

# DEEP DIVE

ON MATER DEI



July 2022

EQUITAS

# SUMMARY

	Page
1. Investment Summary.....	01
2. Industry Overview.....	03
2.1. Introduction.....	03
2.2. Healthcare Sector Overview.....	05
2.3. Industry Structure.....	07
2.4. Hospital Market.....	13
2.4.1. Hospital Market – Consolidation Process.....	17
2.5. Healthcare Industry – Main International Trends.....	18
2.6. Analysis of Potential Synergies in Hospital Businesses.....	19
3. Company Description.....	22
3.1. Footprint and M&A Activity.....	24
3.2. Main Microregions Competitive Environment.....	27
3.3. Leadership.....	33
3.4. Environmental, Social and Corporate Governance (ESG) Evaluation.....	35
4. Why We Invest in Mater Dei.....	37
4.1. Competitive Advantages.....	37
4.2. Financial and Operational KPIs.....	43
4.3. Channel Checks – Interviews with Market Specialists.....	45
5. Valuation and Financials.....	47
5.1. Projection Assumptions.....	47
5.2. Valuation and Sensitivity Analysis.....	50
5.3. Comparable Multiples Analysis.....	51
6. Investment Risks and Downside Analysis.....	52
7. Why we are Different from Consensus.....	54

# 1. Investment Summary

## Company Description

Mater Dei is the 4th largest independent hospital operator in Brazil and the most profitable one in the industry. The company was founded in 1973 by Dr. Jose Henrique Salvador in Belo Horizonte, important hub in the south-east of Brazil and capital of the state of Minas Gerais. It became nationally recognized for its high-quality standards, outstanding medical team and top-notch infrastructure, with a client centric approach and international accreditations.

Over the years, the company has been constantly investing to create strong internal controls, solid corporate governance structure and attract a professional management team. After its consolidation as the main premium hospital player in the state of Minas Gerais, with 3 facilities, the shareholders decided to start a new expansion phase. The many tailwinds of the healthcare sector offer a unique opportunity to implement its high-

quality and efficient healthcare services across the country. The first expansion initiative was developed even before MATD's IPO when, after years of study, the company developed a greenfield project in the city of Salvador, state of Bahia, whose opening took place in May 2022.

In April 2021 the group listed its shares at B3, the Brazilian Stock Exchange, raising BRL 1.2 billion and starting to actively prospect M&A opportunities in strategic regions. Since then, Mater Dei has announced 6 transactions, now having a total of 9 hospital units. It expanded its footprint to 3 new states (Pará, Goiás and Bahia), and increased its presence in the state of Minas Gerais.

## Why We Invest in Mater Dei

We see Mater Dei as a high-quality growth story that should play a leading role in the consolidation of the Brazilian healthcare sector in the years to come.

The healthcare industry has been significantly growing in the past years and has important drivers that will sustain an elevated growth level for many years onward. Some of them are the Brazilian population aging trend and the under penetration of healthcare services in the country. The latter leads more than 77% of the population to resort to the country's public healthcare system, which recognizably does not offer an acceptable quality assistance.

In that scenario, Mater Dei is positioned as a premium player, focused on the quality of care, and has built a strong brand in the medical community and among the main healthcare payors in the country. Its shareholders' long-term view has contributed to the development of a series of competitive advantages related to its medical protocols, efficient cost control, and top-of-mind brand.

After decades of organic growth, the controlling partners have decided to expand its platform to other regions in an accelerated way, being protagonists in the consolidation of the sector. With a successful IPO in April 2021, Mater Dei raised BRL 1.2 billion, and very quickly acquired its first company, Hospital Porto Dias, a unique family-owned hospital operation in the north of Brazil.

Less than 14 months after its IPO, Mater Dei has raised additional BRL 700 million in debt, acquired 5 hospitals and started its first greenfield outside the state of Minas Gerais, in the city of Salvador. With that, the group has overdelivered its M&A commitments from the IPO road show.

Going forward, Mater Dei has a challenging job, including: (i) keep growing; (ii) integrating its M&As; (iii) adapting its 6 new facilities to the group's high-efficiency and quality standards. Besides that, it continues to strongly work to reduce the healthcare system imbalance in the country and to capture the many existing opportunities in the still fragmented and growing healthcare market.

*The format of our investment memorandum is inspired by Baillie Gifford's framework of company analysis.*

## 5 YEAR SUCCESS SCENARIO

Mater Dei becomes the 3rd largest independent hospital operator in Brazil, trailing behind Rede D'Or and Dasa. After ramping up its facilities in Belo Horizonte and integrating its several acquisitions, it consolidates itself as the most profitable player in the industry. In the next 5 years we also expect the Salvador operation to reach around a 75% bed occupancy rate, contributing to Mater Dei's brand development in the state of Bahia.

After these milestones, the group will be deleveraged and well positioned to carry out additional expansion projects and M&As in the coming years. In 2026, we expect Mater Dei to reach BRL 3.4 billion in net revenues (from BRL 1.0 billion in 2021) and BRL 1.0 billion EBITDA (from BRL 0.3 billion in 2021). In this scenario, the company should be worth 3.5x more than its current market value in 5 years.

## 10 YEAR SUCCESS SCENARIO

The company continues its expansion plan and integration of M&As and develops new greenfield projects after the success of Salvador unit. Coupled with that, the group expands its brand equity and quality standards to a national level.

The company could add 2k hospital beds via M&A and new greenfield projects, reaching near 3.8k operating beds in 2030, with BRL 7.5 billion in net revenues and BRL 2.1 billion EBITDA. Mater Dei could be worth 6.5x its current market value in 10 years.

Additionally, Mater Dei is successful in becoming a key partner to healthcare operators, helping them to expand footprint in Brazil. Supported by the use of data, the adoption of more aligned compensation schemes becomes a reality, enabling a better control of medical expenses in the chain.

## What Could Go Wrong

Minas Gerais market ends up growing less than we expect, and Mater Dei is unable to reach a 60% hospital beds occupancy rate<sup>1</sup> within its current capacity in the region. Moreover, Salvador competitive landscape precludes Mater Dei from having a successful operation, which could be very dilutive to the company's earnings.

Even with these two key risks and considering a more challenging integration process of its M&As executed so far, we believe Mater Dei could still be a quite profitable business. However, a credibility loss and questions about its ability to properly allocate capital in the future may arise, compromising the growth story and possibly turning the company into a "Value Trap".

## How Mater Dei Fits in Our Portfolio

Mater Dei is currently one of our main positions at Equitas Selection, contributing to our portfolio with an exposure to the "growth" and "size" factors and to the healthcare industry, which is extremely resilient and underrepresented on IBOVESPA index (benchmark for our funds).

### 10 QUESTIONS

- 1 **Can Revenues double in the next 5 years?** Yes, MATD can increase revenues 3-fold, based on organic growth and M&A.
- 2 **10 Years and beyond?** Revenues can grow by more than 7 times, based on organic growth and new M&As and greenfield projects.
- 3 **What are MATD competitive advantages?** High quality standard and focus on operational efficiency, contributing to MATD high credibility and brand equity.
- 4 **Does it have a unique culture?** Yes, Salvador Family, the company's founders, are highly participative in its management and focused on its long-term growth and the widespread of its client-centric culture.
- 5 **Do clients like it? Does MATD contribute to the Society?** Mater Dei is well recognized and respected by its clients, payors, and competitors. It contributes to the society by employing more than 5,600 people and providing a high-quality healthcare service.
- 6 **Are returns attractive?** 15% ROIC in 2020 and the highest EBITDA margin in the sector.
- 7 **Are returns expected to increase?** We expect the Company to increase its ROIC level after capturing the many existing synergies from its newly acquired operations.
- 8 **How is capital allocation?** Highly disciplined, acquiring hospitals with top-of-mind brands, and recognized quality approach.
- 9 **Can we multiply our investment by 5x in the next 10 years?** Yes, we estimate Mater Dei can be worth near 5x more in 10 years.
- 10 **What does the market not understand?** High concerns regarding Salvador greenfield success and the maturation of Belo Horizonte hospitals are the main existing pushbacks from domestic investors, which lack a detailed view on each of these growth avenues. The stock's low average liquidity and company's size are also factors that reduce the number of investors looking at Mater Dei.

<sup>1</sup> An occupied hospital bed refers to an operating bed that is occupied by a patient, generating revenues to the hospital in a per-daily basis.

The format of our investment memorandum is inspired by Baillie Gifford's framework of company analysis.

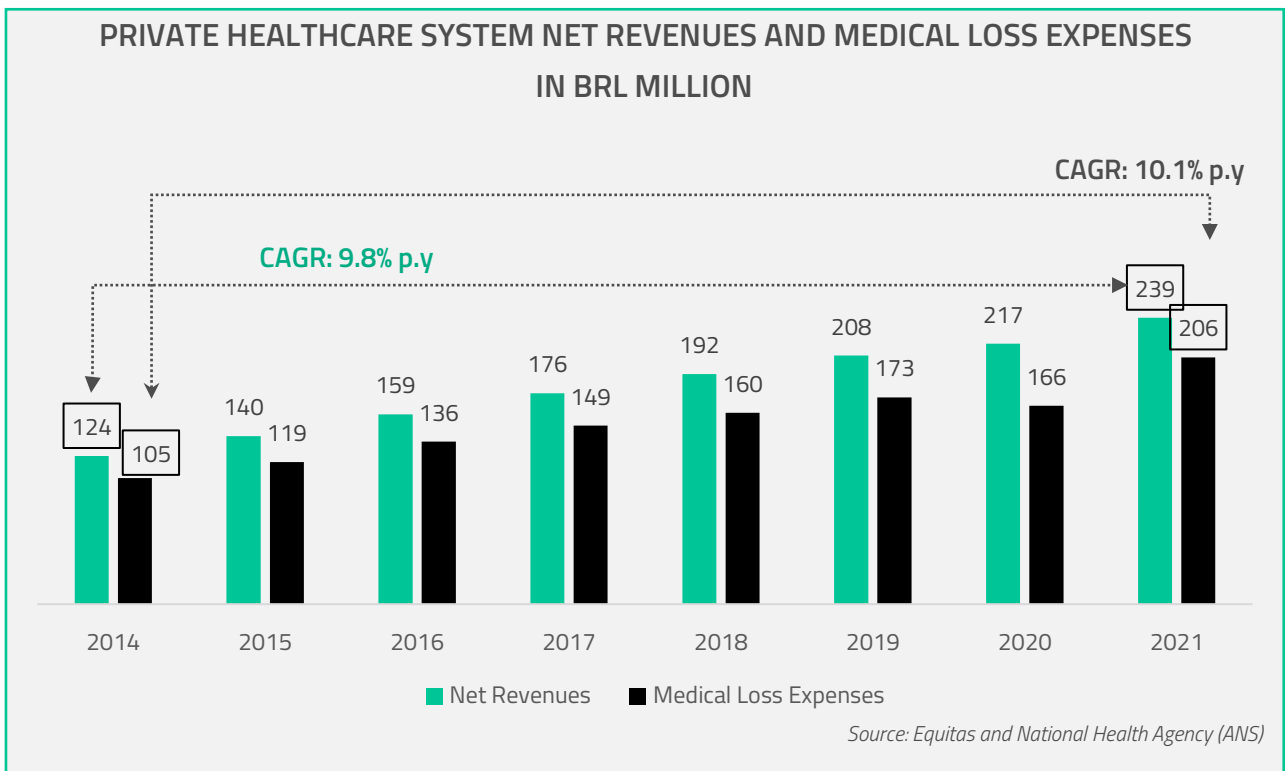
# 2. Industry Overview

## 2.1. Introduction

Brazil has a large and growing private healthcare sector, but a high inflation and conflicts of interest among participants impair its ability to take off, forcing more than 75% of the country's population to rely on low-quality public services.

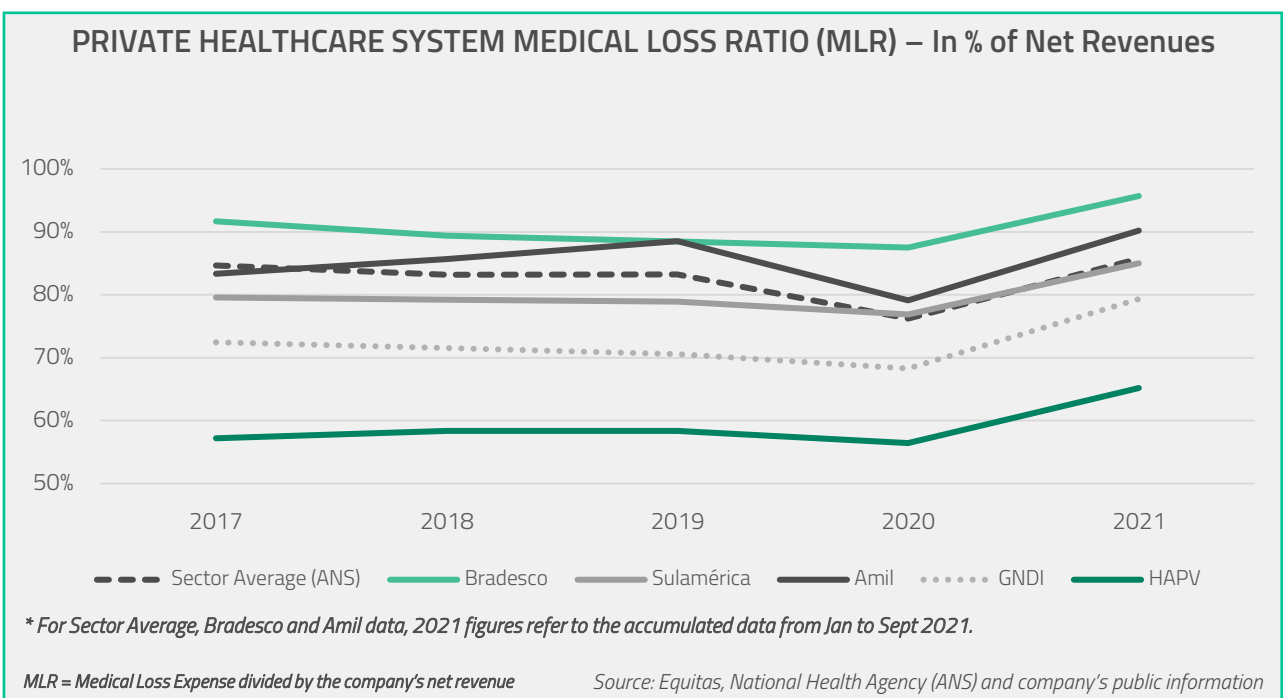
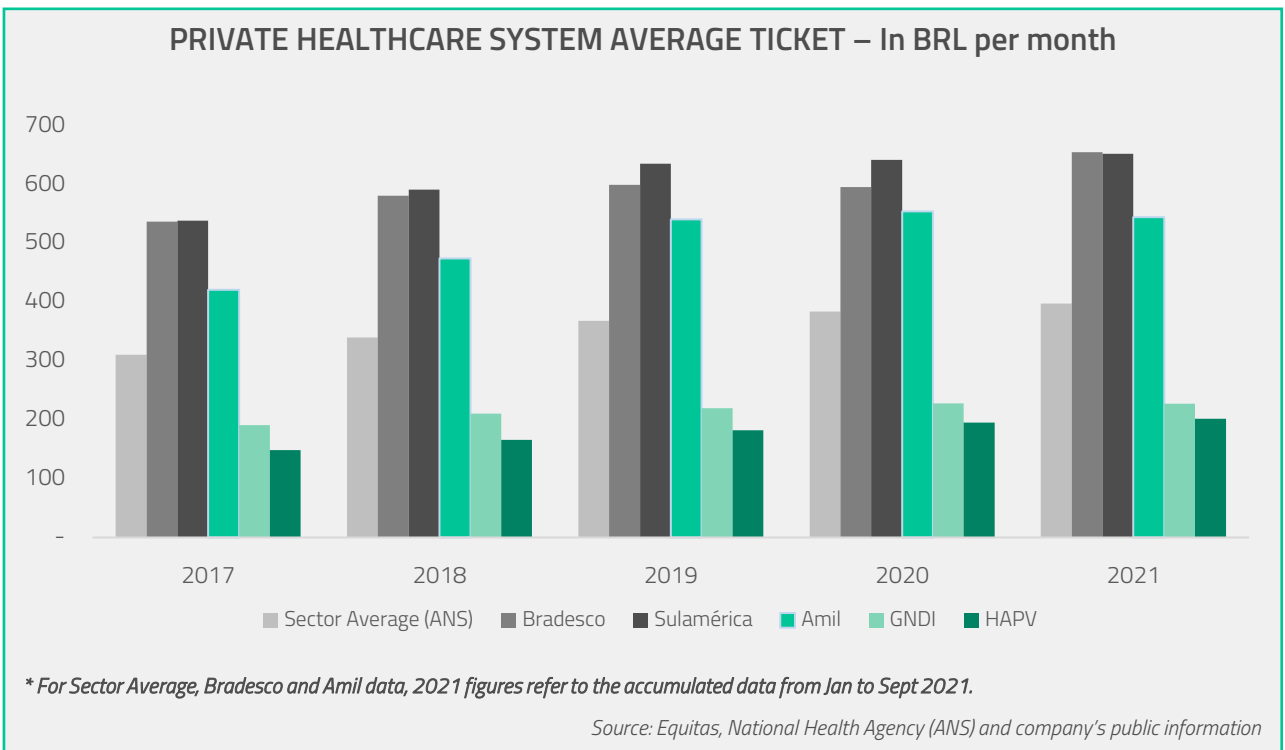
The private healthcare sector in Brazil is sizable and has been growing at a double-digit rate (10% per year from 2014 to 2021) in the past years, but still being underpenetrated, with just 22.5% of the country's population having access to private healthcare institutions, a proportion that was 25% in 2014, but has dramatically decreased since then. The other 77.5% of the population rely on SUS, the government-run healthcare system, that despite having its merits, offers quite low-quality assistance to its users, especially in the secondary and tertiary care.

The total medical expenses (so-called, medical loss expenses) in the system have also been growing at near 10% per year in the same period, even with a drop in the number of healthcare beneficiaries since 2014, due to interconnected issues such as the galloping medical inflation historically faced by the country, incremental technology and innovative treatments that add up to average prices and the existing conflict of interest among participants in the value chain. The latter exists especially due to the dominance of fee-for-service payment methods, which encourages service providers to overbill payors with excessive exams, inpatient and therapies during their patient's journey.



Not only does this hinder participants operations but also reduces growth prospects for the entire industry, with the cost pressure throughout the chain being passed on to the final beneficiary, leading the healthcare operators to face an elevated churn level and prospect new clients in a stagnant beneficiary pool, since the high prices prevents low-income population to have their desired private health plans.

In an attempt to change this dynamics, private players have been looking for solutions to provide a more efficient and accessible operation that has been found in the verticalized model, in which the company that offers the health plan also owns the hospital and clinic facilities, allowing for a better cost control. Recently merged Hapvida (HAPV) and Notredame Intermédica (GNDI), have led a consolidation of this model in Brazil and showed that it is possible to offer quality healthcare at lower prices and controlled costs, as can be seen in the graphs below.

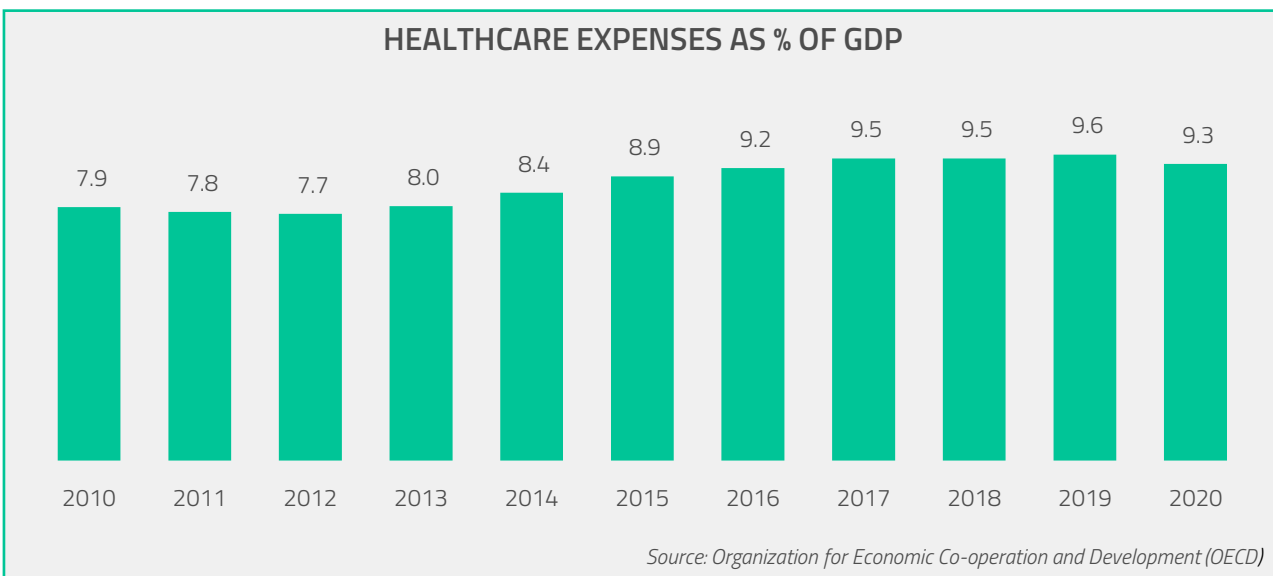


Other players in the market that do not have a vertical operation are looking for solutions to control their costs more efficiently and have a more sustainable ecosystem, through the constitution of business partnerships with hospital providers to establish alternative payment methods focused on clinical outcome and medical KPIs, better aligning the interests with its service providers. A recent announcement by Rede D'Or regarding an acquisition offer for Sulamérica, one of the largest health insurance companies in Brazil, illustrates the changes the sector has been through and brings additional complexity to the healthcare ecosystem in the country, which will be discussed further.

## 2.2. Healthcare Sector Overview

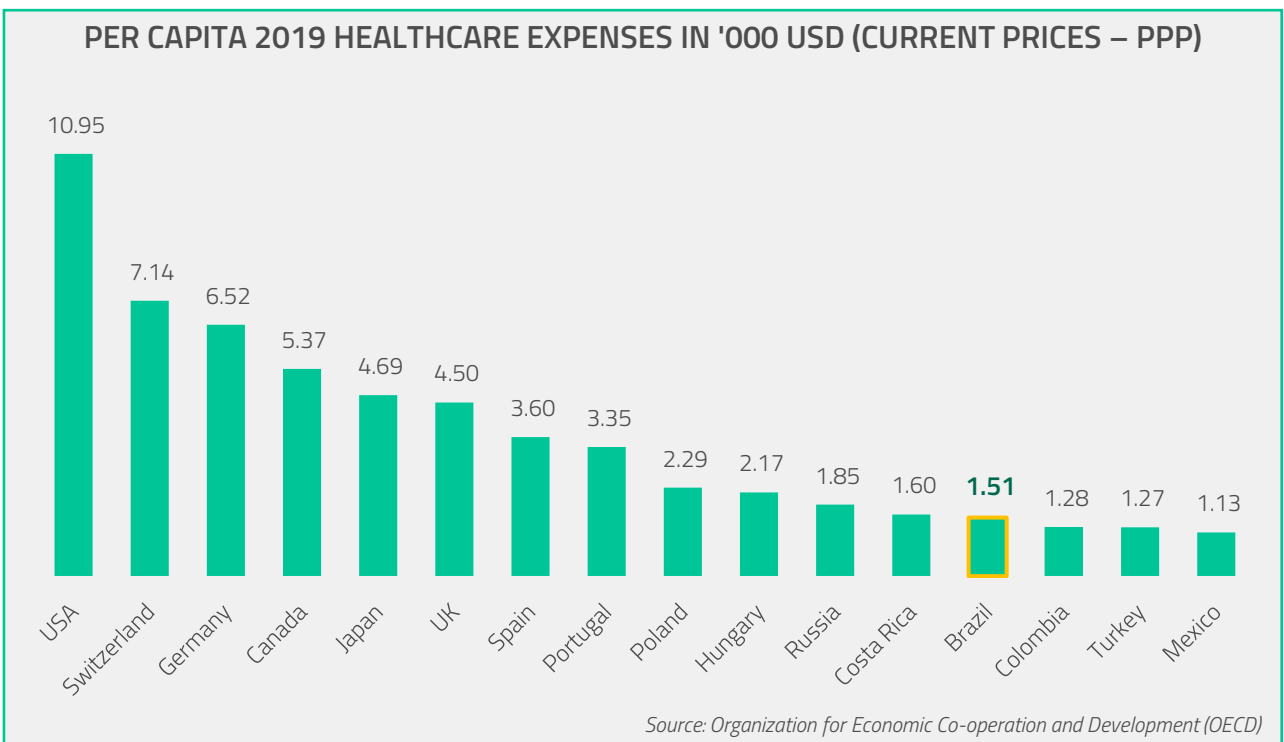
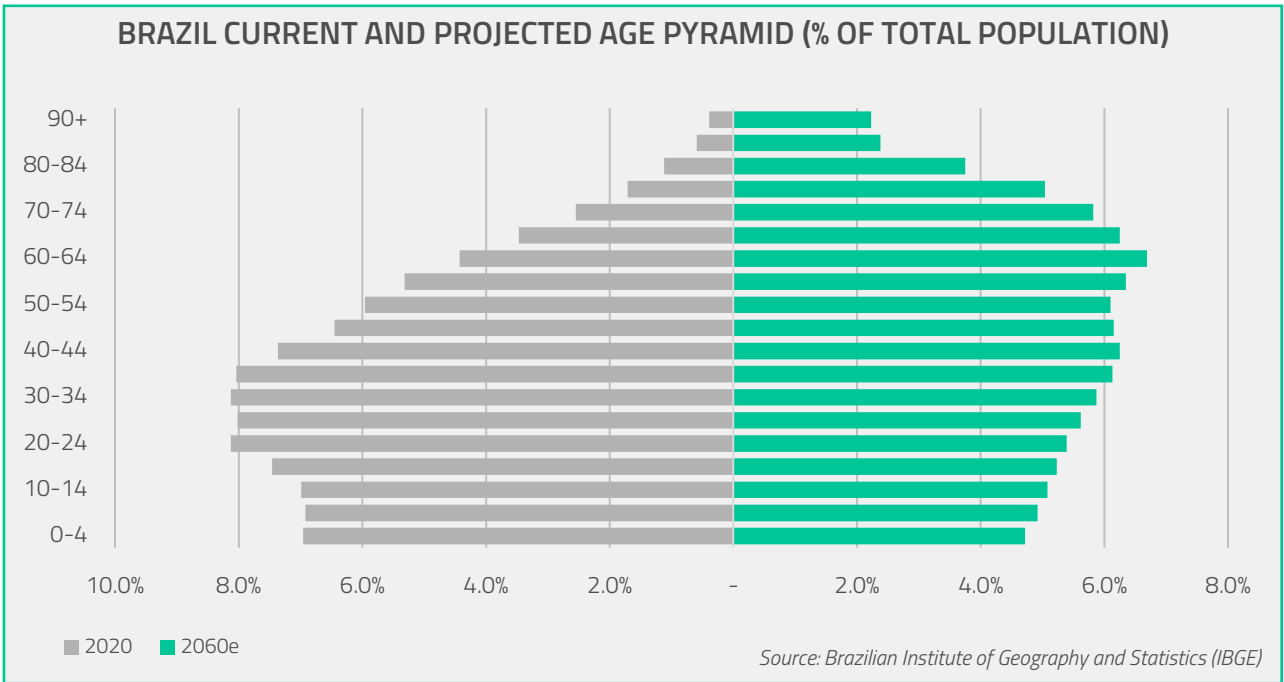
Despite having a sizable and growing healthcare market, with over USD 136 billion expenses in 2020, Brazil is still significantly underpenetrated in terms of health expenditures per capita when compared to developed countries. The 8% per year growth in the industry over the past decade has been driven by the private healthcare market, that is benefiting from the country's long term demographic trends (aging population) and the increasing population desire to have access to higher quality health institutions. The latter is primarily motivated by SUS's (the government-run public healthcare system) lack of budget, human resources, and professional management.

