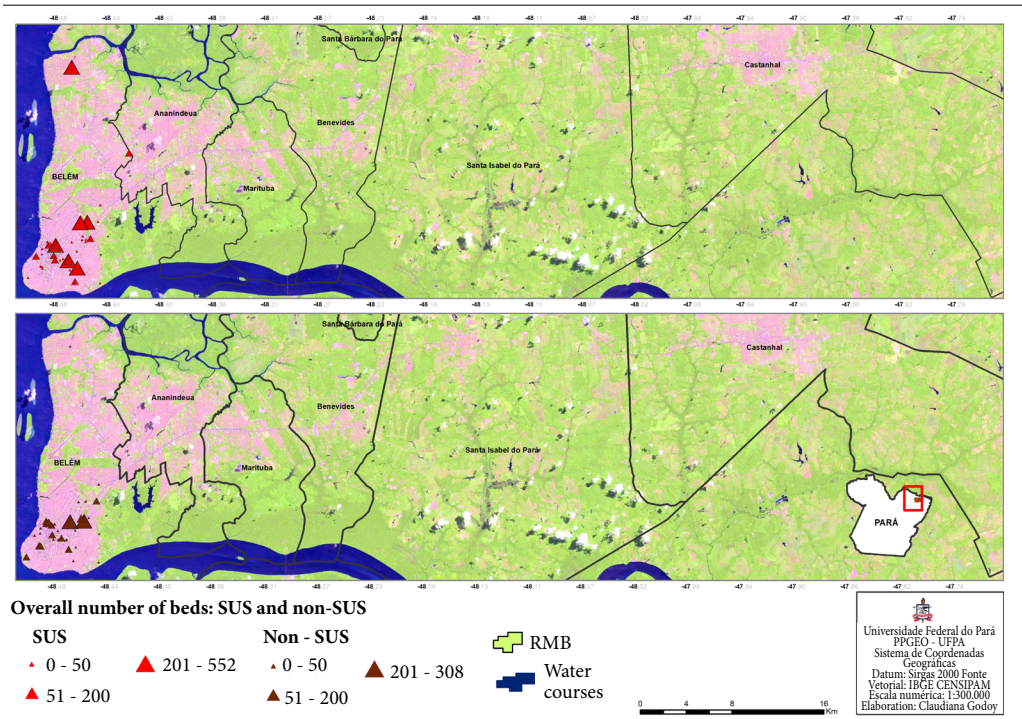

Figure 2. Map showing the number of SUS and non-SUS beds in the BMR.

Source: Authors based on data from DATASUS-CNES.

