

Health & Hospitals in Italy

18th ANNUAL REPORT 2020



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Associazione Italiana
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This Report has been edited by **Nadio Delai**, in close collaboration with Ermeneia – Studi & Strategie di Sistema in Rome and AIOP – Italian Association of Private Hospitals. To this end, a technical work group has been established made up of Angelo Cassoni, Filippo Leonardi, Francesca Gardini, Stefano Turchi, Fabiana Rinaldi, in addition to Peppino Biamonte, and Nadio Delai (Ermeneia).

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Contents

Note	page	7
Presentation by <i>Barbara Cittadini, National President of AIOP</i>	»	9

Part One **THE CONTINUITY AND DISCONTINUITY** **OF THE HOSPITAL SYSTEM IN THE YEAR** **OF THE PANDEMIC**

1. The strain placed on the hospital system by the arrival of the Corona virus	»	15
1.1. Referencing the distinctive (and appreciated) characteristics of the mixed system of public and accredited private facilities	»	15
1.2. Confirmation of a continuous average improvement in the complexity and effectiveness of services notwithstanding the persistence of unequal “average” results	»	26
1.3. The added value of the convergence of public hospitals and accredited private hospitals to deal with the Covid-19 emergency	»	42
2. The suspension of services for non-Covid patients	»	51
2.1. The backlog of patients already on waiting lists at the beginning of the year	»	51
2.2. The interruption of services for regular patients and the consequences in terms of behaviors	»	58

2.3. Assessment of the ability of different healthcare facilities to respond to the needs of non-Covid patients and Covid patients	page	61
3. The opening up of resources driven by the pandemic	»	65
3.1. Signs of refinancing after a protracted defunding process	»	65
3.2. Monitoring areas of inefficiency by examining the financial statements of public Hospital Centers	»	88

Part Two STATISTICAL INDICATORS

1. Facility data	»	119
1.1. Number of public and accredited private medical institutions	»	119
1.2. Bed distribution	»	120
1.3. Medical equipment	»	121
2. Activity data	»	135
2.1. In-hospital days and patient bed occupancy rate	»	135
2.2. Types of admissions and discharges	»	136
2.3. Prevalent DRGs	»	137
2.4. Activities classified according to major diagnostic categories	»	138
2.5. Activities classified according to specialty	»	138
2.6. Patient mobility	»	139
3. Staff information	»	173
3.1. Staff fluctuation over the years	»	173
3.2. Staff distribution throughout Italy	»	174
4. Spending data	»	179
4.1. Economic flow trends over the years	»	179
4.2. Health expenditure comparisons	»	180

APPENDICES

1. Methods applied	»	187
2. The complete list of contents of the 2020 Report	»	215

Note

This text is an abstract of the Report on “Ospedali & Salute”, 18th edition 2020.

The primary objective of AIOP (Italian Association of Private Hospitals) is to contribute to improving knowledge of the Italian health system at an international level, by providing European institutions, professionals and scholars with data and assessments which in some cases also relate to 2020.

Following the introduction written by the President of AIOP, Mrs. Barbara Cittadini, Part One of the abstract highlights major health issues which have emerged in the last year, and analyzes supply and demand issues, focusing in particular on the quality of services and on citizens’ opinions, as expressed in a special survey.

Part Two provides a set of indicators regarding equipment, information on hospital activities and expenses, as well as a complete sample of data for the Italian hospital system as a whole.

Finally, details of the method used to conduct the survey of Italian families and a complete list of the contents of the 18th Report are also provided.

Presentation

by *Barbara Cittadini, National President of AIOP*

For 18 years now, our Association has published the *Health & Hospitals Report* with the aim of providing its members, institutions and the general public with a means for examining the Italian hospital system that offers a clear and detailed explanation of the dynamics that shape the supply and demand of healthcare in Italy.

This mission, having established itself as an annual review and commentary on the approaches “actually used” in Italy, stems from the recognition of three factors:

- the fundamental importance of having a National Health Service based on the principles of universal and inclusive healthcare, which inspired the 1978 reform;
- the real need to diversify and increase services and features to keep up with the transformations of the country which have gradually increased over the years as regards demographic trends, innovations produced by research and technology and the greater needs and expectations of people, while taking into account inadequate financial resources, governance and organization and, therefore, the difficulty of coping with the changes that have taken place and – to an even greater degree – those yet to come;
- the opportunity to make the most of the advantages of a system that has from its very beginning included both public and private hospitals, offering a choice that becomes, among other things, an increasingly key feature when attempting to effectively maintain the basic universal and inclusive principles the system was founded upon, while endeavoring to provide increasingly better responses to citizens’ healthcare needs.

Furthermore, there is the basic conviction that the Report must be able to “objectively” interpret and introduce issues and opportunities (and this is why it has been entrusted to an external party) facing the public and private facilities, policy-makers, white-economy enterprises, the media and interested citizens.

This objective overview should also be capable of inspiring decision-makers, entrepreneurs and clinicians to take up future health challenges by starting from innovative perspectives that make it possible, first of all, to overcome the pre-established, limited funding of the Italian healthcare system and of the spending review phase as an end in itself, and to adopt a holistic and efficient approach to healthcare.

Also from this perspective, 2020 was a singularly unique and unfortunately tragic year, during which both regularly occurring issues and those brought on by the extraordinary advent of the COVID-19 pandemic were simultaneously in focus.

It was an incredibly demanding experience, and one that demonstrated the value of having a National Health Service with a dual “nature”, one public and one private, working in synergy, also with regard to the Coronavirus emergency.

AIOP (with its 530 facilities, 72,000 employees and 60,000 patient beds), did, in fact, prove to be a concrete and effective network that can be relied on – for both regular and extraordinary activities – thanks to a process that witnessed greater collaboration and synergy between the two components.

A further wave of the pandemic grew in strength in the fall and would seem to foreshadow extremely challenging actions continuing into 2021.

Thus, it is not yet possible to provide a true overall picture of the results achieved in 2020 on the basis of consolidated data, and yet it is necessary to safeguard the continuity of the regular workings of a system that must be capable not only of treating Covid patients but non-Covid patients as well, especially if these are affected by serious and/or severe illnesses or chronic conditions and are unable to obtain the necessary services.

This condition is all the more important, given the fact that the National Health Service is characterized by its “dual nature” (as it was even before the emergence of the Coronavirus in early 2020), as was attested to in the 2019 Report, with average statistical indicators that have been increasing for some time in terms of the complexity of the services, but whose “average” levels are still unbalanced and unsatisfactory, and with a disadvantage especially in the South (but not only), within the framework of a national system made up of 21 Regional Health Services that differ profoundly from each other in various ways.

For this reason, the 2020 Report has attempted to interpret the reality of a system with structural vulnerabilities that existed well before the arrival of Covid-19, following a lengthy, continual and on-going process of defunding the system, which resulted in the consequent “rationing” of services, lengthening of waiting lists, improper use of the Emergency Room by patients,

compared to Regional healthcare services which, certainly, need to be reinforced, and have experienced an increase, year by year, of the health mobility of “fleeing” patients, especially from the South and the dramatic phenomenon of the forgoing of treatment.

Naturally, all this has become further complicated following the impact of the pandemic, which has, on the one hand, caused the extensive and emergency use of facilities and personnel for Covid patients, and, on the other, the deferral of services for non-Covid patients throughout the first pandemic phase.

For these reasons, this Report – as in the past – examines regular continuity with reference to the evolution of the hospital system, in its lights and shadows, but also reports the problems experienced – unavoidably as a consequence of the emergency situation – by non-Covid patients following the impact on facilities and personnel of the special care needs of Covid patients.

In this regard, it is sufficient to mention, that from the results obtained from the survey of a representative sample of the Italian population, how:

- the increase in the number of people on waiting lists in 2019 remained largely unchanged, even in 2020;
- a substantial interruption of inpatient services between February and September 2020 was reported by more than 40% of the interviewees, who declared that they needed them, with a more pronounced situation in the Southern Regions;
- a slow or even extremely slow return of inpatient services was reported by 1/3 of the people interviewed.

In short, 2020 shed light on:

- the aggravated emergence of longer-lasting problems, which has led to a de facto differentiation among the 21 Regional Health Services, as was specifically described in 2019 and resumed this year;
- the difficulties of dealing with the pandemic as, moreover, has been experienced by all countries, aggravated here, however, by the uneasy co-existence of “shared competences”, which have fueled a continuous debate between the State and the Regions, which was certainly not needed;
- the difficulty of providing inpatient services to patients, even those most affected by serious diseases, especially cardiovascular and cancer-related or long-lasting chronic diseases, which require continuity of visits, treatments or scheduled interventions;
- renewed attention to the issue of the economic and financial resources to be allocated to the National Health Service, with a new “opening” of the policy relating to the private hospital component, which has led to significant exchanges and cooperation experiences among public and private

facilities. Indeed, on the basis of the requests made by the individual Regions during the first wave of the Coronavirus almost 1,000 intensive-care and high-dependency patient beds, 9,400 patient beds for acute and post-acute Covid patients, as well as 25,000 beds for non-Covid patients in need of continuity of care were made available by AIOP hospitals and, in some geographical areas, also by other accredited facilities;

- the presence of some hostile attitudes in some Regions regarding the role played by the so-called “private hospital system”, a legacy of generic prejudices, as well as a lack of knowledge of the mixed system that characterizes Italy.

In light of the scenario outlined, it is desirable that the harmony of intent among public and private hospitals, fostered by the pressure of the pandemic emergency, be strengthened to better meet the challenges and opportunities created by the opening up of Europe, both in terms of budgetary flexibility and resources of the *Recovery Fund*, towards its Member States, and in the first place towards Italy, and to promote an overhaul of the NHS, so that it will lead to an increasingly fluid synergetic relationship between different care institutions, in the interest of an ever-increasing quality of responses for patients and citizens.

The latter, in fact, have amply demonstrated by behaviors and in actions that they appreciate and wish to make greater use of the services provided by the private component, which they have increasingly turned to over the years.

The usefulness of the 2020 edition of the *Health & Hospitals Report* is fully confirmed by the picture of the Italian Healthcare system that emerges from the data analyzed.

This clearly demonstrates the importance of the contribution provided by the private component of the NHS for the benefit of all Italians.

It is a fundamental contribution that ensures continuity of care, even in an emergency period, and its value must be taken into consideration in order to reform and reorganize the current NHS framework, in order to mitigate the inflated regionalism and to reform, once and for all, measures such as Legislative Decree 95/2012 which impose austerity for its own sake. Such measures were put in place to deal with an emergency, but continue today to prevent the definition of equitable, innovative and efficient models of care according to a holistic approach to public health.

Part One

*The continuity and discontinuity of the hospital
system in the year of the pandemic*

1. The strain placed on the hospital system by the arrival of the Corona virus

1.1. Referencing the distinctive (and appreciated) characteristics of the mixed system of public and accredited private facilities

For some time now, it has been usual to open the Report by presenting the profile of the dual-nature hospital system that exists in Italy. There is a twofold reason for this approach:

- that of “recalling” the characteristics of the mixed hospital system we enjoy which, due to specific political and regulatory decisions, includes not only public hospitals, but also accredited private hospitals as an integral part of the National Health Service;
- and that of “providing continual oversight” of the dynamics of the public and accredited private hospital system that the Report has been describing for 18 of the 42 years that the National Health Service has existed, and even this year with the emergency pandemic situation that we are experiencing.

The first need is addressed by the opening pages of this section, whereas the remainder of this section and those that it follow in Part One address the second issue and also include some of the more relevant results of the field survey on the population, which is discussed in detail in the Part Two of the Report.

In order to “recall” the characteristics in question, it should be borne in mind that the Italian hospital system includes a public component (made up of different types of institutions) and a private component (also made up of different types of accredited hospitals). All of these constitute the entirety of the hospital system that Italian citizens can use without any costs. The second accredited-hospital component certainly cannot be defined as marginal if we consider that it provides 28.2% of in-hospital stays for the proportionately smaller investment of 13.1% of total public hospital expenditure.

Yet, we would do well to be even more precise and to recall that when talking about accredited hospitals, we are referring to an extremely complicated type of complex indeed.

First of all, its public facilities include hospital centers, hospitals directly managed by local health authorities (ASL, Azienda Sanitaria Locale), and hospital centers integrated with universities; the whole of which accounts for the greater part of current state hospital expenditures (76.9%). In addition to these are other facilities, namely public university polyclinics that are not affiliated with hospitals, public Institutes for Treatment and Research (IRCCS) and Public Foundations, which together account for another 10.0% of current public hospital expenditures.

The above facilities are augmented by accredited hospitals, private university polyclinics, private IRCCS and religiously-affiliated classified hospitals. These make up the remaining 13.1% of the current National Health System hospital expenditures.

In 2018 (latest available data), there were a total of 188,451 inpatient beds (a decrease of 0.2% compared to the previous year), 69.6% (131,135 units) of which were located in public hospitals and 30.4% (57,316 units) of which were located in accredited private hospitals as a whole (Fig. 1). The comparison between the two sets of patient beds shows how the hospital system essentially assumes the characteristics of a mixed system (indeed one that is recognized and regulated by Legislative Decree 502/1992), one in which the public facilities are more numerous but whose accredited component is also significant (Fig. 1).

Public and accredited hospital facilities total 1,000 (2018), (-0.5% compared to the previous year) with the latter being greater in number (56.7%) than the former (43.3%). However, the concentration of the two types of facilities differs with respect to geographical areas, as shown by the following data taken from Figure 1 below:

<i>Distribution % of public hospitals</i>	<i>Distribution % of accredited hospitals</i>
First place: South and Islands (48.7%)	First place: North (41.6%)
Second place: North (29.6%)	Second place: South and Islands (37.4%)
Third place: Center (21.7%)	Third place: Center (21.0%)

If we compare the number of hospitals and the number of patient beds (again for 2018), we can see more detailed information as the chart below shows: with the average number of patient beds in public hospitals slightly decreasing compared to 2017 but above all decreasing as it goes from the North (533), to the Center (254), and finally, to the South and Islands (185). The trend towards a slight decrease in patient beds is also true for accredited private hospitals going from the North (113), to the Center (105), and finally, to the South and Islands (87).

<i>Geographical distributions</i>	<i>Public hospitals 2018</i>			<i>Accredited hospitals as a whole 2018</i>		
	<i>No. of hospitals</i>	<i>No. of patient beds</i>	<i>Patient beds</i>	<i>No. of hospitals</i>	<i>No. of patient beds</i>	<i>Patient beds</i>
			<i>No. of hospitals</i>			<i>No. of hospitals</i>
North	128	68,250	533	236	26,738	113
Center	94	23,917	254	119	12,229	103
South and Islands	211	38,968	185	212	18,349	87
Total	433	131.135	303	567	57.316	101

Figure 2 depicts aspects relating to in-hospital stay flows and spending for the year 2018 (latest available data).

With regard to in-hospital days, it should be mentioned that these have gradually decreased over time, from 58.2 million in 2018 compared to:

- 58.7 million for the year 2017;
- 59.9 million for the year 2016;
- 61.2 million for the year 2015;
- 61.8 million for the year 2014;
- 62.9 million for the year 2013;
- 65.2 million for the year 2012;
- 67.9 million for the year 2011.

As can be easily calculated, the decrease between 2011 and 2018 is 14.3%, in line with the progressive push towards the reduced hospitalization of patients that the National Health Service has promoted for more than ten years.

Again, in 2018 71.8% of these days were in public hospitals and the remaining 28.2% were in accredited hospitals as a whole.

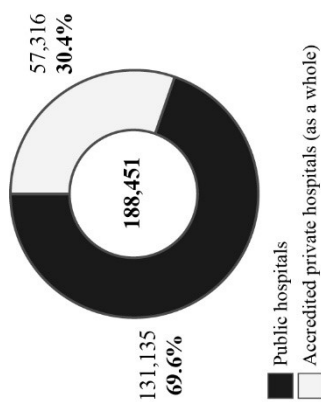
The distribution of in-hospital days, for both the types of structures mentioned, shows a decreasing order of magnitude which places those concentrated in the North in first place, followed by those in the South and the Islands, and those in the Center in third place. As can be seen over the last five years, the concentration of in-hospital days tends to decline in the North except for the last year (2018), to grow in the Center and in the South, though with a slight decrease again in 2018: and this is true both for public and accredited private facilities.

The following chart provides a detailed comparison:

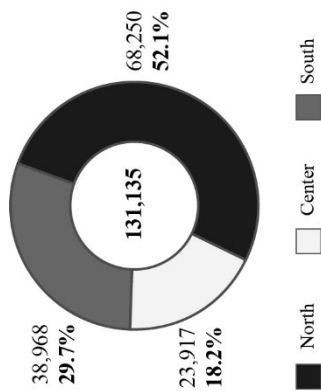
<i>Geographical Areas</i>	<i>Distribution % of in-hospital days in public hospitals</i>					<i>Distribution % of in-hospital days in accredited hospitals as a whole</i>				
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	North	52.3	51.4	48.8	49.0	49.3	46.6	47.7	42.7	43.5
Center	18.0	18.7	19.3	19.6	19.7	22.9	23.0	23.5	24.0	24.2
South and Islands	29.7	29.9	31.9	31.4	31.0	30.5	29.3	33.8	32.5	31.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Fig. 1 – Executive summary of the aggregates of the Italian hospital system: patient beds and institutions (2018)

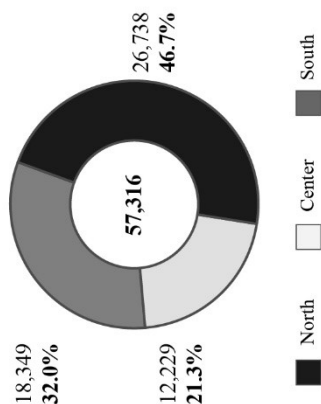
Total number of patient beds in publicly-operated and privately-operated components of the NHS



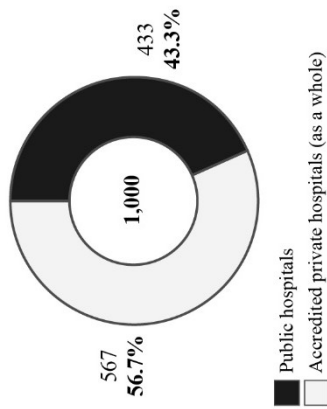
Number of patient beds in the publicly-operated component, throughout the country



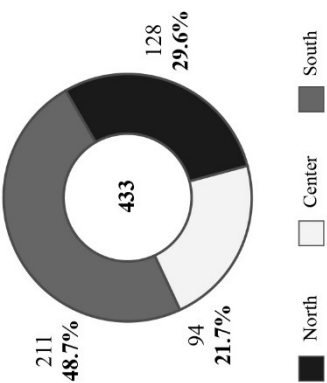
Number of patient beds in the privately-operated component, throughout the country



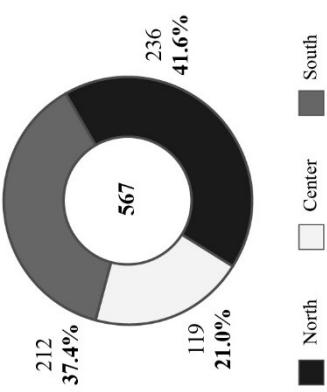
Total number of hospitals in publicly-operated and privately-operated components of the NHS



Number of hospitals in the publicly-operated component, throughout the country

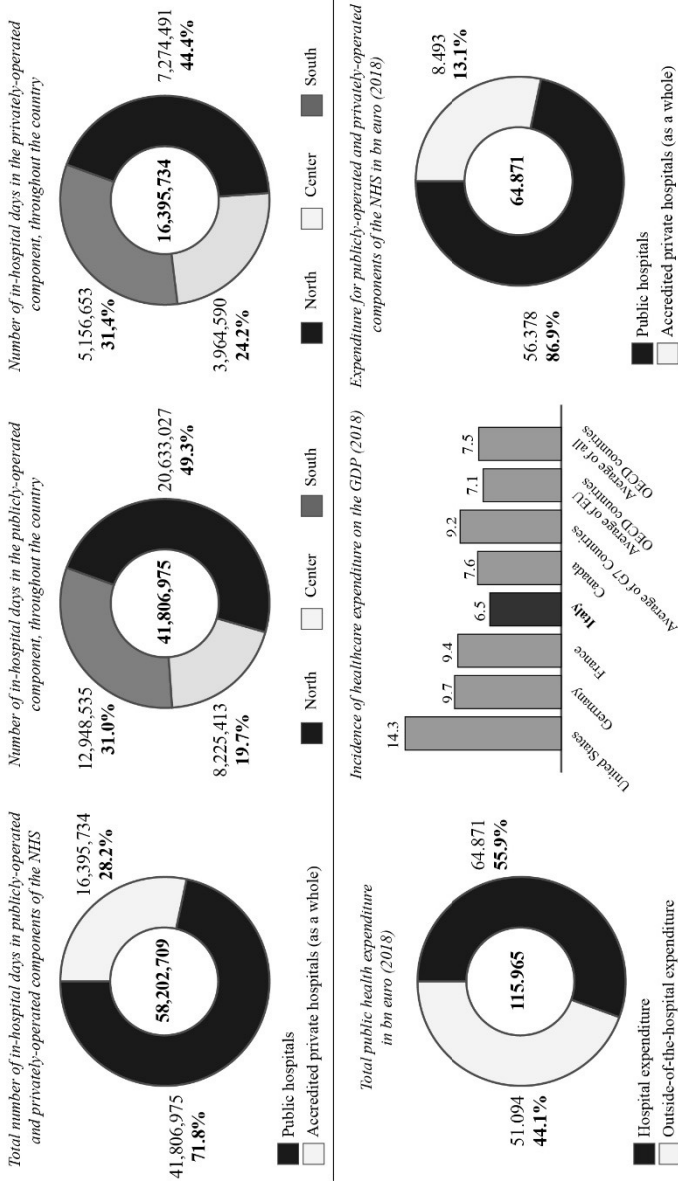


Number of hospitals in the privately-operated component, throughout the country



Source: data processed by Ermeneta – Studi & Strategie di Sistema, 2020

Fig. 2 – Executive summary of the aggregates of the Italian hospital system: in-hospital days and expenses (2018)



Source: data processed by Ermeneia – Studi & Strategie di Sistema, 2020

If we look instead to the flow of resources (see the second part of Figure 2 we can see that:

- a) total public health expenditure, equal to EUR 116.0 billion in 2018, flows more to the hospital component (55.9%) compared to the non-hospital component (44.1%). It should be recalled that the incidence of public hospital spending out of total public health expenditure fluctuates around the value just mentioned and saw slight growth from 54.5% in 2011 to 55.7% in 2017, up to 55.9 in 2018;
- b) the amount of public health expenditure out of GDP places Italy on a decidedly lower level (6.5%) in 2018 compared to the average of the OECD G7 countries (9.2%) and, in any case, also lower than the average of the total OECD countries (7.5%) and the average of OECD countries in Europe (7.1%). It should also be mentioned that Italy not only had the lowest amount of public health expenditure out of GDP, as just mentioned, but also had to deal with a decrease in GDP during the toughest years of the economic crisis starting from 2008, (thereby obtaining a doubly negative result in the expenditure/GDP ratio, since the absolute values of both decreased).