Brazil is one of the largest countries in the world, counting with over 214 million inhabitants, the 5th largest land area and near USD 1.45 trillion GDP in 2020, also with a highly complex healthcare system and the largest government-run public healthcare system in the world, serving over 190 million people. The country's healthcare industry has several asymmetries, is very fragmented and has an important government involvement (either in operating facilities and setting the regulatory framework), although with countless tailwinds and opportunities to be captured in the coming years. In 2020 the country's healthcare expenses reached around USD 136 billion, with SUS (Unified Healthcare System - government-run public healthcare system) being responsible for almost 44% of the total.



Although SUS is globally recognized by its reach in a sizable country, an efficient primary care and immunization program, it suffers from the lack of resources and medical professionals and from the pressure of medical inflation and low budget availability. SUS's inferior infrastructure and lack of human resources lead to low quality standards for complex procedures and surgeries and extensive waiting time periods, which makes the access to the private healthcare market to be considered a major achievement for any individual from the lower-income brackets of our society. Being able to afford a private healthcare plan is one of the main desires of Brazil's population (even more intensely since COVID-19) and many companies are increasingly engaged in offering affordable health plans to capture part of the substantial amount of the population that still resorts to SUS as their only alternative, which represents 77.5% of Brazil's total inhabitants.

Despite the described scenario, a strong growth in the industry revenues has been observed in the past years (8.0% per year in the last 10 years) especially in the private system (10.2% per year in the same period), induced by a growing demand for healthcare services. The main drivers are demographic factors, such as a 0.85% p.y. increase in the country's population in the past decade, an observed aging trend, already occurring but expected to accelerate in the next decades, and more recently, the propelled population desire for a private healthcare plan amidst the emergence of the COVID-19 virus. Nevertheless, Brazil still presents a low level of per capita healthcare expenses comparing to global peers, and the noticeable opportunity to consolidate the market has been captured by the major healthcare private players in many segments, which are executing an accelerated expansion plan.





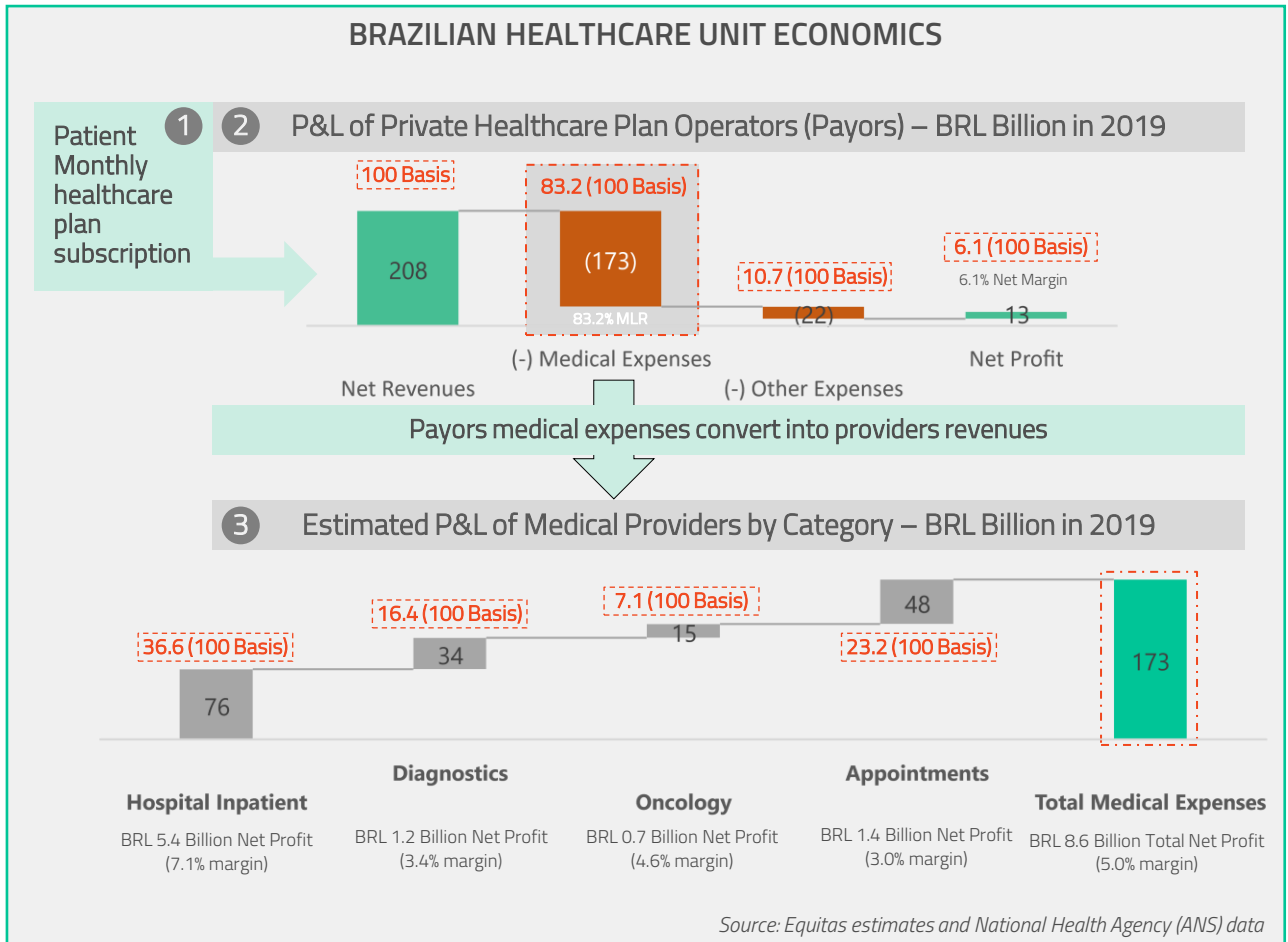
# 2.3. Industry Structure

The Brazilian healthcare industry has numerous stakeholders and a complex regulatory framework. Despite the impacts of a high medical inflation and price readjustment caps for individual healthcare plans, it presents a healthy unit economics throughout the entire value chain, as shown in our proprietary analysis.

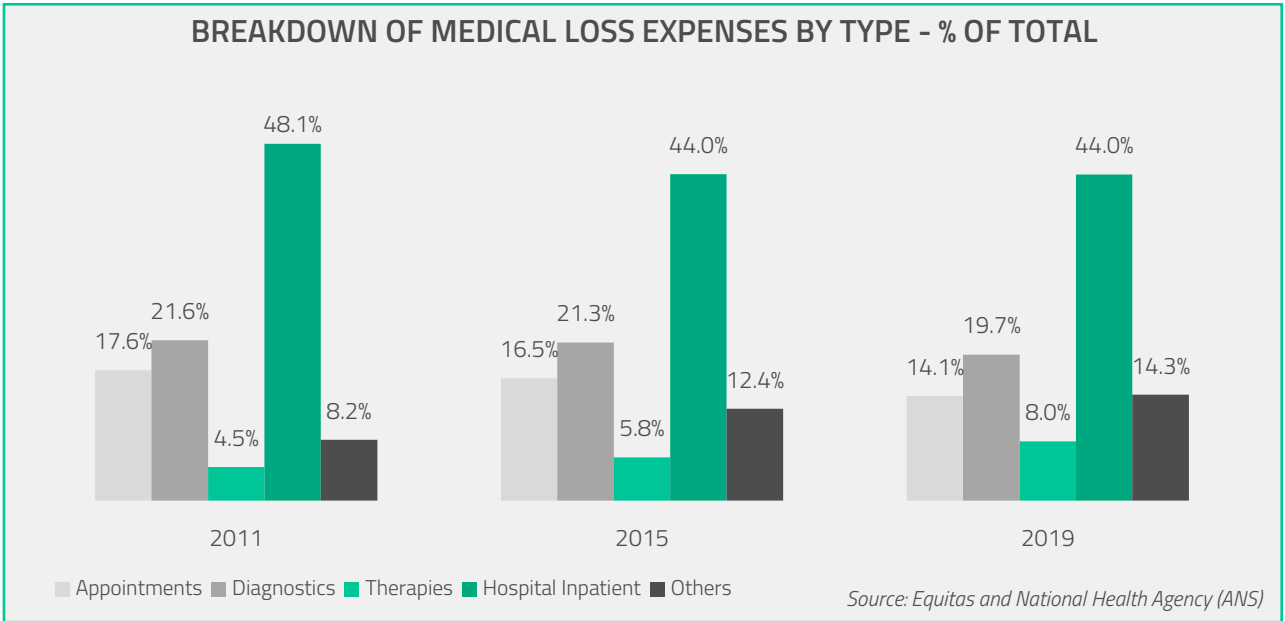
To tackle the rampant medical inflation and provide more access to quality healthcare in the country, the vertically integrated healthcare model has substantially evolved, led by Hapvida and Notredame Intermédica, which have achieved a combined 18% market share in Brazil in 2021.

The healthcare sector has different regulatory bodies, linked to the Brazilian Ministry of Health, to supervise, control and defend the interests of specific parts of the chain, such as the National Health Agency (ANS) in the case of health plan operators, the National Agency for Sanitary Surveillance (ANVISA) that supervises healthcare providers and the Brazilian Chamber of Drug Market Regulation (CMED) that, among other duties, is responsible for setting medicine prices in the country. To better understand the dynamics of the industry in Brazil, a deeper look into the main actors in each part of the chain is necessary, as follows.

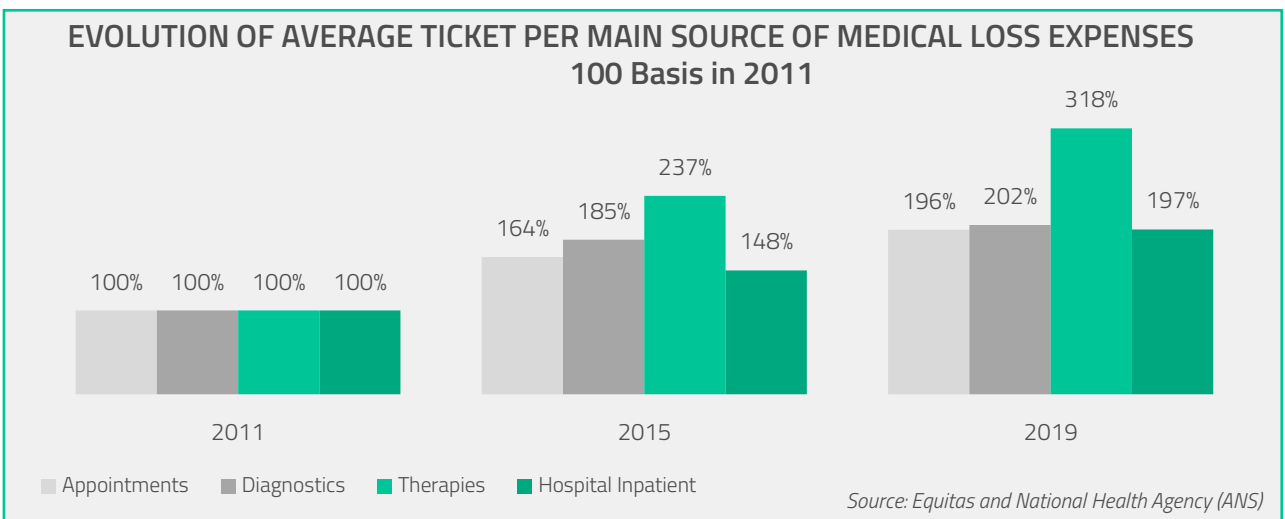
First, we start by decomposing the unit economics of the whole industry and illustrating how money flows throughout the value chain, from patient to healthcare plan operator, to healthcare service provider. As we can see, an important part of the economics is captured by hospital operators that, besides inpatient revenues, in many cases also take part of the diagnostics and oncology revenues pools. Also, we estimate that all sectors present healthy profitability, with major players in each segment, in general, having higher margins, such as Mater Dei, Rede D’Or and Fleury, which presented a 20%, 11% and 12% net margin in 2019, respectively.



Hospital inpatient represents the largest expenses for healthcare payors, which is highly influenced by medical inflation and drives up payors MLR. However, an important part of the healthcare expenses increases in the past years can be explained by the “others” category (includes other medical appointments and primary care services), due to the constant inclusion of additional treatments, types of medical appointments, and medicines that were not part of ANS’s mandatory medical list and may be covered by the healthcare plans. Another factor that has also driven this increase, but not disclosed by ANS quantitatively, is the increase in average prices of those new procedures over the years.



In terms of average ticket evolution, we can see that all medical expenses sources have presented significant average price expansion over the past years, which is affected by annual prices adjustments due to medical inflation, offer of additional procedures to patients and incremental technology, reflected in new medicines, exams and therapies at higher prices.



Following up on our deep dive in the sector, we start presenting below the main stakeholders in the healthcare industry in Brazil, detailing each one’s role and the dynamics in each segment.

## BRAZILIAN HEALTHCARE STAKEHOLDERS

### Beneficiaries and Types of Contracts

#### INDIVIDUAL PLANS

Main Players: Hapvida, Amil and Unimed

- Prices regulated by ANS
- Segment operated by very specialized players and avoided by most operators due to the regulatory landscape
- Represents around 18% of total beneficiaries in Brazil vs 21% in 2011
- Client acquisition occurs directly through brokers

#### CORPORATE PLANS

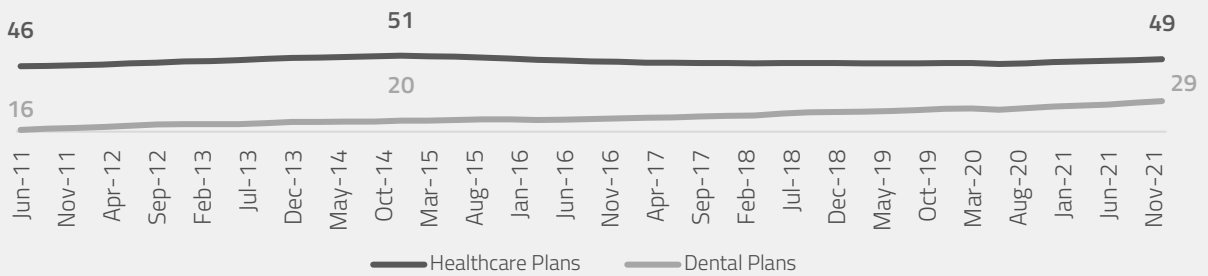
Main Players: Bradesco, Amil and GNDI

- Large corporate contracts and SME clients
- Prices are not regulated. Prices are readjusted by each operator based on the contract historic MLR
- This category has been growing in an accelerated pace in the last decade, coming from 62% of total beneficiaries to 69%
- Client acquisition occurs directly through brokers

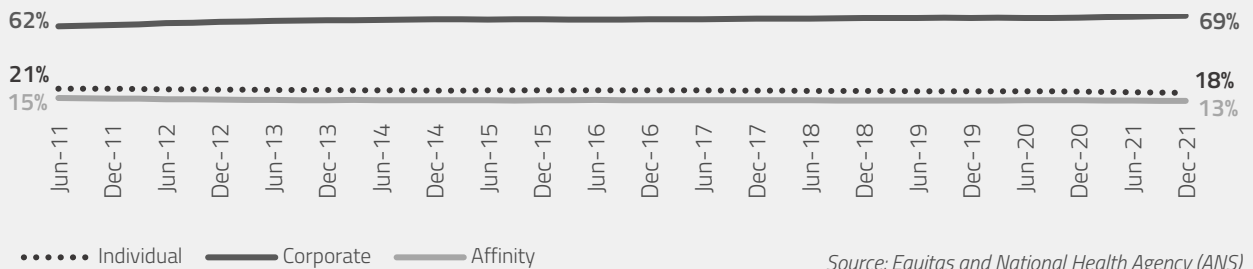
#### AFFINITY PLANS

- Professional associations negotiate health plans in similar terms as those from the corporate segment for its individual associates, with many healthcare operators. Negotiations are carried out directly or intermediated by health administrators (e.g. Qualicorp)
- Sometimes the sole alternative for individuals whom neither are eligible for corporate plans nor find individual plans supply. It represents 13% of total beneficiaries in the country

### Number Of Beneficiaries Evolution In The Private Healthcare Sector - In Million



### % of Healthcare Beneficiaries by Type of Contract



Source: Equitas and National Health Agency (ANS)

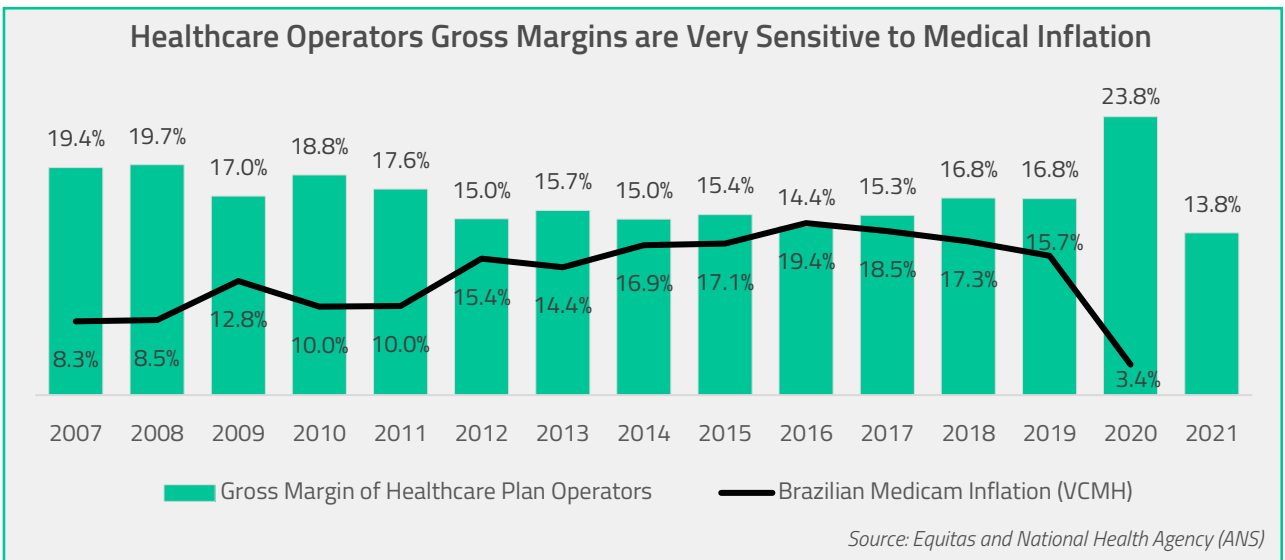
As shown above, most of the country's healthcare beneficiaries navigate in the system through corporate contracts, normally a benefit offered by large companies to its employees and therefore, representing to the health operator a relatively young client portfolio (71% of the beneficiaries up to 43 years old and just 9% older than 59), a more predictable cost structure and frequency of services utilization, and a healthier accounts receivable profile.

The individual plan market is a much more challenging niche to operate, with a few players being able to have profitable businesses, such as Prevent Senior and Hapvida, due to the observed higher MLR. New sales of this type of agreements are provided by a limited number of companies. Players that have commercialized individual plans in the past, which decided to cease sales due to financial losses, are obliged by regulation to keep the legacy contracts active until termination by the client or even his/her death.

The main reason for this challenging economics dynamic relates to the fact that individual contracts in Brazil are basically hired by informal workers or retired people, comprising more than 30% of the clients aged 59 or older. Also, the individual plans in Brazil have an annual price readjustment cap settled by ANS, which does not account for the actual cost increase faced by the plan operators, leading them to constantly report consecutive losses and opting for putting efforts in the corporate and affinity plans.

An emblematic case of how individual plans, if not well managed, can negatively impact a company value is the transaction announced by Amil, one of the largest operators in Brazil owned by United Health, in the end of 2021. The company agreed to pay BRL 3 billion to Fiord Capital, a distressed assets investment fund, to sell its individual plan portfolio of 370 thousand beneficiaries, that had been generating massive losses to the group in the past years. The deal has been disapproved by the Brazilian National Health Agency and Amil will need to look for other alternatives to limit its losses in the future.

Even with companies having flexibility to readjust prices on corporate contracts, cascading down medical inflation to final clients, the increase in medical inflation in Brazil in the past decade has significantly diminished the healthcare operators consolidated gross margin, as shown below. Results in 2020 are an exception to past trends, due to the COVID-19 pandemic, which dramatically reduced hospital frequency and postponed many high-cost and non-urgent elective procedures. Even though, the segment still has a quite healthy financial condition.



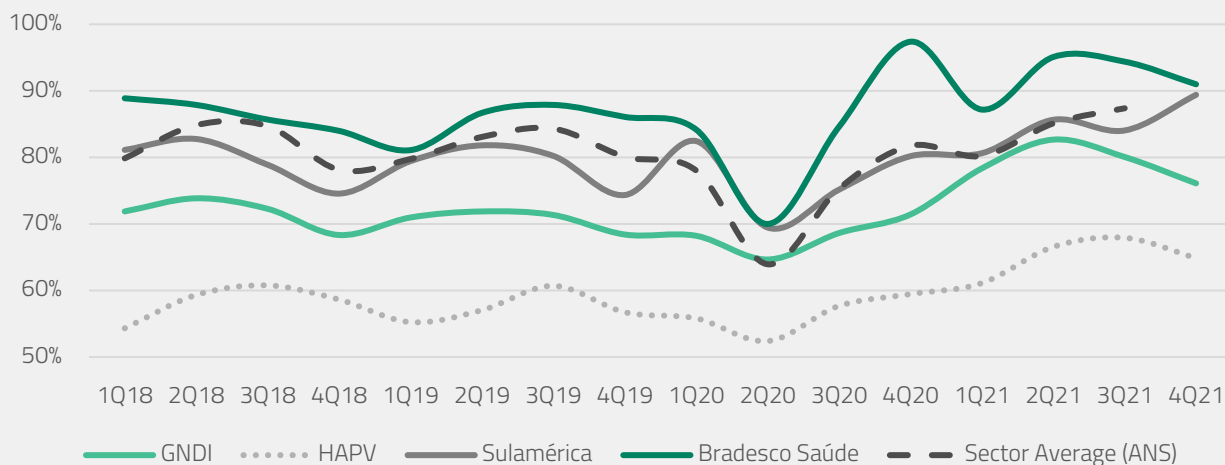
This cost pressure and increasing medical inflation are significantly impacted by the current market structure, in which the healthcare providers are remunerated by the health plans in a fee for service basis and clinical outcome is not taken into consideration, especially in the case of hospital operators, which account for 45% of total health plan costs. Providers are incentivized to increase the number of exams, average hospitalization periods and rate of inpatient per emergency room visit, growing the average waste costs from unnecessary procedures and cascading them down the entire chain, directly impacting the health plan prices to the final user, and ultimately, decelerating the healthcare sector growth and diminishing health access to the lower-income population.

For this reason, the verticalized model, in which the health plan operator owns most of the hospital and

diagnostic facilities and establish efficient medical protocols, has been very successful in the country, enabling a more cost-effective operation, lower final prices to clients and lower annual price readjustments. As a result, Hapvida (HAPV) and Notredame Intermédica (GNDI), the forerunners of the verticalized operation model at high scale, saw their combined market share in number of beneficiaries leap from 6.7% in 2014 to 18% in 2021 and have been consistently presenting the lower medical loss ratio (MLR) in the sector, as we can see below.

Nevertheless, with the evolution of the verticalized model in Brazil, other conflicts of interest arose, such as the concerning cost control vs quality trade-off, which is constantly questioned by market participants.

## Evolution of Cash MLR of Relevant Healthcare Plan Operators in Brazil - % of Net Revenues



\* 4Q21 data were not available for Sector Average to the date of this report

Source: Equitas and Companies' public information

## BRAZILIAN HEALTHCARE STAKEHOLDERS

### Healthcare Operators

#### HMOs – Health Maintenance Organization

- Vertical integration as a way to better manage medical costs and provide cheaper healthcare plans to the lower income population.
- Common discussions in the sector on possible conflicts of interest, due to the fact that the operator runs both the health plans and the hospitals / clinics.
- Notredame Intermedica (GNDI) and Hapvida (HAPV), which have recently merged, pioneered the verticalization operation in scale and are today the largest player in the sector, with more than 8mm healthcare beneficiaries.