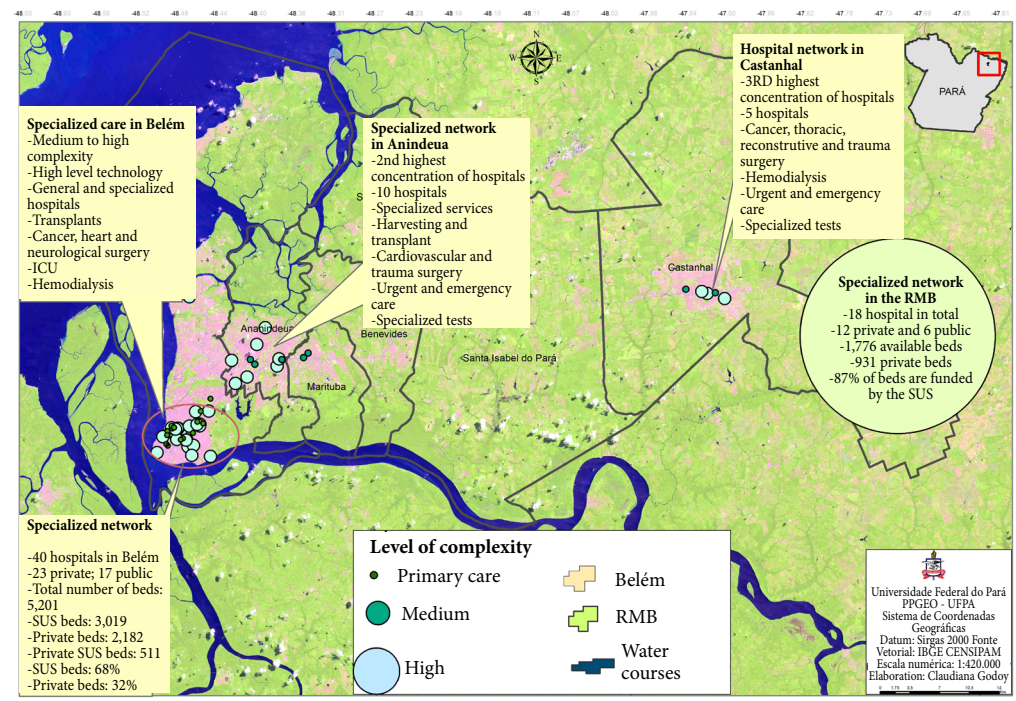

Figure 3. Map of levels of complexity of the hospital network in the BMR up to January 2022.

Source: Authors based on data from DATASUS-CNES.

as "extra-capacity hospitals"[11]. The high-capacity hospitals in the BMR are shown in Chart 1.

Belém has 11 high-capacity hospitals: six public; and five private, two of which are philanthropic, meaning that a large proportion of services are reserved for SUS patients. The municipalities outside Belém have five high-capacity hospitals, which are located in Ananindeua and Castanhal, three of which are private, one philanthropic, and one public. In general, the state government-run hospitals have the largest number of beds for SUS patients. The non-philanthropic hospitals provide mixed services, particularly beds, and were more common in the municipalities outside Belém.

Only two private high-capacity hospitals in Belém did not have public beds, while between 55% and 100% of all beds in the philanthropic hospitals were for public use. More than 70% of the general beds in high-capacity hospitals in Belém were reserved for the SUS, meaning that 2,290 of the 3,203 beds in large public and private hospitals in the capital were paid for by the SUS and only 913 were effectively private. This asymmetry is even more pronounced in the high-capacity hospitals in the municipalities outside the capital, where 788 (90%) of the 885 beds were allocated to the SUS and only 97 were effectively private. It was also surprising to note that three private hospitals accounted for most of the beds allocated to the SUS (a total of 410), with only 378 being provided by the two public hospitals in Ananindeua and Castanhal[1].

Public hospitals in Belém accounted for the largest share of intensive care beds for severe acute respiratory syndrome (SARS) associated with COVID-19, with 219 of the 294 beds being provided by public facilities and only 75 by the private sector. In the municipalities outside Belém, 62 COVID-19 intensive care beds were available in four hospitals, 52 of which were reserved for SUS patients and 10 for private patients[1] (Chart 1).

With regard to government-funded private hospital care in Belém, it is worth mentioning the private hospital HBP (Hospitals are identified using the acronyms adopted by the institutions.). This philanthropic hospital – non-profit organizations that deliver services to the SUS and patients with health insurance; services are provided to the SUS in accordance with the prevailing legislation (Brasil, 1977) – has the highest concentration of highly complex services in the capital and is the only facility to provide all 14 specialties selected in this study. Almost 70% of the HBP's 316 beds were allocated to the SUS, meaning that the SUS plays a major role in maintaining private services, accounting for 84 of the hospital's 112 surgical beds, 49 of 71 clinical beds, 44 of 84 intensive care beds, 35 of 41 obstetric beds, and six of eight pediatric beds[1]. The HBP can therefore be considered a mixed (private-public) facility[7,8], providing highly complex care to both the SUS and private sector, especially medium complexity diagnostic support services used mainly by private patients, and having a third sector featuring modern facilities and equipment for same-day surgery in partnership with plastic surgery clinics, the so-called Day Clinic.