Finally, Figure 3 provides an overall idea of all the human resources that conduct their activities within the mixed hospital system between public and accredited hospitals. Unfortunately, the latest data available are again those from 2013. The total number of employees at the time was 632,730, a drop of -2.1% from 2012. Of this, 19.7% was made up of physicians (124,428 units), 42.3% was made up of nursing staff (268,170 units) and finally, 38.0% comprised the remaining personnel (240,132 units).

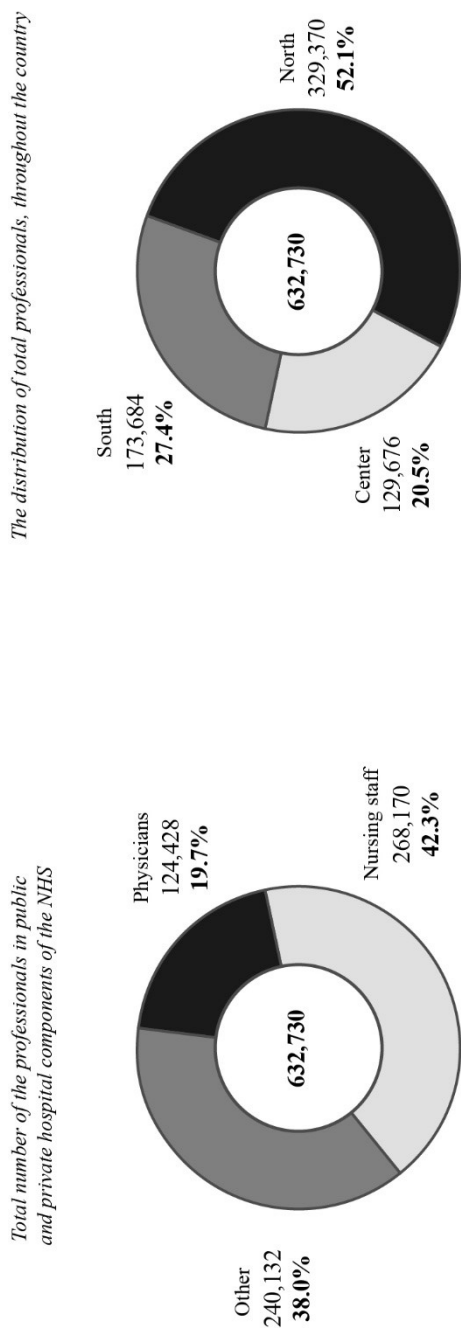
The distribution of personnel throughout the country shows – approximately – the weight of hospital activities in the North (52.1% of the employees), followed by the South (27.4% of the employees) and finally by Central Italy (20.5% of the employees).

The observations made so far have come from analyzing objective data (number of public and accredited hospitals, number of respective patient beds and in-hospital days, public expenditure for the two types of facilities, and number of employees) which provides an idea of the complexity of the “actual” hospital services.

At this point it becomes logical to ask what the subjective perception by citizens is, as well as how they behave towards the above mixed system which has become part of the collective culture.

Table 1 shows the responses of the people interviewed specifically regarding this, and contrasts the data from the two opposite end years of 2009 and 2019. The opinions provided by citizens on the mixed public-accredited

Fig. 3 – Summary of the aggregates of the Italian hospital system: total employees (2013)



Source: data processed by *Ermeneia – Studi & Strategie di Sistema, 2020*

hospital system give a fairly precise idea of how socially “entrenched” this system is. In fact, “strongly + somewhat agree” opinions well exceed 80% and are fairly stabilized over time:

- both with regard to the awareness of being able to use accredited hospitals as part of the overall hospital system, since when one must be hospitalized, one does not consider the type of facility but rather the presence of the specialization that the patient needs, the quality of the services, and the proximity to home: the level of agreement for this ranges from 88.3% in 2009 and – except for some intermediate fluctuations – remain more or less around the same figure, to 87.5% in 2019 (but if we take into account only the “strongly agree” opinions which were 26.9% in 2009 and 31.2% in 2019, it can be seen that, over the decade, these have grown in a more pronounced manner compared to the latter which, on the other hand, tend to decrease, going from 61.4% to 56.3%);
- and as regards the suggestion, addressed to the National Health Service, of making better use of all the hospital facilities in the area (public and accredited) in order to allow citizens to choose what best fits their needs, according to abilities and opinions (ranging from 84.0% in 2009 to 87.9% in 2019);
- and as regards the request addressed to the Regions and the local health authorities to promote appropriate information campaigns directed at citizens in order to encourage the effective free choice of hospital facilities, given that little is known about the opportunity for inpatient admissions at accredited hospitals at no additional cost to the patient (ranging from 84.3% in 2009 to 80.8% in 2019).

In short, there is an increasingly marked awareness in favor of the mixed system and a consequent (necessary) policy by the Health Service of actively integrating the various facilities, as has happened in many Regions to deal with the wave of Covid patients.

The average positive perception values for the mixed hospital system contained in Table 1 become more pronounced – with regard to unequal “average”, that is, services that are on average not acceptable and not adequately widespread –¹ for respondents residing in the North compared to the rest of the country, as it does for people living in medium and, especially, large cities, for females compared to males (also because women are more often in the role of *caregivers* for the whole family), as well as for respondents with an average or above-average level of education and, more generally, for

¹ See further explanation of the topic of the unequal “average” in the following section 1.2.

those who are self-employed within the upper-middle and upper social classes².

While it is important to pay attention to how the mixed system is viewed positively, it is also necessary to go further in depth on the specific knowledge and even the behaviors actually practiced by users. The second part of Table 1 shows:

- a) a “clear” understanding of the provision that allows use of both public and accredited hospitals without costs to patients has increased from 35.5% in 2009 to 41.0% in 2019: as a consequence, the number of citizens with only a “vague idea” of this opportunity dropped from 43.1% in 2009 to 36.1% in 2019;
- b) the full awareness of citizens of the ability to go to hospitals outside their home Region for treatment also rose from 31.9% in 2009 to 34.5% in 2019: again in this case, the amount of respondents who “seem to recall” this opportunity decreased correspondingly (dropping from 41.5% in 2009 to 36.4% in 2019);
- c) similarly, awareness of the opportunity to be able to seek healthcare-hospital services at facilities in the various European Union countries went from 14.1% in 2013 (when the EU Directive became operational) to 19.1% in 2016 and 20.5% in 2019: but, in this case, vague awareness also grew, given the relatively more limited period of the entry into force of this law (increasing from 29.1% in 2013 to 32.2% in 2019);
- d) in turn, the behaviors – this time of the actual users who took into consideration the various choices – extended further to display a particularly pronounced evolutionary dynamic (also due to the fact that when decisions have to be made on account of a concrete need, more and better information is sought), increasing from 21.2% in 2009 to 38.1% in 2019;

It is quite understandable how the level of awareness of the ability to choose as well as the choices actually made between public facilities and accredited facilities is more pronounced – again here, the mechanism of an unequal “average” is at work – for the respondents who reside in larger cities, for females compared to males in the sample and, especially, for those with a certain level of education and who belong to the upper-middle or upper social class.

² See “Health&Hospitals/2019” Report, Table A14/Population sample, section 3 of the appendices.

Table 1 – Clear awareness of the ability of citizens and users to choose facilities outside their own Region or outside Italy. (% val.)¹

Phenomena	2009	2019 ²
THE WIDELY SHARED SENTIMENT OF CITIZENS REGARDING THE MIXED SYSTEM OF PUBLIC HOSPITALS AND ACCREDITED PRIVATE HOSPITALS²		
– “The accredited hospital is now a part of the overall hospital system and that they do not consider whether the facility is public or private when a hospital stay is needed, but rather take into account other factors such as the necessary specialization, the quality of the services provided, the proximity to their home, and so on.”	88.3	87.5
– “The government should make the best use of all the hospitals in the area (public and accredited), in order to allow citizens the best possible choice according to their needs, opportunities and opinions”	84.0	87.9
– “Regions or local health authorities should invest in appropriate information campaigns to make citizens aware of their freedom to choose, since little is known about the various opportunities of admissions that accredited hospitals offer”	84.3	80.8
WORKING KNOWLEDGE AMONG CITIZENS OF AVAILABLE CHOICES		
– Awareness among Italian citizens of the provisions that permit the use of both public and accredited hospitals:		
▪ Yes, very clear	35.5	41.0
▪ Yes, but a little uncertain	43.1	36.1
– Awareness among citizens of the opportunity to seek treatment in hospitals outside of their Region:		
▪ I am perfectly aware of this	31.9	34.5
▪ I seem to remember that is a possibility	41.5	36.4
– Awareness among citizens of the opportunity to travel for healthcare and hospital services at facilities in different European Union countries:		
▪ Yes, I am aware	14.1	20.5
▪ Yes, I’ve heard of it	29.1	32.2
	<u>2009</u>	<u>2019</u>
– Percentage of users who took into consideration the various choices among public, accredited hospitals or private paid clinics in the last twelve months:	21.2	38.1

(1) See Health&Hospitals/2019 Report pp. 22-23

(2) “Very + somewhat agree” opinions expressed by citizens not including “do not know” answers

Source: survey by *Ermenèa – Studi & Strategie di Sistema, 2020*

As for the need to “provide continual oversight”, mentioned at the beginning of the section, it should be recalled that the “Health&Hospitals/2019” Report described how Italy offers average services (measured statistically), with positive developments and at good levels, and that these features of our Health Service are also recognized at the international level. But it was also pointed out that, notwithstanding good average system results, there are some “median” results that are not entirely satisfactory: in the sense that significant weaknesses appear in the organizational profile of the services as well as in the quality of services, which vary according to location in Italy, the size of the city or suburban nature of the setting in which the health services are offered, as well as the cultural and social make up of patients and their families, which may favor or hinder the ability to identify and access services as well as that of best use of health services. Parallel to this, even given the non-uniformly satisfactory “average” results, there exist absolutely excellent healthcare facilities that are nationally and internationally recognized.

Moreover, the summary depicted above is the result of different dynamics that have built up over time. These range from a lengthy process of progressive cutbacks over the last decade in public funding of the health system, to problems of personnel shortages caused by an increasing outflow of retiring operators and the simultaneous hiring freeze, which has been further aggravated over the last two years by early retirement (from the well-known “Quota 100”), which has further stripped services and affected the qualitative level of the services offered. All of this was in play while we were being hit by the pandemic in 2020 (still ongoing), with the need to hire new personnel and to call back those who had already retired. This is why it was decided to “provide oversight” this year on the tightening or even the halting of inpatient services for non-Covid patients: also because the pandemic emergency is still underway and indeed has been ongoing since resuming last fall. Thus, the consolidated structural data for the entire year 2020 that would permit an overview of the entire situation may only be available in 2021. In the meantime, however, the lack of inpatient services have and will have significant consequences for non-Covid patients, especially if they are suffering from serious and/or severe illnesses. Significant attention began to be paid to this at the end of the year.

1.2. Confirmation of a continuous average improvement in the complexity and effectiveness of services notwithstanding the persistence of unequal “average” results

The (increasingly) positive opinions of the mixed public/accredited private hospital system among citizens, shown in Table 1 of the previous section, are confirmed by the trend over time of the national average statistical indicators concerning the complexity of services provided, but with evident regional differences linked to the ability of the 21 de facto existing Health Services to respond to patients’ needs.

The two initial indicators that measure the complexity of the services provided are *average weight* and *case mix*.

If we consider the average weight³ we can compare the services of public hospitals to those of AIOP accredited hospitals, which shows that (Table 2):

- a) the national average indicator for public institutions and accredited hospitals has continued to rise over the years indicated: even if for the first type of facility, it went from 1.21 in 2015 to 1.23 in 2016 and 2017 then rose again to 1.26 in 2018; whereas for the second type of facility growth is more marked, going from 1.32 in 2015 to 1.35 in 2016, to 1.36 in 2017 and to 1.37 in 2018 (rising to 1.43 in 2019 (inasmuch as AIOP is available for this year);
- b) then, if we look at the 2018 indicators Region by Region, we can see that the entities that manage to find a place in the public sector above the national average (*Average weight*: 1.26) are, in descending order:
 - Tuscany (1.37);
 - Piedmont (1.35);
 - Marche and Lazio (1.31);

³ The average weight is a synthetic indicator of the level of complexity of the illnesses (cases) treated. It is an average of the relative weights assigned to each group of patients (DRG), weighted with the corresponding discharge numbers. The calculation formula used is the following:

$$\text{Average weight} = \frac{\left[\sum_{g=1}^{579} (a_g N_{gh}) \right]}{\sum_{g=1}^{579} N_{gh}}$$

where: a_g = specific relative weight of each DRG;

N_{gh} = number of discharged patients for the DRG in a single healthcare facility or in a group of facilities.

Table 2– The quality of services measured by average weight Years 2015-2019

Regions	Public hospitals					AIOP accredited hospitals				
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
– Piedmont	1.30	1.30	1.33	1.35	1.35	1.65	1.64	1.70	1.72	1.87
– Lombardy	1.21	1.21	1.22	1.23	1.23	1.55	1.55	1.59	1.61	1.63
– A.P. of Bolzano	1.10	1.12	1.08	1.08	1.08	0.78	0.78	0.82	0.84	0.88
– A.P. of Trento	1.19	1.19	1.23	1.24	1.24	0.97	1.02	1.09	1.14	1.12
– Veneto ^(a)	1.26	1.28	1.24	1.29	1.29	1.42	1.44	1.45	1.52	1.60
– Friuli Venezia Giulia	1.26	1.26	1.27	1.27	1.27	1.30	1.27	1.28	1.27	1.29
– Liguria ^(b)	1.27	1.27	1.27	1.29	1.29	2.80	2.82	2.87	3.08	3.12
– Emilia Romagna	1.22	1.23	1.25	1.27	1.27	1.34	1.36	1.36	1.33	1.36
– Tuscany	1.34	1.35	1.36	1.37	1.37	1.69	1.71	1.71	1.81	1.73
– Umbria	1.21	1.24	1.25	1.25	1.25	1.43	1.61	1.63	1.40	1.38
– Marche	1.24	1.26	1.29	1.31	1.31	1.30	1.28	1.23	1.30	1.35
– Lazio	1.23	1.26	1.13	1.31	1.31	1.19	1.32	1.30	1.21	1.26
– Abruzzo	1.18	1.21	1.24	1.24	1.24	1.29	1.31	1.32	1.32	1.31
– Molise	1.05	1.10	1.12	1.14	1.14	1.19	1.47	1.46	1.51	1.52
– Campania	1.18	1.19	1.21	1.23	1.23	1.05	1.07	1.13	1.20	1.23
– Apulia	1.09	1.11	1.13	1.16	1.16	1.50	1.50	1.45	1.33	1.49
– Basilicata	1.22	1.23	1.22	1.23	1.23	–	–	–	–	–
– Calabria	1.09	1.12	1.14	1.16	1.16	1.42	1.44	1.51	1.24	1.50
– Sicily	1.16	1.18	1.19	1.20	1.20	1.12	1.19	1.05	1.34	1.48
– Sardinia	1.13	1.14	1.16	1.18	1.18	0.88	1.19	1.24	1.31	1.30
<i>Italy</i>	<i>1.21</i>	<i>1.23</i>	<i>1.23</i>	<i>1.26</i>	<i>1.26</i>	<i>1.32</i>	<i>1.35</i>	<i>1.36</i>	<i>1.37</i>	<i>1.43</i>

N.B.: The values in bold are those that exceed the national reference average for the year, while the values in clear text are those that are lower than the average. All indicator values are aligned to CMS DRG version 24.0 used by the Ministry of Health since 2009. This version consists of 538 DRGs and refers to the 2007 International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) for the classification of diseases, injuries, surgeries, diagnostic and therapeutic procedures.

(a) The public institutions in Veneto also include 4 accredited hospitals associated with AIOP and under the control of USL facilities.

(b) The high average weight is due to the presence of two accredited hospitals, largely devoted to extremely specialized treatment.

Source: data processed by *Ermeneta – Studi & Strategie di Sistema* based on the *Ministry of Health and AIOP data*

- Veneto and Liguria (1.29);
- Friuli Venezia Giulia and Emilia Romagna (1.27).

Likewise, the *Average weight* index exceeds the national average of 1.37 in 2018, for AIOP accredited hospitals in the following regions, again in descending order:

- Liguria (3.08);
- Tuscany (1.81);
- Piedmont (1.72);
- Lombardy (1.61);
- Veneto (1.52);
- Molise (1.51);
- Umbria (1.40);
- while in the South we find lower *average weight* indicators.

Thus, in 8 Regions, the (smaller) national average of the *average weight* indicator for public facilities was exceeded and, in 7 Regions, the (highest) average for accredited facilities. Furthermore, in 4 Regions, the *Average weight* was exceeded by both public hospitals and accredited hospitals, namely in Piedmont, Veneto, Liguria, and Tuscany: confirming the fact that a good territorial setting is capable of generating more overall quality hospital services in both types of facilities;

- c) furthermore, in 13 regions (6 of which are in the South) the average weight *indicator* for the year 2018 is higher for accredited hospitals than for public hospitals;
- d) and finally, as regards AIOP accredited facilities, it can be added that, in 2019, the *average weight* value increased further compared to 2018 (1.43 compared to 1.37): and this applies to 7 Regions and/or Autonomous Provinces in the North (Piedmont, Lombardy, the Province of Bolzano, Veneto, Friuli Venezia Giulia, Liguria, and Emilia Romagna), for 2 Regions in Central Italy (Marche and Lazio), as well as for 5 Regions in the South (Molise, Campania, Apulia, Calabria, and Sicily).

Yet, also in the case of the *average weight* indicator, we can see a non-uniform “average level” of services and, in particular, a decrease (albeit with different types of intensity) in some Regions, especially (but not only), in the South for public facilities and more in the Center-South Italy than in the North for accredited facilities: in this regard, the indicators have been shown taking into account those that are (even slightly) above the national *average weight*.

At this point, the level of complexity of services can also be measured by the second type of indicator – as previously mentioned – that of the so-called

*case mix*⁴. The values in Table 3 below permit the following considerations to be made:

- a) both types of facilities have witnessed stabilization of this indicator value: it has remained fixed at 0.98 for the four years indicated with regard to public hospitals, whereas for AIOP accredited hospitals, after a slight rise in 2015 from 2014 (1.09 compared to 1.05) the Index stabilized at 1.08 dal 2016 al 2018;
- b) the national case-mix indicator for hospitals accredited with AIOP appears permanently higher than that of the public hospitals in all cases, as can be seen by comparing the data of the last line in Table 3;
- c) the Regions that exceed the national average (0.98 in 2018) with respect to public institutions are 7:
 - Tuscany (1.06);
 - Piedmont (1.05);
 - Marche and Lazio (1.01 for both);
 - Veneto and Liguria (1.00 for both).
 - Friuli Venezia Giulia (0.99);

The same process, applied to AIOP accredited hospitals (again for the year 2018) sees 7 Regions exceed the *Case-mix Index* of 1.08; the Regions are:

- Liguria (2.39);
- Tuscany (1.40);

⁴ The case-mix index constitutes a second synthetic (more detailed) indicator of the complexity level of illnesses treated. It expresses the complexity of the cases treated by a department, a hospital or a unit, compared to the complexity of the case for the entire regional or national hospital system. Case mix levels greater than 1 are associated with a complexity higher than the average for the system in question. The calculation formula used is the following:

$$\text{Case mix index} = \frac{\left[\sum_{g=1}^{579} (a_g N_{gh}) \right]}{\left[\sum_{g=1}^{579} (a_g N_{gr}) \right]} : \frac{\sum_{g=1}^{579} N_{gh}}{\sum_{g=1}^{579} N_{gr}}$$

- where: a_g = specific relative weight of each DRG;
 N_{gh} = number of discharged patients for the DRG in a single healthcare facility or in a group of facilities;
 N_{gr} = number of discharged patients for the DRG for the system in question (e.g. regional, national total).