#### Insures

- On average, offer more expensive plans than HMOs and have an open network of service providers.
- Important discussion in the sector on value-based healthcare with its medical service providers, with increasing change from fee-based payments to bundled, capitation and other structures more aligned to a cost control view.
- Dental players have lower MLR given high dentists supply and more predictable cost structure.



#### Medical Cooperatives

- Strong regional players that in many cases have a vertically integrated structure.
- The groups have captured an important part on the sector growth in the past, but currently many are in a challenging financial situation due specially to the lack of a professional management team and the delay in the adoption of the technology and modern medical protocols and processes.



### Evolution in the Number of Healthcare Beneficiaries - In Million (Average of The Year)

Players	2014	2015	2016	2017	2018	2019	2020	2021	CAGR
HAPV + GNDI	3.35	3.55	3.75	4.13	4.38	5.86	7.71	8.77	14.8%
Bradesco	3.93	4.01	3.78	3.43	3.34	3.53	3.60	3.67	(1.0%)
Amil	3.72	3.89	3.90	3.68	3.55	3.22	2.90	2.94	(3.3%)
Sulamérica	1.97	2.01	1.99	2.07	2.14	2.21	2.30	2.53	3.6%
CNU	1.58	1.74	1.59	1.49	1.49	1.71	1.78	1.91	2.7%
Athena	-	-	-	0.01	0.06	0.51	0.64	0.86	-
Cassi	0.70	0.71	0.71	0.70	0.68	0.66	0.64	0.61	(2.0%)
Prevent Senior	0.25	0.30	0.32	0.35	0.40	0.45	0.49	0.55	12.0%
Assim	0.35	0.38	0.41	0.54	0.57	0.59	0.62	0.61	8.4%
Unimeds	17.74	17.67	16.63	16.20	16.01	15.81	15.85	16.29	(1.2%)
Others	16.57	15.58	15	14.62	14.42	12.41	10.64	9.88	(7.1%)
<b>Total</b>	<b>50.14</b>	<b>49.84</b>	<b>48.09</b>	<b>47.20</b>	<b>47.05</b>	<b>46.95</b>	<b>47.17</b>	<b>48.62</b>	<b>(0.4%)</b>

Source: Equitas and National Health Agency (ANS)

# BRAZILIAN HEALTHCARE STAKEHOLDERS

## Healthcare Providers

### Hospitals



Player	Market Share
	Private Beds
Rede D'or	9.0%
GNDI	3.5%
HAPV	3.1%
Dasa	2.8%
Amil	2.8%
MaterDei	1.8%
Kora	1.6%
Hospital Care	1.1%
Athena	1.0%
Einstein	1.0%
BP	0.7%
Unimeds	9.1%
Prevent Senior	0.6%
Others	61.7%

Source: Equitas estimate and CNES

- Very fragmented sector, but going through a consolidation process led by Rede D'or, Mater Dei, Dasa, among others
- Larger players have bargain power to deal with health operators in pricing negotiations
- Main players affected by the evolution of value-based healthcare
- Represent around 45% of operators total costs and have an important impact in the increasing medical inflation in the country

### Laboratories

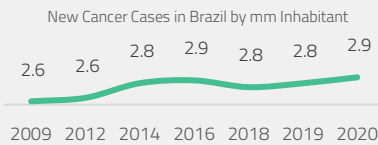


- The sector has been going through a consolidation process that started years before the segment of hospitals, but is still highly fragmented (35% of the sector revenues comes from the 5 larger groups)
- Same dynamic of bargain power and impact on medical inflation

### Oncology Treatment



- The Market has been gaining evidence in the past years with a consolidation led by Oncoclínicas, which has 14% of the market and IPOed in 2021
- Many hospital groups investing to increase their oncological ambulatory care area, a BRL 15 Billion market that has been increasing dramatically in the past years

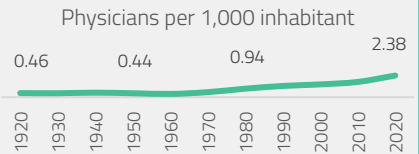


### Medical Supplier / Logistics Operator



- As the healthcare industry grows in Brazil, specially out of the large cities, the importance of independent Mat & Med distributors has increased, providing access to small hospital and lab groups to a complete portfolio of products and simplifying the supply chain area of large companies
- The non-retail distribution sector accounted for BRL 84 billion revenue in 2020, with more than 80% concentrated with small and mid-sized distributors/logistics operators

### Health Professionals (Physicians)



- Brazil has around 500 thousand physicians, a level above the 1.0 per 1,000 inhabitants recommended by the World Health Organization, but still with a relevant regional imbalance, with many regions experiencing a lack of available professionals
- Physicians are fundamental in the patient referral to many healthcare providers, which normally establish a good relationship with the medical community in each region of operation

### Pharmaceutical Industries

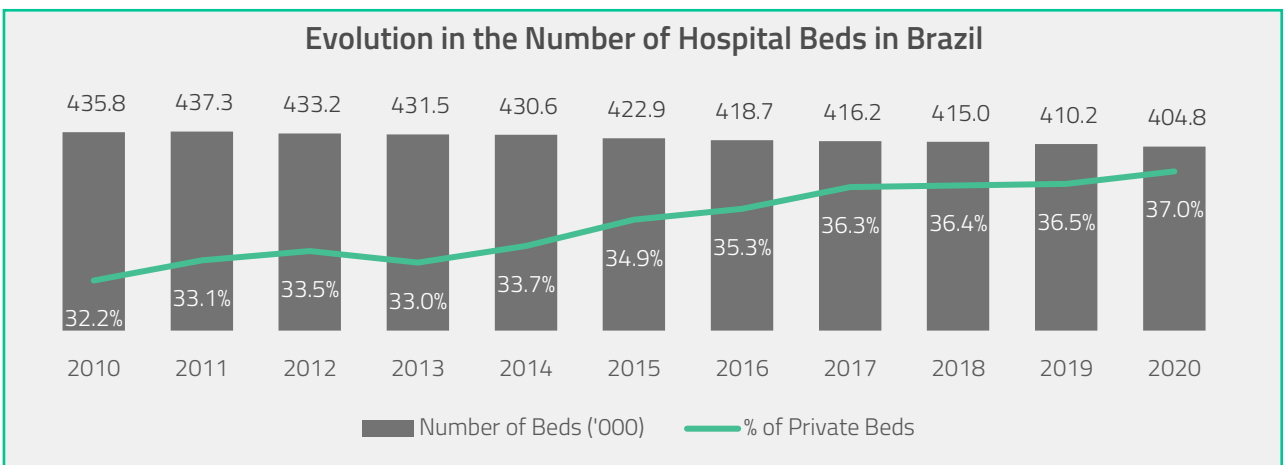
- BRL 115 billion industry growing at 11.5% per year in the past 5 years, benefited by the healthcare sector expansion, with a large generic and similar medicine market dominated by national manufacturers, such as Ache, EMS and Eurofarma
- 32% of the sector revenue is destined to the institutional market (hospitals, clinics, etc) and 68% to pharmacies chains that sell products to retail clients.

Source: Equitas, National Health Agency (ANS), companies IR website, National Association of Private Hospitals (ANAHP) and National Cancer Institute (INCA)

# 2.4. Hospital Market

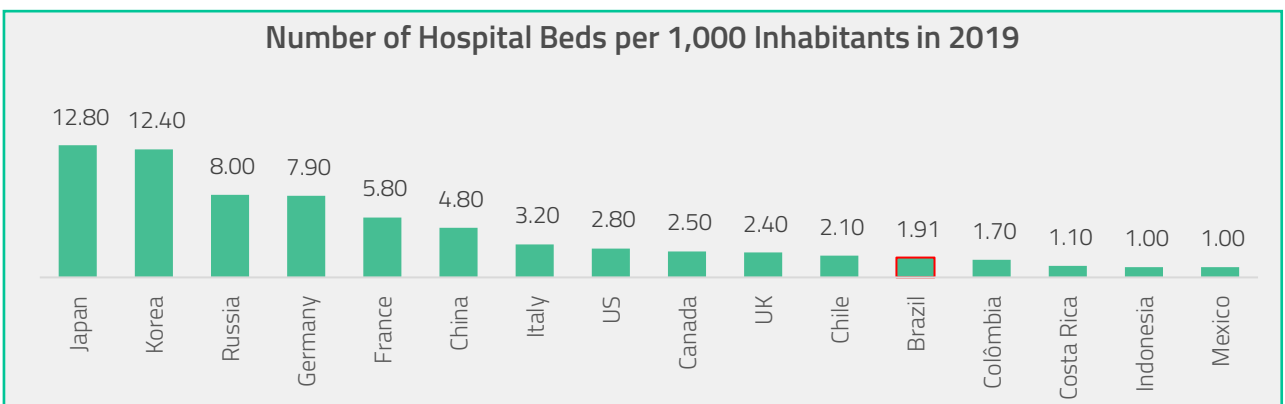
Brazil is underpenetrated in terms of beds per inhabitant when compared to many developed and developing countries, with 63% of its total hospital beds run by public institutions. However, in the past years an extensive consolidation process and capital deployment in greenfield and brownfield projects have been taken place in Brazil, led by large private players, remarkably Mater Dei, Rede D'Or and Kora, which have recently made their IPO debuts and raised a combined BRL 15.1 billion. Additionally, Dasa, another significant diagnostics and hospital operator in Brazil has re-IPOed and raised BRL 3.3 billion to invest in their core business expansion.

The hospital sector in Brazil has been undergoing transformation in the past years, with constant reduction in the number of total beds, but with an increasing concentration of private hospitals, that are more capable, financially, and operationally wise, to maintain sustainable operations and provide better quality services than the public players, that as mentioned earlier, suffer from the lack of human and capital resources. As shown in the graph below, the number of private beds represented 32% of Brazil's total beds in 2010 (140.3k beds) and achieved 37% participation in 2020 (149.8k beds).



Source: Equitas and Brazilian Hospital Federation (IHF)

However, even with the private players taking an important role in the development of this market, with some of them being publicly traded, Brazil still shows a lower number of hospital beds per inhabitant on a comparative basis, which implies sizable room for structured and capitalized players to continue increasing market share in the coming years.



Source: Equitas and OECD

Despite the 149.8k private beds in Brazil disclosed by the Brazilian Hospital Federation in 2020, to analyze the current market share of the main players and obtain a clearer picture of the market size in Brazil, Equitas worked with the raw database and run several filters to exclude non-for-profit associations, psychiatric hospitals, short stay units and general hospitals with low level of complexity. This way, we were rendered a total private market of 111 thousand hospital beds in the country and the following structure:

## Market Share of the Main Players in the Brazilian Private Hospitals Sector

Main Players	North	Northeast	Center-west	Southeast	South	Total
Unimed	9.9%	7.7%	2.2%	9.6%	17.7%	9.1%
Rede D'or	-	12.5%	5.0%	11.0%	2.0%	9.0%
HAPV + GNDI	4.8%	7.3%	2.4%	7.2%	7.8%	6.5%
Dasa	-	3.3%	4.0%	3.0%	1.7%	2.8%
Amil	-	1.2%	0.7%	4.5%	1.2%	2.8%
Mater Dei	5.2%	0.6%	1.2%	2.4%	-	1.9%
Kora	3.4%	1.7%	4.4%	1.0%	-	1.6%
Hospital Care	-	-	-	1.3%	3.9%	1.1%
Athena	-	3.2%	-	0.5%	1.9%	1.0%
Prevent Senior	-	-	-	1.0%	-	0.6%
Others	76.7%	65.2%	80.0%	57.6%	63.8%	63.4%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Source: Equitas and National Registry of Health Facilities (CNES)

### A summary on the main players as well as some milestones are presented below

	<ul style="list-style-type: none"> <li>Healthcare plan operator managed in a cooperative model, with hundreds of units throughout the country (we grouped all of them for this analysis). Many of the operations are verticalized, leading</li> </ul>	<p>them to be the largest hospital operator in Brazil on a consolidated basis. However, the operations are run as independent companies, with no relation with each other.</p>
	<ul style="list-style-type: none"> <li>Largest independent hospital chain in Brazil (10.6k beds in 4Q21) focused on the middle-and high-income classes. It went public in Dec 2020, becoming one of the largest listed companies in Brazil, currently with a mkt cap of BRL 100 billion.</li> <li>The group's control is owned by the Moll family (50.5%), that is conducting an accelerated expansion, especially via M&amp;A, after raising more than BRL 8.0 billion in its IPO and another BRL 4.9</li> </ul>	<p>billion in a follow-on that took place in May 2021. Just in 2021, Rede D'Or acquired 9 hospitals, accounting for 1.7 k beds.</p> <ul style="list-style-type: none"> <li>In Feb 2022 Rede D'Or announced the acquisition of Sulamérica, valuing the company at BRL 16.4bi, the most significant M&amp;A in the company's history. The transaction will probably have different impacts throughout the country, which will be highlighted in the next sections.</li> </ul>
	<ul style="list-style-type: none"> <li>After a merger announced in 2021 and concluded in early 2022, GNDI and HAPV, which were, respectively, the 1st and 2nd largest independent health plan verticalized operators in Brazil,</li> </ul>	<p>consolidated its leadership (18% market share in the number of health beneficiaries), that also leads them to be the 3rd largest hospital operation in the country.</p>
	<ul style="list-style-type: none"> <li>Controlled by the Bueno family, former owners of Amil (sold to United Health in 2012), Dasa is the combination of the largest medical diagnostics company in Brazil and a sizable national hospital operation of around 3k beds (including M&amp;As still not closed).</li> </ul>	<ul style="list-style-type: none"> <li>The group underwent a re-IPO, increasing its free float from 2.2% to 12.6% and raising BRL 3.3 billion to finance M&amp;A operations.</li> <li>It acquired 4 hospitals in 2021, totaling 944 beds.</li> </ul>
	<ul style="list-style-type: none"> <li>One of the largest health plan operators in Brazil and owned by United Health. The group has been under financial challenges and a restructuring process that has comprised the attempt to sell its individual healthcare plan wallet, which has been disapproved by ANS.</li> <li>There are many rumors that United Health is</li> </ul>	<p>looking for a buyer to Amil's operation, which will probably need to be carved-out, to be sold to different companies (one focused in health plans and another in the hospital business).</p> <ul style="list-style-type: none"> <li>With Rede D'Or's acquisition of Sulamérica, the path for acquiring Amil's hospital operation is easier, especially for Dasa.</li> </ul>
	<ul style="list-style-type: none"> <li>Kora is an independent hospital operator backed by the American private equity firm HIG, has IPOed in Aug 2021 and raised BRL 880 million.</li> <li>Kora has a different strategy, focusing on low-to-mid income classes in regions not explored by Rede D'Or (center-east, northeast and parts of the</li> </ul>	<p>southeast regions) and almost always backed by its long-lasting relationship with Unimed, as a relevant payor.</p> <ul style="list-style-type: none"> <li>Kora has around 1.8k beds, including not concluded M&amp;As, and acquired 6 operations in 2021, with 824 beds.</li> </ul>





- Recently listed premium independent hospital provider, with headquarters in Minas Gerais, and controlled by the Salvador family, with a very long-term investment horizon.
- The group is recognized by its high quality and unique cost management, granting higher profitability in the industry. After its IPO in April 2021 and a capital raise of BRL 1.2 billion, Mater Dei has announced 6 acquisitions, totaling 1,251 beds, expanding its footprint to the north, north-east and center-west regions.



- Privately held hospital group created by an entrepreneur in partnership with Elie Horn, one of the most successful real estate businessmen in Brazil, and Crescera, a private equity firm.
- Exploring different footprints from large groups, with 1.2k beds, Hospital Care is expanding operations in the south of Brazil and in the countryside of São Paulo, but with many of its operations still to ramp-up/break-even.
- The group tried consecutively to access the capital markets in the past 2 years, through an IPO offering that has not been successful due to market conditions and to a perceived early-stage of business maturation.



- Health plan provider founded by Patria Investments, aiming to build a verticalized operation to consolidate regions not explored by Hapvida and GNDI. The group has also filed for IPO in the past year but could not conclude the transaction due to the same reasons as Hospital Care.
- It continues to expand the business with funding provided by Patria.



- Privately held verticalized health plan operator based in the city of São Paulo.
- Prevent Senior is well known for its ability to profitably operate in the individual health plan segment, focused on the elderly population.



- Largest independent hospital chain in the country's mid-west region, counting with 1,200 hospital beds. Grupo Santa is a family-owned business and is extremely desired by the major consolidators in the industry for its sizable operation in one of the most attractive regions in Brazil. There are many rumors regarding a possible sale of it, which has been under discussion in the past months, but with valuation being an obstacle.



- Group of independent philanthropic hospitals with sizable operations, strong brand and highly recognizable quality of assistance nationwide. Those type of institutions provide services to SUS's patients in exchange of tax exemptions granted by the government. Despite being non-for-profit businesses, all players are led by seasoned executives with a professional approach and are also consistently investing to protect their influence area from the consolidation process that is in place.

Source: Equitas, National Registry of Health Facilities (CNES), National Health Agency (ANS) and company websites

Another way to make sense of the industry, by making simulations despite the limited public information, is by estimating the addressable market and possible revenue and EBITDA pool for each of the listed hospital players, since they operate in distinct niches, geographies, and social brackets.

The first step for this approach is to sort medical loss expenses of healthcare plans by average ticket group and type of health operator based on some assumptions, as shown below, which excluding the verticalized operators, leads to an estimated BRL 183 billion revenue pool for the country in 2021. Figures reduce considerably when premium health operators are selected (average tickets higher than BRL 600/month), to BRL 78 billion in the same period.

## Brazilian Hospital Revenue and EBITDA Pool Estimate

### 2021 Data (Healthcare plans Medical Loss Expenses) - BRL Billion

2021 Data (Healthcare plans Medical Loss Expenses)					
Average Monthly Ticket	Total	Unimed	Insurance	Self-Mngt	Others
Higher than BRL 1,000	8.5	0.3	1.7	4.6	1.9
Higher than BRL 800	29.5	1.2	18.3	9.6	0.4
Higher than BRL 600	40.5	7.4	28.4	2.3	2.3
Higher than BRL 400	58.8	32.8	21.2	1.8	3.0
Higher than BRL 250	36.5	25.6	1.0	0.8	9.1
Higher than BRL 0	9.7	3.0	0.2	0.1	6.4
<b>Total Revenue Pool</b>	<b>183.5</b>	<b>70.3</b>	<b>71.0</b>	<b>19.1</b>	<b>23.1</b>
<b>Revenue Pool - Premium</b>	<b>78.5</b>	<b>8.9</b>	<b>48.5</b>	<b>16.5</b>	<b>4.6</b>

Source: Equitas and National Health Agency (ANS)

Since the listed companies operate in different geographies, based on ANS data per health operator and city, we estimated the revenue pool by each listed hospital player based on the health operators they work with in each state and social bracket profile. Also, assuming an average EBITDA margin for the total hospital industry of 11.3% (as per ANAHP's average) and 20% for the premium market (Equitas estimate), we also estimate an EBITDA pool and market share for each listed player, as shown below.

## Main Player's Revenue and EBITDA Pool Estimate – Information for 2021

Information in BRL Billion	Revenue Pool	2021 Revenue	% Market Share		2021 EBITDA	% Market Share	
			Revenue Pool	EBITDA Pool		Revenue Pool	EBITDA Pool
Rede D'or	67.1	22.80	34.0%	12.3	5.22	42.3%	
Dasa (Hospitals)	53.1	4.19	7.9%	9.8	0.33	3.4%	
Mater Dei	7.3	1.10	15.2%	1.3	0.31	23.1%	
Kora	19.7	1.36	6.9%	2.0	0.27	13.2%	

### MAIN ASSUMPTIONS PER PLAYER:

#### Rede D'or

Premium market in 12 Estates of operation as of 2021. It does not take into account M&As that were not concluded until the reporting period.

#### Dasa (Hospitals)

Premium market in 3 Estates of operation as of 2021. It does not take into account M&As that were not concluded until the reporting period.

#### Mater Dei

Premium market in Minas Gerais (excluding UNIMED), not including Goiania and Feira de Santana, since the transactions in these areas had not been concluded until the reporting period.

#### Kora

Total market in 5 Estates of operation as of 2021. It does not take into account M&As that were not concluded until the reporting period.

Source: Equitas and National Health Agency (ANS) and companies' public information

In the case of Mater Dei, considering our estimates on its announced acquisitions and greenfield project that will be described in detail further, its revenue pool for 2021 increases to BRL 10 billion and EBITDA pool to BRL 2.2 in the same period, as presented below.

## Mater Dei Revenue and EBITDA Pool Considering M&As and Greenfield– Information for 2021

Info in BRL Million - 2021	Revenue Pool	EBITDA Pool
Minas Gerais	4,824.8	965.0
Pará	753.6	263.7
Goiânia	1,094.8	219.0
Bahia	3,378.0	675.6
<b>Total</b>	<b>10,051.2</b>	<b>2,123.3</b>

Mater Dei Pro-Forma - R\$ mm 2021	Revenue	EBITDA
Reported Figure	1,102.0	308.0
Porto Dias (Pará)	438.2	149.0
St Genoveva and St Clara (Uberlândia)	273.0	8.0
Premium (Goiânia)	50.0	10.0
EMEC and Salvador Greenfield	131.0	26.2
<b>Total</b>	<b>1,994.2</b>	<b>501.2</b>

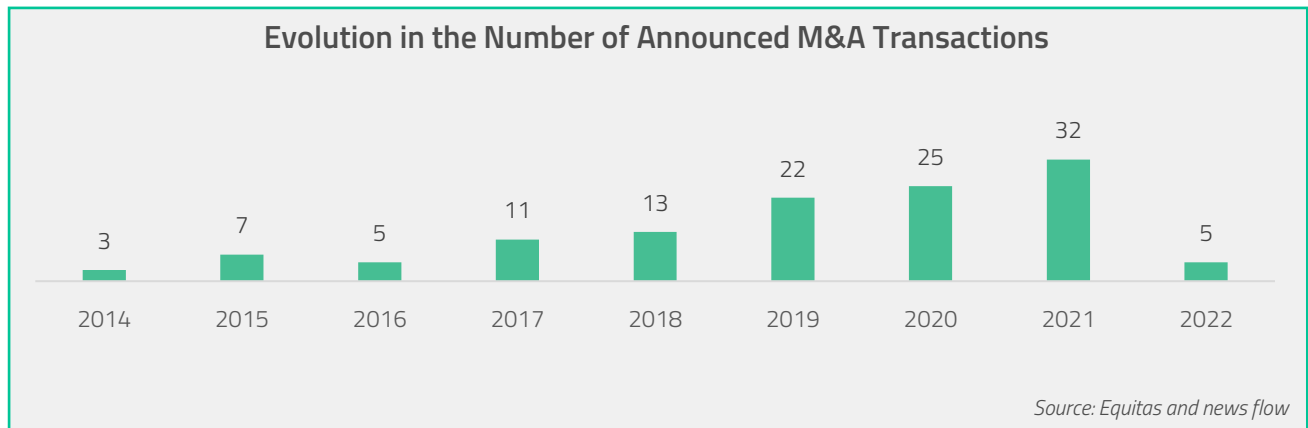
<b>Estimated Market Share - 2021</b>	<b>19.8%</b>	<b>23.6%</b>
--------------------------------------	--------------	--------------

Source: Equitas and National Health Agency (ANS)

## 2.4.1. Hospital Market – Consolidation Process

As detailed in the previous section and explored in the present one, a number of factors are fostering the increase of M&A activity in the hospitals sector, which is expected to continue going forward due to the current scenario and opportunities outlined. In this section we present statistics for M&A activity in the sector, as follows.

### Company Description



### Evolution in the Number of Beds Acquired in Disclosed M&A Transactions by Player

# Beds Acquired	2014	2015	2016	2017	2018	2019	2021	YTD 22
Rede D'or	254	108	270	97	635	1,168	1,722	30
GNDI / HAPV	60	462	112	434	-	262	669	-
Hospital Care	-	-	-	150	113	140	-	-
Kora	-	-	-	-	123	207	824	179
Dasa	-	-	-	-	-	1,800	944	-
Mater Dei	-	-	-	-	-	-	796	455
Amil	-	368	-	-	-	-	-	-
Others	-	-	-	-	700	-	410	-
<b>Total</b>	<b>314</b>	<b>938</b>	<b>382</b>	<b>681</b>	<b>1,571</b>	<b>3,577</b>	<b>5,365</b>	<b>664</b>

*Source: Equitas and news flow*

The past years were also marked by the debut of pure hospital players in the Brazilian stock exchange, with Rede D'Or's IPO in Dec 2020 and Mater Dei and Kora's offers in 2021.

On 23rd February 2022 Rede D'Or announced the acquisition of 100% of Sulamérica in an all-stock transaction, surprising the market for the bold movement, marking a big shift in Rede D'Or's strategy, and creating more moving parts in the sector going forward. The main point in this matter relates to Rede D'Or acquiring one of the major healthcare payors in the industry (and RDOR second largest client) and entering in the underwriting business, which poses risk to hospital competitors in many regions, but also concerns other major healthcare payors that have Rede D'Or facilities in its accredited network. This is the case, for example, of Bradesco Saúde, main national competitor of Sulamérica and Rede D'Or's largest client.

After the deal approval, Rede D'Or's independence and possible new conflicts of interests along the value chain will always be a question mark for competitors and clients, which in our view can have different impacts depending on the city and even create opportunities for independent hospital operators, as we will describe in detail in the next sections.

# 2.5. Healthcare Industry – Main International Trends

Many of the topics in vogue in the global healthcare space relate to the development of new payment schemes to reduce conflicts of interest throughout the healthcare chain, which is challenging to address, since a successful model is yet to be implemented in high scale. Another hot topic refers to the digitization and automation of processes in the value chain, which has dramatically increased in some areas amid the COVID-19 pandemic. The same topics are highly discussed in Brazil, but implementation is in its early stages.