The BMR's private-public care network comprises the philanthropic hospitals HBP, HOT, and MPM in Belém, the hospitals SBSC and HDP in Ananindeua and Marituba, respectively, and the ABSJ and HM in Castanhal. These institutions were benefitted by a program to increase the health care capacity of the SUS implemented after the extinction of the National Institute of Medical Care and Social Security (INAMPS)[12] that sought to relieve the debt of private hospitals that are part of the public universal health care system. Eligible hospitals received financial incentives and subsidized loans for debt financing with the aim of increasing public bed numbers. Philanthropic hospitals are categorized as preferred facilities for the outsourcing of SUS services. Bahia[7] (2008) highlights Decree 5895/2006[13] governing the allocation of private services to the SUS aimed at reducing the misallocation of public services by philanthropic hospitals.

Also with regard to the mixed functions of private hospitals with partnerships with the SUS, five of the HBP's seven neurosurgery beds are allocated to the SUS, while the philanthropic hospital HOT allocates all its 13 beds neurosurgery beds to public patients. Although not philanthropic, the private hospital HM also provides two neurosurgery beds to the SUS. The HBP also performs heart surgeries, with 27 of its 30 beds being allocated to the SUS, while the HOT allocates all its four cardiovascular beds to the SUS[1]. Thus three private institutions, effectively private-public facilities, provided scarce highly complex services in Belém[7].

Highly complex services provided by private hospitals and paid for by the SUS included thoracic, vascular, and trauma surgeries, hemodialysis, and digestive, urinary and respiratory endoscopy. Thoracic surgeries were performed by three public and two private hospitals Belém, with the HBP reserving a proportion of these procedures

Chart 1. High-capacity hospitals in the BMR.

High-capacity hospitals in Belém						
Hospital (acronyum)	**Type**	**Nº beds - Overall**	**Beds SUS**	**Beds None -SUS**	**ICU SARS – Covid-19 SUS**	**ICU SARS – Covid-19 None-SUS**
SCMP	Public (state government)	552	552	-	70	-
HRPAS	Public (state government)	435	435	-	95	-
HBP	Private (philanthropic)	316	174	142	-	20
HPD	Private	313	5	308	-	-
HSM	Private	289	-	289	-	55
HCGV	Public (state government)	266	266	-	17	-
HOL	Public (state government)	255	255	-	19	-
HUJBB	Public (federal government)	240	240	-	10	-
HPSMP	Public (municipal government)	198	198	-	8	-
HAB	Private	174	-	174	-	-
HOT	Private (philanthropic)	165	165	-	-	-
Total	-	3.203	2.290	913	219	75
High-capacity hospitals in Ananindeua and Castanhal						
Hospital (acronyum)	**Type**	**Nº beds - Overall**	**Beds SUS**	**Beds None -SUS**	**ICU SARS – Covid-19 SUS**	**ICU SARS – Covid-19 None-SUS**
HMUE	Public (state government)	218	218	-	20	-
HSMA	Private	196	153	43	-	-
ABSJ	Private (philanthropic)	160	137	23	12	-
HCA	Private	151	120	31	-	10
HRPC	Public (state government)	160	160	-	20	-
Total	-	885	788	97	52	10

Source: Authors based on data from DATASUS-CNES.

and vascular surgeries for SUS patients. However, the number of beds available for these procedures was not recorded in the CNES. Trauma and orthopedic surgeries are performed by 12 hospitals in the capital (five public and seven private). Among the private hospitals performing these procedures, the HBP reserved 10 of its 13 beds for SUS patients and the HM allocated 68 of its 73 beds to the public sector[1].

The concentration of outsourced private services is greater in the municipalities outside Belém. An example is the philanthropic hospital HDP in Marituba, which is the second largest referral hospital in this region, providing a hospital bed backup system to the region's largest public hospital, the state government-run HMUE in Ananindeua. The HDP therefore meets the care demand not absorbed by the HMUE. Since it is a philanthropic hospital, the HDP allocated most of its services to the SUS via the state appointment scheduling system (SESPA)[14], which offered minor and medium complexity orthopedic surgery services, with more complex cases being treated at the HMUE[5].