Please note that the case-mix index is weighted with the complexity of cases of the entire regional hospital system, whereas the average weight index is weighted only with the number of discharges: consequently, the average weight index ends up reducing the variable scope of the indicator itself which must take account of the context.

Table 3 – Comparison of AIOP public hospitals and AIOP accredited hospitals, based on the “case-mix” of the services provided, Years 2015-2018

Regions	Public hospitals				AIOP accredited hospitals			
	2015	2016	2017	2018	2015	2016	2017	2018
– Piedmont	1.05	1.04	1.05	1.05	1.35	1.31	1.35	1.33
– Lombardy	0.97	0.96	0.97	0.96	1.27	1.24	1.27	1.27
– A.P. of Bolzano	0.89	0.89	0.86	0.84	0.64	0.63	0.65	0.65
– A.P. of Trento	0.96	0.95	0.98	0.86	0.79	0.81	0.87	0.88
– Veneto ^(a)	1.02	1.02	0.99	1.00	1.16	1.15	1.15	1.18
– Friuli Venezia Giulia	1.02	1.01	1.01	0.99	1.06	1.01	1.02	0.99
– Liguria ^(b)	1.02	1.02	1.01	1.00	2.30	2.25	2.28	2.39
– Emilia Romagna	0.99	0.98	0.99	0.98	1.10	1.09	1.09	1.08
– Tuscany	1.08	1.08	1.08	1.06	1.38	1.36	1.36	1.40
– Umbria	0.98	0.99	0.99	0.97	1.17	1.29	1.30	1.29
– Marche	1.00	1.00	1.02	1.01	1.07	1.02	1.00	1.01
– Lazio	1.00	1.00	0.90	1.01	0.98	1.05	1.03	0.97
– Abruzzo	0.96	0.97	0.98	0.96	1.06	1.04	1.09	1.08
– Molise	0.85	0.87	0.89	0.89	0.98	1.18	1.16	1.17
– Campania	0.95	0.95	0.96	0.96	0.86	0.85	0.92	0.93
– Apulia	0.88	0.89	0.90	0.90	1.23	1.19	1.15	1.06
– Basilicata	0.99	0.98	0.97	0.95	-	-	-	-
– Calabria	0.88	0.89	0.90	0.90	1.17	1.15	1.20	0.96
– Sicily	0.94	0.94	0.95	0.93	0.98	0.96	0.90	1.04
– Sardinia	0.91	0.91	0.92	0.92	0.72	0.95	0.99	1.02
<i>Total</i>	<i>0.98</i>	<i>0.98</i>	<i>0.98</i>	<i>0.98</i>	<i>1.09</i>	<i>1.08</i>	<i>1.08</i>	<i>1.08</i>

N.B.: The values in bold are those that exceed the national reference average for the year, while the values in clear text are those that are lower than the average. All indicator values are aligned to CMS DRG version 24.0 used by the Ministry of Health since 2009. This version consists of 538 DRGs and refers to the 2007 International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) for the classification of diseases, injuries, surgeries, diagnostic and therapeutic procedures.

(a) The public institutions in Veneto also include 4 accredited hospitals associated with AIOP and under the control of USL facilities.

(b) The high average weight is due to the presence of two accredited hospitals, largely devoted to extremely specialized treatment.

Source: data processed by *Ermeneta – Studi & Strategie di Sistema* based on the *Ministry of Health and AIOP data*

- Piedmont (1.33);
 - Umbria (1.29);
 - Lombardy (1.27);
 - Veneto (1.18);
 - Molise (1.17);
 - while 3 Northern Regions (Autonomous Province of Bolzano, Autonomous Province of Trento, Friuli Venezia Giulia) and 3 Central-Southern Regions (Lazio, Campania and Calabria) are below 1.00;
- d) and finally, for the year 2018, the comparison between the *Case-mix index* of public hospitals and that of AIOP accredited hospitals almost always shows a better position for AIOP facilities, except in the case of the Autonomous Provinces of Bolzano and Trento, Lazio and Campania.

It goes without saying again in this case that the issue of unsatisfactory “average level” of the lower *case-mix* indicators tends to penalize the South, but not only (and in addition there is a clear improvement for Sicily and Sardinia as regards the AIOP accredited hospitals that far exceed the *case-mix* index of public hospitals). The indicators that are above the national average – even slightly – have been shown, as was done for the *average weight*.

In addition to the two indicators considered, others can be identified that measure the level of complexity of the services provided by the different types of hospitals in a more precise and exemplary manner, albeit with reference to some specific services. Table 4 indicates 16 highly specialized DRGs and their incidence per 1,000 discharged patients in the two types of hospital facilities considered, namely public hospitals and those AIOP accredited and associated hospitals. From this comparison, the following can be noted:

- a) an average incidence that continues to increase in the three-year period 2016-2018 for public hospitals (from 26.5% to 28.7%) and a substantial (or near) stabilization between 2016 and 2018 (around 27.7%), with a higher peak of 29.9% in the interim year 2017) for accredited private hospitals. However, the average incidence of the services indicated in 2018 sees public hospitals in the lead – albeit slightly – compared to accredited ones (28.7% compared to 27.7%);
- b) but if one compares the incidence out of 1,000 discharges for individual DRGs in 2018, the greater complexity of the services of the accredited facilities is confirmed (and often by far, except in the cases: DRG 110 (Major cardiovascular system procedures with cc), DRG 547 (Coronary bypass w cardiac cath w major cv dx), DRG 549 (Coronary bypass w / o cardiac cath w major cv dx), DRG 551 (Permanent cardiac pacemaker implant w major cv dx or AICD lead or GNRTR), DRG 552 (Other per-

Table 4 – The quality of public and AIOIP accredited hospital services, as measured by the incidence rates of extremely specialized^(a) DRGs^(*)

DRG	Public hospitals (Incidence per 1,000 discharged patients)			Accredited hospitals associated with AIOIP (Incidence per 1,000 discharged patients)		
	2016	2017	2018	2016	2017	2018
104	1.420	1.632	1.864	5.072	6.750	6.426
105	1.599	1.556	1.744	2.511	2.468	1.794
106	0.034	0.041	0.050	0.137	0.169	0.113
108	0.528	0.478	0.551	0.685	0.846	0.702
110	1.598	1.587	1.707	1.079	1.056	0.824
111	1.519	1.597	1.694	2.058	2.257	2.027
515	1.630	1.601	1.618	1.886	1.897	2.011
535	0.318	0.342	0.395	0.604	0.764	0.867
536	0.394	0.386	0.429	0.605	0.574	0.510
547	0.173	0.200	0.177	0.182	0.163	0.083
548	0.403	0.396	0.401	1.060	1.211	1.188
549	0.179	0.195	0.203	0.438	0.243	0.103
550	0.752	0.724	0.726	1.866	2.075	1.433
551	1.682	1.608	1.647	1.770	1.527	1.211
552	4.995	5.123	5.337	4.432	4.769	4.868
553	0.296	0.282	0.307	0.121	0.121	0.122
Mean Incidence	26.541	26.926	28.730	27.760	29.850	27.684

(*) Inpatient admissions for acute cases.

(a) Values calculated with the later CMS DRG Version 24.0 adopted by the Ministry of Health.

Source: data processed by *Ermeneta – Studi & Strategie di Sistema* based on the *Ministry of Health and AIOIP data*

manent cardiac pacemaker implant w / o major cv dx), and finally, DRG 553 (Other vascular procedures w cc w major cv dx). All this confirms the higher complexity of AIOP services for a group of emblematic highly specialized DRGs.

A further way to measure hospital services is to compare the incidence of cases of high, medium and low complexity of the aforementioned services provided during hospitalization (Table 5): all with reference to the national average, to that of the territorial districts, to the individual Regions as well as to the two types of hospitals, public and private. It should be mentioned that in this instance we are talking about accredited facilities, including private polyclinics, IRCCS and private foundations, religiously-affiliated classified hospitals, USL facilities, research agencies and, finally, accredited private hospitals.

Furthermore, we have to specify that the level of complexity has been calculated on the weighted classes relative to DRGs, taking into account that this indicator refers to the resources absorbed for the production of each DRG⁵.

The picture of the complexity of the services that emerges, with reference to the last four years available (2015 to 2018), shows that:

- a) the increase in the high complexity of services nationally for the four years considered appears to be positive (see the last line of Table 5): both for the public component, which went from 14.4% in 2015 to 15.5% in 2018, and for the private component which, however, displays a significantly greater increase, rising from 18.7% in 2015 to 22.3% in 2018; at the same time, the average complexity of the services for the public hospitals (34.0% to 35.4%) and the accredited private hospitals (30.7% to 31.6%) also increased slightly, while low complexity services for both types of facilities decreased, although in a more pronounced way for the accredited private facilities (going from 51.7% to 49.1% for public hospitals and from 50.6% to 46.1% for accredited private hospitals);
- b) however, if the indicators are compared by geographic location, the relative disadvantage of the South with respect to the Center-North becomes evident (with fewer high-complexity services and with more low-complexity services), confirming the fact that the national average of complex services indeed experiences the phenomenon of an unequal “average” for hospitals in the South (see last two lines of data in Table 5);

⁵ See note in Table 5.

Table 5 – Comparison of percentages of high, medium and low complexity cases of services provided to acute patients during hospitalization, a comparison of the public and private hospital components of the NHS, divided by Regions – 2018

Regions	Public hospital component												Private hospital component (accredited facilities)												
	High complexity				Medium complexity				Low complexity				High complexity				Medium complexity				Low complexity				
	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018	
Piedmont	15.9	16.0	16.6	17.1	35.0	34.7	35.2	35.6	49.2	49.3	48.2	47.3	17.9	19.7	25.0	26.9	23.4	23.7	26.6	27.6	58.7	56.6	48.4	45.4	
Aosta V.	15.5	16.3	15.8	15.8	34.2	34.9	35.2	36.0	50.2	48.8	49.0	48.1	28.8	31.9	37.1	39.3	17.9	9.3	17.6	17.0	65.2	58.8	45.3	43.8	
Lombardy	14.0	14.2	14.5	14.7	31.1	31.2	31.5	31.7	54.9	54.6	54.0	53.5	22.6	24.1	25.3	25.9	23.4	24.0	27.0	23.9	76.6	76.0	73.0	43.0	
Bolzano	12.8	13.3	13.3	13.3	28.1	28.9	28.6	29.2	59.1	57.6	58.1	57.5	-	-	-	-	23.4	24.0	27.0	23.9	76.6	76.0	73.0	43.0	
Trento	14.5	14.4	15.4	15.9	36.0	35.8	36.2	37.4	49.5	49.8	48.4	46.7	15.5	19.8	28.0	24.2	24.2	28.3	27.0	31.0	24.8	56.2	53.2	47.0	51.0
Veneto	15.9	15.9	14.5	15.8	35.2	34.8	34.8	35.3	48.9	49.3	49.3	49.4	22.6	21.3	22.5	22.5	24.1	23.2	22.0	20.5	53.3	55.5	55.5	57.0	
Friuli V.G.	16.5	15.4	15.6	15.1	34.7	35.3	35.1	35.5	49.7	49.3	49.3	49.4	20.7	20.6	19.7	21.8	37.2	36.5	34.9	35.4	42.0	42.9	45.4	42.9	
Liguria	16.2	16.6	15.4	15.7	39.8	40.6	40.1	39.8	44.0	42.8	44.5	44.5	18.1	18.0	22.1	24.5	28.1	27.6	26.1	27.0	53.8	54.4	51.8	48.5	
Emilia R.	14.2	14.3	15.2	15.7	35.8	35.9	36.6	36.7	50.1	49.8	48.2	47.6	33.5	36.2	38.1	42.4	24.9	24.8	24.4	24.0	41.6	39.0	37.5	33.6	
Tuscany	17.1	17.5	17.7	18.1	39.4	39.8	39.8	40.2	43.4	42.7	42.5	41.7	18.1	18.0	22.1	24.5	28.1	27.6	26.1	27.0	53.8	54.4	51.8	48.5	
Umbria	14.2	15.1	15.3	15.5	31.9	33.1	34.1	34.8	53.9	51.8	50.6	49.7	25.3	30.0	31.4	29.2	24.9	19.3	18.2	20.0	55.8	50.7	50.4	50.8	
Marche	15.1	15.6	16.6	17.2	35.8	36.3	37.4	38.0	49.1	48.1	46.0	44.8	17.7	19.1	23.6	22.1	24.2	23.3	26.3	24.9	58.1	57.6	50.1	53.1	
Lazio	16.1	17.0	15.9	18.3	33.4	34.0	34.4	35.4	50.5	49.0	53.7	46.3	15.7	16.7	16.5	17.7	33.5	33.8	32.7	34.9	50.9	49.5	50.8	47.4	
Abruzzo	14.6	15.4	15.6	15.7	35.4	36.3	37.4	38.2	50.0	48.3	47.0	46.0	22.2	21.4	23.1	25.1	30.1	28.9	30.0	33.0	47.7	49.7	46.9	41.9	
Molise	10.3	11.2	12.3	12.7	30.9	33.5	34.1	36.0	58.8	55.3	53.6	51.3	27.3	28.6	31.6	32.4	37.5	37.5	35.8	36.1	35.2	33.9	32.6	31.6	
Campania	12.3	12.6	13.5	14.2	30.4	30.9	32.0	33.5	57.3	56.5	54.5	52.3	11.1	11.9	13.2	15.3	28.2	28.3	28.6	31.4	60.7	59.8	58.2	53.3	
Apulia	10.7	11.3	11.9	12.8	31.9	32.9	34.2	35.3	57.4	55.8	53.9	51.9	16.0	17.1	18.0	19.1	34.6	35.7	36.1	36.1	49.4	47.2	45.9	44.9	
Basilicata	14.0	15.8	15.7	14.4	37.2	37.6	38.1	37.6	48.8	48.6	48.2	48.0	31.4	35.1	-	-	32.0	23.5	-	-	36.6	41.6	-	-	
Calabria	11.1	11.9	12.3	13.0	31.9	32.1	34.4	34.6	57.1	56.0	53.3	52.4	24.4	29.2	30.5	29.3	34.3	33.2	32.2	34.1	41.3	37.6	37.3	36.6	
Sicily	14.4	15.0	15.6	15.7	34.6	34.9	35.0	35.0	51.0	50.1	49.5	49.3	16.9	18.9	19.8	18.1	33.5	34.2	33.9	30.5	49.6	46.9	46.3	51.4	
Sardinia	11.6	12.3	12.3	13.0	32.3	32.9	33.9	34.8	56.1	54.8	53.8	52.2	13.1	14.3	15.6	16.6	16.8	18.0	17.7	18.0	70.0	67.7	66.7	65.4	
North	14.9	15.0	15.1	15.5	34.0	34.1	34.4	34.7	51.1	50.9	50.5	49.7	22.0	23.2	24.8	26.0	29.9	30.2	30.0	30.3	48.2	46.6	45.2	43.8	
Center	16.1	16.8	16.7	17.7	36.0	36.5	35.7	37.7	47.9	46.7	47.6	44.6	18.2	19.4	19.7	21.1	31.5	31.9	31.1	32.8	50.3	48.7	49.2	46.1	
South	12.5	13.0	13.6	14.2	32.6	33.2	34.2	35.0	54.9	53.8	52.2	50.8	15.3	16.5	17.5	18.5	31.2	31.6	31.7	32.4	53.5	51.9	50.8	49.1	
Italy	14.4	14.7	14.9	15.5	34.0	34.3	34.6	35.4	51.7	51.0	50.5	49.1	18.7	19.9	21.2	22.3	30.7	31.1	30.8	31.6	53.0	50.0	49.0	46.1	

(*) The classification by classes of complexity of the DRGs currently available is that contained in the 2012 TUC Agreement, also included in the provisions of the 2016 Stability Law which excludes high-complexity services from passive mobility control measures, and subsequently extended. The TUC, however, only defines 84 high-complexity DRGs and 108 potentially inappropriate DRGs, nevertheless incorporating a setting aimed at the construction of a fee system designed to compensate inter-regional mobility. This table therefore utilizes a classification based on weight classes of DRGs, taking into account that this indicator expresses the complexity through the evaluation of the resources used for the production of each DRG; the average complexity is between the weight values of 0.9500 and 1.700 and the range of high complexity DRGs is 97% of the TUC high complexity services. Public hospital services are provided by: Hospital Centers, University Hospitals, Public IRCCS and Public Foundations, Directly-Managed Hospitals, Accredited private hospital services are provided by: Private Polyclinics, Private I.R.C.C.S. and Private Foundations, Classified Hospitals, USL Facilities, Research Facilities, Accredited Hospitals.

Source: survey by *Ermeneta – Studi & Strategie* based on data from *Minister of Health – SDO 2018*

- c) the differences in terms of high complexity become even more evident (again, the unequal “average” mentioned above) if one looks at the individual Regions. In fact, if we consider the values on opposite ends of the spectrum for highly complex services in 2018 (see the fourth column of Table 5, relating to the two hospital components):
- in public hospitals it ranges from a maximum of 18.3% for Lazio to a minimum of 12.7% for Molise;
 - and in accredited private hospitals, the highest index is still reached by Tuscany (42.4%) and the lowest by Campania (15.3%);
- d) finally, it is worth considering where the more complex services are concentrated on the one hand and less complex on the other. Thus:
- the high complexity index is constantly higher (as well as more accelerated in 2017 and 2018), in the four-year period, at the national average for accredited private facilities compared to public ones;
 - the average complexity index of services is instead constantly higher in the four-year period for public facilities compared to accredited private ones (significantly more than 34% in the former case compared to 31% in the latter case);
 - this is also the case for low-complexity services, which are more numerous for public hospitals (around 50%) while they are slightly less numerous for accredited private hospitals (under 50%).

Closely related to the indicators used so far, it is also possible to consider the one that illustrates the effectiveness of the treatments, that is, the maintenance and the possible improvement/deterioration of the average statistical services that use the National Outcome Evaluation Program (Programma Nazionale Valutazione Esiti, PNE), developed by Agenas on behalf of the Ministry of Health which provides comparative assessments of efficacy, safety, efficiency and quality of care produced by individual publicly-operated and privately-operated hospitals within the NHS.

The indicators developed are discussed in the framework of the PNE Committee, composed of representatives of Regions, Autonomous Provinces, Ministry of Health and scientific institutions, while planning, management, definition of indicators, data analysis and web site management are entrusted to the Department of Epidemiology of the Regional Health Service (Servizio Sanitario Regionale, SSR) of the Lazio Region, in its capacity as Agenas’ PNE operational center.

The PNE indicators are an evaluation tool used to support clinical and organizational *auditing* programs aimed at improving effectiveness and equity within facilities of the National Health Service. The functions of these indicators – It should be remembered – do not include the publication of

classifications, rankings or “report cards”. Even though the results are processed using media and the most important public reporting portals in the health sector for each data presentation, they are often based on indicators that are not fully evaluated in terms of statistical significance and quality, as well as a correct reading of the basic data: such a circumstance may have inappropriate repercussions in terms of image and clinical reliability for the facilities concerned.

In any case, the PNE indicators have over time assumed strategic importance also as an assessment tool for health care planning and the redefinition of the hospital network and services. In fact, with the issuance of Ministerial Decree 70/2015 – which sets as priorities the implementation of clinical governance, safety of care, research and innovation – indicators of volumes of activity and evaluation of outcomes constitute a central reference for the determination of qualitative, structural, technological and quantitative standards relating to hospital care. Point 4.6 of the Decree states that “*both in terms of volumes and outcomes, the minimum thresholds that can be identified at the national level on the basis of scientific evidence, may permit the definition of non-discretionary criteria for the reconversion of the hospital network and potential assessments for accreditation*”.

The 2019 edition of the PNE Report (published in July 2020 and which reports data referring to the year 2018) is based on the same methodologies described in the *Health&Hospitals2019*⁶ Report. But this year the indicators it was possible to use to carry out a public-private comparison analysis have increased from 28 to 42. In detail:

- 12 indicators for the cardiovascular clinical area;
- 3 indicators for the cerebrovascular clinical area;
- 3 indicators for the digestive clinical area;
- 9 indicators for cancer surgery;
- 9 indicators for the musculoskeletal clinical area;
- 3 indicators for the perinatal clinical area;
- 2 indicators for the respiratory clinical area;
- 1 indicator for the urological clinical area.

However, Table 6 presents the same 28 outcome indicators (19 of which are TREEMAP⁷) from last year as they allow for a significant comparison, by number of cases examined, for both public hospitals and accredited pri-

⁶ See Part One/Section 1.2, p. 26 et seq.

⁷ The TREEMAP indicators constitute a new synthetic assessment tool, by means of which each facility can be evaluated both on the basis of the results obtained for each of the PNE indicators, and on the basis of a synthetic analysis by clinical area, taking into account the validity and the different weight of each indicator.

vate hospitals. The table shows the outcome indicators structured according to the approach used for the complexity indicators (such as the *Average weight* and the *Case mix*). The analysis of the national values shows the risk adjustment (*ADJ*)⁸ values, thus making it possible to compare the results of the year 2017 with those of 2018.