## AUTOMATION OF THE PATIENT JOURNEY

There is a digitization trend among leading international hospital providers, which despite in its early developments, is gaining traction and being tested in many stages of the patient journey within an institution, such as in the hospital admission, diagnostics, surgeries and procedures, general ward stays and discharge. Some of the initiatives are described below:

- Telemedicine: many players, including Mater Dei and others in Brazil, have launched mobile apps so that patients can be assessed by answering a few questions or even talking to a physician before going to a hospital facility. If necessary, the patient can schedule an appointment directly via its app with the recommended professional. Another initiative in this area is the use of greeting robots in the healthcare facility to better direct patients to the appropriate department of ward.
- Telesurgery: Surgeries being carried out by a medical team on the ground but remotely coordinated by a specialist doctor that lives in another city or country.
- Robots: Use of robots to assist in cleaning and disinfecting the operating room through ultraviolet technology. Also, the adoption of surgery robots has been increasing in many countries, being controlled by a doctor, and performing time efficient procedures, reducing headcount, and reducing infection risk. The initial investment of a robotic setup is quite expensive, ranging between USD 1.5 and 2.0 million, with the US being currently the largest market for this technology. In Brazil, the use of robotic surgery is still very limited, performed just by the largest private groups, but still showing a challenging monetization, being more adopted as a marketing strategy to attract talented physicians and new clients.
- General Ward and ICU: vital signs and other information remotely tracked by a robotic device and transmitted to the doctor in charge, who is monitoring all its patients in real time. Also, robots can perform repetitive administrative work and sterilization procedures, freeing up time of nurses and doctors for higher-value activities.

## SHIFT TO VALUE-BASED CARE

This subject, thoroughly explored in this report due to the many conflicts of interest observed in the complex healthcare system in Brazil, also observed in many other countries, is in its early stage of shift from fee-for-service payment methods to fee for performance, which is not an easy mission.

One initiative observed in the United States was the creation of Accountable Care Organizations (ACO), a health structure that includes independent physicians, hospitals, clinics, nursing homes and so on, whose goal is to provide coordinated patient care. ACO participants have their payments strongly linked to specific quality and costs KPIs, through value-based fees that align all stakeholders. The ACOs put the accredited physicians, which direct and guide patients throughout the system, in the center of the system, having their compensations tied to the cost of each treatment and being financially penalized for unjustified cost increases.

This model has been steadily growing in the United States and according to data from the Center of Medicare and Medicaid Services, it already accounted for almost 45 million individual members covered in the end of 2019 throughout the country, with 1,588 existing public and private ACOs. Nevertheless, this model has been quite criticized in the US due to supposedly not deliver the increase in medical quality and alignment along the healthcare, which is its main objective.

## CARE AT HOME

The patient treatment out of the hospital environment, whether at home or at a lower complexity health institution, is something that brings many benefits but is not new. After COVID-19 pandemic and the boost of telehealth use, we have seen the emergence of new technology and capabilities to turn homecare possible for more people with post-acute and long-term care needs. Remote patient monitoring devices and telehealth technology, for instance, allow professionals to track patient progress remotely, have primary-care online visits and self-administered dialysis. According to a poll run by Mckinsey in the US in April 2021, more than 1 in 5 leaders of healthcare institutions confirmed that their health specialty already uses remote patient monitoring.

Not only does homecare improved practices provide quality healthcare to more people in the comfort of their homes, but it also implements more effective coordinated care, reducing preventable health events and ultimately increasing the patient's life expectancy. Of course, the potential evolution of homecare could bring countless benefits to the patient and health plan operator, but that also spans new challenges to service providers, with potential lower reimbursements and additional investments to develop its homecare initiative. Notwithstanding, the service provider could experience savings opportunities and cost optimization, especially having a more adequate and well-dimensioned facility to this possible new scenario.

## 2.6. Analysis of Potential Synergies in Hospital Businesses

As the large hospital operators continue to grow inorganically, there are a series of potential synergies to be extracted and revenue levers to be added that can lead the newly acquired unit to operate at margin levels similar, or even higher, than the acquirers. The main opportunities relate to increasing the hospital average revenue per bed, by enhancing complexity and establishing partnerships with new healthcare plan operators and reducing Mat & Med costs due to increasing bargain power. Another important synergy source is linked to the reduction of redundant administrative expenses and absorption of scale gains through a shared services center, which lead to sizable expenses dilution, as is the case of Rede D'Or.

In this section, we discuss the many existing synergy opportunities in the hospital business, that can be explored in M&A transactions and be captured as Mater Dei operations become more robust and compare the financials of the 3 main publicly traded players with pure hospital operations (Dasa has a significant portion of its results coming from its diagnostics business, reason why it is not included in the present analysis). Please refer to the column "Ref" in the table below to see comments on each P&L line.

# Financials of Main Pure Hospital Operators

Ref	Financial Income - In R\$ Million	Mater Dei				Rede D'or				Kora			
		2018	2019	2020	2021	2018	2019	2020	2021	2018	2019	2020	2021
1	<b>Net Revenues (ex Medical Fee Pass Through)</b>	<b>627</b>	<b>733</b>	<b>718</b>	<b>1,024</b>	<b>9,398</b>	<b>11,695</b>	<b>12,029</b>	<b>17,587</b>	<b>231</b>	<b>365</b>	<b>711</b>	<b>980</b>
	Net Revenue per Occupied Bed (annual)	2.00	2.13	2.25	2.47	2.03	2.25	2.38	2.56	0.50	0.58	0.97	1.08
	<b>Cash Costs</b>	<b>(313)</b>	<b>(363)</b>	<b>(398)</b>	<b>(587)</b>	<b>(6,244)</b>	<b>(7,577)</b>	<b>(8,719)</b>	<b>(11,675)</b>	<b>(146)</b>	<b>(223)</b>	<b>(405)</b>	<b>(610)</b>
	% of Net Revenues	(49.9%)	(49.5%)	(55.4%)	(57.3%)	(57.2%)	(56.9%)	(62.1%)	(57.3%)	(51.5%)	(50.6%)	(46.3%)	(48.4%)
2	<b>Personel (Ex Medical Fee Pass Thoug)</b>	(129)	(153)	(164)	(247)	(3,482)	(4,527)	(5,045)	(6,249)	(69)	(106)	(172)	(267)
	% of Net Revenues	(20.6%)	(20.9%)	(22.8%)	(24.1%)	(31.9%)	(34.0%)	(36.0%)	(30.7%)	(24.2%)	(24.0%)	(19.7%)	(21.1%)
3	<b>Mat &amp; Met and Other Variable Costs</b>	(161)	(179)	(194)	(283)	(2,197)	(2,798)	(3,363)	(5,011)	(54)	(88)	(178)	(248)
	% of Net Revenues	(25.8%)	(24.4%)	(27.0%)	(27.7%)	(20.1%)	(21.0%)	(24.0%)	(24.6%)	(19.1%)	(20.0%)	(20.3%)	(19.7%)
	<b>Other Costs</b>	(23)	(31)	(40)	(57)	(565)	(253)	(311)	(415)	(23)	(29)	(55)	(95)
	% of Net Revenues	(3.6%)	(4.2%)	(5.6%)	(5.5%)	(5.2%)	(1.9%)	(2.2%)	(2.0%)	(8.1%)	(6.6%)	(6.3%)	(7.6%)
4	<b>Cash SG&amp;A</b>	(94)	(113)	(165)	(154)	(507)	(637)	(822)	(1,094)	(57)	(79)	(121)	(175)
	% of Net Revenues	(15.0%)	(15.4%)	(23.0%)	(15.0%)	(4.6%)	(4.8%)	(5.9%)	(5.4%)	(19.9%)	(17.9%)	(13.9%)	(13.9%)
	<b>Personel Expenses</b>	(79)	(94)	(98)	(94)	(290)	(291)	(504)	(637)	(21)	(36)	(72)	(53)
	% of Net Revenues	(12.5%)	(12.8%)	(13.7%)	(9.2%)	(2.7%)	(2.2%)	(3.6%)	(3.1%)	(7.4%)	(8.1%)	(8.3%)	(4.2%)
	<b>Other Expenses</b>	(15)	(19)	(67)	(60)	(217)	(347)	(318)	(457)	(35)	(44)	(49)	(122)
	% of Net Revenues	(2.5%)	(2.6%)	(9.3%)	(5.9%)	(2.0%)	(2.6%)	(2.3%)	(2.2%)	(12.5%)	(9.9%)	(5.6%)	(9.6%)
	<b>Adjusted EBITDA (Reported)</b>	<b>221</b>	<b>258</b>	<b>155</b>	<b>308</b>	<b>2,747</b>	<b>3,562</b>	<b>2,810</b>	<b>5,216</b>	<b>31</b>	<b>70</b>	<b>216</b>	<b>270</b>
	% of Net Revenues	35.2%	35.2%	21.6%	30.1%	25.2%	26.7%	20.0%	25.6%	10.8%	15.8%	24.7%	21.4%

Source: Equitas and companies' public data. We adopted some assumptions based on chats with the companies related to the medical fees that pass-through Rede D'Or and Kora's P&L but are paid direct to the physicians

1 There are many factors that impact a hospital average ticket per bed, such as the level of complexity on services offered (complex surgeries, oncology treatment, diagnostic exams, etc), the target public the company focuses on, the number of healthcare plan accreditation agreements, the profile of its most relevant healthcare payors, the city / state where the facility is located, etc.

- Some of these factors significantly affect a hospital average revenue per bed and are quite hard to change, such as hospital location. There are regions in Brazil with lower table prices for medical services due to historical reasons, such as the dominance of a relevant public payor in the city or the presence of medical providers with low bargain power to set better negotiations. Another aspect is the hospital's mix of revenues per payor, which is challenging to change and sometimes even unfeasible depending on the region dynamics.

- The level of complexity in a hospital is a relevant point that an acquirer focusses on to enhance after a M&A transaction, investing in the acquisition of new equipment (MRI, robotic surgery, CT, etc) and opening new specialty areas that bring more patient flow (maternity ward, oncology, pediatrics, etc) to list a few initiatives. In those cases, the hospital also needs the ability to attract new quality medical staff to lead the areas, being essential to have a renowned brand in the region and enable the project to be successful.

- A more professional group can add important capabilities and management practices to reduce medical disallowances by payors, which on average ranges near 4% of the hospital sector revenue but can be much higher. By implementing better management systems and structured medical protocols in a newly acquired hospital, this expense could be dramatically reduced.

- Another important factor to better monetize operating beds is to have more accredited payors to direct patients that the hospital had no access before. Mater Dei and other large groups do so by leveraging their longstanding relationships with health plans in other regions and negotiate attractive partnerships for the acquired hospital. It is also common that the acquisition itself has been encouraged by a payor that was willing to expand its operation in the target city.

- An additional strategy adopted by hospital consolidators that does not necessarily increase revenue per bed in the short run but enhances the acquired hospital total revenues and can improve its brand equity in the city is engaging in brownfield expansions. A relevant aspect always considered in the acquisition evaluation process is the existence of adjacent land that could be bought to allow future infrastructure expansions, which many times are simultaneously acquired.

- In the table above, we can see that Rede D'Or has the highest average revenue per occupied bed (adjusted for medical fees that pass-through its P&L) since it is predominantly based in high ticket regions (São Paulo, Rio de Janeiro and Brasília) and has a high complexity level. Kora has a totally different strategy, operating in regions with lower average income and primarily in partnership with a local Unimed healthcare plan, which historically has low price tables to medical providers.

**2** The operating personnel, such as physicians, nurses and pharmacists represent a significant cost for a hospital operation and as we can see above, can vary dramatically depending on many factors.

- Here, again, hospital location is fundamental to determine the weight of medical costs in the operation. The same cities mentioned in the topic above, with high average ticket for medical services in Brazil, also have the higher medical costs in general. For example, in São Paulo a nurse average salary can be slightly higher than in other regions, which explains part of the superiority of Mater Dei and Kora in this cost line.
- In terms of physician remuneration, it is a more sensitive cost line and difficult to adequate, since it is very dependent on the region the hospital is located in, not mentioning that this is a quite strong professional group and relevant to the business, that many times work at other medical institutions in the city, have its own patient portfolio and flexibility to direct them for surgeries and procedures in the hospital of choice. However, some practices can be adopted to better control this cost line, such as better defining medical teams, establishing more strict rules and protocols, and standardizing medical remuneration in the city.
- One important point to have in mind related to the physician professional is that the hospital business is theoretically more secure if hiring them on an exclusive basis, being able to better implement medical protocols and granting its patient flow to the hospital. However, this practice is knowingly not appreciated by physicians in general, which historically have been working as autonomous providers at different institutions and could pose a risk to the hospital.
- Despite the many described obstacles, the efficient management of beds depending on current demand and staff sizing can significantly reduce the hospital average number of employees per bed, which we showed Mater Dei has great superiority in the industry and reduces the weight of personnel costs.

**3** Mat & Med expenses represent the main variable cost in a hospital and as we can see in the comparison of Mater Dei and Rede D'Or, it may vary significantly depending on the group scale, direct relationship with manufacturers and unified warehouse, which is Rede D'Or's case. In this comment, we did exclude Kora, which has noticeably lower Mat & Med costs as a percentage of net revenue due to its lower complexity hospitals, a factor its management is knowingly investing in to enhance.

- The other variable and fixed costs represented by utilities, cleaning, sterilization, and occupation costs are obvious targets for reductions, being very sensitive to the group size and bargain power.

**4** SG&A expenses are the main synergy opportunity in the business and can be quickly extracted after an acquisition, by centralizing the acquired hospital back-office and administrative activities in the group's shared services center, reducing redundant staff, renegotiating a wide array of contracts, unifying marketing campaigns and many other initiatives.

- In the table above we can see how Rede D'Or has been successful in diluting its SG&A expenses that, despite accounting for more than 7x Mater Dei's expenses in 2021, still represents only 5.4% of its net revenues while this line accounts for 15.0% and 13.9% of Mater Dei and Kora's net revenues, respectively.

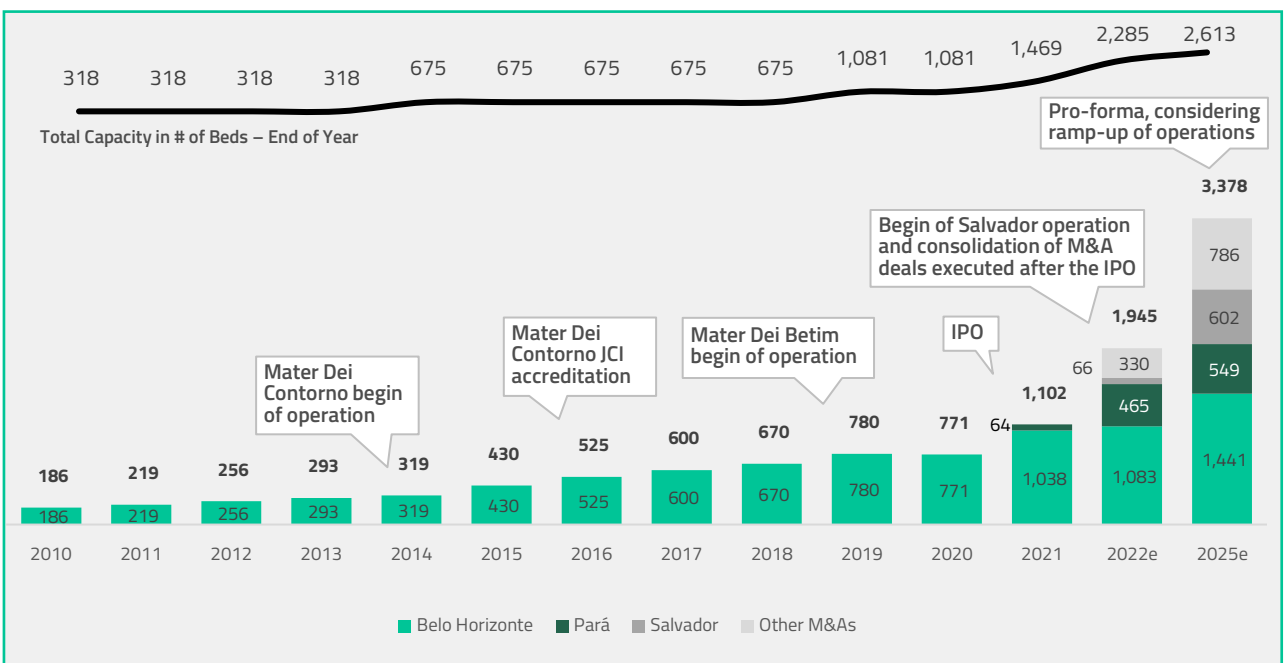
# 3. Company Description

Mater Dei is a premium national hospital operator that has been transformed over the past decades from a regional, family-owned business with a strong rooted culture, to a professional, publicly traded national hospital platform, with facilities in 4 Brazilian states. The company remains controlled by its founding shareholders, the Salvador family, and currently is the 4th largest independent hospital operator in Brazil. Mater Dei has a distinct quality approach, client-centrism recognition and unparalleled efficiency and cost control, presenting the highest profitability in the sector.

The company was founded in 1973 by Dr. Jose Henrique Salvador in Belo Horizonte, important hub in the south-east of Brazil and capital of the state of Minas Gerais. It became nationally recognized for its high-quality standards, outstanding medical team and top-notch infrastructure, with a client centric approach and international accreditations.

Mater Dei is the 4th largest independent hospital player in Brazil in number of hospital beds and the most profitable group in the sector, with an EBITDA margin of 35% in 2019. Its profitability level is well above the main publicly traded hospitals in Brazil and the average of the companies accredited by the National Association of Private Hospitals (ANAHF), which run at 12.4% in the same period.

## Gross Revenue Evolution (In BRL million) and Main Milestones



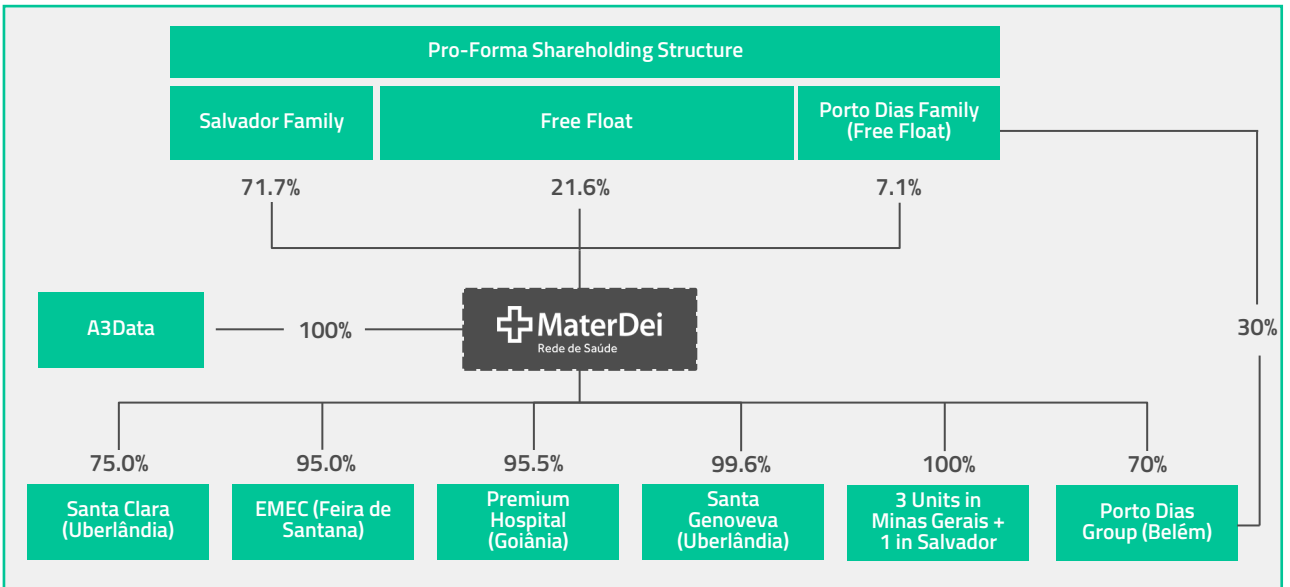
Source: Company information and Equitas Investimentos

Over the years, the company has been constantly investing to create strong internal controls, solid corporate governance structure and attract a professional management team. After its consolidation as the main premium hospital player in the state of Minas Gerais, with 3 facilities, the shareholders decided to start a new expansion phase. The many tailwinds of the healthcare sector offer a unique opportunity to implement its high-quality and efficient healthcare services across the country. The first expansion initiative was developed even before MATD's IPO when, after years of study, the company developed a greenfield project in the city of Salvador, state of Bahia, whose opening took place in May 2022.



In April 2021 the group listed its shares at B3, the Brazilian Stock Exchange, raising BRL 1.2 billion and starting to actively prospect M&A opportunities in strategic regions. Since then, Mater Dei has announced 6 transactions, now having a total of 9 hospital units. It expanded its footprint to 3 new states (Pará, Goiás and Bahia), and increased its presence in the state of Minas Gerais.

## Net Revenue Evolution (In BRL million) and Main Milestones



Source: Company information and Equitas Investimentos. The presented structure considers that EMEC and Santa Clara acquisition has already been closed

In addition to the capital raised in its IPO, in the end of 2021 Mater Dei reinforced its capital structure by raising BRL 700 million in a long-term debt instrument. The amount grants a strong cash position to the company in the short-run and will be deployed in new strategic opportunities over the next quarters.

# 3.1. Footprint and M&A Activity

After its IPO, Mater Dei acquired 5 hospitals, currently having a total of 9 facilities in 7 distinct cities in the country. All regions in which the company entered present an attractive profile, with private healthcare beneficiaries' growth above Brazilian average and high demand for hospital beds.

Currently, besides its greenfield project in the city of Salvador (with capacity of 367 beds), mentioned earlier, Mater Dei has 8 operating facilities in 6 distinct cities, as summarized below, with 5 of them being incorporated in M&A transactions occurred after its IPO.

## Mater Dei Infrastructure

### CONTORNO UNIT – Belo Horizonte, state of Minas Gerais – 357 Beds

Opened in 2014 and accredited by JCI (Joint Commission Association). It also counts with a complete infrastructure for hospitalization, surgery, diagnostics, oncology and etc.



### BETIM - Contagem Unit – Betim, state of Minas Gerais - 406 Beds

Opened in 2019 to serve a very populous area in the metropolitan region of the state. The hospital is accredited by JCI (Joint Commission Association) and counts with a complete infrastructure for hospitalization, surgery, diagnostics, oncology and etc.



### SANTO AGOSTINHO UNIT – Belo Horizonte, state of Minas Gerais - 318 Beds

Opened in 1973 and went through an expansion in 2000. The hospital is accredited by JCI (Joint Commission Association) and counts with a complete infrastructure for hospitalization, surgery, diagnostics, oncology and etc.



### GREENFIELD – Salvador, state of Bahia 367 Beds

New facility started in May 2022, with around BRL 400mm capex borne by the founder family. A long-term leasing agreement with Mater Dei has already been executed, with lease step-ups as the operation ramps-up.



### PORTO DIAS – Belém, state of Pará 592 Beds (Including ongoing expansion)

Transaction concluded in Oct 2021, in which Mater Dei acquired 70% of the group's shares in a deal involving BRL 800 million in cash and BRL 600mm in Mater Dei's stocks. The transaction marks Mater Dei's entry in the north region of the country and the hospital will continue to be run by Porto Dia's founders.



### SANTA GENOVEVA HOSPITAL – Uberlândia, state of Minas Gerais - 204 Beds

M&A announced in Nov 2021 and closed in Feb 2022. Mater Dei acquired 99.6% of Santa Genoveva's shares in an all-cash transaction for the consideration of BRL 309 million, increasing its footprint in another important region in the state of Minas Gerais.



Source: Company information and Equitas Investimentos

### EMEC – Feira de Santana, state of Bahia 150 Beds (Including ongoing expansion)

M&A announced in Feb 2022, under assessment by the anti-trust authority. EMEC is the reference full-service hospital in Feira de Santana, the second largest city in the state of Bahia. Mater Dei acquired 95% of the company's shares for BRL 195.6 million, focusing reinforce its brand in the state of Bahia before its greenfield opening in Salvador.



### PREMIUM HOSPITAL – Goiânia, state of Goiás - 156 Beds

Recent transaction closed in Mar 22, in which Mater Dei acquired 95.5% of the company's shares for BRL 250 million. After this acquisition, Mater Dei entered in the center-west region, in a large city that has not been explored by any large group so far and presents several growth opportunities.



### Santa Clara – Uberlândia, state of Minas Gerais - 173 Beds

Recent transaction announced in Mar 2022, in which Mater Dei acquired 75% of the company's shares for BRL 175 million. After this acquisition, Mater Dei reinforces its presence in Uberlândia region, leading the group to have near 50% market share in the microregion.



Source: Company information and Equitas Investimentos

At Equitas, instead of looking for data on a city level, we prefer to group data by microregion, since Mater Dei's hospitals attract considerable patient flow from nearby cities due to its outstanding brand equity and to the lack of healthcare infrastructure in the countryside of many regions in Brazil.

As we can see below, all locations where Mater Dei is established, including all recent M&As, present a significant population and high penetration of private healthcare plans, greater than the country's average, with Feira de Santana as an exception. Moreover, those regions overall present a high growth rate in private healthcare beneficiaries when compared to the country's consolidated figure.