These territorial dynamics[7,8] can be observed in more specialized procedures. The latter constitute a care bottleneck because they are services that require specialist equipment and highly qualified personnel[9], making them more costly and scarce in ill-equipped facilities, such as those in the municipalities outside Belém. Examples include thoracic, neurological, heart, and reconstructive burn surgery, transplants, and hemodialysis, which have limited availability or are inexistent in a large part of the region's hospital network. Thoracic surgery, for example, was only performed by the state public hospital HMUE, which also offered neurosurgery for traumas and developmental, spinal and peripheral nerve surgery. The latter were also performed by the HDP and financed by the SUS.

Heart surgery was offered by the HCS and HCA, both in Ananindeua, and financed exclusively by the SUS. Reconstructive surgeries were only performed in the HM (private) and HMUE (public), in Castanhal. Both these hospitals also provided organ and tissue harvesting and donation services for transplants. In Marituba, organ harvesting was performed in the HDP (philanthropic) and HAC (public). Another limited access procedure, hemodialysis, was provided by the HMUE, HCS, HSMA, HDP, and HM, all of which are located in municipalities outside Belém[1] (Table 1).

Renal replacement therapy, performed in hemodialysis centers, was provided by 16 hospitals in Belém, seven of which were private. The 28 dialysis machines in the HBP and a single machine in the HOT, as well as three digestive, urinary and respiratory endoscopy devices in the latter facility, were funded by the SUS. Dialysis machines and digestive endoscopy devices in private hospitals in Marituba and Castanhal were also registered as being loaned or funded by the SUS. Twenty-five dialysis machines in the HDP and machines in the HM, in Castanhal, were also funded by the SUS. Digestive endoscopy devices in the HDP, HSMA, and ABSJ[1] were also financed by the SUS. This data reveals widespread distribution of public/publicly funded equipment under private management and available for mixed use, that is, in private-public services[7-9] (Table 1).

Table 1 specifies 15 medium to highly complex specialties provided in public and private hospitals in the BMR. Most specialties were centralized in hospitals in the capital and in Ananindeua, with limited availability or an absence of these services in Marituba, Santa Isabel, and

Table 1. Specialized health services in hospitals in the BMR up to January 2022.

Specialized hospital services in the RMB												
Specialties	Belém		Ananindeua		Marituba		Castanhal		St. Isabel		RMB	
	Pub. Hosp.	Priv. Hosp.	Pub. Hosp.	Priv. Hosp.	Pub. Hosp.	Priv. Hosp.	Pub. Hosp.	Priv. Hosp.	Pub. Hosp.	Priv. Hosp.	Pub. Hosp.	Priv. Hosp.
Transplants	8	9	2	-	1	1	-	-	1	-	12	10
Neurosurgery	5	5	-	-	-	1	-	-	-	-	5	6
Cardiovascular surgery	2	4	-	2	-	-	-	-	-	-	2	6
Reconstructive surgery	1	3	1	-	-	-	-	1	-	-	2	4
Thoracic surgery	3	2	1	-	-	-	-	-	-	-	4	2
Vascular surgery	5	4	-	-	-	-	1	-	-	-	6	4
Hemodialysis	9	7	1	2	-	1	-	1	-	-	10	11
Oncology	3	3	-	1	-	-	-	-	-	-	3	4
Pneumology	5	1	-	-	-	1	-	-	-	-	5	2
Urology care	5	3	-	-	-	-	-	-	-	-	5	3
Nuclear medicine	2	1	-	-	-	-	-	-	-	-	2	1
traumatology/ orthopedics	5	7	1	3	-	1	1	2	-	-	7	13
Urgent/ emergency care	6	7	1	8	1	1	1	3	1	-	10	19
Laparoscopy	6	8	1	4	-	1	1	-	-	-	8	13
Endoscopy	13	12	2	5	-	1	-	2	1		16	20
Total	78+12	Non-SUS 12	10+9	Não SUS 16	2+5	Não SUS 3	4+4	Não SUS 5	3	Não SUS -	97(+30) =127	118 (-30) = 88
Percentage	64	SUS 53%		47%	70%	30%	62%	38%	100%	-	60%	40%

Source: Authors based on data from DATASUS-CNES.