The data contained in the mentioned Table contribute to illustrating:

- first of all, the best service levels achieved by a hospital type, highlighting the scores attained by the best ones (see columns 6^a and 7^a of the table 6): the comparison shows a more solid positioning for private hospitals (with 23 better outcome indicators out of the 28 used) than public ones (with 2 better outcome indicators out of the 28 used);
- but also the progress of positive outcome indicators between 2017 and 2018 within each type of hospital (see column 8^a and 9^a of Table 6): the comparison makes it possible to record a recovery of 17 out of 28 services for public hospitals (which were slightly at a disadvantage in the previous year) and in any case of 15 out of 28 services for private hospitals;
- however, apart from the improvement just mentioned, it should be borne in mind that the positioning of the average outcome in 2018 remains significantly better for private hospitals than for public ones, as shown in the last two columns of Table 6.

However, the improvement in average hospital services is accompanied, as already mentioned at the beginning of this section, by the persistence of an unequal (and therefore unsatisfactory) “average” of the same⁹.

The situation throughout the pre-pandemic year of 2019 presented a series of unsatisfactory “average” “structural” type phenomena that are reported in

⁸ The comparative evaluation of outcomes must take into account the possible differences existing in the population examined, which may include age, gender, the severity stages of pathologies, and comorbidities. The risk adjustment techniques make it possible to analyze the observed variability between facilities and/or territorial areas in terms of relative risk (RR), this index being used as an associative measure. This way the possible ‘confounding effect’ of the association between outcome and exposure is insulated, as this effect is caused by an uneven distribution of patient characteristics.

⁹ The term “average” implies the ability of the services to offer an acceptable level of performance, in terms of quantity and quality, but also with adequate coverage to and within the various territories of Italy.

Table 6 – Outcome indicators (with risk adjustment values) for 2 TREEMAP indicators, comparing the results of public, hospitals and private hospitals¹

Indicators	Total cases	Number of treated cases				National average of Outcomes ²		Outcome Improvement 2017-2018 ²	
		Public hospitals		Private hospitals		Public hospitals	Private hospitals	Public hospitals	Private hospitals
		Number of cases	%	Number of cases	%	Public hospitals	Private hospitals	Public hospitals	Private hospitals
Valvuloplasty or replacement of heart valves: 30-day mortality	40,962	21,985	53.7	18,977	46.3	2.39	2.04	-0.64	-0.26
Aortic annular by-pass: 30-day mortality	26,824	15,510	57.8	11,314	42.2	2.03	1.72	-0.04	-0.32
Amit: 30-day mortality	84,716	75,225	88.8	9,491	11.2	8.05	6.72	-0.24	-0.87
Amit: % treated with PTCA within 2 days	84,713	75,025	88.6	9,688	11.4	47.77	60.77	1.05	2.27
Congestive heart failure: 30-day mortality	124,502	98,190	78.9	26,312	21.1	10.64	8.35	-1.05	0.80
Repair of unruptured aneurysm of the abdominal aorta: 30-day mortality	16,945	13,038	76.9	3,907	23.1	1.54	1.04	-0.61	-0.37
Ischemic stroke: 30-day mortality	58,016	51,814	89.3	6,202	10.7	10.01	8.30	-0.73	0.78
Surgery for cerebral tumor: 30-day mortality	29,646	24,348	82.1	5,298	17.9	2.57	1.72	-0.11	-0.79
Exacerbated COPD: 30-day mortality	74,137	60,709	81.9	13,428	18.1	9.97	5.69	-1.18	1.10
Laparoscopic Colectostomy: post-operative stay of less than 3 days	64,221	44,639	69.5	19,582	30.5	76.20	83.42	1.33	1.02
Inpatient Cholecystectomy: complications after 30 days	131,205	91,476	69.7	39,729	30.3	2.37	1.41	-0.06	0.00
Proportion of Deliveries by primary cesarean section	326,119	265,197	81.3	60,992	18.7	20.99	29.22	-1.98	-6.48
Proportion of Vaginal deliveries after previous Cesarean section	-	-	-	-	-	-	-	-	-
Cesarean deliveries: complications during childbirth and the puerperium	267,717	200,433	74.9	67,284	25.1	0.92	0.58	0.08	0.06
Cesarean deliveries: subsequent hospitalizations during the puerperium	-	-	-	-	-	-	-	-	-
Natural deliveries: complications during childbirth and the puerperium	522,429	434,961	83.3	87,468	16.7	0.61	0.45	0.08	-0.05
Natural deliveries: subsequent hospitalizations during the puerperium	-	-	-	-	-	-	-	-	-
Surgery for colon tumor: 30-day mortality	47,960	38,029	79.3	9,931	20.7	4.16	3.39	0.22	0.79
Surgery for lung tumor: 30-day mortality	26,183	20,616	78.7	5,567	21.3	0.91	1.55	-0.04	-0.07
Surgery for stomach tumor: 30-day mortality	17,561	13,776	78.4	3,785	21.6	4.63	3.86	0.27	0.96
New resection interventions within 120 days from conservative surgery for malignant breast cancer	37,262	27,067	72.6	10,195	27.4	7.30	6.09	0.06	-0.87
Fracture of the neck of the femur in over 65: surgery within 2 days	70,143	62,285	88.8	7,858	11.2	65.45	73.69	2.75	-0.13
Hip prosthesis: readmissions after 30 days	76,112	43,162	56.7	32,950	43.3	4.12	2.48	0.06	-0.47
Hip prosthesis: new surgery after 2 years	79,559	48,280	60.7	31,279	39.3	1.90	1.77	0.05	-0.11
Knee prosthesis: readmission after 30 days	56,905	17,455	30.7	39,450	69.3	1.62	1.15	-0.13	-0.17
Knee prosthesis: new surgery after 2 years	53,348	17,702	33.2	35,646	66.8	2.80	2.71	-0.05	0.06
Knee Arthroscopy: new surgery after 6 months	107,175	37,786	35.3	69,389	64.7	1.09	1.02	-0.20	-0.30
Fracture of the tibia and fibula: waiting times for surgery (days) (median)	10,853	9,562	88.1	1,291	11.9	4.00	3.40	0.19	0.68

(1) For public hospitals, the following were considered: Hospital Centers, Hospitals directly managed by Local Health Authorities, Public Institutes for Treatment and Research and Public Foundations. Whereas for private hospitals the following were considered: Accredited Hospitals, Non-Accredited Healthcare Facilities, Private University Policlinics, Private Institutes for Treatment and Research and Private Foundations.

(2) The values shown in light gray represent the best services validated by the statistical significance test. Where the comparison does not show any highlighted data, the higher value for one of the two groups examined might be a chance result.

Source: AIOF – INNOCENTIA “Report on the quality of clinical outcomes in private hospitals”, prepared by Imogene using Agenas data – National Outcome Evaluation Program (PNE) 2019

the data of Table 7. As can be seen, the subjective perception of this inadequate “average” affects the country across the board, but particularly the South, where it may be seen:

- a) first of all in the “slightly + not at all satisfactory” opinion, expressed by caregivers with regard to hospital services in their Region based on the experience in the last two years: 35.9% for public hospitals, 26.2% for accredited private ones and 23.3% for private paid clinics; but these evaluations appear pejorative if we look at the answers obtained from respondents from the South, which rise respectively to 47.8% for the first type of facilities, to 27.3% for the second type and finally remain just below the average for the latter with regard to private paid clinics;
- b) in the 23.3% of caregiver opinions of “slightly + not at all satisfied” towards public hospitals compared to 9.1% for accredited private hospitals; although these opinions become 31.6% and 23.3%, respectively, in the evaluations of respondents from the South, with an obvious decrease in the level of satisfaction for the South (from 76.5% of the national average to 68.0% for public facilities and from 90.6% to 75.8% for accredited private facilities);
- c) in the 29.0%, rising to 37.5% as the national average, of respondents who stated that they were “slightly + not at all satisfied” between 2018 and 2019, given the statements of the population with respect to the experiences actually had in the emergency room the last time this occurred during the two years indicated, with an increasingly higher incidence for the South, which rose from 37.9% in 2018 to 45.9% in 2019;
- d) in the widespread tendency to use hospitals outside the home Region according to caregiver opinions, an attitude that increased from 10.1% of respondents in 2016 to 16.4% in 2018, but contracted in 2019 (12.4%), probably linked to the transfer and assistance costs of the patient’s family; however, this difficulty did not seem to have a slowing effect on caregivers in the South, who tended to take this direction in 17.5% of cases in 2019. Moreover, the potential drift towards in-hospital stays outside the home Region is even more significant, the result of the fear of not finding adequate solutions in terms of local/regional hospital facilities, given that it rose from 18.1% in 2016 to 43.9% (!) in 2018 and then hovered – for the reasons just mentioned – at 39.6% in 2019: and again the South showed much more pronounced tendencies in this direction than the national average, reaching 42.4%;
- e) in a parallel recourse to rehabilitation and long-term care facilities in other Italian Regions, with an effective recourse or in any case a positive orientation in this sense by 40.4% of caregivers interviewed in 2019 with

Table 7 – The perception of an unsatisfactory “average level” of services (especially in the South), according to the statements by caregivers, users and population (% val.)

Phenomena	Data			
	Public hospitals	Accredited hospitals	Private paid clinics	
– Assessment of a more or less acceptable “average level” of the hospital services in the home Region based on the experiences of the caregivers and/or other family members over the last two years (the percentages shown are net of non-responses): ¹ <ul style="list-style-type: none"> ▪ Completely satisfactory + satisfactory average level ▪ Slightly + completely unsatisfactory average level ▪ Slightly + completely unsatisfactory average level in South Italy 	64.1	73.8	76.7	
	35.9	26.2	23.3	
	47.8	27.3	22.4	
– Level of satisfaction/dissatisfaction with hospital services received the last time users made use of public facilities or accredited private facilities in 2019: ² <ul style="list-style-type: none"> ▪ Very + Quite satisfied ▪ Slightly + Not at all satisfied 	Public hospitals		Accredited hospitals	
	National average	South	National average	South
	76.5	68.0	90.6	75.8
	23.3	31.6	9.1	23.3
– Level of satisfaction/dissatisfaction of the population relating to actual experiences had in the Emergency Room of one or more hospitals the last time this happened over the last twelve months: ³ <ul style="list-style-type: none"> ▪ Year 2018 ▪ Year 2019 	Public hospitals		Slightly + Not at all satisfied	
	Very + Quite satisfied	South	Total	South
	65.1		29.0	37.9
	59.7		37.5	45.9

(Continued) Table 7 – The perception of an unsatisfactory “average level” of services (especially in the South), according to the statements by caregivers, users and population (% val.)

Phenomena	Data				
	2016	2017	2018	Total	The South
<ul style="list-style-type: none"> – The higher propensity over the last 12 months to resort to hospital facilities outside the home Region by caregivers and/or other family members¹ <ul style="list-style-type: none"> ▪ Inclination to actually make use of extra-regional hospital facilities ▪ Inclination to potentially make use of extra-regional hospital facilities ▪ The issue did not arise 	10.1	16.4	16.4	12.4	17.5
	18.1	31.3	43.9	39.6	42.4
	71.8	52.3	51.7	50.1	48.0
<ul style="list-style-type: none"> – Behaviors and orientations of caregivers and/or other family members regarding the use of rehabilitation and/or long-term care facilities in Italian Regions other than their home Region²: <ul style="list-style-type: none"> ▪ Effective use of extra-regional facilities or at least a willingness to do so ▪ Did not make use of extra-regional facilities though they were willing to do so due to the expenses to be incurred for the transfer of family members + Did not make use of extra-regional facilities but, if there was a need, would evaluate the possibility ▪ Did not make use of extra-regional facilities because they were not informed of this possibility + Regional facilities were sufficiently adequate 	40.4	58.1	47.3	66.2	
	22.1	35.8	20.8	29.0	
	50.2	36.5	37.5	26.7	
<ul style="list-style-type: none"> – Increased <i>out-of-pocket</i> healthcare spending by Italian families⁴: <ul style="list-style-type: none"> ▪ In millions of euros (at current prices) ▪ I.N.: 2014 = 100.0 		2015	2017	2019	
		35,807	37,341	37,999	
		100.0	104.3	106.1	

(1) “Health&Hospitals/2019” Report/Part One, Table 8.

(2) See “Health&Hospitals/2019” Report, p. 407.

(3) “Health&Hospitals/2019” Report/Part One, Table 14.

(4) Source: ISTAT, Final consumption expenditure by Italian families.

Source: Survey by *Ermenewa – Studi & Strategie di Sistema, 2019*

regard to rehabilitation (which however was 58.1% in the South) and 47.3% for long-term care facilities (which rose to 66.2% in the South);
f) and consequently in the increasing tendency towards out-of-pocket spending by Italian households which, as can be seen from the last group of data in Table 7, rose from EUR 35.8 billion in 2015 to EUR 37.3 billion in 2017, reaching EUR 37.9 billion in 2019, an increase of 6.1% compared to four years earlier.

1.3. The added value of the convergence of public hospitals and accredited private hospitals to deal with the Covid-19 emergency

The situation, or rather the many situations, of relative disadvantage among the large areas in Italy is rooted in history, culture and social and institutional behavior that has led to the well-known territorial differences also referred to in the previous section.

However, it should be emphasized that points of excellence and points of inefficiency can be found within the individual Italian regions, including the South: the result is therefore that of an unequal “average” (that is, the lack of acceptable and uniformly widespread health services). Therefore, having had to deal with the Covid-19 emergency has further exposed the pre-existing weaknesses of the system, starting from the first wave of the virus, from which the Center-South was substantially spared (or was only marginally affected).

The country suffered from the pandemic impact for at least three reasons:

- due to the highly contagious nature and therefore rapid spread of the virus and at the same time due to a lack of knowledge about it;
- due to the evident lack of facilities, organization, personnel and procedures specifically prepared to deal with any pandemics: and this despite numerous warnings received from 2000 onwards, when considering the concentration of epidemic-pandemic warnings such as SARS (2002), the ‘Swine flu (2009), MERS (2012), Ebola and Zika (2014);
- and, finally, due to the well-known weaknesses of community healthcare which – already in previous years – has ended up pushing users to use hospital facilities, even for typical local health authority (ASL) services, perhaps going to the Emergency Room to “save” time¹⁰.

¹⁰ In this regard, see the “Health&Hospitals/2019” Report, Part Two/Section 4 on the specific issue of improper use of the Emergency Room.

The result was an exponential growth of infections, especially in the North (Lombardy, Veneto, Emilia Romagna, Piedmont and, in a slightly more marked way, Marche), with a heavy impact on the Emergency Room and therefore on inpatient admissions for acute and post-acute care, and thus on sub-intensive care and intensive care admissions.

It was in this context during the first epidemic wave that the National Health Service requested help from accredited private hospitals (also known as privately operated institutes). In this regard, Table 8 provides a list of the regulatory provisions that were activated, starting at the national level and then by the Regions concerned (a summary presentation of the contents of these provisions and the related Protocols between Regional Health Services and stakeholder associations of the accredited private hospitals is given in section 3.1 of Part One).

Privately operated facilities (accredited private hospitals), were therefore significantly involved, starting with those associated with AIOP and – in some Regions – other accredited private facilities as well. Overall, 958 intensive and sub-intensive care patient beds were made available for Covid-19 patients, as well as 9,401 acute and post-acute care patient beds (see Table 9). These were backed up by 25,103 patient beds for activities potentially aimed at non-Covid patients, given the suspension of services deemed (at least theoretically) deferrable. In this way, a special reserve hospital system was created that can be used in every Region and at any time to address the care needs of both types of patients.

Emblematic of the availability and ability of AIOP facilities to respond to the needs of the first emergency phase is the case of Lombardy, the most affected region that had to deal with the impact of Covid-19 first. In just three weeks during the month of March 2020, the accredited private hospitals of the Region made 484 intensive and sub-intensive care patient beds available, equal to 6.1% of all those destined for the emergency, 4,975 patient beds for acute and post-acute Covid patients, equal to 62.6% of all those used in the Region in the period of the maximum epidemic acuity and finally 2,491 patient beds for non-Covid patients, equal to the remaining 31.3%.

In addition to the Lombardy case, we also wanted to conduct a panel survey on AIOP regional presidents in order to better understand the consequences of making the related facilities available in the Regions most affected. Table 10 shows that in 90% of cases the AIOP facilities were involved through specific agreements or at least were so in actual fact, without any formal agreements in the strict sense. Of course, the formalization took place above all for the Regions more affected by the pandemic than the others.

Table 8 – List of regulatory provisions adopted by the Italian government and Regions starting in Spring 2020, aimed at using accredited private hospitals to support public ones to deal with the health emergency caused by the Corona virus pandemic

GOVERNMENTAL PROVISIONS
<ul style="list-style-type: none"> ▪ Resolution of the Council of Ministers on January 31, 2020 (O.J. 26 of February 1, 2020) ▪ Ministry of Health Circular of March 1, 2020 GAB 2627/2020 ▪ Legislative Decree of February 23, 2020 no. 6 (O.J. 45 of February 23, 2020) converted with amendments into the Law of March 5, 2020, no. 13 (O.J. 61 of March 5, 2020) ▪ Legislative Decree of March 9, 2020 no. 14 (O.J. 62 of March 9, 2020) ▪ Ministry of Health Circular of March 16, 2020 no. 7422 ▪ Legislative Decree of March 17, 2020 no. 18 (O.J. 70 of March 17, 2020) Converted with amendments into the Law of April 24 2020, no. 27 (O.J. 110 of April 29, 2020, o.s.) ▪ Legislative Decree of March 25, 2020 no. 19 (O.J. 79 of March 25, 2020) Converted, with amendments, by the Law of May 22, 2020, no. 35 (O.J. 132 of May 23, 2020) ▪ Ministry of Health Circular of March 25, 2020 no. 7865 ▪ Ministry of Health Circular of March 30, 2020 no. 8076 ▪ Legislative Decree of April 8, 2020 no. 23 (O.J. 94 of April 8, 2020) Converted, with amendments, by the Law of June 5, 2020, no. 40 (O.J. 140 of June 6, 2020) ▪ Legislative Decree of May 19, 2020 no. 34 (O.J. 128 of May 19, 2020 o.s. 21) converted with amendments by the Law of July 17, 2020, no. 77 (O.J. 180 of July 18, 2020, o.s. 25/1) ▪ Ministry of Health Circular of June 1, 2020 no. 1144o8 ▪ Resolution of the Council of Ministers on July 29, 2020 (O.J. July 30, 2020 no. 190) ▪ Legislative Decree of July 30, 2020 no. 83 (O.J. 190 of July 30, 2020) Converted, with amendments, by the Law of September 25, 2020, no. 124 (O.J. 240 of Sept. 28, 2020)

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(Continued) Table 8 – List of regulatory provisions adopted by the Italian government and Regions starting in Spring 2020, aimed at using accredited private hospitals to support public ones to deal with the health emergency caused by the Corona virus pandemic

REGIONAL PROVISIONS	
<i>Northern regions</i>	<ul style="list-style-type: none"> – Lombardy <ul style="list-style-type: none"> ▪ Resolution of March 4, 2020, No. Xi/2905 – Piedmont <ul style="list-style-type: none"> ▪ Resolution of March 10, 2020, No. 3/1111 – Emilia Romagna <ul style="list-style-type: none"> ▪ Resolution of April 14, 2020 No. 13 – Veneto <ul style="list-style-type: none"> ▪ Resolution of April 7, 2020 No. 4442
<i>Center Regions</i>	<ul style="list-style-type: none"> – Tuscany <ul style="list-style-type: none"> ▪ Resolution of March 13, 2020 No. 361 ▪ Resolution of March 16, 2020, No. 346 ▪ Resolution of March 17, 2020, No. 3595 – Abruzzo <ul style="list-style-type: none"> ▪ Ordinance of April 8, 2020, No. 28 – Umbria <ul style="list-style-type: none"> ▪ Resolution of April 16, 2020, no. 277
<i>Southern regions and the Islands</i>	<ul style="list-style-type: none"> – Sicily <ul style="list-style-type: none"> ▪ Resolution of March 12, 2020 No. 859 ▪ Agreement of March 30, 2020 – Molise <ul style="list-style-type: none"> ▪ Decree of March 26, 2020, No. 22 – Apulia <ul style="list-style-type: none"> ▪ Decree of April 8, 2020, No. 26 ▪ Agreement of March 27, 2020 – Campania <ul style="list-style-type: none"> ▪ Agreement of March 29, 2020

Source: survey by *Ermenèia – Studi & Strategie di Sistema, 2020*

Table 9 – Patient beds for the Covid-19 emergency made available by the privately operated facilities of the NHS (A.V.)