## Selected Figures for Mater Dei's Current Locations

Figures by Microregion in Million	Belo Horizonte	Salvador	Belém	Uberlândia	Goiânia	Feira de Santana	Brazil
# of Inhabitants	5.3	4.0	2.7	0.9	2.5	1.2	213.3
Private Health Plan Beneficiaries	2.3	1.6	0.7	0.3	0.8	0.3	49.5
<b>% Private Health Penetration</b>	<b>43.4%</b>	<b>38.8%</b>	<b>26.4%</b>	<b>34.4%</b>	<b>31.8%</b>	<b>21.0%</b>	<b>23.2%</b>
<b>CAGR 3 Years of Beneficiaries</b>	<b>3.8%</b>	<b>0.1%</b>	<b>-0.4%</b>	<b>3.3%</b>	<b>2.6%</b>	<b>0.8%</b>	<b>1.8%</b>

Source: Company information and Equitas Investimentos

It is important to talk about the case of Feira de Santana, as a benchmark to understand most of what happens in other Brazilian regions. Feira de Santana has a very populous microregion but suffers from a challenging financial condition of the average citizen and social inequality, which combined with a scarce healthcare infrastructure in the city, prevents many healthcare plans to put sales efforts in the region or even to look at the it as a possible expansion target. Mater Dei acquired the leading player in the city, that runs at more than 85% average occupation rate, but envisioning a much larger opportunity to develop the region, attract health plan operators that rely on its quality and, as the end game, be a catalyst to the higher offering of healthcare services to a wider range of the population. Moreover, the acquisition also brings important synergies to the greenfield project in Salvador, since many physicians that work in Feira de Santana also have professional activities in Salvador and can be an additional driver of patient flow to Mater Dei's greenfield in the area.

To estimate the future hospital beds demand per microregion, a common cross-check analysis we run to evaluate each of Mater Dei locations, we first estimate the number of private healthcare beneficiaries in 2026, which in a conservative way, we project as growing at half the historic growth rate observed in the past 2 years (except by Feira de Santana, which has been growing at stronger pace and is still underpenetrated), as we can see in the first part of the table below. Then, based on assumptions of hospitalization rate of the entire healthcare system and data on bed turnover, we reach an estimated number of hospital beds that would be demanded in 2026.

After deducting the current hospital available structure, also considering the already announced expansion plans in each region, and based on the abovementioned assumptions, we can detect available room for hospital infrastructure increase in all locations, except Goiânia, which is a city with a quite uncommon dynamics, as will be explained below, but also offering a sizable opportunity.

## Hospital Beds Demand Estimate

Estimated Demand for Hospital Beds	Belo Horizonte	Salvador	Belém	Uberlândia	Goiânia	Feira de Santana
<b>Estimate of Private Healthcare Beneficiaries in 2026</b>						
Private Beneficiaries (mm) 2021	2.29	1.56	0.72	0.32	0.81	0.26
Estimated CAGR next 5 Years	1.9%	0.1%	-0.2%	1.6%	1.3%	5.0%
<b>Private Beneficiaries (mm) 2026e</b>	<b>2.51</b>	<b>1.56</b>	<b>0.71</b>	<b>0.35</b>	<b>0.86</b>	<b>0.33</b>
<b>Assumptions for estimating hospital beds demand</b>						
Average Hospitalization Rate	18.4%	18.4%	18.4%	18.4%	18.4%	18.4%
Average Hospitalization Period	4.3 Days	4.3 Days	4.3 Days	4.3 Days	4.3 Days	4.3 Days
Average Bed Occupation Rate	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%
<b>Hospital Beds Demand 2026e</b>	<b>7,692</b>	<b>4,777</b>	<b>2,183</b>	<b>1,074</b>	<b>2,646</b>	<b>1,010</b>
(-) Existing Hospital Beds	(4,227)	(2,640)	(2,070)	(821)	(4,069)	(586)
(-) Mater Dei's Expansion Plan	(507)	(367)	(204)	-	-	(24)
(-) Rede D'or's Expansion Plan	(150)	(196)	-	-	-	-
<b>Expected Surplus / Deficit of Beds</b>	<b>2,808</b>	<b>1,574</b>	<b>(91)</b>	<b>253</b>	<b>(1,423)</b>	<b>400</b>

Source: National Registry of Health Facilities (CNES), National Health Agency (ANS) and Equitas Investimentos

<sup>1</sup> We estimate hospital beds demand by 2026 using the following equation:  $e = [(a * b * c) / (d * 365)] * 1,000,000$

Goiânia at a first glance seems to have an oversupply of hospital beds, but after discussing with the company's management and going deeper into each healthcare provider in the region, we concluded that its beds figures are not comparable to the other cities presented above. Goiânia has outstanding healthcare facilities, but almost all of them are focused on a few medical specialties (e.g., neurology, orthopedy, burns, etc), with no reference of general / full service private hospital in the city. Orion, a 220-bed facility acquired by Hospital Israelita Albert Einstein in the beginning of 2021, is the only exception, but and according to our channel checks, it has been facing low volume of patients due to strategic decisions taken by its controller. We will jump into more detail on each microregion in the next section.

In the case of Belém, growing the number of hospital beds seems more challenging due to a decreasing number of healthcare beneficiaries in the microregion and a seemingly adequate supply of hospital beds in the region.

To finish the M&A section, besides the presented acquisitions, Mater Dei also acquired A3Data in 2021, a machine learning and Artificial Intelligence company, which already provided services to the group, to enhance its data capabilities and ability to better understand the population served by Mater Dei, statistically speaking, and to structure new bundled medical procedures in partnership with healthcare plan operators. This trend in the industry, as already discussed, is an effort made by the major hospital providers alongside large health plan payers to conduct healthcare services in Brazil toward a more client centric approach, with better care coordination, reduction of medical costs in the whole chain and ultimately, to be more sustainable and affordable to the population in the long run.

## 3.2. Main Microregions Competitive Environment

Considering all executed M&A deals and its greenfield project, Mater Dei is exposed to 6 different microregions in four states of Brazil. Some of them have unique characteristics and a great growth opportunity to explore, such as Belém and Goiânia. Belo Horizonte is the largest region the group is present in and the acquisitions of Santa Genoveva and Santa Clara, in Uberlândia, reinforce its presence and strong brand equity in the Minas Gerais state. Salvador is a very competitive region, dominated by Rede D'Or, but with a clear demand for more hospital operators from both payors and the medical community, which in our view will be fundamental for the long run sustainability of the healthcare sector in the region.

### BELO HORIZONTE – State of Minas Gerais

The microregion has UNIMED BH as a major healthcare payor, with more than 50% market share in number of health beneficiaries, operating both with proprietary hospitals and an accredited 3rd party network, which does not include Mater Dei for historical reasons. Hapvida and GNDI have been in Belo Horizonte for the past 2 years through the acquisition of healthcare operators and they already have an important presence in the area, including their own hospital facilities that were part of the M&As transactions. The other players in the region are longstanding partners of Mater Dei, representing 20% of the healthcare beneficiaries in Belo Horizonte and are developing new initiatives to increase their market share, supported by Mater Dei, as will be detailed further.

Despite the acquisition of Sulamérica by Rede D'Or, we see limited impact for MATD in Belo Horizonte, since Rede D'Or's hospital is located in a different influence zone from MATD's; additionally, Sulamérica is not a major payor in the city, representing only 9% of MATD's revenues (and 5% of MATD's total revenues). On the other hand, due to Bradesco's higher size and fierce competition with Sulamérica, we envision a possible growing partnership with MATD, since the company will seek a de-risk of its business, which is highly dependent on Rede D'Or in other cities.

Number of Health Beneficiaries - In Thousand	Belo Horizonte Microregion	
	Members	Mkt Share
UNIMED BH	1,085	51.5%
HAPV + GNDI	440	20.9%
Other UNIMEDs	137	6.5%
Bradesco	94	4.5%
Sulamérica	40	1.9%
Amil	36	1.7%
Cassi	17	0.8%
Others	257	12.2%
<b>Total</b>	<b>2,107</b>	<b>100.0%</b>

Private Beds - Including MATD's planned expansions	Belo Horizonte Microregion	
	Beds	Mkt Share
Mater Dei	1,081	22.8%
Unimed	676	14.3%
HAPV + GNDI	627	13.2%
Felício Rocho	340	7.2%
Rede D'or	321	6.8%
Orizontti	252	5.3%
Others	1,437	30.4%
<b>Total</b>	<b>4,734</b>	<b>100.0%</b>

Source: National Health Agency (ANS), National Registry of Health Facilities (CNES) and Equitas Investimentos

In terms of hospital infrastructure, Mater Dei is the leading player, followed by UNIMED, which is its main competitor. Mater Dei possesses strong brand equity in the region and is highly desired by the medical community and population in general, some strengths of which will be discussed in the next section. The "Others" category refers to a pulverized base of mid-sized hospitals, many of them operating as philanthropic or non-for-profit companies.

In the same week of Mater Dei's IPO pricing, Rede D'Or announced the acquisition of Biocor, a hospital player with 321 beds based near Nova Lima, a promising and high-income area in the Metropolitan Region of Belo Horizonte, but almost 10km far away from the Mater Dei units and the healthcare hub in Belo Horizonte. The acquisition was extensively debated at the time, considered by some investors as a major threat to Mater Dei's project. However, Mater Dei's management team shared some relevant information with the market, such as the fact that less than 4% of its patients in a year come from the region Biocor is located in and that around 75% of Biocor revenue comes from Unimed, a payor that Mater Dei bears no relationship with. Then, we consider as a low probability scenario that this move could negatively affect Mater Dei's maturation in Belo Horizonte, but we remain cautious and following all of Rede D'Or's steps in the region, since it announced, some months after the acquisition, the future launching of a Star Unit (Rede D'Or's premium flagship brand) close to Biocor, whose construction has not started yet.

Another relevant move in the hospital space that took place in the region and, as per our analysis, positively affected Mater Dei, was the entrance of GNDI and HAPV in 2020, which acquired Lifecenter and Vera Cruz hospitals, respectively. Both hospitals operated in an open model, serving patients from many healthcare plans in the region, including many of Mater Dei's main payors. As GNDI and HAPV operate in a vertically integrated model, their hospital infrastructure will be geared primarily towards serving their own healthcare plan clients soon, generating an additional patient flow that could be partially captured by Mater Dei.

## UBERLÂNDIA – State of Minas Gerais

Uberlândia has ample presence of Unimed Uberlândia and other regional Unimed as payors in the region, with GNDI and HAPV also operating throughout acquired operations since 2020. Bradesco and Sulamérica also have an important presence in the region, but with room for expansion.

In case of negative impact for Santa Genoveva and Santa Clara originated from Rede D'Or acquisition of Sulamérica, we see a possible offset with an increasing partnership with Bradesco, a larger player in the region.

Number of Health Beneficiaries - In Thousand	Uberlândia Microregion	
	Members	Mkt Share
UNIMED Uberlândia	78	25.8%
HAPV + GNDI	75	24.9%
Other UNIMEDs	44	14.5%
Bradesco	21	6.8%
CNU	18	6.0%
Sulamérica	15	4.9%
UNIMED BH	13	4.2%
Others	39	12.9%
<b>Total</b>	<b>302</b>	<b>100.0%</b>

Private Beds - Including MATD's planned expansions	Uberlândia Microregion	
	Beds	Mkt Share
Mater Dei	377	45.9%
Uberlândia Medical Center	129	15.7%
HAPV + GNDI	93	11.3%
Others	222	27.7%
<b>Total</b>	<b>821</b>	<b>100.0%</b>

Source: National Health Agency (ANS), National Registry of Health Facilities (CNES) and Equitas Investimentos

Santa Genoveva, acquired by Mater Dei in the end of 2021, is the dominant player and reference hospital in the city, with plenty of positive feedbacks from healthcare payors. The city is located in the so-called Triângulo Mineiro region, a hub in the south-west of Minas Gerais, attracting patients from several nearby cities and being an important entry point to Brazil's center-west region, 100km away from Catalão, in the south of the state of Goiás.

In March 2022, Mater Dei acquired Santa Clara Hospital, a full-service operation in Uberlândia that reinforces Mater Dei position in the region, which achieves 46% market share in number of private beds.

## SALVADOR – State of Bahia

In terms of healthcare payors, Salvador has a strong presence of Planserv, a state government-run healthcare plan focused on Bahia's civil servants and their relatives, which accounts for more than one third of the region's healthcare beneficiaries and is known by the private healthcare providers to have low price tables, but a massive volume of patient flow. Nevertheless, since Salvador is one of the largest cities in the country, the major healthcare plan operators are present in the region, many of whom bear a strong relationship with Mater Dei in Belo Horizonte. In the case of HAPV, the second largest operator, as already mentioned, it is a vertically integrated healthcare plan, owning several primary, secondary, and tertiary care facilities to serve its beneficiaries in the area.

As per our channel checks, we could observe that Salvador has been a challenging region for many of the health plan operators, especially for those that do not have a verticalized operation, due to a very concentrated hospital market and an observed much higher average expense per beneficiary than in other regions. The latter can be explained by an allegedly culture of the medical community to prescribe an excessive number of exams and procedures per appointment (much higher than the country's average) and by excessive litigation costs, caused by an abnormal percentage of patients that sue the health plan operators to obtain additional medical coverage, among other reasons.

Regarding Rede D'Or's acquisition of Sulamérica, we see the highest impact occurring in Salvador, since the hospital sector in the city is highly concentrated on Rede D'Or's facilities and Bradesco, Rede D'Or's largest payor, is more than 2x larger than Sulamérica. The impact of the transaction and how Bradesco and other independent payors (i.e., Amil and Cassi) will behave in Salvador will be a good cross-read on the real long-term scenario for the healthcare sector we may see going forward.

Number of Health Beneficiaries - In Thousand	Salvador Microregion	
	Members	Mkt Share
Planserv	545	34.8%
HAPV + GNDI	352	22.5%
Bradesco	147	9.4%
CNU	96	6.1%
Athena	77	4.9%
Sulamérica	71	4.5%
Amil	37	2.3%
Other UNIMEDs	31	2.0%
Cassi	30	1.9%
Others	182	11.6%
<b>Total</b>	<b>1,567</b>	<b>100.0%</b>

Private Beds - Including MATD's planned expansions	Salvador Microregion	
	Beds	Mkt Share
Rede D'or	833	27.7%
Mater Dei	367	12.2%
Dasa	278	9.2%
Athena	233	7.7%
HAPV + GNDI	176	5.9%
Unimeds	68	2.3%
Hospital Português	484	16.1%
Others	568	18.9%
<b>Total</b>	<b>3,007</b>	<b>100.0%</b>

Source: National Health Agency (ANS), National Registry of Health Facilities (CNES) and Equitas Investimentos

In terms of hospital operators, as we can see in the table above, on the right, Rede D'Or leads the number of beds, owning 3 hospitals, namely Cardiopulmonar, São Rafael and Hospital Aliança, the latter being considered a reference in terms of quality and brand equity alongside Cardiopulmonar. Due to its strong presence in the city, it is unfeasible for any health plan operator looking to succeed in the area to not partner with at least one of the 3 hospitals, and consequently, having a significant part of its revenue at Rede D'Or's hands.

Another relevant hospital player in the region is Dasa, that acquired Hospital da Bahia in 2021, followed by the acquisition of Clínica Amo, an independent oncology treatment group. Hospital da Bahia is a very traditional player in the region, but that has not been able to attract the most talented physicians and lacks the ability to work together with the health plan operator in the control of medical expenses.

Mater Dei's greenfield construction in Salvador started 3 years ago, when Rede D'Or had just one hospital in the city (São Rafael) and Dasa had not acquired Hospital da Bahia, a considerably different scenario when compared to today's. Even with the change in Salvador's competitive landscape during the past years, after studying each player and holding a series of meetings with market specialists and physicians, we noticed key factors that reinforce the need for an additional quality hospital player in the city, as follows:

- As mentioned above, we see a saturated market from the healthcare plan standpoint, with above average medical costs, due to a characteristic of the region, and great revenue concentration with Rede D'Or having a significant bargain power. Moreover, other players in the region such as Hospital da Bahia (Dasa) and Hospital Português, have a sizable infrastructure, but lack the capability to focus on the patient and the treatment outcome, not representing a cost-effective option in the city. Probably for these reasons, more than 10 healthcare operators have signed a letter of intent with Mater Dei to evaluate a possible accreditation of its hospital in Salvador.
- We obtained feedbacks that after Rede D'Or consolidation in the region that the lives of physicians have significantly changed, with the implementation of very aggressive targets of frequency (number of appointments, tests, and so on) and a culture of pressure that had never been practiced in the region, with the professional dismissal in case of sequential non-achievements of targets. Moreover, the adoption of very strict medical protocols focused on cost cuts only, reducing the physician's flexibility and research capability, together with the establishment of exclusivity agreements for many doctors who previously used to work in many institutions, are some reasons for dissatisfaction of the medical community in Salvador.

In order to illustrate this last point, Mater Dei's relationships with physicians in Belo Horizonte work through a cooperative model, in which the physicians join an independent cooperative that negotiates price tables and conditions with many hospitals in the city, have a team to do the back-office job and control the physicians accounts receivable from each institution. This model is quite appreciated by the medical community, who work as independent professionals and can focus on their core activities. Mater Dei will extend this work model to Salvador, which may be an additional attraction factor and distinction to retain a quality medical team.



Despite the inducing environment, we still believe Mater Dei will face many challenges in the maturation of its new venture, with its competitors making movements to prevent its ramp-up. One factor that illustrates it was the announcement of a 150-bed expansion of Hospital Aliança in June 2021 that, on the one hand, shows that the demand for hospital services is growing in the region but brings additional risk to Mater Dei's project.

One recent event that we see as positive to Mater Dei's greenfield in Salvador is its recently announced acquisition of EMEC, based in Feira de Santana. It was disclosed that many of EMEC's physicians work both in Feira de Santana and Salvador and could help in directing patient flow to Salvador due to their current relationship in the city and to the fact that EMEC already run at more than 85% occupancy rate and constantly directs patients to be treated in other hospitals in Salvador.

## FEIRA DE SANTANA – State of Bahia

Feira de Santana, a town located just about 100 km away from Salvador, also presents an important presence of a state government-run healthcare plan, as per our estimate, but with presence of many other health operators. EMEC, the hospital acquired by Mater Dei, is accredited by all relevant payors in the city and will be important to share know-how and best practices in the region that could be applied to Salvador's greenfield and direct patient flow to the new unit.

Number of Health Beneficiaries - In Thousand	Feira de Santana Microregion	
	Members	Mkt Share
Public Servants	107	69.5%
CNU	43	28.2%
União Médica	35	23.1%
HAPV + GNDI	27	17.7%
Bradesco	13	8.7%
Sulamérica	6	4.1%
Other UNIMEDs	1	0.9%
Others	27	17.3%
<b>Total</b>	<b>153</b>	<b>100.0%</b>

Private Beds - Including MATD's planned expansions	Feira de Santana Microregion	
	Beds	Mkt Share
Mater Dei	150	24.6%
Rede D'or	109	17.9%
Unimeds	53	8.7%
HAPV + GNDI	50	8.2%
Others	248	40.7%
<b>Total</b>	<b>610</b>	<b>100.0%</b>

Source: National Health Agency (ANS), National Registry of Health Facilities (CNES) and Equitas Investimentos

EMEC is the main full-service player in Feira de Santana, where Rede D'Or is already present and whose hospital is considered almost a greenfield project, since it acquired, in 2021, Hospital Santa Emilia, a maternity hospital that still needs the addition of many other specialties to become a full-service platform in the region.

Rede D'Or acquisition of Sulamérica may add limited risk to the Feira de Santana dynamics, due to Sulamérica and Bradesco's low relevance in terms of beneficiaries, not mentioning the immaterial presence of Rede D'Or in the city. Nevertheless, the larger size of Bradesco compared to Sulamérica may be a good protection to Mater Dei.

## BELÉM – State of Pará

The region is concentrated in terms of healthcare payors, with Unimed and IASEP accounting for +55% of beneficiaries and HAPV, operating in a vertically integrated model, accounting for an additional 22.6% of health beneficiaries.

Number of Health Beneficiaries - In Thousand	Belém Microregion	
	Members	Mkt Share
Unimed Belém	240	32.8%
IASEP	180	24.5%
HAPV + GNDI	168	22.8%
Bradesco	35	4.7%
Other UNIMEDs	20	2.7%
CNU	19	2.6%
Sulamérica	6	0.9%
Cassi	6	0.8%
Others	60	8.1%
<b>Total</b>	<b>734</b>	<b>100.0%</b>

Private Beds - Including MATD's planned expansions	Belém Microregion	
	Beds	Mkt Share
Mater Dei	592	26.0%
Hospital HSM	281	12.4%
Instituto da Mulher	162	7.1%
HAPV + GNDI	111	4.9%
Unimeds	105	4.6%
Others	1.023	45.0%
<b>Total</b>	<b>2,274</b>	<b>100.0%</b>

Source: National Health Agency (ANS), National Registry of Health Facilities (CNES) and Equitas Investimentos

Porto Dias is the leader and a consolidated hospital player in Belém, already running at a +30% EBITDA margin, with elevated occupation rate and significant expansion projects to be delivered in the next months. Despite being a traditional player in the region, the hospital has never been accredited with Bradesco and have historically received low patient flow from Sulamérica, Cassi and Caixa, obtaining its revenue mainly from the major payors in the city. However, those healthcare payors are very relevant to Mater Dei in Belo Horizonte and the accreditation between Bradesco and Porto Dias is in final discussion, as well as conversations with the other national payors to increase the partnership in the region. With Rede D'Or's acquisition of Sulamérica, we understand the partnership with Porto Dias may become even more relevant for Bradesco to grow in the region.

The other hospital operators in the region such as HSM and Instituto da Mulher present good quality level, but do not represent a threat to Porto Dias, being family-owned companies with a very conservative management approach.

The acquisition of Porto Dias gives Mater Dei an important gateway to expand to other cities in the state of Pará, through Porto Dias's strong brand in the state and taking advantage of the current condition of many large cities such as Ananindeua (540k inhabitants) and Santarém (308k inhabitants) that are extremely underserved in terms of healthcare providers and have low penetration of private healthcare plans.

## GOIÂNIA – State of Goiás

We have explored the current scenario in Goiânia in the last section but bring additional data below. As it has been mentioned earlier, Goiânia is a market yet to be explored by the large national payors such as Bradesco, Sulamérica and Amil, which have an insignificant presence, while Unimed, Hapvida and Imas (a state government-run healthcare plan focused on Goiás's civil servants and their relatives) account for almost 80% of all healthcare beneficiaries in the region.

Goiânia is an attractive market in terms of size and average prices for healthcare services, but the national payors face difficulty to expand in the region due to the hospital market fragmentation and the lack of full-service hospitals in the city, except Einstein, that acquired Orion in 2020, and Hospital Premium, acquired by Mater Dei. As the city is dominated by countless regional hospital facilities focused on specific medical treatments, those national payors face difficulty to form a strong and reliable network of accredited hospitals and end up not putting effort in sales of new plans in the region, which we believe will change significantly after Mater Dei takes over Hospital Premium's operations.

Rede D'Or's acquisition of Sulamérica, as described for other regions, may pose limited downside risk for Mater Dei's expansion in Goiânia, since Sulamérica has showed interest to expand in the region and has no options for partnership other than Mater Dei in the area. Moreover, Bradesco has a higher presence in the city and may become an even more important partner for Mater Dei.

Number of Health Beneficiaries - In Thousand	Goiânia Microregion	
	Members	Mkt Share
UNIMED Goiânia	296	37.8%
HAPV + GNDI	243	31.1%
IMAS	81	10.4%
Bradesco	31	4.0%
CNU	28	3.6%
Other UNIMEDs	9	1.1%
Sulamérica	7	0.9%
Amil	5	0.6%
UNIMED Anápolis	1	0.2%
Others	80	10.2%
<b>Total</b>	<b>782</b>	<b>100.0%</b>

Private Beds - Including MATD's planned expansions	Goiânia Microregion	
	Beds	Mkt Share
HAPV + GNDI	288	7.1%
Einstein	180	4.4%
Mater Dei	156	3.8%
Kora	88	2.2%
Others	3,357	82.5%
<b>Total</b>	<b>4,069</b>	<b>100.0%</b>

Source: National Health Agency (ANS), National Registry of Health Facilities (CNES) and Equitas Investimentos

The main hospital players in Uberlândia, excluding HAPV and Mater Dei, are Einstein, which acquired Orion in 2020, and Kora, which acquired Instituto de Neurologia de Goiânia in 2021, a specialized hospital focused on neurology procedures. As per our channel checks, Einstein is having trouble to break-even its operation, since it formed the core of its medical team with professionals coming from São Paulo, but in a city with much lower average medical prices. In Kora's case, it has acquired a well-recognized player in the city but is planning to turn it into a full-service hospital in the future, which may help the market to go forward.