Castanhal, and a total absence in Benevides and Santa Bárbara do Pará, which do not have hospitals. More complex surgeries, such as organ and tissue transplants and, neurological, cardiovascular, reconstructive, and thoracic surgery, as well as cancer treatment, and nuclear medicine, had the highest index of underservice[1].

Private hospitals account for a significant share of the highly specialized care network in Belém, with a large proportion of private services being allocated to the SUS. The only large private hospitals in Belém that did not have agreements with the SUS were the HPD and HAB, which have a capacity of 313 and 174 beds, respectively, allocated exclusively to private patients[1].These hospitals are owned and run by private health insurance companies that administer their own hospital network and have partnerships with laboratories and other private hospitals, providing services exclusively for policy holders and paying patients. A similar system was adopted by the HA in Belém, which has only 99 beds and created its own private health insurance plan[8].

The state capital does not have a high-capacity private hospital, even after the opening of a large facility by the health insurance operator Unimed, the HUP. The new hospital has a capacity of 83 beds for clinical and surgical procedures. A large part of the patients that would have previously been treated at the company's recently closed polyclinic are referred to the HUP. The operator currently performs medium to highly complex procedures in the new facility as it is redesigning care at its general and pediatric hospital. The overall capacity of the private network is around 135 beds distributed across hospitals owned by health insurance companies. The health insurance operator Hapvida was not registered in Belém in the CNES[1].

Final considerations

The health facility registry showed that the public hospital network had a higher capacity for highly complex health care, having a larger number of high-capacity hospitals and greater volume of intensive care beds and highly complex procedures, such as organ and tissue transplants, neurological, heart and thoracic surgeries, and hemodialysis. The results also show that private philanthropic hospitals have a high capacity for highly complex services allocated to the SUS, therefore being characterized as mixed (private-public) hospitals. The fact that the state hospital structure has a greater capacity does not necessarily mean that public hospitals have greater capacity than private hospitals[7].

Highly complex care services were centralized in public and private hospitals in the state capital, with the population living in the municipalities outside Belém encountering greater difficulty accessing more complex procedures such as neurological, heart, cancer, thoracic, and reconstructive surgeries, and hemodialysis. Within this context of underservice in these municipalities, the private hospitals that provided most highly complex services were philanthropic, with these facilities providing services to both SUS patients, the private network and paying patients. It is curious to note that most of the beds for public use were provided by private hospitals, for example by the largest private hospitals in Ananindeua and Castanhal.

The most underserved municipalities when it comes to specialized services are Benevides and Santa Barbará do Pará, which do not have hospitals. Despite the existence of hospitals in Santa Isabel do Pará, Marituba, and Castanhal, essential medium and high complexity services were absent in these municipalities. While Ananindeua has the second largest concentration of specialized services in the BMR, this municipality was also considered underserved in terms of specialized services due to the low number or absence of certain highly complex procedures such as neurological surgeries.

The findings also show that the private network accounted for a large share of SUS services in the municipalities outside the metropolitan region, especially in the most underserved areas in terms of specialized services. The private philanthropic hospitals in Ananindeua and Marituba provided neurosurgical and heart surgeries, respectively, for public patients funded by the SUS. In this respect, the public health system, whose constitutional function is to provide universal comprehensive care, has surpassed its role as a provider that complements the private health sector, given that health insurance companies and operators are strongly subsidized and benefitted by the government[8].

The data show that a significant proportion of the highly complex services provided by the private sector are funded by the government, with a large percentage of private services being allocated to the SUS. However, this should not be confused with universal coverage. Access to highly complex services in the private network is governed by legal and institutional barriers depend-

ing on the form of access (closed-door versus open-door/bureaucratic), with the latter depending on the SUS appointment scheduling system. However, the facilities, services, procedures, and equipment registered as allocated to the SUS are restricted access or closed-door. Therefore, records informing that the same health facility or equipment is available for both SUS and non-SUS patients has little practical relevance because the modus operandi of private hospitals in practice (open-door or closed-door) remains unclear[7].

Collaborations

CV Godoy was responsible for study conception and design, the literature review, data collection, analysis and interpretation, methodology, map creation, and drafting the article and approving the version to be published. GM Rocha was responsible for study conception and supervision, revising the maps, and critically revising the article and approving the version to be published.