<i>Regions</i>	<i>Total intensive and sub intensive care patient beds for Covid</i>	<i>Total acute and post-acute phase patient beds for Covid</i>	<i>Total patient beds made available for non-Covid activities</i>
– Piedmont	87	457	1,111
– Aosta Valley	-	35	-
– Lombardy	484	4,975	2,491
– Bolzano	-	48	204
– Trento	-	140	184
– Veneto	46	184	1,649
– Friuli Venezia Giulia	-	96	80
– Liguria	-	-	97
– Emilia Romagna	93	886	1,901
– Tuscany	4	74	497
– Umbria	-	12	429
– Marche	12	58	385
– Lazio	132	570	8,913
– Abruzzo	-	-	187
– Molise	13	10	109
– Campania	18	687	2,358
– Apulia	50	160	1,101
– Basilicata	-	-	20
– Calabria	-	-	275
– Sicily	9	969	2,278
– Sardinia	10	40	834
Italy	958	9,401	25,103

Source: Ermeneia survey – Studi & Strategie di Sistema, 2020 (data provided by AIOP – Italian Private Hospital Association)

The second part of Table 10, relating to the methods used in practice by the Regional Health Service, shows that:

- practically all of the AIOP facilities responded to the requests of the aforementioned Service, making patient beds and equipment available and reorganizing entire departments in order to be able to cope with the Corona virus emergency, in the meantime suspending inpatient services, even if not all the patient beds were subsequently used: it was sometimes necessary to give up inpatient services without performing the emergency activity that had been requested;
- in about 1 out of 10 Regions (which become 2 out of 10 for the most affected Regions) the intensive and sub-intensive care patient beds are of two types, those identified and those not identified for use. The latter represent so-called “technical patient beds” which are in fact located in intensive care units in accredited private facilities not contracted by the Regional Health Service;
- finally, it should be remembered that in some cases (1 out of 10 which become 2 out of 10 in the Regions most affected) the involvement of the

AIOP facilities essentially depended on the decisions taken by the Regional Health Service, given that the readiness of the aforementioned healthcare facilities to make patient beds or entire departments available was not enough: in some cases, therefore, there was a sort of “unexpressed potential” by AIOP facilities that were ready to intervene, though not called upon to do so.

The collaboration between publicly operated facilities and privately operated facilities (i.e. “accredited”) has highlighted the value of this convergence in the extraordinary pandemic situation, though this has also happened because the accredited AIOP facilities already play a significant role in the regular situation, providing patients with 500 facilities, 70,000 employees and 60,000 patient beds distributed throughout the Italian Peninsula. Among other things, we point to the great appreciation citizens have declared regarding the mixed system, given that 9 out of 10 affirm that “the accredited private hospital is now part of the general hospital system and that when a hospital stay is required it is not important whether the facility is public or private, but rather other factors are taken into account such as which specializations are present, the quality of services, proximity to home, etc.” “The government should make the best use of all the hospitals in the area (public and accredited), in order to allow citizens the best possible choice according to their needs, opportunities and opinions”¹¹.

Nonetheless, one cannot fail to note the presence of a lack of awareness and sometimes of a basic prejudice in public opinion when it comes to so-called “private” health care. It must be recalled once again that the hospital system does indeed include a private sphere in the strict sense, in which the patient pays directly for the services he/she receives or has them paid for (in whole or in part) by his/her insurance company, provided there is a policy. But there is also a range of privately operated hospitals that exists alongside the publicly operated ones – as already mentioned in section 1.1 – to which citizens may freely resort without costs, and it is exactly these private (accredited) hospitals that have been engaged by the National Health Service to help deal with the emergency of Covid patients together.

Some media reactions, especially in the areas most affected by the pandemic, have provided an opportunity to verify, in a more structured way, how objectively these reacted both nationally and locally (at least in the 5 Regions most affected by the first wave of the virus) with respect to the collaboration between the two types of facilities. The data in Table 11 shows how on 183

¹¹ See Part One/Section 1.1/Table 1.

identified articles that specifically dealt with this theme in the period from the beginning of March to the beginning of June 2020:

- 71.6% offered a substantially positive opinion: more pronounced at the local/regional level (where the problems are seen up close and every effort is made to finding solutions that work) than at the national level (where situations might seem removed from actual reality and there may be some tendency to take ideological approaches);
- 19.1%, on the other hand, expressed a neutral opinion, simply providing information on the subject of collaboration between public hospitals and accredited private hospitals;
- and only 6.6% gave a negative opinion, either due to very particular events or for a more or less principled position against the so-called “private” component, notwithstanding the fact that – in this case – this was constituted by the accredited private facilities that make up an integral part of the National Health Service.

Table 10 – The engagement of the AIOIP hospital facilities and the relative methods for dealing with the Covid-19 emergency, as per the opinions of the AIOIP Presidents of the Regions (and/or of the Autonomous Provinces of Trento and Bolzano) (% val.)¹

Phenomena	Data	
	Regions most involved	Other Regions
– Engagement or non-engagement of AIOIP facilities by the Regional Health Service of the Region (or Autonomous Province) to which they belong		
• Yes, they were engaged through specific agreements	72.2	80.0
• Yes, they were engaged in actual fact, without formal agreements	16.7	20.0
• No, they weren't engaged	11.1	-
Total	100.0	100.0
– Methods used in practice by the Regional Health Service of reference to engage the AIOIP facilities		
• The AIOIP facilities responded promptly to the requests of the Regional Health Service, making patient beds and equipment available as well as reorganizing entire departments in order to be able to cope with the Corona virus emergency, in the meantime suspending inpatient services, even if not all the services were subsequently used either in whole or in part	93.8	100.0
• It should also be borne in mind that the intensive care (and sub intensive care) patient beds in AIOIP facilities are of two types: those identified and those not identified for use. The latter are the so-called “technical patient beds” which are in fact located in intensive care units in accredited private facilities not contracted by the Regional Health Service	12.5	20.0
• The engagement of the AIOIP facilities essentially depended on the decisions taken autonomously by the Regional Health Service, given that the willingness of the accredited facilities alone was not enough.	12.5	20.0

(1) Based on a panel survey conducted in the months of September-October 2020 to which 18 AIOIP regional presidents replied (Piedmont, Valle d'Aosta, Lombardy, Liguria, AP of Trento, AP of Bolzano, Veneto, Emilia Romagna, Tuscany, Umbria, Marche, Lazio, Molise, Campania, Apulia, Calabria, Sicily, Sardinia).

(2) This refers to the Regions most involved in the first wave of the Covid-19 pandemic: Piedmont, Lombardy, Veneto, Emilia Romagna, Marche.
Source: survey by *Ermenetica – Studi & Strategie di Sistema, 2020*

Table 11 – The collaboration between public facilities and accredited private facilities in the media (newspapers and online), with reference to the period March-June 2020 (A.V. and val. %)

Regional/national media	Positive ratings		Negative ratings		Neutral ratings		Positive/negative ratings		Neutral/negative ratings		Totals	
	A.V.	%	A.V.	%	A.V.	%	A.V.	%	A.V.	%	A.V.	%
Piedmont	18	90.0	-	-	2	10.0	-	0.0	-	0.0	20	100.0
Lombardy	48	68.6	6	8.6	13	18.6	-	0.0	3	4.3	70	100.0
Veneto	5	100.0	-	-	-	0.0	-	0.0	-	0.0	5	100.0
Emilia Romagna	32	71.1	1	2.2	12	26.7	-	0.0	-	0.0	45	100.0
Marche	9	75.0	-	-	2	16.7	-	0.0	1	8.3	12	100.0
National	19	61.3	5	16.1	6	19.4	1	3.2	-	0.0	31	100.0
Total	131	71.6	12	6.6	35	19.1	1	0.5	4	2.2	183	100.0

Source: survey by Ermeneia – Studi & Strategie di Sistema, 2020

2. The suspension of services for non-Covid patients

2.1. The backlog of patients already on waiting lists at the beginning of the year

The topic of waiting lists, which have continued to increase over time, has been addressed in recent years by this Report, but has taken on even greater importance this year due to the inevitably pejorative repercussions of postponements of regular services by facilities due to the impact on these by Covid patients and the postponing and/or forgoing of treatment from non-Covid patients out of fear of possible infections.

Table 12 of the survey made on a representative sample of 4,020 adults¹ provides a brief overview of the situation, showing that:

- a) in 2019, 7.6 million adults (equal to 15.0%) experienced one or more waiting lists for serious illnesses/procedures while attempting to access local healthcare services, and 16.4 million (equal to 32.4%) for mild illnesses/procedures, totaling 24.0 million people, out of which 6.6 experienced waits for both types of illnesses/procedures (see first and second column of Table 12);
- b) parallel to this, 5.3 million (equal to 10.4%) of the adult subjects interviewed experienced one or more waiting lists for access to hospital admissions for serious illnesses/procedures and 8.8 million (equal to 17.4%) for less serious needs, totaling 14.1 million people, out of which 4.6 million experienced waits for both types of needs;

¹ See Section 1 of the Appendices for more information.

Table 12 – Experiences with waiting lists for local healthcare services and for access to hospital admissions (or for both), in 2019 and in the first two months of 2020 (val.%)

Phenomena	Data			
	Year 2019		January-February 2020	
	% Val	Estimate in millions	% Val	Estimate in millions
<i>For local healthcare services¹</i>				
- Yes, one or more times for serious illnesses/procedures	15.0	7.6	13.1	6.6
- Yes, one or more times for mild illnesses/procedures	32.4	16.4	23.3	11.8
- Yes, one or more times for both serious and mild illnesses/procedures	86.4	6.6	85.0	5.6
<i>For access to hospital admissions²</i>				
- Yes, one or more times for serious illnesses/procedures	10.4	5.3	8.1	4.1
- Yes, one or more times for mild illnesses/procedures	17.4	8.8	12.8	6.5
- Yes, one or more times for both serious and mild illnesses/procedures	86.9	4.6	89.2	3.7
<i>For access to hospital admissions and to local healthcare services³</i>				
- Yes, one or more times for serious illnesses/procedures in 2019	86.0	4.5	90.0	3.7
- Yes, one or more times for mild illnesses/procedures in 2019	88.5	4.7	90.7	3.7
- Yes, one or more times for serious illnesses/procedures in 2020	85.9	4.5	91.7	3.8
- Yes, one or more times for mild illnesses/procedures in 2020	86.3	4.5	90.3	3.7

(1) See Part Two/Table 1 + 1A, pp. 116-117.

(2) See Part Two/Table 2 + 2A, p. 119.

(3) See Part Two/Table 2B, p. 120.

Source: survey by *Ermeneta – Studi & Strategie di Sistema, 2020*

Table 13 – Presence of the respondents on one or more waiting lists for the services indicated below and relative duration, as of January-February 2020 and specifically for more than 30 and up to 120 or more days (val.%)

Types of services	Presence on one or more waiting lists				
	For serious illnesses/procedures ¹		For mild illnesses/procedures ²		
	Italy Total	South	Italy Total	South	
				With a duration of more than 30 up to 120 or more days ¹	With a duration of more than 30 up to 120 or more days ²
Laboratory exams	21.6	26.0	19.4	19.1	23.9
Diagnostic tests (such as X-Ray, CAT, MRN, etc.)	20.9	25.4	35.5	18.8	23.2
Specialist visits	26.7	28.5	57.2	21.7	24.9
Access to regular treatments/required check-ups	16.6	21.1	45.9	14.7	17.1
Day service outpatient medical services	13.6	17.9	53.3	10.7	14.8
Day service outpatient surgery services	10.6	12.8	55.5	10.5	14.7
Admissions for treatment	9.0	11.3	57.4	8.3	9.9
Hospitalization for surgery	9.5	12.2	52.1	9.2	11.3
Other	6.3	8.2	64.8	4.6	6.1

(1) See Part Two/Table 3, p. 122.

(2) See Part Two/Table 4, p. 124.

Source: survey by *Ermeneta – Studi & Strategie di Sistema, 2020*

c) and, again in 2019, 4.5-4.7 million people experienced one or more waiting lists for hospital admissions due to serious illness/procedures and were also on waiting lists for local healthcare services for serious or mild needs, although some people on the waiting list in 2019 appear to be still waiting during the first two months of 2020: 4.5 million for serious illnesses/procedures and another 4.5 million for mild illnesses/procedures (see the last group of data in the first two columns of Table 12).

A look at the second two columns of Table 12 will show how, already in the first two months of 2020:

- a) 6.6 million people were on one or more waiting lists for local healthcare services (equal to 13.1%) for serious illnesses/procedures and 11.8 million (equal to 23.3%) for mild illnesses/procedures: but even in this case 5.6 million of the previous total of 18.4 million were waiting for local healthcare services for both types of need (see the last two columns of Table 12);
- b) parallel to this, 4.1 million individuals (equal to 8.1% of the adult population) experienced one or more waiting lists for access to hospital admissions for serious illnesses/procedures and a further 6.5 million (equal to 12.8%) for less serious needs, and, again, there were experiences on multiple waiting lists by 3.7 million adults waiting for hospital admissions for both serious and mild needs (see again the last two columns of Table 12);
- c) finally, once again during the first two months of 2020, approximately 3.7 million people with serious needs, and another 3.7 million with less serious needs, were found to be on one or more waiting lists for access to hospital admission and for local healthcare services that had already been on the lists since 2019, evidently because the waiting lists had not been completely “emptied”.

Precisely to investigate the condition of the respondents on the lists in the first two months of 2020, we decided to ask for some more information, distinguishing some specific services of the health system (from both local healthcare agencies and hospitals), as shown in Table 13 below, which shows that:

- a) that about 1 in 5 people were on waiting lists, a slight majority of these for serious illnesses/procedures compared to mild ones (see first and fourth column of Table 13) if we look at laboratory tests, diagnostic exams and specialist visits; while there is a slight decrease in the number of individuals waiting for access to regular treatments and/or required check-ups (16.6% for serious needs and 14.7% mild needs, respectively), and thus an even greater decrease for *day service* outpatient medical services, and even more so for access to hospital admissions (see again the

first and fourth column of Table 13); but the percentage of people on waiting lists in the South is decidedly higher for both serious and light needs (see the second and fifth columns of Table 13);

- b) however, it is also necessary to consider the length of the waits already backlogged in the first two months of 2020 (those of more than 30 and up to and more than 120 days already accrued), which often exceed 40% or even 50% of cases (see the third and sixth columns of Table 13).

The opinion of the AIOP regional presidents on the subject of waiting lists is summarized by the data contained in Table 14, which shows:

- a “very + fairly serious” situation in almost all the Regions and relatively even more problematic for the local health authority services than for those relating to hospital admissions as well as for the Regions not (or only slightly) affected by Covid-19, also since in the latter case, the services for regular patients were deferred over time;
- a situation that was worsening already prior to January 2020 in just over 1 out of 4 Regions, to which is added a permanently problematic situation for almost 1 out of 2 Regions, while just over 1 out of 4 Regions displayed an improving (or in any case stable) situation;
- the presence of agreements signed between the Region and AIOP already prior to the pandemic in 2/3 of the regions for access to local health services and by half of them for access to hospital admissions (and this happened more clearly in the Regions most affected by the impact of the first wave of the virus (which, moreover, substantially correspond to those of the North);
- and, finally, some cases, limited to 1 Region out of 10 (which however doubles for the Regions most affected, and are those in the North), of possible terminations of prior contracts/agreements regarding waiting lists with accredited facilities both for local healthcare services and for hospital admissions.

Table 14 – Assessment of the AIOP Presidents of the situation of waiting lists for health services in January 2020, with reference to their Region (or Autonomous Province), before the full-blown start of the Corona virus pandemic (val.%)

Phenomena	Data					
	For access to local health authority services (Polyclinics, etc.)		For admission to public hospitals			
	Total	Regions most affected ^f	Other Regions	Total	Regions most affected ^f	Other Regions
-						
Waiting list situation in January 2020:						
• Very serious problem	16.7	-	23.1	11.8	-	16.7
• Quite serious problem	77.7	100.0	69.2	70.5	80.0	66.6
• Mild problem	5.6	-	7.7	11.8	-	16.7
• Was not a problem	-	-	-	5.9	20.0	-
Total	100.0	100.0	100.0	100.0	100.0	100.0
-						
Assessment of the improvement or worsening of the waiting list situation prior to January 2020, with reference to the home Region (or Autonomous Province):						
• Had gotten much worse	5.6	-	7.7	-	-	-
• Had gotten pretty bad	22.2	20.0	23.1	6.3	-	8.3
• It had remained more or less the same as before (but remained problematic)	44.4	60.0	38.4	49.9	50.0	50.0
• It had remained more or less the same as before (but was not a real problem)	5.6	-	7.7	18.8	25.0	16.7
• It had improved slightly	22.2	20.0	23.1	25.0	25.0	25.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

f.

(Continued) Table 14 – Assessment of the AIOIP Presidents of the situation of waiting lists for health services in January 2020, with reference to their Region (or Autonomous Province), before the full-blown start of the Corona virus pandemic (val. %)¹

Phenomena	Data				
	For access to local health authority services (Polyclinics, etc.)			For admission to public hospitals	
	Total	Regions most affected ^f	Other Regions	Total	Regions most affected ^f
- Agreements entered into with the Region (or Autonomous Province) in the period prior to the pandemic, in order to reduce the lists both for the local health authority services and for admissions to public hospitals:					
• Yes, in twelve months prior	22.2	20.0	23.1	14.3	-
• Yes, prior to the last twelve months	22.2	20.0	23.1	21.4	33.4
• Yes, already existing agreements were extended	22.2	60.0	7.7	14.3	33.3
• No, there are no agreements to that effect	33.4	-	46.1	50.0	33.3
Total	100.0	100.0	100.0	100.0	100.0
- Possible terminations by the Health Service of the Region (or Autonomous Province) of contracts, agreements, or other previously entered into with the accredited facilities aimed at reducing the waiting lists both for local health authority services and for admissions to public hospitals:					
• Yes, already existing agreements were extended	11.8	25.0	7.7	12.5	25.0
• No, there are no agreements to that effect	88.2	75.0	92.3	87.5	75.0
Total	100.0	100.0	100.0	100.0	100.0

(1) Based on a panel survey conducted in September-October 2020 to which 18 AIOIP regional presidents responded (Piedmont, Aosta Valley, Lombardy, Liguria, Autonomous Province of Trento, Autonomous Province of Bolzano, Veneto, Emilia Romagna, Tuscany, Umbria, Marche, Lazio, Molise, Campania, Apulia, Calabria, Sicily, Sardinia).

(2) Piedmont, Lombardy, Veneto, Emilia Romagna, Marche.
Source: survey by *Ermenèia – Studi & Strategie di Sistema*, 2020

2.2. The interruption of services for regular patients and the consequences in terms of behaviors

The arrival of the Corona virus pandemic has, due to the emergency situation, obviously led to patient beds and personnel being taken away from the regular services for non-Covid patients, thus giving rise to a real interruption for postponement of the services that has, however, become another one of the various insufficient “average quality” conditions relating to the services, already significantly detectable across the health system and particularly in the South.

Table 15 shows the presence and duration of this interruption, and how:

- a) this occurred, according to more than 40% of the respondents, for all services (with a peak of more than 53.3% for specialist visits), but with a different effect in the different geographical areas. In fact, the suspension of regular services seems to have impacted the Regions less affected by the virus more than those not affected (and even more in the South), while the Regions hardest hit by the first pandemic phase made an extraordinary effort in terms of public health protection, might it also be true to say that the others “adapted” to the usage of cautious lockdowns and “smart working”, by postponing regular services beyond what was reasonable? (see first four columns of Table 15);
- b) the consequence of the interruption/postponement obviously meant that regular services were pushed forward: up to 2 months (according to just over 40% of the respondents), between 3 and 4 months (from 35%-38 %) and even between 5 and 7 months (for another 20% of the people involved in the survey). And the length of this de facto interruption of services was more pronounced precisely for the Regions less affected by the pandemic and in particular for the South (see last two columns of Table 15).

The interruption of services obviously generated reactive behaviors by the public, which are depicted in Table 16 below, which shows how in most cases the first choice was to postpone and/or forgo services (between 70% and 80%), also due to the fear of potential infection that might arise from accessing health facilities (see the sixth column of Table 16). However, there was another group of respondents (ranging between 20% and about 30%) who turned to accredited facilities and private paid facilities and, to a lesser extent, to the Emergency Room, again out of fear of infection in this latter instance (see the first column of Table 16).

Table 15 – The interruption of the regular services indicated below, which were needed and the relative duration in the period February-September 2020 (val.%)

Types of services	There was an interruption ¹				Duration of the interruption ¹					
	Total Italy	Regions most affected ²	Other Regions ³	South	Up to 2 months	3 to 4 months	Total Italy	Regions most affected ²	Other Regions ³	South
	- Laboratory exams	41.6	38.6	43.8	47.9	46.7	36.3	17.0	17.0	17.1
- Diagnostic tests (such as X-Ray, CAT, MRN, etc.)	47.5	45.1	49.2	53.1	43.0	35.3	21.7	20.0	22.9	24.6
- Specialist visits	53.3	51.6	54.6	60.4	41.3	37.8	21.1	24.6	18.5	19.8
- Access to regular treatments/required check-ups	45.4	44.2	46.4	50.8	43.2	35.3	21.3	19.5	22.6	26.7
- Day service outpatient medical services	43.2	41.6	44.3	47.8	41.2	36.4	22.4	21.4	23.0	25.8
- Day service outpatient surgery services	44.1	41.6	46.0	50.6	42.6	36.8	20.6	20.0	20.9	25.0
- Admissions for treatment	41.4	40.4	42.2	46.6	43.7	37.4	18.9	21.4	17.1	17.5
- Hospitalization for surgery	42.6	41.1	43.7	47.3	43.3	35.6	21.1	20.7	21.2	23.7

(1) See Part Two/ Table 6, p. 128.