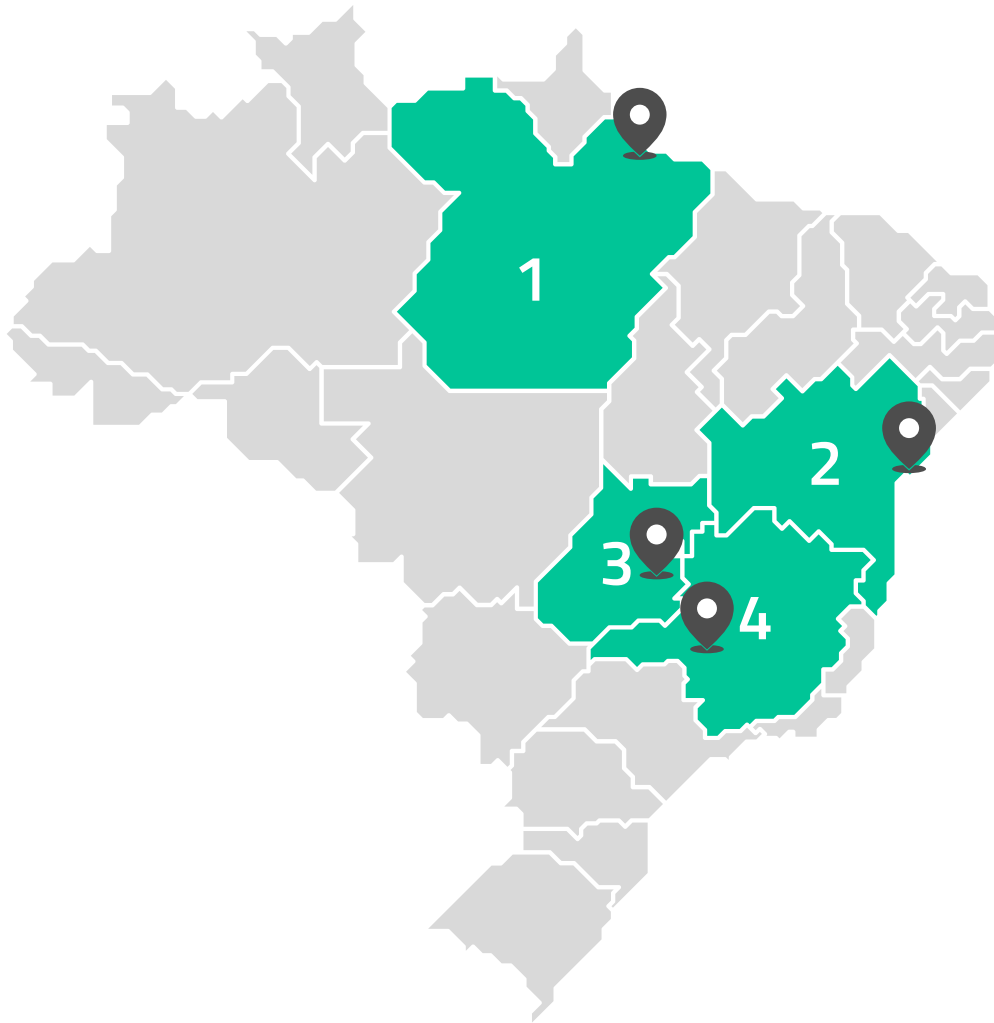
## 3.3. Leadership

The company's executive team is found below, composed by a seasoned and complementary group of professionals.

Executive	Position	Years of Experience	Years at Mater Dei	Experience
José Salvador Silva	Chairman & Founder	60	40	UFMG, FDC FUNDAÇÃO DOM CABRAL, AMMG
Henrique Salvador Silva	CEO	38	38	UFMG, Sociedade Brasileira de Mastologia, FDC FUNDAÇÃO DOM CABRAL, anahp
Maria Norma Salvador	Commercial VP	36	36	INSEAD, anahp, FDC FUNDAÇÃO DOM CABRAL
Maria Salvador Géio	Assistance VP	34	34	ST GEORGE'S HOSPITAL, INSEAD, anahp
José Henrique Salvador	Chief Operating Officer	14	10	ALBERT EINSTEIN, FDC FUNDAÇÃO DOM CABRAL, dars, INSEAD, SÍRIO-LIBANES
Felipe Salvador Ligório	Chief Medical Officer	14	10	Columbia Business School, HOSPITAL MÃE DE DEUS, unibh, London Business School
Renata Salvador Grande	Chief Commercial and Marketing Officer	14	10	HCor, ICHOM, HULT, MIT
Rafael Cardoso Cordeiro	CFO and IRO	19	2	oi, FDC FUNDAÇÃO DOM CABRAL, Urba, CFMIG, S
Fábio Mascarenhas	Financial Planning Director	17	17	FDC FUNDAÇÃO DOM CABRAL, Ibmecc

Source: Company information and Equitas Investimentos

Besides the executive team, the company has attracted several highly skilled executives to lead and put dedicated focus on each of its new hubs, as detailed in the image below.



### 1 North Operation

The region is led by Antonio Dias (Medical Director) and Diogo Dias (Managing Director), Porto Dias's founder family.

Thiago Custódio, former executive of HIG portfolio's investee, was hired to act as CFO to the north operation.

### 3 Goiânia Operation

Daniel Coudry has recently joined Mater Dei to lead its center-west hub, after occupying the role of CEO at Amil and Sanitas Group.

Coudry has also been an executive director at Dasa and ANAHP and has taken a specialization course at The Johns Hopkins University.

### 2 Salvador Operation

The Bahia hub is run by Marcelo Sonneborn, former Vice President at Hospital Mãe de Deus for more than 10 years. Marcelo has joined Mater Dei team in 2018 to develop the project from its inception.

### 4 Uberlândia Operation

Gustavo Paiva, that has been in Mater Dei since 2015, will manage the Uberlândia operation. Gustavo has managed several areas at Mater Dei (maintenance, engineering, central shared services, facilities) and knows deeply its practices and culture. Before joining Mater Dei, Gustavo worked for 8 years at Gerdau.

Source: Company information and Equitas Investimentos

# 3.4. Environmental, Social and Corporate Governance (ESG) Evaluation

The healthcare sector, as an essential service, is committed to providing quality and safety care for its final beneficiaries. Therefore, ESG concepts must be inherent to the planning of companies in the sector.

Mater Dei Hospitals have been consistently evolving when it comes to sustainability. Since 2005, the company has been committed to environmental practices, aiming at conscious consumption, and avoiding waste of water and electricity. For monitoring the data, indicators per patient-day were developed and are monthly presented to the board.

In 2018 and 2019, the company engaged in several social projects focused on reducing inequality through professional training both to prepare the community for the labor market as well to develop its employees. Mater Dei has annual campaigns against cancer, for men and women, and has already benefited more than 1,450 people since the beginning of the program. Also, in 2019 the company released its first sustainability report which describes the pillars and projects in the ESG theme. In 2020, there was an evolution to the Global Reporting Initiative – GRI Standards – and determination of the materiality matrix based on the health sector.

The sustainability report for 2021 has not yet been released. However, an alignment with the stakeholders of the topics in the materiality matrix and advancements regarding indicators and the overall sustainable outcomes is expected. In addition, the company is expected to advance in terms of Data Protection requirements such as Data Protection Policy and cybersecurity requirements, which was part of the goals described in the last report.

To delve further into the matter, the company was evaluated according to an ESG checklist developed internally by Equitas. The first step of the assessment consists on identifying which aspect is most critical for the operation. Governance was defined as the most relevant aspect considering the sector of the company.

## ESG Aspects

ESG Rating	Evaluated Metric	Checklist
<i>Environmental</i>	Environmental Impact	-
<i>Social</i>	Social Impact	-
<i>Governance</i>	Governance Impact	Ok

Source: Equitas Investimentos

Equitas' ESG checklist consists of 28 aspects evaluated, of which the company was able to meet or achieve "satisfactory – very good" levels in 19 of them. Considering the advances within the sustainable theme, we hope that the 2021 base report will reflect this evolution. In the social aspect and mainly related to Privacy, Data Protection and Cybersecurity, improvements are expected in the website pages, additional detail on the Privacy Policy and adequacy to the Data Protection regulation. As it has been a publicly traded company since mid-2021 with advances on the sustainable subject, we consider the ESG performance as "Regular", with high potential for improvement in the short/medium term.

## ESG Checklist

ESG Rating	Evaluated Metric	Checklist
Overall Assessment	Disclosure of Commitment to ESG	-
Overall Assessment	Existence of a Sustainability Report	Ok
Overall Assessment	Third Party Review - Sustainability Report	Ok
Overall Assessment	Sustainability Report is Relevant	Ok
Overall Assessment	Sustainability Policy	-
Overall Assessment	SDG (Sustainable Development Goals)	Ok
Overall Assessment	GRI (Global Reporting Initiative)	Ok
Overall Assessment	SASB (Sustainability Accounting Standards Board)	-
Overall Assessment	Materiality Assessment	Ok
Overall Assessment	Sustainability Goals	-
Overall Assessment	ESG Indexes	-
Environmental	Energy Efficiency Plan	Ok
Environmental	CO2 Emission Reduction Plan	-
Environmental	Baseline Scenario for Climate Change	-
Environmental	Waste Management Plan	Ok
Environmental	Water Use/Reuse Plan	Ok
Social	Social Projects	Ok
Social	Rating on Consumer Evaluation Plataforms	Ok
Social	Employee Support - Training	Ok
Social	Website - Accessibility and Data Privacy Policy	Not Ok
Social	Website - Purpose of Use and Acceptance of Cookies	Ok
Social	Diversity Plan	-
Social	Negative Media	Ok
Governance	Availability of the Ethics Code	Ok
Governance	Governance Level	Novo Mercado
Governance	Board of Directors - Term of Office Definition	Ok
Governance	Investor Relations - Website Usability and Quality/Transparency of the shared information	Ok
Governance	Shareholder Meetings Agenda	Ok

Source: Equitas Investimentos

# 4. Why We Invest in Mater Dei

Mater Dei has a recognizable client centric approach and focus on quality of services, being a reference hospital and top-of-mind brand in the state of Minas Gerais in the past decades, according to its clients, payors, physicians and even competitors. Based on strict medical protocols and an efficient cost control view, the group has become a reference in terms of medical outcome and client satisfaction, and at the same time, delivering the higher profitability margins in the sector.

## 4.1. Competitive Advantages

During our due diligence process that started before Mater Dei went public, we were able to identify, and validate, a series of differentials and competitive advantages that have been built over the years by the company's shareholders and management team that contributed to the construction of its top-of-mind brand before its clients, recognition within the medical community, attraction of major healthcare payors to form operating partnerships and elevated profitability levels.

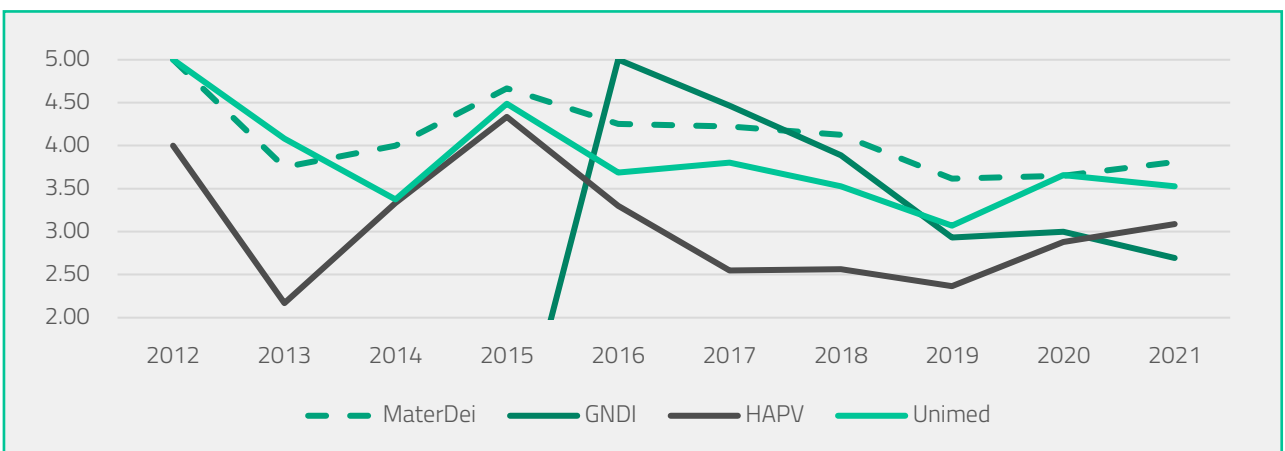
- **Top of mind healthcare provider for clients**

Mater Dei is the most desired hospital and care provider institution in the region of Belo Horizonte and available only as an accredited hospital for high-ticket health plans in the city, although there are recent initiatives (to be described further) to enable new cheaper plans to also offer the hospital in a restricted network.

The company has disclosed that in 2020, 33% of its patients served in Belo Horizonte and 28% of its clients served in Betim came from other cities. Another interesting data point is that around 65% of the members of the 5 largest healthcare plan operators in the metropolitan region of Belo Horizonte go to Mater Dei at least once a year. This last figure excludes members from Unimed BH, the largest healthcare plan in the region whom Mater Dei has no relationship.

As an attempt to measure the patient's feedback to Mater Dei services and compare it with its competitors, we built an algorithm that gathered more than 3,600 individual evaluations for medical facilities in Minas Gerais on Google maps, ranked from 1 to 5 stars. We show below the evolution of the average score for Mater Dei, Unimed BH, GNDI (mainly Medisanitas and Santa Monica hospitals) and HAPV (Vera Cruz Hospital). Just as a reference, Hospital Israelita Albert Einstein and Sírío Libanes' scores are around 4.

### Google Maps Average Score Evolution



Source: Equitas and Google Maps

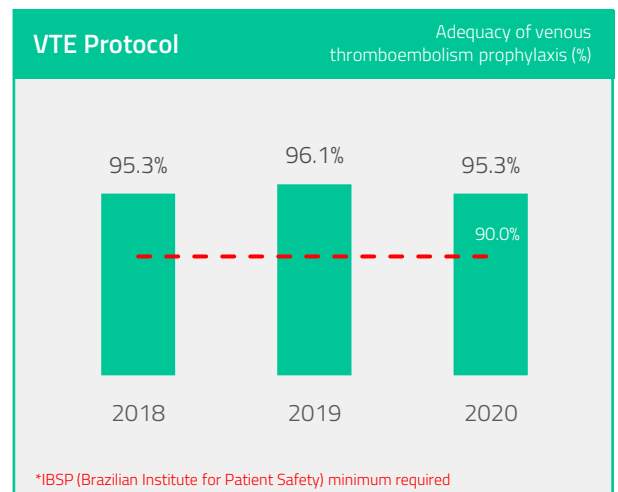
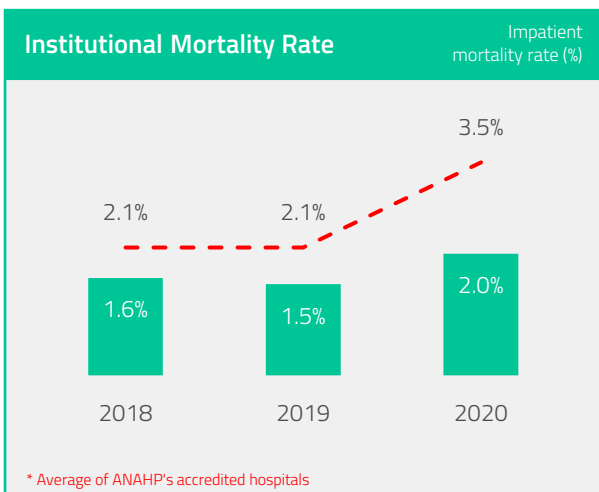
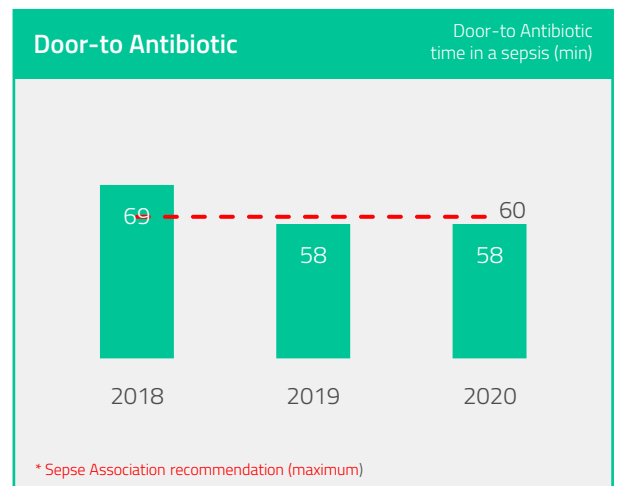
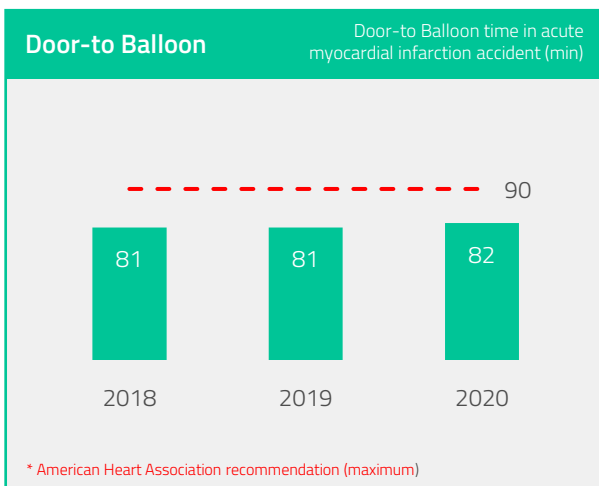
## • Quality in Medical Care and Patient Service

A main pillar of the company's culture since its foundation by Dr. José Henrique Salvador is to be a client centric medical provider and offer best-in-class infrastructure to attract the most talented medical team in the region. One important evidence that the company is engaged in providing top-notch services is the fact that Mater Dei has the JCI (Joint Commission International) accreditation in all its 3 hospitals in Minas Gerais and in Porto Dias, with Premium, EMEC, Santa Clara and Santa Genoveva to be accredited after their integration to the group. Also, Mater Dei was the first hospital outside the United States to obtain the Niaho (National Integrated Accreditation for Healthcare Organizations) accreditation.

JCI is a well-recognized global medical accreditation that certifies that the company has undergone a rigorous evaluation process and met a robust series of qualifications in patient safety and quality of care. In Brazil, even the most prestigious hospital groups do not have all their operations accredited, such as Hospital Israelita Albert Einstein (1 accredited facility out of 2 general hospitals), Hospital Sírio Libanês (1 accredited facility out of 2 general hospitals) and Rede D'Or (seven accredited facility out of +60 general hospitals).

Moreover, during its IPO road show, Mater Dei shared important medical KPIs illustrating how it operates above the sector average, as illustrated below, in terms of medical excellence, with below average door-to-balloon time in acute myocardial infraction accident, door-to-antibiotic time in a sepsis and institutional mortality rate, for instance. As it will be described in detail, many of our channel checks reinforced this perception of excellence by many participants in the healthcare chain.

## Clinical and Medical KPIs



Source: Equitas and Mater Dei information



• **Medical Protocols, Continuous Improvement Program and Cost Control**

In our view, this topic illustrates Mater Dei’s main competitive advantage, which has been investing over the past decades in tools to better understand (quantitatively speaking), control and optimize the cost structure and medical outcome of its operations. Mater Dei has presented several of its projects at CONAHP (Private Hospitals National Congress), and we were able to look deeper into many of them, as described below, in order to present how the company has been building its excellence approach over the years.

| Since 2006, Mater Dei has created a group of leading physicians to participate in its annual strategic planning process, alongside the company’s management and shareholders. One significant step of this process has been the alignment of the medical team’s targets to the whole company’s target and to the creation of objective individual targets linked to the assistance performance (infection rate, mortality rate, etc), adherence to processes (non-compliance records) and client satisfaction. After 4 years of implementation, the company observed the following evolution:

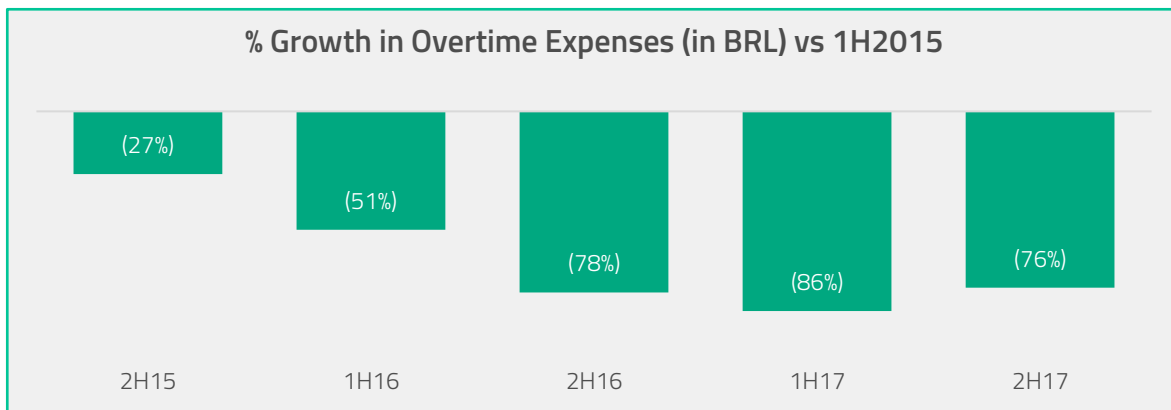
Parameter	2006	2010
Number of medical teams involved in the process	12	22
Number of physicians individually assessed	0	701 (responsible for 94% of patient treatment)
Client satisfaction in the emergency room	60%	79%
Discharge in up to 9 hours	36%	64%

*Source: “How Mater Dei management has been contributing to the development of hospital and medical science”. Compilation of Mater Dei’s studies presented at CONAHP (Private Hospitals National Congress) events from 2011 to 2018*

| In 2010 Mater Dei adopted a new medical KPI to evaluate the consistency of physicians’ diagnostic hypotheses for each patient to the actual diagnostic observed during the inpatient period. After some years of implementation of this KPI, the group saw significant improvement, with diagnostic assertiveness rate evolving from 91.8% in 2010 to 95.3% in 2013. This tool is highly used nowadays to make sure the highest quality standard is met and to evaluate each physician individually.

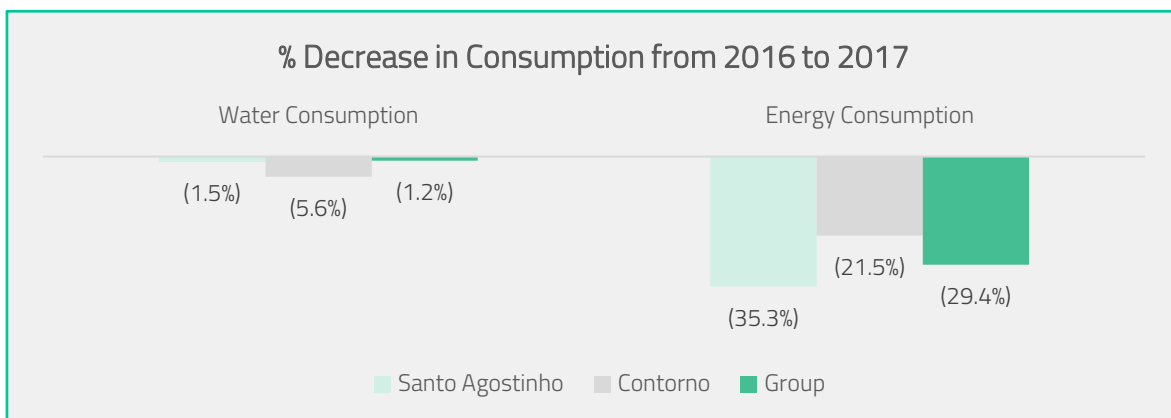
| Development of the Institutional Training Center (CFI) for nurses aiming to increase the client satisfaction and reduce the turnover and absenteeism rates. The program, created in 2013 and applied since then, comprises the training and professional follow-up of each nurse to align them to the group’s culture, make performance assessment and prepare them to be eligible to be a full-time employer at Mater Dei. After the first 8 months of implementation, significant improvements in the main KPIs were noticed, such as the increase of “Excellent” assessments for nurse services in 5.19% (average score of 81%) and the 30% reduction in nurse turnover. This program is currently an important pillar of Mater Dei to convey its excellence approach to the operating team in all its units.

| In 2015 after the launching of a new unit in Belo Horizonte, Mater Dei created a productivity committee, focusing on achieving a better control and optimization of its operating team in real time, to quickly adequate the hospital structure to the seasonal demand of hospital services during the year and seeing its hospital units as a group. A management system was created to track the treatment demand in each hospital in real time, assisting in the hiring process, better employee allocation in each hospital and the possibility of employee relocation from one unit to another. The impact has been quite significant, measured in terms of total personnel expenses and especially overtime expenses, as depicted below. Mater Dei updated the result of this study and presented at CONAHP in 2018, being awarded by its outstanding work and recognized as one of the highlights of the event.



Source: "How Mater Dei management has been contributing to the development of hospital and medical science". Compilation of Mater Dei's studies presented at CONAHP (Private Hospitals National Congress) events from 2011 to 2018.

In 2017 Mater Dei developed a new project to optimize the use of energy and water in its operations, studying the best working period for the central air conditioning systems, substituting equipment with higher consumption rate for more efficient models, setting up regenerative drive technology to substantially improve the energy efficiency of the elevators system, setting up motion sensors to better adapt light intensity in several areas of the hospital, installing sensor faucets, and many other initiatives. The project results have been extremely significant, as shown below.



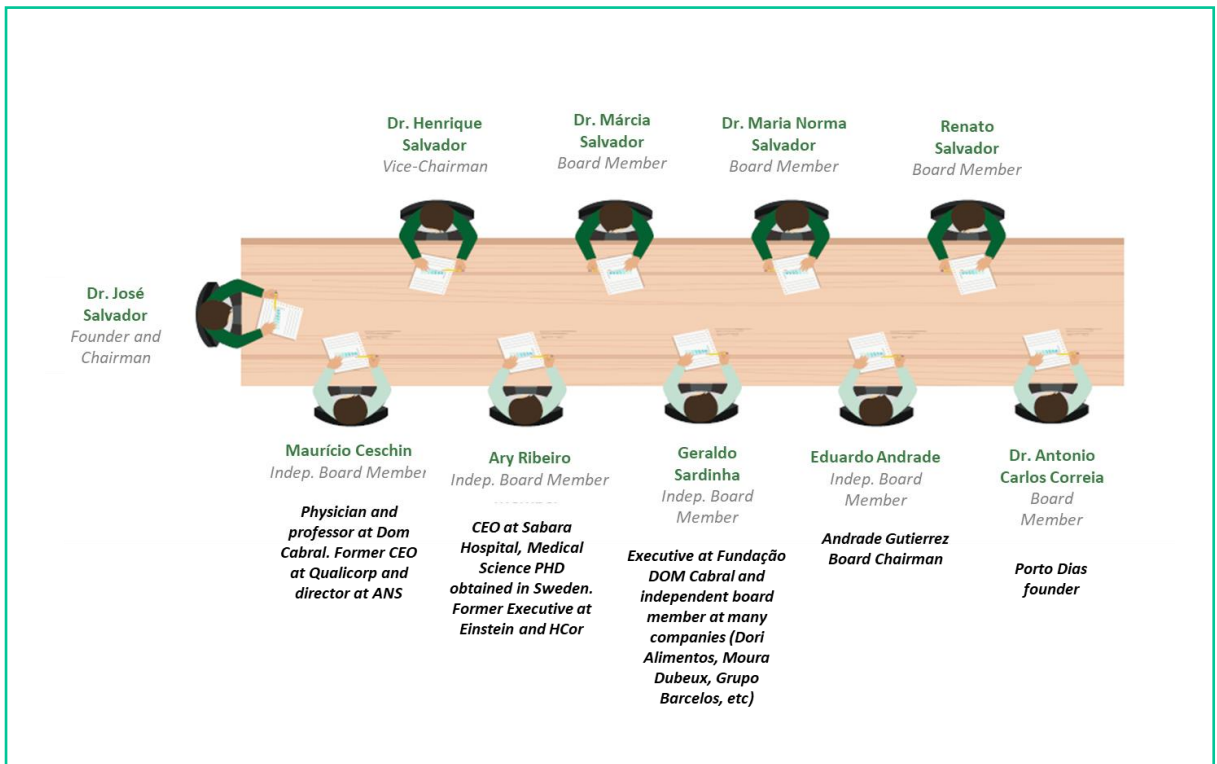
Source: "How Mater Dei management has been contributing to the development of hospital and medical science". Compilation of Mater Dei's studies presented at CONAHP (Private Hospitals National Congress) events from 2011 to 2018

There are also numerous other projects the group has implemented and recorded the results in the past years, many of which are connected to very specific medical protocols for certain pathologies or situations, to optimize the clinical outcome and reduce the average patient stay in the hospital facilities, which benefits both Mater Dei, able to have a better utilization of its beds and the payor, with reduced medical expenses.