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References

1. Brasil. Ministério da Saúde (MS). Cadastro Nacional dos Estabelecimentos de Saúde – CNES. Indicadores – Tipo de estabelecimento/hospital geral, hospital especializado, hospital dia, pronto socorro geral, em uso em Belém, Ananindeua, Marituba, Santa Isabel, Castanhal [Internet]. 2022. [acessado 2022 nov 19]. Disponível em: http://cnes2.datasus.gov.br/Mod_Ind_Unidade.asp?VEstad oUnidade.asp?VEstado=15&VMun=150140&VComp=00&VUni=05
2. Brasil. Ministério da Saúde (MS). Portaria n.º 1.646, de 2 de outubro de 2015. Institui o Cadastro Nacional de Estabelecimentos de Saúde (CNES). *Diário Oficial da União* 2015; 3 out.
3. Brasil. Conselho Nacional de Secretários de Saúde (CONASS). *Assistência de média e alta complexidade no SUS*. Brasília: CONASS; 2007.
4. Solla J, Chioro A. Atenção ambulatorial especializada. In: Giovanella L, Escorel S, Lobato LVC, Noronha JC, Carvalho AI, organizadores. *Políticas e sistemas de saúde no Brasil*. Rio de Janeiro: Fiocruz; 2012.
5. Brasil. Ministério da Saúde (MS). Portaria nº 3.390, de 30 de dezembro de 2013. Institui a Política Nacional de Atenção Hospitalar (PNHOSP) no âmbito do SUS, estabelecendo-se as diretrizes para a organização do componente hospitalar da RAS. *Diário Oficial da União* 2013; 31 dez.
6. Brasil. Ministério da Saúde (MS). Lei nº 8.080, de 19 de setembro de 1990. Dispõe sobre as condições para a promoção, proteção e recuperação da saúde, a organização e o funcionamento dos serviços correspondentes e dá outras providências. *Diário Oficial da União* 1990; 19 set.
7. Bahia L. A *démarche* do privado e público no Sistema de Atenção à Saúde no Brasil em tempos de democracia e ajuste fiscal, 1988-2008. In: Matta GC, organizador. Estado, sociedade e formação profissional em saúde: contradições e desafios em 20 anos de SUS. Rio de Janeiro: Fiocruz, EPSJV; 2008. p. 123-185.
8. Santos IS, Ugá MA, Porto SM. O mix público/privado no Sistema de Saúde Brasileiro: financiamento, oferta e utilização de serviços de saúde. *Cien Saude Colet* 2008; 13(5):1431-1440.
9. Calvo MCM. Hospitais públicos e privados no sistema único de saúde no Brasil: o mito da eficiência privada no estado de Mato Grosso em 1998 [tese]. Florianópolis: UFSC; 2002.
10. Brasil. Senado Federal. *Constituição da República Federativa do Brasil de 1988*. Brasília: Senado Federal; 1988.
11. Brasil. Ministério da Saúde (MS). Secretária Nacional de Ações Básicas de Saúde. Coordenação de Assistência Médica Hospitalar. Conceitos e definições em saúde. Brasília: [*s. n.*]; 1977.
12. Brasil. Presidência da República. Lei nº 8.689, de 27 de julho de 1993. Dispõe sobre a extinção do Inamps e dá outras providências. *Diário Oficial da União* 1993; 27 jul.
13. Brasil. Ministério da Saúde (MS). Decreto nº 5.895, de 18 de setembro de 2006. Dispõe sobre a concessão do Certificado de Entidade Beneficente de Assistência Social. *Diário Oficial da União* 2006; 18 set.
14. Brasil. Ministério da Saúde (MS). Secretaria de Atenção à Saúde. *Diretrizes para a implantação de complexos reguladores*. Brasília: MS; 2010.
15. Menicucci TMG. *Público e privado na política de assistência à saúde no Brasil: atores, processos e trajetória*. Rio de Janeiro: Editora Fiocruz; 2007.

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