(2) Piedmont + Lombardy + Veneto + Emilia Romagna + Marche.

(3) See Table A6.1 of the Statistical Appendix.

Source: survey by *Ermeniea – Studi & Strategie di Sistema, 2020*

Table 16 – Behavior of the respondents who experienced an interruption in regular services at the local health authority and/or at public hospitals, in the period February-May 2020 (val.%)¹

Types of services	Went to accredited facilities + paid private facilities + ER			Did without for the time being	Gave up entirely	Total	Postponements + Going without		
	ER	Postponed	ER				Italy Total	Regions most affected ²	Other Regions
- Laboratory exams	31.8	17.7	22.0	28.5	100.0	68.2	72,1	65,6	61,9
- Diagnostic tests (such as X-Ray, CAT, MRN, etc.)	26.0	21.4	20.9	31.7	100.0	74.0	75,6	73.0	72,4
- Specialist visits	28.1	20.7	22.3	28.9	100.0	71.9	71,4	72,2	70,9
- Access to regular treatments/required check-ups	20.0	21.2	21.1	37.7	100.0	80.0	80,7	79,5	78,3
- Day service outpatient medical services	20.8	17.2	22.0	40.0	100.0	79.2	79,6	79.0	76,4
- Day service outpatient surgery services	19.7	19.9	21.0	39.4	100.0	80.3	78,4	81,5	82,4
- Admissions for treatment	20.7	15.5	23.5	40.3	100.0	79.3	77,4	80,5	79,4
- Hospitalization for surgery	19.6	18.8	21.4	40.2	100.0	80.4	81,8	79,4	77,2
- Other	20.2	13.8	32.2	33.8	100.0	79.8	80,4	79,4	81,3

(1) See Part Two/ Table 7, p. 132.

(2) Piedmont + Lombardy + Veneto + Emilia Romagna + Marche.
Source: survey by *Ermenèia – Studi & Strategie di Sistema, 2020*

It is obvious that the individuals residing in the Regions most affected by the virus were found to be more inclined to postpone and/or forgo regular services, whereas in the areas (including the South) a slightly more marked use was made of the alternatives mentioned.

2.3. Assessment of the ability of different healthcare facilities to respond to the needs of non-Covid patients and Covid patients

The first half of 2020 was characterized by a de facto division between Regions that were struck by a serious/very serious Covid-19 wave and Regions that were barely affected or not hit at all by the pandemic.

For this reason, Table 17 first of all reports the assessments of the population sample interviewed about the ability of the health facilities of their home Region (or Autonomous Province) to treat Covid patients in the period February-May 2020. But at the same time, the Table also reports the assessments of the ability to resume regular services for non-Covid patients, starting from June 2020 onwards.

The Regional Health Services affected by the virus thus had a very difficult period to deal with, engaged as they were responding to the first wave of the pandemic, and then also having to resume regular services for non-Covid patients, starting from June 2020.

The data contained in Table 17 (reported net of non-responses) shows:

- a) in the first case, opinions divided roughly between 2/3 positive and 1/3 negative with regard to the ability to react more or less promptly with respect to the needs of Covid patients, with a slightly more favorable evaluation for the functions performed by the family doctor (see the first two columns of Table 17);
- b) in the second case, slightly more critical opinions on the ability of the health facilities of the home Region (or Autonomous Province) to renew the offering of regular services to meet the needs of non-Covid patients (see the second two columns of Table 17).

If we then consider the respondents residing in Regions (or Autonomous Provinces) where there was not an actual Corona virus emergency, the assessment of the ability to provide regular services for non-Covid patients is illustrated by the data contained in Table 18 below, comparing the period February-May 2020 and then the period June-September 2020.

As can be seen:

- a) about 1/3 or a little more of the respondents stated that, for the period February-May 2020, the healthcare facilities performed their activities

Table 17 – The assessment, during the actual pandemic emergency phase, of the ability of the health facilities of one's home Region (or Autonomous Province) to treat Covid patients in the period February-May 2020, as well as the ability to resume regular services for non-Covid patients starting from June 2020 (val. %)*

Types of healthcare facilities	With regard to Covid patients ¹		With regard to non-Covid patients ²	
	They reacted Very quickly + Quickly enough	They reacted Slowly + Very slowly	They resumed Quickly + Quickly enough	They resumed Slowly + Very slowly
- Family doctor	78.4	21.6	76.5	23.5
- Local health authority facilities (ASL)	66.5	33.5	65.2	34.8
- Public hospital facilities	69.1	30.9	67.5	32.5
- Accredited private hospital facilities	67.4	32.6	67.1	32.9
- (Upon payment) Private clinics	69.2	30.8	70.2	29.8

(*) Net of non-responses

(1) See Part Two/Table 11A, p. 142, with reference to the period February-May 2020.

(2) See Part Two/Table 12A, p. 144, starting from June 2020.

Source: survey by *Ermeneta – Studi & Strategie di Sistema, 2020*

the same as before the pandemic, while about 50% (!) slowed down a little or even a lot, and, finally, the last part (between 10.9% and 19.6%) completely interrupted services: the data of the second and third columns remains difficult to understand except in light of the extension of the general lockdown affecting the whole country and the parallel introduction of the “smart working” approach to work by civil servants (see first part of Table 18);

- b) in the following period from June to September 2020, with the resumption of more or less normal activity, there was obviously an increase in the provision of regular services compared to the previous period (but without exceeding 40%, except for the family doctor), while the continued reduced services were too much, at least according to the statements of the respondents, and the interruption of services also maintained its “hard core” opinions, varying between 9.6% and 13.7% (see the second part of Table 18).

Table 18 – The assessment of the ability to provide regular services for non-Covid patients in the event that the home Region (or Autonomous Province) was not affected by an actual Corona virus emergency in the period February-May 2020 and then in the period June-September 2020 (vd. %)*

Types of healthcare facilities	In the period February-May 2020 ¹				National average	South and Islands
	Services were provided as before	Services were provided A little + Much less than before	Services were interrupted	Services were provided A little + Much less than before + Services were interrupted		
- Family doctor	38.2	50.9	10.9	61.8	70.0	
- Local health authority facilities (ASL)	32.7	47.7	19.6	67.3	68.2	
- Public hospital facilities	30.6	53.7	15.8	69.4	73.1	
- Accredited private hospital facilities	36.2	47.1	16.6	63.8	66.5	
- (Upon payment) Private clinics	33.0	50.5	16.5	67.0	70.7	

Types of healthcare facilities	In the period June-September 2020 ¹				National average	South and Islands
	Services were provided as before	Services were provided A little + Much less than before	Services were interrupted	Services were provided A little + Much less than before + Services were interrupted		
- Family doctor	45.6	44.9	9.6	54.4	59.0	
- Local health authority facilities (ASL)	36.9	49.4	13.7	63.1	63.5	
- Public hospital facilities	39.5	48.2	12.3	60.5	62.2	
- Accredited private hospital facilities	33.2	55.0	11.8	66.8	71.5	
- (Upon payment) Private clinics	39.6	50.1	10.3	60.4	62.0	

(*) Net of non-responses.

(1) See Part Two/Table 13A, pp. 148-149.

Source: survey by Ermenèa – Studi & Strategie di Sistema, 2020

3. The opening up of resources driven by the pandemic

3.1. Signs of refinancing after a protracted defunding process

The overall situation of the Italian hospital system has been analyzed from three different perspectives in the preceding sections.

The first is that of the underlying nature of the system, characterized by two “souls”, consisting of the public hospital component (comprising different types of institutions) and the private component (itself made up of different types of accredited facilities). But in this regard there is a substantially unitary, consolidated and positive perception of the hospital system as a whole (i.e. of the mixed system) by citizens, to which in 2020 was added an equally positive experience of collaboration between public and accredited private facilities in order to address the needs of Covid patients during the first wave of the pandemic.

The second is that of a growing trend in the average complexity of services which, however, involves a series of differences on a regional and sub-regional level and even, among individual facilities in the same area, which form an “average level” of responses that are inadequate from a quantitative and qualitative standpoint and do not provide sufficiently uniform healthcare services throughout Italy.

The third is that of the emergence of problems related to the suspension of regular services for non-Covid patients following the extraordinary effort that came about as a result of having to deal with the emergency of Covid patients. Thus, the year 2020 had to manage the coexistence of the problems already present for some time (in terms of financing, organization, personnel and, in short, an uneven “average level” of services) and the problems deriving from the first wave of the pandemic emergency and then those of the second wave that struck in the fall.

Among the problems dating back more than a decade is the main one having to do with the limited resources allocated to the health system, a subject that has been dealt with consistently in this Report, which has shown a dangerous trend towards defunding of the system, which was even more pronounced during the years of the spending review. A comparison of international and Italian trends in this regard has provided (and still provides) clear evidence of this.

The clearly disadvantaged position of Italy compared to OECD countries appears in the data found in the latest 2020 *Health Data Report*, which shows that (Table 19):

- a) Italian public healthcare spending remained anchored at the low level of 6.5% of GDP in 2018, as it was in 2017, though it was slightly higher in 2016, equal to 6.7% (and was even one decimal more in 2015, equal to 6.8%). The average of the G7 countries, on the other hand, remained fixed at higher levels, equal to 9.2% in 2018 and in 2017, and was one decimal more (9.3%) in 2016. Furthermore, the average for OECD European countries was 7.1% in both 2018 and 2017, and 7.2% in 2016. If we then look at the total average of the OECD countries, the incidence on GDP rose by a few percentage points, remaining fixed at 7.5% for the three years shown in Table 19. Yet the amount of public health expenditure out of GDP within Europe sees Germany “shine” with 9.7% in 2018, slightly higher than the 9.6% in 2017, and even more than the 9.5% of 2016, and the same is true for France with 9.4%, which appears to decrease slightly from the previous two years in which it hit 9.5% (2017), and 9.6% (2016);
- b) total health expenditure remains constant for Italy at 8.7% of GDP over the last three years, but even in this case it is below the average of the G7 countries (11.4% in 2018) just as with respect to the total of OECD Europe countries (9.2%) and, even more, compared to the average of the total of OECD countries (9.7%): while the much higher percentages for Germany and France, which were 11.5% (up further over the previous two years) and 11.3% (slightly down compared to 2016-2017), respectively.

But in the case of total health expenditure it must be borne in mind that in Italy a substantial part of healthcare needs are met through out-of-pocket spending by households: the related expenditure in fact increased from EUR 35.8 billion in 2015 to EUR 37.9 billion in 2019, an increase of 6.1%, as reported in Section 1.2/Part One.

Once again the OECD *Health Data Report* mentioned above provides the data contained in Table 20, concerning hospital system expenditure for public and accredited private facilities, from which it can be noted that:

Table 19 – Amount of total healthcare expenditure and public healthcare spending in relation to the GDP

% Values	Total healthcare expenditure			Public healthcare expenditure		
	2016	2017	2018	2016	2017	2018
United States	17.0	17.0	16.9	14.4	14.4	14.3
Japan	10.8	10.8	11.0	9.1	9.1	9.2
Germany	11.2	11.4	11.5	9.5	9.6	9.7
France	11.5	11.4	11.3	9.6	9.5	9.4
Italy	8.7	8.7	8.7	6.7	6.5	6.5
United Kingdom	9.9	9.8	10.0	7.9	7.7	7.8
Canada	11.0	10.8	10.8	7.7	7.6	7.6
Average of G7 countries (*)	11.5	11.4	11.4	9.3	9.2	9.2
Average of European OECD countries*	9.3	9.2	9.2	7.2	7.1	7.1
Average of all OECD countries*	9.7	9.7	9.7	7.5	7.5	7.5

(*) Averages are calculated as unweighted arithmetic means.

Source: *Ermeneia processing of “OECD Health Data 2020”, OECD, Paris, November 2020*

Table 20 –Public and Accredited Hospital Expenditure in relation to the public healthcare spending and the GDP

% Values	Public and Accredited							
	Hospital Expenditure / Total Public Healthcare Spending				Public and Accredited Hospital Expenditure/GDP			
	2015	2016	2017	2018	2015	2016	2017	2018
United States	36.7	37.1	37.2	37.0	5.2	5.3	5.3	5.3
Japan	43.4	44.0	44.0	-	4.0	4.0	4.0	-
Germany	33.2	32.8	32.0	31.8	3.1	3.1	3.1	3.1
France	46.4	43.8	43.8	43.1	4.1	4.2	4.2	4.1
Italy	57.2	57.7	57.1	56.5	3.8	3.7	3.7	3.6
United Kingdom	48.9	48.6	49.5	48.7	3.8	3.8	3.8	3.8
Canada	39.3	36.0	35.9	35.7	2.9	2.8	2.7	2.7
Average of G7 countries*	43.6	42.9	42.8	42.1	3.8	3.9	3.8	3.8
Average of European OECD countries*	45.6	45.5	45.5	45.4	3.2	3.2	3.2	3.2
Average of all OECD countries*	45.1	44.8	44.8	44.6	3.3	3.3	3.3	3.3

(*) Averages are calculated as unweighted arithmetic means.

Source: *Ermeneia processing of “OECD Health Data 2020”, OECD, Paris, November 2020*

- a) Italy had the highest amount of total hospital expenditure out of total public healthcare spending with 56.5% in 2018, albeit slightly lower compared to previous years: but the incidence on GDP reflects the process of progressive de facto hospitalization that arose following the limitations exhibited by local medical services, which were already evident in normal times but proved even more problematic during the pandemic: the comparison with the average of the G7 countries (42.1%), with the average of the OECD European countries (45.4%) and with the total average of OECD countries (44.6%) jumps off the page: and even more relevant is the difference with Germany (31.8%) which, unlike Italy, displays the more resilient nature of its healthcare system at the local level. Speaking of disadvantage, it should be emphasized that Italy is doubly penalized

not only by the amount of healthcare spending out of GDP, which is on average lower than in other countries, but also because the economic crisis of 2008 contributed to reducing the calculation of the incidence of expenditure. In fact, it reversed the negative trend at the tail-end of the previous crisis and, then beginning in 2015, and again at the end of 2019 and, even more so during the pandemic crisis in 2020, it began to shrink again;

- b) the ratio of public and accredited private hospital spending to GDP sees Italy in 2018 at 3.6%, with a steady decrease from 2015 onwards, remaining however higher than the average of OECD European countries (a constant 3.2% over the last 4 years), as well as compared to the total average of the OECD countries (3.3%, also constant in this case over the four-year period), while it is lower than the average of the G7 countries (3.8%).

However, the issue of the pandemic deserves to be resumed due to the influence it had on the funding of the National Health Service: indeed, in April 2019, the Economic and Financial Document (DEF) – as mentioned in Section 4.2/Part Three – indicated a trend in the expenditure/GDP ratio for 2022 equal to 6.4%, while the new DEF of April 2020 indicates values, for the current year, of 7.2% (+ 3.6%) and 6.9% (+ 1.3%), and an overall funding amount for the National Health Service which should exceed EUR 121 billion in 2021. But this does not mean catching up with other countries, since the latter are and will continue to be forced to readjust the funding of their health systems following the pandemic cycle we are all experiencing.

If we then move on to take the internal situation of Italy into consideration, with reference to healthcare and hospital spending in recent years, Tables 21 and 22 show that:

- a) spending on public hospitals at current prices (Table 21) grew slightly, in terms of Index Numbers, from 100.0 in 2014 to 102.1 and 103.5 in 2015 and 2016, respectively, and then positioned itself at 104.7 in 2017 and 106.9 in 2018: but, if we consider this expenditure at constant prices (Table 22), we go, again in terms of Index Numbers, from 100.0 in 2014 to just 102.9 in 2018;
- b) hospital spending for accredited facilities as a whole remained almost unchanged, at current prices, between 2014 and 2018, having only grown by 0.8% (Table 21), but in reality it dropped by 3% at constant prices (Table 22);
- c) and, finally, hospital spending for accredited hospitals (specifically for accredited private healthcare facilities) apparently grew by 1.6% at current prices over the four-year period (Table 21), but in reality it fell by 2.2% at constant prices (Table 22).

Table S/21 – Current health spending, Years 2014-2018 (in billions of euro + I.N. 2014 = 100.0)

Types of spending	2014		2015		2016		2017		2018	
	A.V.	I.N.	A.V.	I.N.	A.V.	I.N.	A.V.	I.N.	A.V.	I.N.
Public hospital facilities	52.744	100.0	53.847	102.1	54.566	103.5	55.226	104.7	56.378	106.9
Accredited hospitals (as a whole)	8.425	100.0	8.466	100.5	8.484	100.7	8.419	99.9	8.493	100.8
of which: accredited hospitals ¹	4.289	100.0	4.335	101.0	4.351	101.4	4.321	100.7	4.359	101.6
Total public hospital system expenditure	61.169	100.0	62.313	101.9	63.050	103.1	63.645	104.0	64.871	106.1
Other expenditure features	51.504	100.0	50.354	97.8	50.681	98.4	50.694	98.4	51.094	99.2
Total public healthcare expenditure	112.673	100.0	112.667	100.0	113.731	100.9	114.339	101.5	115.965	102.9

(1) Code 5.1 Institutes (Accredited private healthcare facility) in the ministerial classification.

Source: data processed by Ermeneta from the 2015, 2016, 2017, 2018 and 2019 "Report on the coordination of public finance" by the Court of Auditors, the 2018 Agenas Report on the monitoring of the health spending of the Regions and the 2019 MEF Report on the monitoring of the healthcare spending

Table 22 – Healthcare expenditure at constant prices (*). Years 2014-2018 (in billions of euro + I.N. 2014 = 100.0)

Types of spending	2014		2015		2016		2017		2018	
	A.V.	I.N.	A.V.	I.N.	A.V.	I.N.	A.V.	I.N.	A.V.	I.N.
Public hospital facilities	53.236	100.0	53.847	101.1	53.954	101.3	54.213	101.8	54.779	102.9
Accredited hospitals (as a whole)	8.504	100.0	8.466	99.6	8.389	98.6	8.265	97.2	8.252	97.0
of which: accredited hospitals ¹	4.329	100.0	4.335	100.1	4.302	99.4	4.242	98.0	4.235	97.8
Total public hospital system expenditure	61.739	100.0	62.313	100.9	62.343	101.0	62.477	101.2	63.031	102.1
Other expenditure features	51.984	100.0	50.354	96.9	50.113	96.4	49.764	95.7	49.645	95.5
Total public healthcare expenditure	113.723	100.0	112.667	99.1	112.455	98.9	112.241	98.7	112.676	99.1

(*) GDP deflator calculated on the basis of the new ISTAT series in a chained series with reference to 2015, November 2020.

(1) Code 5.1 institutes (Accredited private healthcare facilities) in the ministerial classification.

Source: data processed by Ermeneta from the 2015, 2016, 2017, 2018 and 2019 "Report on the coordination of public finance" by the Court of Auditors, the 2018 Agenas Report on the monitoring of the health spending of the Regions and the 2019 MEF Report on the monitoring of the healthcare spending

It should be remembered that accredited hospitals (being private hospitals) have to deal with the various Regional Health Services, which from 2008 onwards, faced with the difficulty of rationalizing their hospital “machine”, ended up restricting the expense (and therefore the services) provided by the aforementioned accredited facilities, and this took place using the most diverse methods ranging from establishing more restrictive “ceilings” to services, to fee regressions – in the event these ceilings were exceeded – to reducing prices explicitly or implicitly, making many facilities – or their departments – drift towards less qualified types of services in order to save resources.

But it is also necessary to underline how the new phase we are experiencing with the pandemic has shown the importance of having public facilities and accredited private facilities work well together in order to respond to the needs of Covid patients, but also to the needs of non-Covid patients, who must and will need to make up for the period of total or partial suspension of the regular services they needed.

Perhaps the situation that has arisen will make it possible to experience a slightly different climate, if not a real turnaround, compared to the policies of resizing the resources it had generated – under the pressure of a management inspired by a “financial healthcare system” – with the consequent impoverishment of what may be defined as the “real healthcare system”, made up of patients, families and operators.

In fact, there are signs of interruption of the previous cycle of defunding, which were rendered necessary by the emergency and which have affected public facilities and the same accredited facilities that have been asked to work together to address the needs of both Covid patients and non-Covid patients.

This request is referred to in the state and regional legislation explicitly dedicated to the involvement of (accredited) private facilities with whose representative associations special Protocols have been prepared by the Regional Health Services. Table 23 offers an overview of this legislation, divided between the national and regional levels, in which the methods of collaboration are also indicated.

In this regard, section 1.3 above already mentioned the number and type of patient beds made available by the private facilities (and, in large part, by those associated with AIOP), and how, during the first phase of the Corona virus, they offered 958 patient beds for intensive and sub-intensive Covid care, 9,401 patient beds for acute and post-acute Covid cases, as well as 25,103 patient beds for non-Covid patients.

Table 23 – List of regulatory provisions (and a summary of their contents) adopted by the Italian government and Regions starting in Spring 2020, pursuant to the Resolution of the Council of Ministers of January 31, 2020, aimed at using accredited private hospitals to support public ones to deal with the health emergency caused by the Corona virus pandemic.