#### • Culture and Long-term View – A Legacy from the Salvador Family

The Salvador family is quite respected in the medical community and many of the family members obtained a medical degree from top universities following Dr. José Henrique Salvador's path. His son, Dr. Henrique Salvador, is currently Mater Dei's CEO and a former president of the National Association of Private Hospitals (ANAHP), which gave the family and Mater Dei even more visibility in the country.

Despite being a family-owned business, with a strong culture widespread throughout the entire organization, Mater Dei leaders have had the view to professionalize the company and prepare it to a second phase of growth, by institutionalizing its medical processes, structuring a strong corporate governance (supported by Fundação Dom Cabral, a specialized consulting firm), and strengthening its management team. Below we show Mater Dei's current board of director's structure.



Source: Company's information

The presence of members of the Salvador family acting as managers in the company is a constant push-back from institutional investors, that fear a possible conflict in the recruitment process, with relatives being favored over more seasoned professionals to hold senior positions in the group. We do not have this concern, since one of the steps of Mater Dei's professionalization process has been to develop very strict rules to allow family members to join the management team. Below we list some of them:

- | Just one member per family branch can join the management team if there is an available position.
- | Before working for Mater Dei, the family member must have worked in another large size (+BRL 1 billion in annual revenues) healthcare institution in Brazil or abroad.
- | The family member must have an international specialization or MBA degree from a top university.

In order to picture how those rules are being strictly followed, José Henrique Salvador Dias, grandson of Dr. José Henrique Salvador and COO at Mater Dei, has an MBA degree from Columbia Business School and has worked at Hospital Israelita Albert Einstein, one of the most renowned healthcare institutions in the country. Felipe Salvador Ligorio is another example, who is also one of Dr. José Henrique Salvador's grandson and Mater Dei's Chief Medical Director. He has an MBA degree from the London Business School and has worked for Mãe de Deus Hospital, another relevant hospital group in Brazil.

To finalize this subject, it is worth mentioning that Mater Dei is the only relevant business the family controls and represents the only paid professional activity of each member of the management team. The family has been intensively investing in the business over the past decades, with an extremely long-term growth view and we are confident that they will continue doing so and deploying capital in a responsible and disciplined way going forward.

#### • Excellent Relationship with Payors

Below we present a summarized picture of the main healthcare operators in each of Mater Dei's locations, which have different dynamics depending on each region. In Belo Horizonte, Mater Dei does not serve Unimed BH's clients, or HAPV and GNDI's clients, since HAPV and GNDI are vertically integrated operators,

with their own hospital facilities. In all other regions, the hospitals acquired by Mater Dei already had good relationships with the local Unimed operators, whose contracts will be maintained and represent a good way to start benchmarking, for a possible future conversation with Unimed BH.

Bradesco, Sulamérica, Amil and Cassi are examples of nationwide health plans with whom Mater Dei has long standing commercial relationships in Belo Horizonte and represent an important commercial synergy for the 5 acquisitions made by the company and to support the greenfield project in Salvador. In the case of Porto Dias, for instance, it has never been accredited by Bradesco in Belém, an important operator in the region with whom Mater Dei is already under negotiations to form a partnership, increasing patient flow to the hospital.

Those strong relationships with payors also bring an important benefit to Mater Dei, such as the transparency to discuss other prospective regions where payors are willing to expand their operations or even want to start-up a new venture. For these expansion projects to materialize, payors need a flagship hospital to be accredited in the region and support the attraction of new clients to the healthcare plan providers. Three important milestones in that sense are partnerships recently announced by Mater Dei, as detailed in the table below.

## New Products Launched in Belo Horizonte with Mater Dei as the Flagship Hospital



New initiative of Sulamérica to tackle the mid income population as a new growth vertical for the company, which has historically been operating in the higher income niche and facing decreasing growth rates. Sulamérica selected Mater Dei as its flagship hospital in Belo Horizonte, in a product with a restricted healthcare providers network and a payment structured based on standardized bundled services and inpatient global period, enabling a better cost control and a sustainable product with a lower average price in the region. Two of Mater Dei's differentials that attracted Sulamérica to form this exclusive partnership were its top-of-mind brand in the region and its data capability (including A3Data services), allowing both parties to structure a product based on a robust statistical foundation.



Cassi is a national healthcare plan that serves Branco do Brasil's (a government-controlled publicly traded company and one of the largest banks in the country) employees, former employees, and relatives until the 4th degree. In 2022 Cassi launched its first regional health plan with a restricted health providers network, choosing Belo Horizonte as the first location for this product. Cassi chose Mater Dei to be its flagship hospital in the region due to the same reasons mentioned for Sulamérica.



Alice is a Brazilian healthcare startup that raised USD 127 million in its series C in Dec 2021, led by Softbank. The company business model comprises the offering of quality and affordable healthcare plans in Brazil, using technology to do "coordinated care".

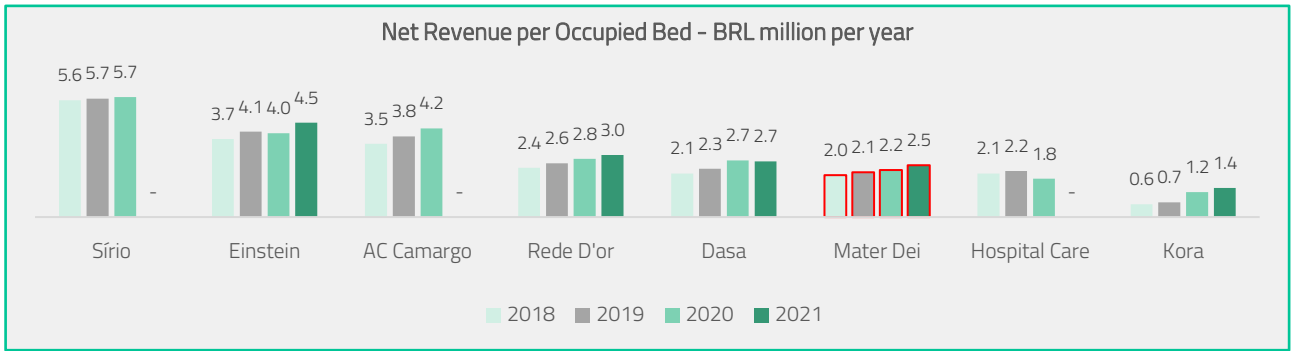
Client data gathered through its app its integrated with operations of hospitals, doctors, and other providers in order to optimize the system medical expenses and reduce the existing healthcare access inequality in the country.

Mater Dei has been selected as its main partner in Belo Horizonte in a recently launched product.

Source: Equitas Investimentos and Company's information

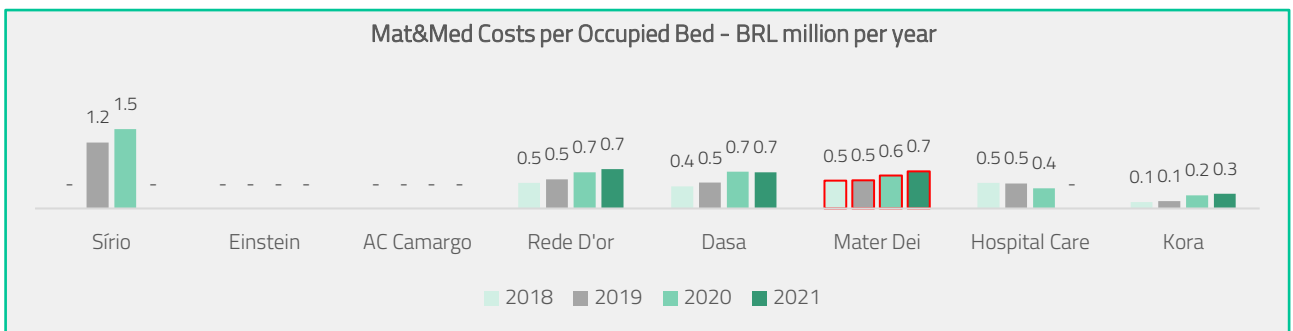
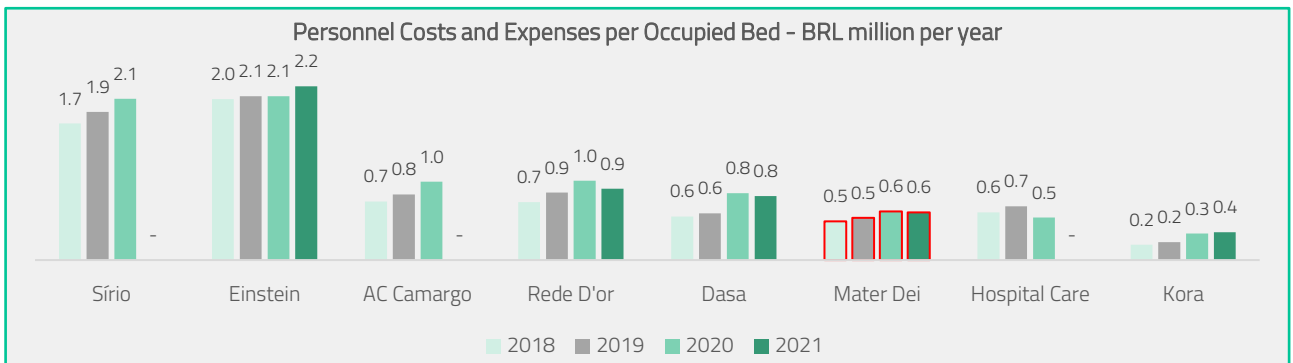
# 4.2. Financial and Operational KPIs

Mater Dei is the most profitable hospital group in the country with the highest EBITDA margin peers with disclosed financial information. An important side of this superlative is that despite having high complexity hospital facilities, Belo Horizonte is a region with lower medical fees than São Paulo, Rio de Janeiro and Brasilia, for instance, locations in which Sírio Libanes, Einstein, AC Camargo, Rede D'Or and Dasa are strongly present. We can see the hospitals footprint impact on their average revenue per occupied bed in the graph below.



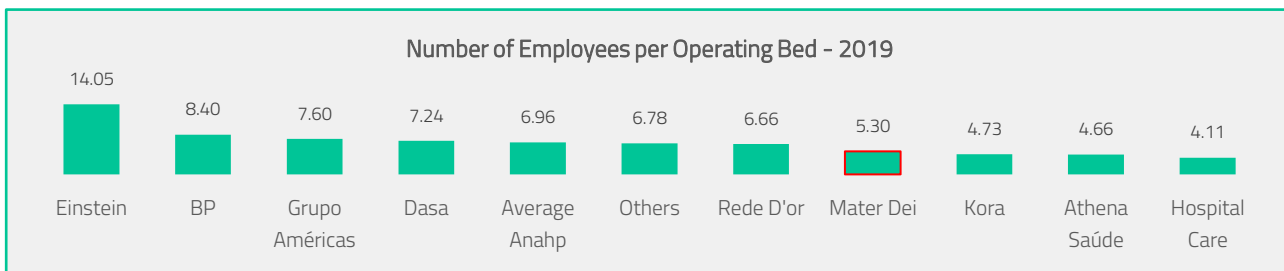
Source: Equitas and company's public financial statements. 2021 figures are not available for all the companies

Some explanations to its high profitability are its disciplined cost control, well-defined medical protocols and a leadership aligned to the long-run growth of the business. As we can see below, Mated Dei's advantage in terms of cost control is noticeable, showing its ability to maintain a lower personnel expenditure per occupied bed comparing to its peers and to keep a Mat&Med cost in a similar level as Rede D'Or's, that has a much larger bargain power in the purchases of medical material and medicines due to its sizable operation of +60 hospitals. One important factor that Mater Dei's management constantly highlights is its velocity to adequate the hospital capacity to different demand levels during the year, opening and closing operating beds to adapt the hospital (an open bed, even if not occupied, requires an available team of nurses, residents, pharmacists, and other fixed costs that are borne by the hospital).



Source: Equitas and company's public financial statements. 2021 figures are not available for all the companies

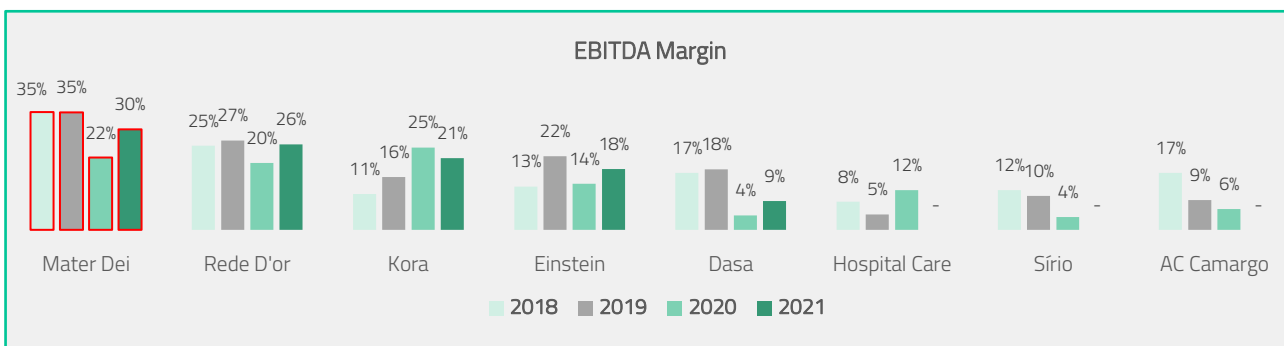
In relation to its lower personnel costs and expenses relative to peers, one could easily argue that the average salaries for medical professionals in Belo Horizonte are lower than in other locations such as São Paulo and Rio de Janeiro. However, as we present below, Mater Dei indeed runs its operations with fewer employees per operating beds, and as per all other evidence brought in this report, keeping an outstanding level of medical services and client satisfaction.



Source: Equitas and The National Association of Private Hospitals (ANAHP)

Methodology comment: The analysis includes data for some hospitals of each group that were available at ANAHP. In the case of Mater Dei, the figures represent an average of its 2 hospitals in the city of Belo Horizonte, Porto Dias, Santa Clara and Santa Genoveva operations. For Rede D'or, we had access to information for 20 of its main hospitals.

As a result, Mater Dei runs its operations at above-average EBITDA margins, as it can be seen below, with 2021 already showing an important recovery after COVID-19 impact in 2020..



Source: Equitas and company's public financial statements. 2021 figures are not available for all the companies

Another indicator that we analyze for the healthcare providers space is the Return on Invested Capital (ROIC), calculated under the same methodology for all players, which shows Mater Dei in a prominent position, with a healthy level of return in the period.

Company	Activity	ROIC				
		2,017	2,018	2,019	2,020	2,021
Fleury	Diagnostics	10.6%	9.9%	10.1%	8.2%	10.6%
MATD Adjusted	Hospital	-	28.7%	30.5%	15.3%	12.7%
MATD AS IS	Hospital	-	26.9%	28.7%	14.4%	12.0%
Oncoclínicas	Oncology	-	-	10.9%	8.7%	9.1%
Rede D'or	Hospital	-	11.8%	11.5%	5.4%	9.3%
Kora	Hospital	-	-	7.2%	8.2%	4.6%
DASA	Diagnostics and Hospital	4.6%	7.4%	5.6%	1.3%	0.4%

Source: Equitas and company's public financial statements

Methodology comment: For Mater Dei, we present two distinct figures, with the "AS IS" ROIC label referring to the ROIC calculated based on an invested capital reflecting the reported figures in the company balance sheet (we consider the sum of the working capital, fixed assets, right of use agreements and intangible assets, excluding goodwill). The "Adjusted" ROIC label is calculated based on an estimated 30% reduction on its right of use asset, related to the hospital facilities in Minas Gerais, owned by the Salvador Family, whose contracts correspond to the entire real estate, but the company is currently using less than 60% of the available bed capacity. For this exercise, we consider a 30% reduction because the administrative and support areas are also based in the same buildings, so we estimate the company is currently using around 70% of the built area.

# 4.3.Channel Checks – Interviews with Market Specialists

Our interview sessions have highlighted the strong brand of Mater Dei in Belo Horizonte and reinforced its elevated quality perception and efficiency in the region. In Salvador, there is evidence that it is a challenging market for health plan operators to be profitable and that the hospital segment is quite competitive, dominated by Rede D’Or. However, we see several signs that a new premium hospital player will improve the current imbalance observed in the market, being welcomed by the medical community, patients and especially, the health plan operators.

During our due diligence process before the IPO, we interviewed several specialists to cross-check some thoughts and help in the validation of certain hypotheses and assumptions. As part of Equitas’s investment process, after Mater Dei’s IPO we have continued investigating those assumptions and we are constantly discussing and reevaluating our investment thesis. In this section we bring pieces of our last interviews and highlight what we judge relevant to the case, either as a positive sign or point to be cautious (we omit the identity of the professional to preserve the confidentiality of each talk, as agreed with them).

- **Physicist in the city of Belo Horizonte that works at Mater Dei and other hospitals in the city**

*“One of the many points of Mater Dei that attracted me in the beginning of my career was its top-of-mind brand, that has been a showcase and enabled me to have my own independent clinic and a loyal base of clients. [...] Mater Dei’s medical fees agreed with the health plans are above the city’s average, a great advantage to the medical staff. [...] Dr. Henrique Salvador’s culture of client centrism and personal service is rooted in all hospital units, being a tremendous differential in the eye of the patient”*

- **Professional in Belo Horizonte working for a large healthcare plan, supervising its accredited network partnerships with providers**

*“Mater Dei is the top hospital in the city in our perception and as per our client surveys. [...] We also work with Santa Genoveva, that is an important partner of ours in Uberlândia. [...] We believe Mater Dei is well positioned to tackle the premium market in Salvador, but the project can take longer than expected to succeed. [...] Rede D’Or’s acquisition of Biocor, in Belo Horizonte, has not impacted the market dynamics in the city”*

- **Medical Director in a large healthcare plan in Salvador**

*“Salvador is dominated by Rede D’Or’s 3 hospitals, which bothers the medical community and the healthcare plan operators. The average physician desires to have flexibility to work at different groups, direct its patients to the hospital of choice for each specific surgery and have the best equipment and infrastructure. After Rede D’Or consolidation in the region, physicians that worked for one of its 3 hospitals lost their flexibility and needed to transit just in the group’s network. Of course, there were also major improvements in the hospital’s infrastructure and technology, which were much appreciated [...] Rede D’Or also implemented very strict medical protocols in its hospital chain, preventing physicians to look for alternative treatments if they judged necessary [...] From the healthcare operator’s perspective, Rede D’Or has the best facilities in Salvador, but as a sizable group, it is very difficult to negotiate with. It is impossible for any payor to not work with them in the city. [...] Mater Dei is well-recognized, and I believe has room to make a good job in Salvador. It will find a propitious environment but will also face fierce competition.”*

- **Director for a large healthcare plan in Belo Horizonte**

*“Mater Dei has a great client assessment due to its medical assistance, accommodation, and hospitality. It is the most desired hospital in the city, but one obstacle is that it is also the most expensive hospital player, which restricts the niche of clients that have access to its facilities”*

- **Former Commercial professional for a large healthcare plan in Belo Horizonte**

*"To my knowledge, Mater Dei quality is unquestionable, and I see its new unit in the city of Betim as an excellent move, to explore a region with many large industries and lack of hospital facilities. [...] The health plans commercialized in Belo Horizonte normally are informally divided as "with Mater Dei" and "without Mater Dei"."*

- **Commercial manager for a large healthcare plan in the north-east region of Brazil**

*"Salvador is a large city and well served by Rede D'Or, with its 3 hospitals that I understand have a good client perception. [...] I see a Mater Dei hospital in Salvador as a new quality offer in the region and with room to have a successful project."*

- **Surgeon at many large hospitals in Salvador**

*"Mater Dei has been doing a good marketing job with the medical community in Salvador, being already a well-known hospital player among physicians, but still unfamiliar by the population in general. [...] After getting to know Mater Dei, I did some research and saw how the group and the founder family are respected in Belo Horizonte by its quality approach. [...] I have many friends and acquaintances that are already part of Mater Dei's medical team in Salvador [...] I have many friends that work at Rede D'Or network and after the acquisitions they observed a dramatic change in the hospital's culture, remarkably with an increasing pressure to achieve newly established targets of volumes and productivity. However, it continues being a good group to work for, being a massive source of patient attraction and having high-quality standards for the region. [...] I heard that Rede D'Or already instructed their physicians to choose between Mater Dei or Rede D'Or in the region and stated that the group will not accept to share its medical team [...] Dasa's acquisition seems quite challenging, although Hospital da Bahia has a sizable infrastructure, it operates at lower quality standards and has an inferior quality perception. Moreover, it has high volumes of patients from the government-run health plan of Salvador, which is a downside from the physician's standpoint. [...] EMEC is the reference hospital in Feira de Santana, having a much more complete suite of services compared to Santa Emilia Hospital, owned by Rede D'Or."*

- **Former national commercial director for a leading diagnostics company, very knowledgeable of Salvador's market dynamics**

*"Salvador is an extremely challenging region for the healthcare payors, with an elevated number of requested exams per patient (much higher than the country's average) and very high litigation costs, whose reasons are not so clear, but supposedly due to a culture of patients excessively suing healthcare payors to obtain additional coverage than the mandatory according to ANS. [...] Rede D'Or helped Salvador market to reduce its hospital beds deficit, but ended up concentrating too much the market, becoming an indispensable player and getting enormous bargain power [...] Mater Dei's expansion to Salvador will be challenging, but may be a perfect fit to address many problems in the region, that needs a player focusing on the client and looking for a better balance with healthcare payors."*



# 5. Valuation and Financials

We consider Mater Dei's growth trajectory has de-risked after their previous acquisitions, with its future growth prospects coming from a more pulverized base of hospitals and regions. In our base case scenario, considering only the group's existing operations, we estimate a 34% per year IRR in the next 4 years.

## 5.1. Projection Assumptions

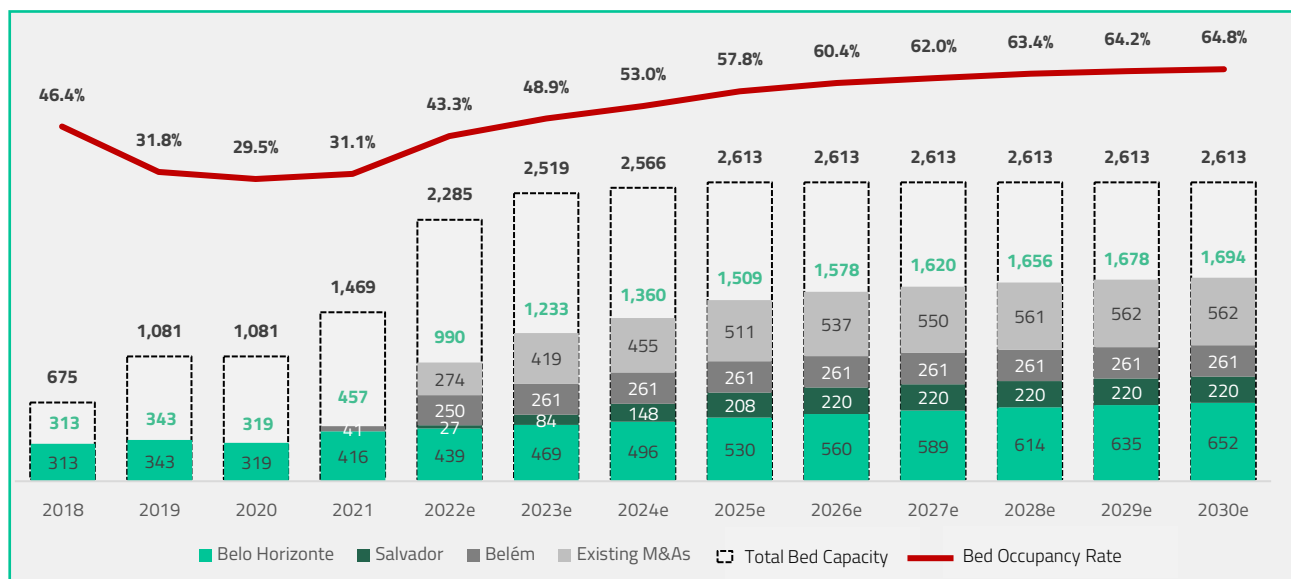
We built an in-depth financial model for Mater Dei, at an independent hospital hub level (Belo Horizonte, Belém, Goiânia, etc), to better reflect the impact on revenue per bed and margins of each new operation consolidated in the group, weighed by their distinct growth profile and competitive dynamics. Our objective in this section is to evaluate the company based on its current operations and simulate our internal rate of return in a conservative approach, by not considering additional capacity expansions in the future.