NATIONAL PROVISIONS	
Resolution of the Council of Ministers 31/01/2020 (O.J. 26 of February 1, 2020)	DECLARATION OF A STATE OF EMERGENCY FOR SIX MONTHS throughout Italy as a consequence of the health risk connected to the onset of illnesses deriving from transmissible viral agents, and, at the same time, entrusting the Head of the Civil Defense Department with the implementation of the relevant interventions (Article 25, paragraphs 1 and 2 letters a) and b) of Legislative Decree 1/2018), up to the amount of € 5,000,000.00 from the Fund for national emergencies (Article 44, paragraph 1, Legislative Decree 1/2018).
Ministry of Health Circular of March 1, 2020 GAB 2627/2020	ABILITY FOR REGIONS AND AUTONOMOUS PROVINCES, as part of the plans to increase the number of patient beds in the intensive care, pneumology and infectious disease operating units, TO MAKE PRIORITY USE OF ACCREDITED PRIVATE FACILITIES, in order to reduce the pressure on public facilities by transferring and taking care of patients not affected by COVID-19.
Decree-Law of February 23, 2020 no. 6 (O.J. 45 of February 23, 2020) converted with amendments into the Law of March 5, 2020, no. 13 (O.J. 61 of March 5, 2020)¹	INTRODUCTION OF URGENT MEASURES FOR THE CONTAINMENT AND MANAGEMENT OF THE EPIDEMIOLOGICAL EMERGENCY FROM COVID-19. This provision essentially stipulates that the President of the Council of Ministries and, while pending his decisions in case of extreme necessity and urgency, the Mayors and the Presidents of the regional councils, adopt every adequate and proportionate measure for the containment and management of the epidemiological emergency caused by COVID-19, also in view of the evolution of the epidemiological situation, under the conditions specified therein.
Decree-Law of March 9, 2020 no. 14 (O.J. 62 of March 9, 2020)²	ABILITY FOR THE REGIONS AND AUTONOMOUS PROVINCES to employ the healthcare personnel of public or private facilities primarily to deal with the emergency, TO CHANGE OR SUSPEND NON-URGENT HOSPITAL AND OUTPATIENT ACTIVITIES, including those <i>intramoenia</i> services provided by private professionals (ART. 13).
Ministry of Health Circular of March 16, 2020 no. 7422	GUIDELINES FOR THE CHANGES TO SCHEDULED ACTIVITIES DURING THE COVID-19 EMERGENCY, JOINTLY APPROVED BY THE CIVIL DEFENSE TECHNICAL AND SCIENTIFIC COMMITTEE. General indications for the reprogramming of the services deemed to be clinically deferrable on the basis of an assessment of the risk-benefit ratio were communicated in order to make any initiatives for the reorganization of diurnal and regular in-hospital treatment and outpatient hospital services that may be necessary in order to meet the potential increase in hospitalization needs and to limit the flow of patients within the healthcare facilities.

For the Notes see p. 75.

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(Continued) Table 23 – List of regulatory provisions (and a summary of their contents) adopted by the Italian government and Regions starting in Spring 2020, pursuant to the Resolution of the Council of Ministers of January 31, 2020, aimed at using accredited private hospitals to support public ones to deal with the health emergency caused by the Corona virus pandemic.

<p>(A) ABILITY FOR REGIONS, AUTONOMOUS PROVINCES AND HOSPITAL AUTHORITIES to enter into AGREEMENTS FOR THE PURCHASE OF ADDITIONAL HEALTHCARE SERVICES FROM ACCREDITED PRIVATE FACILITIES (Article 8-quinquies, Legislative Decree 502/1992) – as an exception to the spending limit set out in Art. 45, paragraph 1-ter, Decree-Law 124/2019 – when (a) the emergency situation due to the spread of COVID-19 requires the implementation of the plan, adopted pursuant to the Ministry of Health Circular of March 1, 2020 (GAB 2627/2020), and (b) it becomes clear from the same plan that it is impossible to pursue the objectives of strengthening the assistance in the public and accredited private facilities by means of the services acquired with the existing agreements. Moreover, if the public and accredited private facilities identified in the aforementioned plan are unable to meet the needs assessed by the Ministerial Circular, it is also possible for the Regions, the Autonomous Provinces of Trento and Bolzano and for healthcare authorities to enter into AGREEMENTS WITH NON-ACCREDITED PRIVATE FACILITIES, notwithstanding Art. 8-quinquies of Legislative Decree 502/1992, provided they are authorized pursuant to Art. 8-ter of the aforementioned Legislative Decree. Finally, it was envisaged that private facilities, whether accredited or not, place their healthcare personnel on duty as well as their premises and equipment at the disposal of the Regions, the Autonomous Provinces of Trento and Bolzano and the Hospital Authorities, upon request their request. These agreements and the measures specified therein shall cease to be effective at the end of the state of emergency referred to in the Resolution of January 31, 2020 (ART. 3).</p>	<p>Decree-Law of March 17, 2020 no. 18 (O.J. 70 of March 17, 2020) Converted with amendments into the Law of April 24 2020, no. 27 (O.J. 110 of April 29, 2020, o.s.)</p>	<p>(B) ABILITY FOR THE REGIONS AND AUTONOMOUS PROVINCES to employ the healthcare personnel of public or private facilities primarily to deal with the emergency, TO CHANGE OR SUSPEND DEFERRABLE AND NON-URGENT HOSPITAL AND OUTPATIENT ACTIVITIES, including those intramoenia services provided by private professionals (ART. 5 SEXIES).</p>
<p>Introduction, with simultaneous repeal, among other things, of Decree-Law 6/2020 (with the exception of articles 3, paragraph 6-bis, and 4), of the ability of the President of the Council of Ministers and, in the event of unexpected situations, pending his decisions in case of extreme necessity and urgency, the Minister of Health, to implement URGENT MEASURES TO DEAL WITH THE EPIDEMIOLOGICAL EMERGENCY FROM COVID-19 in specific areas of, or throughout the entirety of Italy, based on specific criteria of the suitability and proportionality to the risk actually present in Italy.</p>	<p>Decree-Law of March 25, 2020 no. 19 (O.J. 79 of March 25, 2020) Converted, with amendments, by the Law of May 22, 2020, no. 35 (O.J. 132 of May 23, 2020)</p>	<p>THE COVID-19 EMERGENCY. Among other things, the need to suspend in-patient admissions was noted, with the exception of those considered non-positable such as extreme cases (understood to be emergencies), elective oncological and non-oncological admissions with a priority A classification (as defined by PNGLA 2019-2021, referred to in the State-Regions Agreement Feb. 21, 2019) and, at the same time, the need to reschedule services considering the entire hospital system network, public and private, reformulating existing agreements with regard to their assistance contents and the remuneration systems, adapting them to the COVID-19 emergency (any additional charges foreseen may find a reference in Art. no. 3 of Decree-Law 18/2020).</p>
	<p>Ministry of Health Circular March 25, 2020 no. 7865</p>	

For the Notes see p. 75.

(Continued) Table 23 – List of regulatory provisions (and a summary of their contents) adopted by the Italian government and Regions starting in Spring 2020, pursuant to the Resolution of the Council of Ministers of January 31, 2020, aimed at using accredited private hospitals to support public ones to deal with the health emergency caused by the Corona virus pandemic

<p>Ministry of Health Circular March 30, 2020 no. 8076</p>	<p>CLARIFICATION NOTE TO MINISTERIAL CIRCULARS NOS. 7244 AND 7865. This clarifies what is indicated regarding the planned services to be considered clinically deferrable based on an assessment of the risk-benefit ratio. It recommends including in the services that cannot be postponed, for both outpatient and inpatient services, all the planned services in the oncology field (including the II level services provided for by the cancer screening campaigns), as well as the planned services, indicated therein, aimed at maternal-infantile health care.</p>
<p>Decree-Law of April 8, 2020 no. 23 (O.J. 94 of April 8, 2020) Converted, with amendments, by the Law of June 5, 2020, no. 40 (O.J. 140 of June 6, 2020)</p>	<p>ABILITY FOR THE REGIONS, INCLUDING THOSE WITH A DEBT RESCHEDULING PLAN, AND FOR THE AUTONOMOUS PROVINCES limited to the emergency period, to recognize the facilities included in the plans adopted in implementation of the Ministry of Health Circular of March 1, 2020 (prot. GAB 2627) – also as an exception to the spending limit referred to in Art. 45, paragraph 1-ter, of Decree-Law 124/2019, and Art. 8-sexies, paragraph 1-bis, Legislative Decree 502/1992 – the REMUNERATION OF A SPECIFIC ASSISTANCE FUNCTION, for the higher costs related to the setting up of the wards and the management of the COVID-19 emergency, and A PRICE INCREASE for the services rendered to COVID-19 patients, during the renegotiation for the year 2020 of the agreements and contracts referred to in Art. 8-quinquies of Legislative Decree 502/1992, for emergency purposes (the methods for determining said function and the price increase will be established by decree of the Minister of Health, concretely with the Minister of Economy and Finance, after agreement with the Conference between the State, Regions and Autonomous Provinces). In application of this renegotiated agreement, the NHS BODIES SHALL PAY THE PRIVATE SERVICE PROVIDERS A MONTHLY FEE AS AN ADVANCE PAYMENT, SUBJECT TO ADJUSTMENT FOLLOWING APPROPRIATE REPORTING, FOR THE SERVICES PROVIDED, OF UP TO 70% OF THE AMOUNT DUE FOR THE YEAR 2020 (ART. 32)¹;</p> <p>(A) INCREASE BY REGIONS AND AUTONOMOUS PROVINCES, in order to structurally strengthen the NHS in the hospital setting, OF ADMISSION ACTIVITIES in the ICU and in areas of high-intensity care assistance, by means of a specific reorganization plan implemented in the operational programs referred to in Decree-Law 18/2020 and submitted for the approval of the Ministry of Health, following which the total expenditure allocated for this purpose for the year 2020 (EUR 1,467,491,667) will be transferred to the special Commissioner who will implement these plans, ensuring the utmost promptness and local uniformity in connection with each Region and Autonomous Province. The Commissioner may possibly delegate the implementation of the reorganization plan to each President of the Region and Autonomous Province; in this case, the Presidents will be required to operate in compliance with the directives given by the Commissioner and the time frame established by him. To this end, the provision of at least 3,500 intensive care beds is made structural in Italy; the Regions and the Autonomous Provinces will be required to plan for the repurposing of 4,225 semi-intensive care patient beds, of which – at least 50% – in relation to the trend of the pandemic curve, must be available for immediate conversion to intensive care beds. In addition, 300 intensive care beds shall be made available for the purpose of dealing with the pandemic emergency for up to 4 months from the date of activation, and these shall be divided into 4 movable structures. The Regions and the Autonomous Provinces that have identified hospital units for patients affected by COVID-19 within their hospital facilities will ultimately be required to reinforce the separation of the clinical pathways, making them structural and to see to the restructuring of their Emergency Room departments, identifying distinct areas for patients suspected to have Covid-19 or those who are potentially contagious, awaiting diagnosis (ART. 2).</p>
<p>Decree-Law of May 19, 2020 no. 34 (O.J. 128 of May 19, 2020 o.s. 21) converted with amendments by the Law of July 17, 2020, no. 77 (O.J. 180 of July 18, 2020 o.s. 25/L)</p>	<p>(A) INCREASE BY REGIONS AND AUTONOMOUS PROVINCES, in order to structurally strengthen the NHS in the hospital setting, OF ADMISSION ACTIVITIES in the ICU and in areas of high-intensity care assistance, by means of a specific reorganization plan implemented in the operational programs referred to in Decree-Law 18/2020 and submitted for the approval of the Ministry of Health, following which the total expenditure allocated for this purpose for the year 2020 (EUR 1,467,491,667) will be transferred to the special Commissioner who will implement these plans, ensuring the utmost promptness and local uniformity in connection with each Region and Autonomous Province. The Commissioner may possibly delegate the implementation of the reorganization plan to each President of the Region and Autonomous Province; in this case, the Presidents will be required to operate in compliance with the directives given by the Commissioner and the time frame established by him. To this end, the provision of at least 3,500 intensive care beds is made structural in Italy; the Regions and the Autonomous Provinces will be required to plan for the repurposing of 4,225 semi-intensive care patient beds, of which – at least 50% – in relation to the trend of the pandemic curve, must be available for immediate conversion to intensive care beds. In addition, 300 intensive care beds shall be made available for the purpose of dealing with the pandemic emergency for up to 4 months from the date of activation, and these shall be divided into 4 movable structures. The Regions and the Autonomous Provinces that have identified hospital units for patients affected by COVID-19 within their hospital facilities will ultimately be required to reinforce the separation of the clinical pathways, making them structural and to see to the restructuring of their Emergency Room departments, identifying distinct areas for patients suspected to have Covid-19 or those who are potentially contagious, awaiting diagnosis (ART. 2).</p>

For the Notes see p. 75.

(Continued) Table 23 – List of regulatory provisions (and a summary of their contents) adopted by the Italian government and Regions starting in Spring 2020, pursuant to the Resolution of the Council of Ministers of January 31, 2020, aimed at using accredited private hospitals to support public ones to deal with the health emergency caused by the Corona virus pandemic.

<p>(B) ART. 4¹, repeating the provisions of Art. 32 of Decree-Law 23/2020, repealed for this purpose, ability for the Regions, including those with a Debt rescheduling plan, and for the Autonomous Provinces, limited to the emergency period, to recognize the facilities included in the plans adopted in implementation of the Ministry of Health Circular of March 1, 2020 (prot. GAB 2627) – also as an exception to the spending limit referred to in Art. 45, paragraph 1-ter, of Decree-Law 124/2019, and Art. 8-sexies, paragraph 1-bis, Legislative Decree 502/1992 – the REMUNERATION OF A SPECIFIC ASSISTANCE FUNCTION (1), for the higher costs related to the setting up of the wards and the management of the COVID-19 emergency, and A PRICE INCREASE (2) for the services rendered to COVID-19 patients, during the renegotiation for the year 2020 of the agreements and contracts referred to in Art. 8-quinquies of Legislative Decree 502/1992, for emergency purposes (the methods for determining said function and the price increase will be established by decree of the Minister of Health, concretely with the Minister of Economy and Finance, after agreement with the Conference between the State, Regions and Autonomous Provinces). Furthermore, the rule, originally reserved for private facilities, has also been extended to the NHS bodies (Article 19, letter c, Decree-Law 118/2011), compatibly with the recognized health needs for the year 2020.</p> <p>(1) the specific care function will be determined with reference to the services actually carried out and the costs actually incurred, by the facilities provided for therein and by the NHS bodies, relating (i) to the setting up and costs of waiting for inpatient admission beds for acute patients affected by COVID-19 in internal medicine and intensive care disciplines established on the recommendation of the Region, pursuant to the aforementioned plan adopted by them, and (ii) the setting up and cost of waiting for Emergency Room departments dedicated to handling confirmed COVID-19 and suspected COVID19 cases, established on the recommendation of the Region;</p> <p>(2) the price increase will be determined with reference to the higher costs related to hospital admissions of patients suffering from SARS-CoV-2 diseases, borne by the facilities and bodies of the NHS, assessed on the basis of information obtained from the health information system of the Ministry of Health and from the information made available by the Regions, also in relation to their accuracy.</p> <p>Finally, a partial modification and integration of the provisions of Art. 32 mentioned above, is envisaged, so that:</p> <p>(a) in application of this renegotiated agreement, the NHS bodies shall pay the private service providers a monthly fee as an advance payment, subject to adjustment following appropriate reporting, for the services provided, of up to 90% of the 12 monthly payments or total amount due for the year 2020.</p> <p>(b) the Regions and Autonomous Provinces, pending the adoption of the Ministerial Decree in which the procedures for determining the said function and the price increase will be established, may compensate the accredited private facilities who receive a special budget and witness a temporary suspension of regular services for the year 2020, also according to the provisions of Art. 5-sexies, paragraph 1, of Decree-Law 18/2020, paying them a monthly fee as an advance payment, subject to adjustment following appropriate reporting, up to a maximum of 90% of the volume of activity recognized under the agreements and contracts in place, pursuant to Art. 8-quinquies of Legislative Decree 502/1992, for 2020.</p>	
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For the Notes see p. 75.

(Continued) Table 23 – List of regulatory provisions (and a summary of their contents) adopted by the Italian government and Regions starting in Spring 2020, pursuant to the Resolution of the Council of Ministers of January 31, 2020, aimed at using accredited private hospitals to support public ones to deal with the health emergency caused by the Corona virus pandemic

<p>Ministry of Health Circular of June 1, 2020 no. 114408</p>	<p>GUIDELINES FOR THE PROGRESSIVE REACTIVATION OF SCHEDULED ACTIVITIES DEEMED DIFFERABLE DURING THE COVID-19 EMERGENCY CONCERNING ALL PUBLIC (INSTITUTIONAL AND PRIVATE PROFESSIONAL), ACCREDITED AND NON-ACCREDITED PRIVATE HEALTHCARE ACTIVITIES.</p>
<p>Resolution of the Council of Ministers on July 29, 2020 (O.J. July 30, 2020 no. 190</p>	<p>EXTENSION OF THE STATE OF EMERGENCY, as a consequence of the health risk associated with the onset of illnesses deriving from transmissible viral agents, UNTIL OCTOBER 15, 2020⁵.</p>
<p>Decree-Law of July 30, 2020 no. 83 (O.J. 190 of July 30, 2020) Converted, with amendments, by the Law of September 25, 2020, no. 124 (O.J. 240 of Sept. 28, 2020)</p>	<p>Annex I (ART. 1, paragraph 3) EXTENSION TO OCTOBER 15, 2020⁶ TERM:</p> <ul style="list-style-type: none"> • effectiveness of contracts for the purchase of additional healthcare services from accredited and non-accredited private facilities (Article 3, paragraph 4, of Decree-Law 18/2020) [No. 5]; • recognition of the compensation for a specific care function and of a price increase (Article 4, paragraphs 1 and 3, of Decree-Law 34/2020) [No. 30].

(1) Repealed (with the exception of articles 3, paragraph 6-bis and 4) by Decree-Law 19/2020 (O.J. March 25, 2020 no. 79).

(2) Repealed by the Law of April 24, 2020, no. 27 (GU 110 of 29 April 2020, o.s.) although the text of Art. 13 has been re-proposed in Art. 5-sexies of Decree-Law 18/2020.

(3) Repealed by the Decree-Law of May 19, 2020, no. 34 (O.J. May 19, 2020, no. 128) and inserted therein, with amendments, in Art. 4.

(4) In this regard, it should be noted that this article has been amended and supplemented by Art. 9 of the Decree-Law of November 9, 2020, no. 149 (O.J. November 9, 2020, no. 279) as follows:

(A) the time frame within which the Regions and Autonomous Provinces can recognize the compensation, as an advance subject to adjustment, to accredited private facilities receiving a specific budget for the year 2020 and which witness a temporary suspension of regular services has been eliminated, also according to the provisions of Art. 5-sexies, paragraph 1, of Decree-Law 18/2020 (paragraph 5);

(B) the following were added after paragraph 5: (i) paragraph 5-bis, which granted the power to the Regions and Autonomous Provinces which, depending on the trend of the Covid emergency, suspended, also through their own bodies, regular services to compensate accredited private facilities, recipients of a specific budget for the year 2020, up to 90% of the budget assigned under the agreements and contracts in place for the year 2020 (Article 8-quinquies of Legislative Decree 502/1992), without prejudice to the economic stability of the Regional Health System. This recognition, as specified by the same regulatory text, will take into account the following elements: (a) services ordinarily provided during the year 2020 whose actual production must be reported; (b) a one-off contribution linked to the emergency in progress and provided to cover only fixed costs incurred by and reported by the accredited private facility. This contribution, recognized up to the aforementioned limit of 90% of the budget, will be paid to facilities that, on the basis of a specific regional provision, suspended the services envisaged by the related agreements and contracts in place during the year 2020, by the Region and by the Autonomous Province to which they apply. Lastly, the new paragraph is without prejudice to the recognition, in the context of the budget assigned for the year 2020, in the case of production of the volume of activity exceeding 90% and up to the budget provided for in the agreements and contracts in place for the year 2020, as reported by the facility concerned; (ii) paragraph 5-ter with which the application of the provision referred to in paragraph 5-bis was extended to the purchased social and healthcare services, only for the part relevant to healthcare, with reference to accredited private facilities receiving a 2020 budget, as reported in the related agreements and contracts in place for the year 2020.

(5) It should be noted that with the Resolution of the Council of Ministers of October 7, 2020 (O.J. October 7, 2020, no. 248) the state of emergency was extended, as a consequence of the health risk associated with the onset of illnesses deriving from transmissible viral agents, until January 31, 2021.

(6) It should be noted that, consequently to the Resolution of the Council of Ministers of 7 October 2020, this term was extended by the Decree-Law of October 7, 2020, no. 125 (O.J. 248 of October 7, 2020) to January 31, 2021.