We start this section by presenting our success scenario, whose main assumptions are outlined below, and then discuss other scenarios and the impact of each project for our view on Mater Dei's fair value.

- Maturation of Belo Horizonte Infrastructure in 2030, at a 60% level of bed occupancy rate within its existing capacity of 1,081 beds. In terms of average revenue per bed, we project an annual average readjustment close to 90% of Brazilian CPI, and reflect the negative impact caused by Betim unit ramp-up, which leads average readjustments close to 70% of CPI in some years. This is a conservative approach, since as a hospital it incorporates new treatments and increases its complexity, there is a natural positive impact in its average revenue per bed apart from the regular annual readjustments negotiated with healthcare payors, which is quite challenging to estimate. This assumption is adopted for all other hospital units the group owns.
- Success in Salvador, reaching in 2026 a 60% hospital bed occupancy rate within its 367 beds.
- Successful integration of Porto Dias operation. Also, we do not consider the opening of its planned 204 additional beds expected for the next quarters due to a challenging scenario observed in the region.
- Integration of Santa Genoveva Hospital and Santa Clara (Uberlândia) and well-executed incorporation of protocols and best practices, elevating their EBITDA margins to 25% up to 2024, still below Mater Dei's historical level to be conservative, since the hospitals currently run at a lower profitability level.
- Integration of Premium Hospital (Goiânia) and increase of its current 20% EBITDA margin to 25%. We have not considered any expansion plan in this unit so far due to the lack of information available, although management has already confirmed that a brownfield project will be an obvious move in the city.
- Integration of EMEC (Feira de Santana) and increase of its current 12% EBITDA margin to 25% until 2024 to be conservative since the hospital operated at a lower profitability level.
- Regarding profitability margins for Minas Gerais operations, we adopt a conservative approach, with Mat & Med and personnel costs per bed being readjusted by 100% of Brazilian CPI, a higher rate than the average revenue per bed, pressuring gross margins. Minas Gerais EBITDA margin should reach a 32% level in 2030, while we forecast the consolidated operation to reach 30%.
- Since the company has executed several M&As and has a short-term challenge of integrating all acquired operations, we do not consider new M&As and greenfield projects in our forecast for the following years, although we believe the company will be active in M&As after 2023. This way, we assess the Mater Dei investment case and expected returns of its standalone operation..

With the described assumptions, in the next 8 years Mater Dei is expected to reach 1,7k occupied hospital beds within its consolidated 2.6k bed capacity (65% average bed occupancy rate by 2030). The evolution of these figures are displayed in the next graph.

## Number of Occupied Beds by Region and Total Bed Capacity



Source: Equitas Investimentos projections

Taking into consideration our assumptions for each individual project, its growth profile, average ticket, profitability margins and Capex needs (impact on depreciation) we display, below, Mater Dei's projected consolidated P&L for the coming years. Please note that a decrease in company's EBITDA margin for the next years is expected due especially to the ramp-up of Salvador and Santa Genoveva operations. After that, we expect the group to be capable of running at around 30% EBITDA margin, due to its proven track record in cost management as well as the many existing synergies among operations and multiply its net revenues by more than 4 times until 2030.

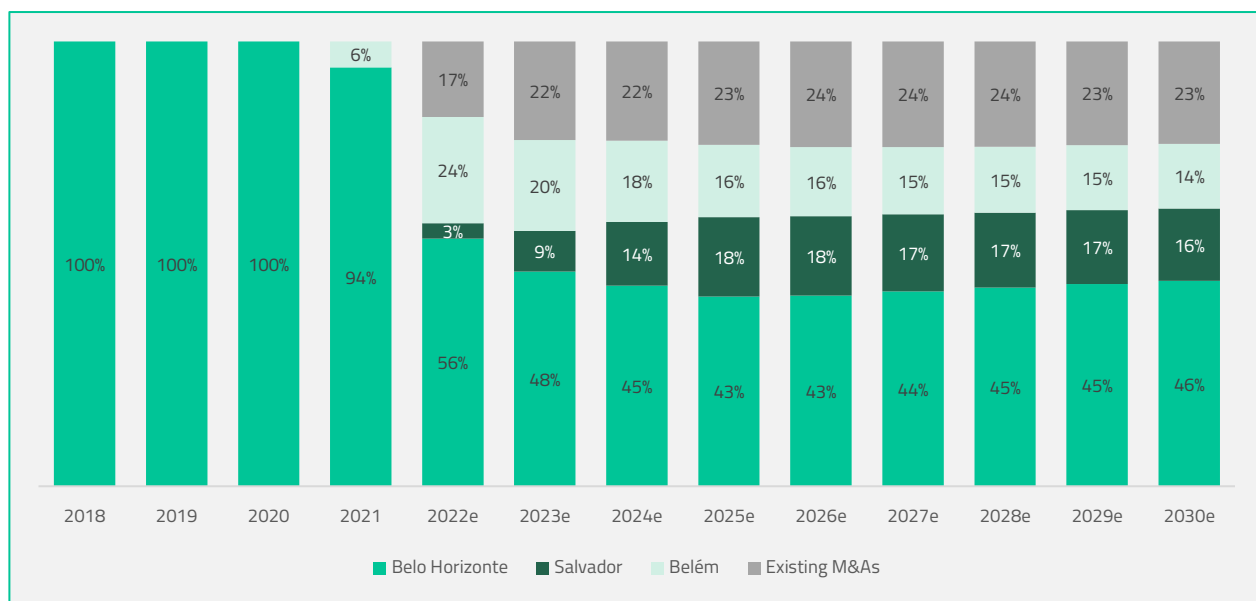
## Projected Income Statement

Income Statement - In BRL million	2018	2019	2020	2021	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e
Net Revenue	627	733	718	1,024	1,813	2,339	2,726	3,151	3,397	3,581	3,762	3,923	4,077
Costs of Services Provided	(342)	(397)	(428)	(620)	(1,130)	(1,431)	(1,640)	(1,887)	(2,031)	(2,139)	(2,244)	(2,336)	(2,424)
Gross Profit	285	336	290	405	683	908	1,086	1,263	1,365	1,442	1,518	1,587	1,653
Gross Margin	45.5%	45.8%	40.4%	39.5%	37.7%	38.8%	39.8%	40.1%	40.2%	40.3%	40.4%	40.5%	40.6%
SG&A	(101)	(125)	(173)	(162)	(293)	(356)	(391)	(432)	(457)	(474)	(492)	(507)	(522)
% of Net Revenue	(16.0%)	(17.0%)	(24.1%)	(15.9%)	(16.2%)	(15.2%)	(14.3%)	(13.7%)	(13.4%)	(13.2%)	(13.1%)	(12.9%)	(12.8%)
Operating Profit	184	211	117	242	390	552	695	831	909	968	1,027	1,080	1,131
% Operating Margin	29.4%	28.8%	16.3%	23.6%	21.5%	23.6%	25.5%	26.4%	26.7%	27.0%	27.3%	27.5%	27.8%
(+) Depreciation	35	46	38	41	68	75	78	91	95	96	98	100	103
(+) Non Recurring Expenses	-	-	-	28	9	-	-	-	-	-	-	-	-
Adjusted EBITDA	220	257	155	311	467	627	773	922	1,004	1,064	1,125	1,180	1,234
% EBITDA Margin	35.1%	35.1%	21.6%	30.4%	25.7%	26.8%	28.4%	29.3%	29.6%	29.7%	29.9%	30.1%	30.3%
Financial Result	6	0	(14)	(22)	(144)	(143)	(107)	(97)	(79)	(51)	(20)	10	42
EBT	190	211	103	220	245	409	588	734	829	917	1,007	1,090	1,173
Corporate Taxes	(66)	(73)	(30)	(74)	(83)	(139)	(200)	(249)	(282)	(312)	(342)	(371)	(399)
Net Profit	124	138	73	147	163	270	388	484	547	606	664	719	774
% Net Margin	19.9%	18.9%	10.1%	14.3%	9.0%	11.5%	14.2%	15.4%	16.1%	16.9%	17.7%	18.3%	19.0%

Source: Equitas Investimentos projections

It is paramount to highlight a significant de-risk of Mater Dei's growth story that, after many new expansion projects and M&As, has reduced its dependence on a few specific projects, pulverizing its revenue generation throughout a diversified base of hospital facilities, regions, and risk exposures, as we can see in the graph below.

## Breakdown of Mater Dei's Projected Revenue by Operation



Source: Equitas Investimentos projections

We present, below, the free cash flow to firm analysis, considering the assumptions already stated as well as projections for infrastructure maintenance, M&A payables, leases and working capital investments that will be required in the coming years. The company may have negative FCF in the next years due to M&A and greenfield projects capex but is well capitalized and able to deliver this level of growth with low additional capital raises or debt issuance.

## Projected Cash Flow

Cash Flow - BRL million	2019	2020	2021	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e
<b>EBITDA</b>	257	155	311	467	627	773	922	1,004	1,064	1,125	1,180	1,234
(-) Corporate Taxes	(73)	(30)	(74)	(1)	(27)	(88)	(138)	(170)	(228)	(342)	(371)	(399)
(-) Non-Recurring Expenses	-	-	(28)	(9)	-	-	-	-	-	-	-	-
(-) Working Capital Investments	(85)	(34)	(94)	(78)	(89)	(101)	(96)	(43)	(45)	(42)	(38)	(37)
(-) Capex	(95)	(123)	(1,155)	(851)	(77)	(173)	(78)	(69)	(144)	(54)	(59)	(64)
(-) Maintenance	(96)	(72)	(138)	(117)	(50)	(61)	(75)	(84)	(93)	(102)	(111)	(121)
(-) Salvador Greenfield	-	(52)	(192)	(31)	36	38	41	44	47	50	53	57
(-) Greenfields and Brownfields	-	-	-	(4)	(34)	(120)	(11)	(3)	(3)	(2)	(1)	(1)
(-) M&A Consideration	1	1	(824)	(699)	(28)	(29)	(33)	(26)	(95)	(0)	(0)	(0)
(+/-) Tax Shield - Financial Income	0	(4)	7	(28)	(27)	(15)	(9)	(0)	9	19	29	40
<b>FCFF</b>	4	(37)	(1,032)	(500)	407	396	601	721	656	705	741	774

Source: Equitas Investimentos projections

## 5.2. Valuation and Sensitivity Analysis

Considering Mater Dei's current operations, with no new expansion projects, we estimate a fair value ("Equitas Valuation" in the table below) of BRL 7.4 billion, 150% above current market cap of BRL 2.9 billion, as per MATD share price in the July 26, 2022. These forecasts imply a 34% per year Internal Rate of Return (IRR), considering an exit at 10x EV/EBITDA.

### Valuation Summary

Valuation - BRL million	Equitas Valuation	Market Value 26/07/2022
<b>Enterprise Value (ex Minority Stakes)</b>	<b>8,827</b>	<b>4,349</b>
(-) Net Debt 4T22e	(1,436)	(1,436)
<b>Equity Value (Market Cap)</b>	<b>7,391</b>	<b>2,913</b>
BRL per Share	19.33	7.62
<b>Upside</b>	<b>153.7%</b>	
<b>EV / EBITDA 2023 (ex Minorities)</b>	<b>15.4x</b>	<b>7.6x</b>
EV / EBITDA 2023 (Reported)	14.1x	6.9x
<b>P/E 2023 (ex Minorities)</b>	<b>19.4x</b>	<b>7.6x</b>
P/E 2023 (Reported)	21.5x	8.5x

Source: Equitas Investimentos projections

Despite presenting a target price estimation, with Equitas's long-term view and philosophy, we are focused on the potential return we could obtain in an appropriate investment horizon, such as a 4-year period.

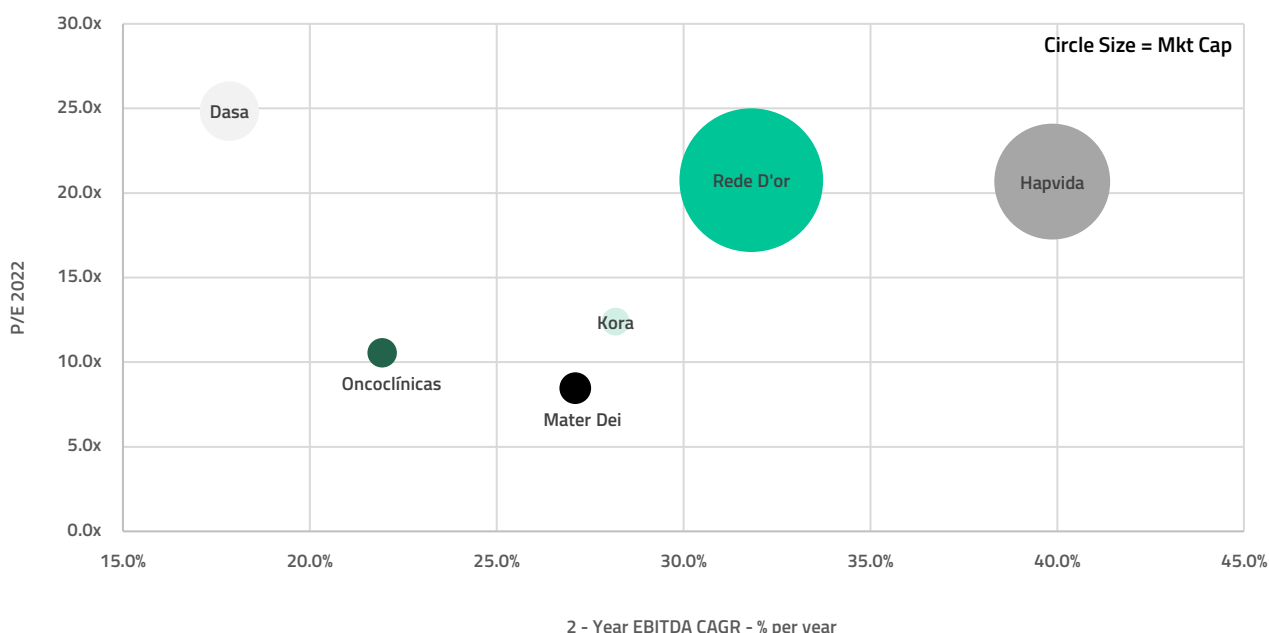
As abovementioned, we forecast a 34% internal rate of return for an investment in Mater Dei, only considering its stand-alone operations. Nonetheless, we expect that the company will be in a great position to continue expanding its operations in the next years, after integrating its several M&As executed in the past 14 months. In this scenario, we see a potential for an even greater investment return as those expectations materialize.

# 5.3.Comparable Multiples Analysis

Below we present a comparable multiples table with data gathered at Bloomberg for major listed healthcare players in Brazil and abroad (For Mater Dei figures we adopted our estimates, as indicated). We highlight that Mater Dei presents one of the highest expected EBITDA growth for the next 2 years among its peers and the most attractive PEG ratio for 2022e. Also, the company trades at a 30% discount in terms of EV/EBITDA and 60% of P/E for 2023e compared to Rede D’Or, the largest hospital group in the country.

Group	Ticker	Country	Business	Source	Currency	Market Cap	EBITDA				P/E			EV/EBITDA	
							2022e	2023e	2024e	CAGR	2022e	2023e	PEG 22	2022e	2023e
HCA Healthcare	HCA	USA	Hospital Operator	Bloomberg	USD mm	60,261	12,028	12,534	13,296	5.1%	11.9x	10.7x	2.3	8.4x	8.0x
Rede D'or	RDOR3	Brazil	Hospital Operator	Bloomberg	USD mm	11,270	1,064	1,379	1,849	31.8%	36.3x	20.8x	1.1	13.7x	10.6x
Hapvida	HAPV3	Brazil	Health operator	Bloomberg	USD mm	7,326	539	881	1,055	39.9%	78.6x	20.7x	2.0	15.8x	9.6x
IHH Healthcare Berhad	IHH MK	Malaysia	Hospital Operator	Bloomberg	USD mm	12,698	986	1,053	1,132	7.2%	34.6x	30.2x	4.8	15.3x	14.3x
BDMS	BDMS TB	India	Hospital Operator	Bloomberg	USD mm	11,358	545	583	640	8.4%	40.1x	36.8x	4.8	21.3x	20.0x
Tenet Healthcare	THC	USA	Hospital Operator	Bloomberg	USD mm	6,805	3,418	3,639	3,916	7.0%	10.1x	8.9x	1.4	6.9x	6.5x
Dasa	DASA3	Brazil	Diagnostics and Hospita	Bloomberg	USD mm	1,929	434	537	602	17.8%	82.7x	24.8x	4.6	8.1x	6.5x
Fleury	FLRY3	Brazil	Diagnostics	Bloomberg	USD mm	898	195	209	220	6.4%	14.1x	12.3x	2.2	6.8x	6.3x
Mater Dei	MATD3	Brazil	Hospital Operator	Equitas	USD mm	543	88	115	142	26.9%	12.3x	8.5x	0.5	10.6x	7.6x
Oncoclínicas	ONCO3	Brazil	Oncology	Bloomberg	USD mm	470	130	171	193	21.9%	14.8x	10.6x	0.7	5.7x	4.3x
Kora	KRSA3	Brazil	Hospital Operator	Bloomberg	USD mm	423	98	131	162	28.2%	16.5x	12.4x	0.6	7.6x	5.8x

Source: Equitas Investimentos projections and Bloomberg data



Source: Equitas Investimentos projections and Bloomberg data

# 6. Investment Risks and Downside Analysis

We consider a Belo Horizonte growth saturation and a challenging maturation of Salvador greenfield scenarios as the main risk factors for the investment case, which could be very dilutive to the company's earnings and lead to a credibility loss, possibly putting Mater Dei's growth story in jeopardy.

We deem the most relevant risk factors for Mater Dei's success case as the following:

- A possible insufficient patient demand in Belo Horizonte, lower than expected by management, to reach maturation at its 3 facilities in the region that have a total installed capacity of 1,081 hospital beds with close to 50% of them already operational. We expect the 3 units to achieve a 65% bed occupancy rate by 2030, aligned with the company's projections, and we have confidence in its capacity to do so, based on the following facts.
  - | Belo Horizonte microregion's number of health beneficiaries has been growing at a 3.8% rate per year in the past 3 years. Market size is expected to grow in the coming years, especially its addressable market, with important healthcare plan operators such as Sulamérica, Cassi and Alice launching new products bearing Mater Dei as a flagship hospital. Also, Mater Dei is establishing a partnership with a new healthcare plan that has around 500k beneficiaries in Minas Gerais, that will benefit its Belo Horizonte and Uberlândia operations.
  - | Brazil's demographic trend of a growing population, improved life expectancy and declining fertility rate is pointing to an accelerated aging of population in the next decades. The Brazilian Institute of Geography and Statistics (IBGE) projects the population above 60 years old to grow from 14.2% of total population in 2020 to 32.1% in 2060. This trend will directly reflect in the hospital sector, with higher inpatient rates and complexity treatment per stay, only to mention a few impacts, due to the general larger requirement of hospitalization and healthcare needs of elderly patients.
  - | As per our channel checks, HAPV and GNDI's hospital acquisitions in Belo Horizonte (Vera Cruz and Lifecenter, respectively) have already encouraged important healthcare plan operators to look for alternatives in the city to direct their patients to after an upcoming contract termination with the referred hospitals. HAPV and GNDI are vertically integrated players, having their own hospital facilities to treat their healthcare plan clients.
- Challenging scenario to develop its brand and mature its greenfield operation in the Salvador market that has shown a worsening in the competitive landscape over the past years, with Rede D'Or owning 3 hospitals in the city, Dasa's recent acquisition of Hospital da Bahia and Oncoclínica's also expanding operations in the region.
  - | We have gathered evidence, through our sources, that Salvador lacks hospital facilities with top-notch infrastructure and quality of service, even considering Rede D'Or's 3 units. The city seems to have a perfect environment to be explored by Mater Dei, with a medical community desiring more options and flexibility, healthcare plans demanding quality alternatives in the region and patients in need of a better service and care, with a client centric approach.
  - | Our assumptions for the Salvador operation are very conservative, aligned with Mater Dei's perspective, achieving the maturation of its installed capacity in just in 2028.
  - | A sensitivity analysis of our expected 4-year IRR is shown below, subject to the different assumptions in the maturation of Belo Horizonte and Salvador's operations, which are fundamental towards achieving of a good return in our investment in Mater Dei.

## Nominal 4-Year IRR - % per year

		% of Bed Occupancy Rate in Minas Gerais at Maturity						
		45%	50%	55%	61%	65%	70%	75%
% of Bed Occupancy Rate in Salvador at Maturity	30%	24.2%	25.7%	27.1%	28.7%	29.8%	31.2%	32.4%
	40%	26.5%	27.9%	29.2%	30.7%	31.8%	33.0%	34.3%
	50%	28.6%	29.9%	31.2%	32.6%	33.6%	34.8%	36.0%
	60%	30.6%	31.8%	33.1%	34.4%	35.4%	36.5%	37.7%
	65%	31.0%	32.2%	33.4%	34.8%	35.7%	36.9%	38.0%
	70%	32.5%	33.7%	34.9%	36.2%	37.1%	38.2%	39.3%
75%	33.4%	34.6%	35.7%	37.0%	37.9%	39.0%	40.1%	

Source: Equitas Investimentos projections and Bloomberg data

- Since the end of 2021, the government has discussed potential new legislation related to the establishment of national salary floors for nurses, nursing assistants and nursing technicians. The financial impact on individual companies is unknown. However, according to the bill's rapporteur, the overall economic impact should amount to roughly BRL 16 billion annually (BRL 5.4 billion for the private sector, BRL 5 billion for philanthropic institutions and BRL 5.7 billion for the public sector).
  - | The bill was approved by the Lower House in May 2021 and the Brazilian Senate in November 2021 but is awaiting presidential approval, or veto, until August 4.
  - | The sector's financial impact is significant, especially for philanthropic and public institutions. Similarly, many private players not part of a robust group will also experience these effects more strongly. For these reasons, the government has been trying to create a mechanism to offset or partially offset the negative impact in the sector, such as exempting payrolls from social contributions for healthcare companies. For funding, a solution has yet to be defined.
  - | Sell-side analysts have released estimates on the potential impact on individual private players, but with significant variations. Considering each unique region Mater Dei operates in, we estimate the company could have its consolidated EBITDA margin reduced from 30.3% to 27.8% in the long run. This value considers no neutralizing measure created by the government or cost reduction initiatives Mater Dei could engage in.
  - | In this scenario, we forecast that our 4-Year IRR would fall from 34.4% per year to 31.0%

Even with these key risks and considering a more challenging integration process of its M&As executed so far, we believe Mater Dei could still be quite a profitable business; however, credibility loss and questions about its ability to properly allocate capital in the future may arise, compromising its growth story and possibly turning the company into a "Value Trap".

The recently announced acquisition of Sulamérica by Rede D'Or brings a possible downside risk to Mater Dei, since Sulamérica is an important payor for MATD in Belo Horizonte (we estimate it accounts to 9% of Belo Horizonte's revenues and 5% in the company level). In case Rede D'Or moves toward a verticalization model (so far, the company stated that the operations will remain working independently), Mater Dei might lose patient flow from Sulamérica over time. However, in our view, this possible move would trigger a strategy change from other health insurance operators, such as Bradesco and Amil, which are extremely representative to Rede D'Or revenues and fierce competitors of Sulamérica nationwide. In this case, we estimate the benefit to Mater Dei can more than offset the damages caused by a reduction in patient flow from Sulamérica.

Other risk factors that may stand lower chances to materialize are related to the difficulty to properly integrate all its acquired hospitals and to extract relevant synergies, especially in relation to Santa Genoveva, Santa Clara, EMEC and Premium, that run at lower profitability margins. In the case of Porto Dias, the operation already presents attractive margins, but we believe there is room to obtain larger scale gains and take the hospital to another level. The second point of attention is the transition from a family-owned business based in the region of Belo Horizonte, to a publicly traded company with a national footprint, that poses an execution risk to the company.

# 7. Why we are Different from Consensus

High concerns regarding the Salvador greenfield success and the maturation of the Belo Horizonte hospitals are the main existing pushbacks from domestic investors that lack a detailed view on each of these growth avenues. The stock's low average liquidity and company's size are also factors that reduce the number of investors looking at Mater Dei.

In our perception, the market attributes higher execution risk to the greenfield project of Salvador due to a challenging competitive landscape that albeit a reality, it lost significance in the overall project success after the company's previous acquisitions.

In talks with Brazilian investment managers, we have noticed that a few of them have invested considerable time to fully understand the Salvador market dynamics or have spoken with local executives and physicians but consider the project as highly risky simply based on Rede D'Or's and Dasa's past acquisitions. As thoroughly explained throughout this report, after our due diligence process, we reinforced our view that there is room for an additional quality player in the Salvador region and we think there are many opportunities to be explored there. Another pushback we see from market participants is a higher concern with the maturation of the operation in Belo Horizonte. In spite of this fact, Mater Dei has been gaining relevance among domestic investors and there have been good feedbacks associated to the case.

Regarding the possible negative impacts caused by the conclusion of Rede D'Or's acquisition of Sulamérica, the consensus cross-read for Mater Dei is still blurry, but based on Sulamérica's low relevance to Mater Dei's revenue (less than 5%) as a whole and its market share versus main competitors in each region MATD is located in, we have a constructive view for Mater Dei should Rede D'Or move toward a verticalized model.

A third factor affecting the company's market performance is technical, with many investors avoiding mid-cap companies in the past months due to the macro scenario, its stock's low average liquidity of around BRL 10 million ADTV (average daily trading volume) and many concerns about the healthcare sector short-term dynamics related to COVID-19, which is not the reality for long-term investors such as Equitas Investimentos.

We believe the stock tends to have a strong performance as the company delivers good results in the coming quarters and presents good news / updated information on the greenfield in Salvador, that is expected to initiate operations already in the first quarter of 2022.



# EQUITAS



## **Equitas Investimentos**

Rua Funchal - n. 375 ■ Conjuntos 151 e 152  
CEP. 04551-060 - Vila Olímpia - São Paulo