(Continued) Table 23 – List of regulatory provisions (and a summary of their contents) adopted by the Italian government and Regions starting in Spring 2020, pursuant to the Resolution of the Council of Ministers of January 31, 2020, aimed at using accredited private hospitals to support public ones to deal with the health emergency caused by the Corona virus pandemic

REGIONAL PROVISIONS NORTHERN ITALY	
LOMBARDY	<p>The Council of the Region of Lombardy, with Resolution no. XI/2905 of March 4, 2020, given the serious state of emergency caused by the spread of COVID-19, which has affected numerous health workers and which, at the same time, has led to an increase in requests for assistance to public facilities, making it difficult to provide essential health services to deal with the health emergency, approved the Memorandum of Understanding signed with trade associations, including AIOF, to regulate the special employment by public hospitals in Lombardy of healthcare personnel working at accredited and contracted private facilities – members of the aforementioned trade associations – who have signified their readiness to place their healthcare personnel at their disposal in order to deal with the COVID-19 emergency. This personnel, pursuant to the aforementioned Resolution, will work in public facilities identified by the Director General of Welfare of the Region, for the period strictly necessary to deal with the COVID-19 emergency and, in any case, no more than 60 days from the signing of the Protocol of Understanding, renewable in case of further need. Finally, private accredited and contracted facilities and public hospitals will have to sign agreements aimed at regulating any further detailed aspects in compliance with the principles contained in the Memorandum of Understanding.</p> <p style="text-align: center;">RESOLUTION 04/03/2020 No. XI/2905</p>
PIEDMONT	<p>The Council of the Region of Piedmont, with Resolution no. 3/1111 of March 10, 2020, given the serious state of emergency caused by the spread of COVID-19, which has affected numerous health workers and which, at the same time, has led to an increase in requests for assistance to public facilities, making it difficult to provide essential health services to deal with the health emergency, approved the draft Memorandum of Understanding to be signed with trade associations, including AIOF, aimed at regulating the provision, in response to the healthcare and technical assistance needs of the Regional Hospital Centers, of temporary and exceptional support to deal with the emergency caused by COVID-19. The private accredited and contracted facilities, with the signing of said Protocol by the relevant trade associations, offer their full availability in relation to the individual possibilities for the provision of health and technical assistance services at Piedmont's public hospitals, for the period strictly necessary to deal with the COVID-19 emergency and, in any case, no more than 60 days from the signing of the Memorandum of Understanding, renewable in case of further need, it being understood that every consequent and correlated aspect will be regulated directly between the individual facilities and the local health authorities in charge of the area in accordance with the contract arrangement, also approved by the Resolution.</p> <p style="text-align: center;">RESOLUTION 10/03/2020 NO. 3/1111</p>
EMILIA-ROMAGNA	<p>The Council of the Region of Emilia-Romagna, with Resolution no. 344 of April 16, 2020, acknowledged and approved the Framework Agreement for the regulation of relations aimed at involving accredited private hospitals in the regional hospital network to manage the COVID-19 emergency, signed by the Region and AIOF, on March 20, 2020, and valid until the end of the state of emergency. The Agreement, given the need to involve accredited private hospital facilities in the Covid emergency management network for the purpose of serving regional needs, and having acknowledged the definition of the plan for strengthening the hospital network and the commitment of the private sector not to activate layoffs, defines the methods of involvement of accredited private hospitals, dictating the relative remuneration, including the monthly one made as an advance payment (80% of the average monthly turnover in 2019 for hospitalization services), including subsequent adjustments. The Agreement also provides for the suspension of the rules relating to the incompatibility of public and private personnel and employees of private facilities who, to this end, must work to encourage, at the request of public facilities, the secondment of their medical and nursing staff, based on the needs of the Region/Local health authorities and without compromising the administrative equilibrium of the facilities.</p> <p style="text-align: center;">RESOLUTION 16/04/2020 NO. 344¹</p>

For the Notes see pp. 80-82.

(Continued) Table 23 – List of regulatory provisions (and a summary of their contents) adopted by the Italian government and Regions starting in Spring 2020, pursuant to the Resolution of the Council of Ministers of January 31, 2020, aimed at using accredited private hospitals to support public ones to deal with the health emergency caused by the Corona virus pandemic

VENETO	<p>RESOLUTION 07/04/2020 444²</p>	<p>The Council of the Region of Veneto, with Resolution no. 444 of April 7, 2020, given the fact that the external circumstance of the health emergency caused by COVID-19 has, among other things, created the need to suspend, regular healthcare services, both inpatient and outpatient, in all facilities, consequently putting at risk the production capacity of accredited private hospitals, which contribute to the optimization of the Regional Health System as a whole, with the possibility that they are forced to activate employee layoffs, and it has also been found that private providers on request of the Regions or local health authorities must provide healthcare personnel (Art.3, paragraph 3, Decree-Law 18/2020), approved the Memorandum of Understanding to regulate relations aimed at dealing with the COVID-19 emergency, between the Region, AIOF and ARIS, signed on May 5, 2020 and effective for the entire period of the suspension of planned services, envisaged by state and regional provisions. In the said Protocol, the aspects of an economic and directly legal nature and consequent to the handling of the COVID-19 emergency, were regulated, including the monthly remuneration as an advance (100% of one-twelfth of the yearly budget for both hospital care and for outpatient care), subject to adjustment, and the provision to the Local Health and Social Authorities (ULSS), at their request, of personnel no longer employed at accredited private hospitals due to the suspension of services.</p>
CENTRAL ITALY		
TUSCANY	<p>RESOLUTION 13/03/2020 No. 361</p>	<p>The General Manager of the Central Tuscany Local Health Authority, with Resolution no. 361 of March 13, 2020, taking note of the need to increase the number of patient beds for patients potentially affected by COVID-19 in the Agencies' Hospitals and to free up beds in intensive care and resuscitation units (also on the basis of national and regional provisions), approved the draft Agreement to be signed with accredited private facilities who have expressed their readiness to activate patient beds for care and assistance services during the COVID-19 emergency. Moreover, the agreement also stipulated that the contents of the contractual agreement to be signed with the respective facilities will be drawn up according to the volumes of activity indicated by AIOF, taking into account the unitary economic values contained therein.</p>
MARCHE	<p>RESOLUTION 16/03/2020 346³</p>	<p>The Council of the Region of Marche, with Resolution no. 346 of March 16, 2020, following the worsening of the COVID-19 epidemic and the increase in care needs in the Region, deeming it necessary to integrate what is set out in Resolution no. 320 of March 12, 2020⁴, approved, the Temporary Agreement signed, on March 14, 2020, by AIOF in order to meet the healthcare needs of the citizens of the Region in a unified manner, due to the COVID-19 pandemic. In particular, said Agreement regulated the involvement of accredited private health facilities that were disposed to accept stable post-surgery patients accepted by public facilities, along with those hospitalized in internal medicine and long-term care units, etc., ALL NON-COVID-19 patients, with the relative remuneration, specifying, moreover, that in order to place the patient beds of the facilities associated with AIOF at their disposal it will be necessary to temporarily interrupt their regular surgical services.</p>
	<p>RESOLUTION 17/03/2020 NO. 359⁵</p>	<p>The Council of the Region of Marche, with Resolution no. 359 of March 17, 2020, given the changing situation of the Coronavirus pandemic which makes it necessary to reduce the overcrowding of the public health facilities of the Regional Healthcare System, caused by the further increase of COVID-19 positive patients, and the consequent critical issues reported by the Regional Healthcare System bodies, has approved the Integration to the Temporary Agreement above, signed on March 16, 2020, by AIOF, which governed the involvement of an associated facility disposed to accept COVID-19 POSITIVE patients in the stable post-critical phases, dictating the relative remuneration.</p>

For the Notes see pp. 80-82.

(Continued) Table 23 – List of regulatory provisions (and a summary of their contents) adopted by the Italian government and Regions starting in Spring 2020, pursuant to the Resolution of the Council of Ministers of January 31, 2020, aimed at using accredited private hospitals to support public ones to deal with the health emergency caused by the Corona virus pandemic

<p style="text-align: center;">ABRUZZO</p>	<p style="text-align: center;">ORDINANCE 08/04/2020 No. 28</p>	<p>The President of the Region of Abruzzo, with Ordinance no. 28 of April 8, 2020, in the light of the provisions of the Ordinances nos. 3/2020⁶ and 7/2020⁷, as extended by Ordinance no. 23/2020, having identified the need to implement the involvement of private providers in the COVID-19 emergency, also following what was highlighted by the Abruzzo Regional Emergency-Urgency Committee (CREA) about the recurrence in the Region of the emergency conditions indicated by Art. 3 of Decree-Law 18/2020, and also taking into account the commitment of private facilities not to activate layoffs which, in addition to the social repercussions, could jeopardize their production capacity, it was decided to implement the involvement of the accredited private healthcare facilities of the Region, approving, for this purpose, the Collaboration Framework Agreement to be signed with accredited private healthcare facilities, delegating to the Health Department the preparation of individual and specific collaboration agreements for the management of the COVID-19 emergency and all the activities related to its termination and notification. The Agreement, having deemed it necessary to further involve the accredited private healthcare facilities in the COVID-19 emergency management network, and having acknowledged the definition of the plan for strengthening the hospital network, defined the types of involvement of the accredited private hospitals, dictating the relative remuneration, including the monthly advance payment (80% of the monthly spending limit authorized for 2020 for hospitalization services), subject to adjustment⁸. The Agreement also provides for the suspension of the rules relating to the incompatibility of public and private personnel and employees of private facilities who, to this end, must work to encourage, at the request of public facilities, the secondment of their medical and nursing staff, based on the needs of the Region/Local health authorities and without compromising the administrative equilibrium of the facilities. The validity of the Agreement was set at 2 months, starting from its signing, leaving open the possibility, if necessary and given the changing regional emergency situation, of extension and/or additions at the request of the Regional Healthcare Representative for the emergency (R.SR) and with the opinion of CREA.</p>
<p style="text-align: center;">UMBRIA</p>	<p style="text-align: center;">RESOLUTION 16/04/2020 No. 277</p>	<p>The Council of the Region of Umbria, with Resolution no. 277 of April 16, 2020, given the necessity of involving the accredited private facilities in the COVID-19 emergency management network for the purpose of placing them at the disposal of the needs of the Region, and also taking into account the commitment of the facilities not to activate layoffs, approved the Framework agreement for the management of relationships aimed at involving accredited private healthcare facilities in the regional hospital network for the management of the COVID-19 emergency signed on April 17, 2020, with AIOF and valid until the end of the state of emergency, in which different types of involvement are envisaged for private facilities, based on the accreditation of each facility by surgical area and medical area, or facilities to be used for the transfer and treatment of surgical, internal medicine, and rehabilitation cases of NON-COVID patients, determining the relative remuneration, including the monthly advance payment (70% of the average monthly turnover for hospitalization services), subject to adjustment. The Agreement also envisages, for the duration of the emergency and until the Region declares this phase over, the suspension of the rules relating to the incompatibility of personnel, both those relating to the possible operation of public personnel, upon notification to their administration, at private facilities, and those relating to the possibility of personnel and collaborators of private facilities to operate at the public facilities.</p>

For the Notes see pp. 80-82.

(Continued) Table 23 – List of regulatory provisions (and a summary of their contents) adopted by the Italian government and Regions starting in Spring 2020, pursuant to the Resolution of the Council of Ministers of January 31, 2020, aimed at using accredited private hospitals to support public ones to deal with the health emergency caused by the Corona virus pandemic

SOUTH	
SICILY	<p style="text-align: center;">RESOLUTION 12/03/2020 NO. 85⁹</p> <p>The Council of the Region of Sicily, with Resolution no. 85 of 12 March 2020, given the serious state of emergency caused by the spread of COVID-19, which has led to an increase in requests for assistance from public facilities and the healthcare workers who work there, in particular in the areas of infectious disease and intensive care, making it difficult to maintain the healthcare services needed to deal with the emergency, approved the Memorandum of Understanding for the special engagement of healthcare personnel at Sicilian public hospitals in order to deal with the COVID-19 emergency, signed on March 16, 2020, by AIOF, pursuant to which the trade associations and accredited private facilities, signatories, gave their consent to place their personnel at the disposal of the Regional Healthcare System centers and organizations to work in public facilities for the time strictly necessary to deal with the COVID-19 emergency and, in any case, for no more than 60 days from the date of signing the Protocol, renewable in case of further need. Finally, private accredited and RHS facilities will have to sign agreements aimed at regulating any further detailed aspects in compliance with the principles contained in the Memorandum of Understanding. Furthermore, in said Protocol, some accredited and contracted patient beds are placed at the disposal of the hospitals, if necessary, upon request by the General Manager of the DPS, each according to their specialties and, where present, intensive care, semi-intensive care, and cardiac intensive care unit beds, limited to the period linked to the emergency, and, in any case, for no more than 60 days from the date of the signing of the Protocol.</p>
	<p style="text-align: center;">AGREEMENT 30/03/2020</p> <p>The Region of Sicily, given the necessity of involving the accredited private facilities in the COVID-19 emergency management network for the purpose of temporarily strengthening the Regional Healthcare System, and also taking into account the commitment of the facilities not to activate layoffs, signed the Framework Agreement for the regulation of relationships aimed at involving accredited private healthcare facilities in the regional hospital network for the management of the COVID-19 emergency on March 30, 2020, with AIOF that is valid until the end of the state of emergency, determining the relative remuneration, including the monthly advance payment (100% of one-twelfth of the yearly budget for hospitalization services)¹⁰, subject to adjustment.</p>
MOLISE	<p style="text-align: center;">DECREE 26/03/2020 No. 22</p> <p>The acting Commissioner of the Region of Molise, with Decree no. 22 of 26 March 2020, deemed to have recognized to accredited private hospitals the services arising from the transfer of patients from public hospital facilities, together with those that will be arranged by the Regional Health Authority of Molise (ASRe.M.) and/or by other Authorities institutionally responsible for the management of the emergency, as well as those arising from the use of the Facilities as hospitals responsible for the management of COVID-19 patients, according to the provisions set out by the ASRe.M. regulations, as a result of the activation of the FOURTH PHASE, approved, among other things, a special contractual arrangement for the purchase from private facilities operating under the accreditation scheme of health services for the purpose of managing the COVID-19 emergency, pursuant to the provisions of Decree-Law 18/2020. The measures referred to in this provision, pursuant to the provisions therein, have effect from March 9, 2020 and will be effective until the adoption of a specific and subsequent provision in relation to further needs to deal with the epidemiological emergency caused by COVID-19.</p>

For the Notes see pp. 80-82.

(Continued) Table 23 – List of regulatory provisions (and a summary of their contents) adopted by the Italian government and Regions starting in Spring 2020, pursuant to the Resolution of the Council of Ministers of January 31, 2020, aimed at using accredited private hospitals to support public ones to deal with the health emergency caused by the Corona virus pandemic

MOLISE	<p style="text-align: center;">DECREE 08/04/2020 No. 26</p>	<p>The acting Commissioner of the Region of Molise, with Decree no. 26 of April 8, 2020, given that the accredited private hospital facilities operating in the Molise region, while confirming their willingness regarding their involvement in emergency management, have stressed the need that the costs be borne to maintain their organizational and management structures in order to provide their healthcare services in the context of the COVID-19 emergency, as these are not otherwise sustainable if considered exclusively in application of the remuneration methods envisaged by DCA 22/2020, has integrated the aforementioned Decree and replaced the contractual arrangement for the purchase from private facilities operating under the accreditation system of health services for the purposes of dealing with the COVID-19 emergency, modifying, in particular, the remuneration methods (monthly payment of 95% of the amount paid or to be paid in the first two months of 2020, referring to hospital care, subject to adjustment), and also establishing that in the event that changes in the emergency situation create a change in the need in terms of patient beds, the accredited private hospital facilities shall place the use of their patient beds at the disposal, commensurate with their own equipment, on the basis of their individual technological and structural organizational equipment and in line with the operational guidelines provided by the ASRe.M., the service of NON-COVID-19 patients or to COVID-19 patients. The provisions of the Decree, pursuant to the provisions therein, are effective from March 9, 2020 and will be effective for the months of March and April 2020 in relation to the need to cope with the epidemiological emergency from Covid-19.</p>
APULIA	<p style="text-align: center;">AGREEMENT 27/03/2020</p>	<p>The Region of Apulia, following a meeting held on March 27, 2020, formalized the most significant provisions regarding the organizational methods of the COVID, post-acute COVID and NON-COVID hospitals together with AIOP, regulating the different methods of involvement of private facilities and determining the relative remuneration, including the monthly advance payment (90% of one-twelfth of the spending limit designated for 2019, and also confirmed for 2020, with reference to hospitalizations), subject to adjustment, having, conversely, accredited private facilities guarantee the maintenance of employment levels without resorting to other forms of income support for workers.</p>
CAMPANIA	<p style="text-align: center;">AGREEMENT March 29, 2020¹¹</p>	<p>The Region of Campania, given that the actions implemented by the hospital centers aimed at the repurposing and/or establishment of patient beds dedicated to the assistance of COVID-19 patients have not currently provided an adequate number of places to meet hospitalization needs, also in light of the still increasing epidemic phase in progress, and also considering that the regional patient bed enhancement plan has not reported sufficient implementations to guarantee the number of beds necessary for COVID-19 patients in the short term, both for inpatient, sub-intensive and intensive care needs, on March 29, 2020, it signed a Memorandum of Understanding with AIOP in order to activate dedicated COVID patient beds, and to implement NON-COVID patient beds for the transfer and sending of patients from hospital facilities to Healthcare facilities, valid for 3 months unless extended and, in any case, until the end of the state of emergency¹², in which various types of involvement are envisaged for accredited private healthcare facilities, establishing the relative remuneration, including the monthly advance payment (95% of one-twelfth of the yearly budget¹³).</p>

(1) Please note in this regard, the Resolution of June 12, 2020, no. 9898, of the General Directorate for Personal Care, Health and Welfare, with which the Technical Application Document of said Agreement was implemented.

(2) It should be noted that the Resolution of June 16, 2020, no. 782 which, in dictating provisions on health matters in implementation of Decree-Law 34/2020, has, among other things, reduced the monthly payment for the services provided pursuant to Art. 4 of Decree-Law 34/20, up to a maximum of 90% of the twelve monthly amounts paid or in any case due for the year 2020.

- (3) It was revoked by Resolution no. 522 of May 5, 2020 with which, given the gradual, albeit slow, mitigation of the emergency health situation caused by COVID-19, that was such as to lead to the non-occupation of all the patient beds made available, with the temporary Agreement, to deal in a unified manner with the multiple care needs arising from the emergency itself, and finally considering the need to meet care needs which, albeit of an regular nature, await a response, and to contain the negative effects caused by the health emergency on the social, economic and productive levels, which make it possible for the facilities to resume, in a prudent and progressive manner, their temporarily interrupted regularly scheduled services, while at the same time, ensuring that each accredited private healthcare facility, for the entire duration of the state of emergency referred to in the Resolution of the Council of Ministers of January 31, 2020, maintains its readiness to place patient beds at the disposal of the Regional health System should new healthcare needs emerge, up to a maximum number of those already made available in the Temporary Agreement referred to in Resolution 346/2020, a **New Agreement signed on April 29, 2020 has been approved by AIOP**, with which, among other things, a monthly payment was paid to the accredited healthcare facilities as an advance payment for the month of April 2020 (90% of one-twelfth of the economic resources allocated for all the services referred to in Regional resolution DGR 978/2019), subject to adjustment.
- (4) In this regard, it is necessary to specify that with Resolution no. 320 of March 12, 2020, given the situation of special need and urgency, as well as the rapid changes to the regulatory framework and the epidemiological situation, and also taking into account the particularly widespread nature of the epidemic, the constant increase in cases and deaths encountered in the Region, the regional plan for the management of the health emergency, adopted with Resolution no. 272 of March 9, 2020, with which the regional health organization was remodeled to allow adequate and appropriate responses to the care needs of patients, was updated. In said plan the private healthcare facilities had already granted patient beds reserved for the reception of NON-COVID-19 patients from regional hospitals.
- (5) It was revoked by Resolution no. 387 of March 27, 2020 with which, in order to allow the decongestion of hospital facilities and the freeing up of hospital beds in the public network for the entire duration of the COVID-19 emergency, the **Temporary agreement** with the private healthcare facility associated with AIOP, already the subject of Resolution 359/2020, aimed at regulating the provision of patient beds for COVID-19 positive patients was approved, supplemented by Resolution no. 522 of May 5, 2020 (see note 3) which authorized the prudent and gradual reduction of the 70 COVID-19 positive beds made available, until they are gradually suspended in line with and compatibly with the disappearance of the overcrowding conditions of the Region Health System Hospitals, without prejudice to their reactivation, within the emergency state referred to in the Resolution of the Council of Ministers of January 31, 2020 and in agreement with the GORES, should further critical care needs related to COVID-19 arise.
- (6) The Ordinance of March 9, 2020, no. 3, outlined, in relation to the evolution of the local epidemiological situation, the actions and interventions necessary to deal with them and to be implemented at the hospital level, ordering, among other things, (i) suspension of the outpatient services performed in the Abruzzo Region until April 3, 2020, within the limits and under the conditions established in the relative Annex B, (ii) increasing of the number of patient beds and assistance for intensive care, infectious diseases, pneumology and any other ward used to address the needs of possible critically ill patients suffering from COVID-19, by urgently activating, through the local health authorities, also as an exception to the ordinary procedures, additional Intensive Care patient beds, either through expansion or through the repurposing of regular hospital beds, (iii) to avoid congestion of the local health authorities' emergency facilities by encouraging the relocation of users to the other facilities of the Regional Health Service, (iv) downsizing, for the entire duration of the COVID-19 emergency period, the elective services of accredited private hospital facilities, pending further indications from the Health Department and according to the guidelines of the Crisis Unit in agreement with the Regional Health System – involving private operators to deal with the COVID-19 emergency. This Ordinance, among other things, was integrated and amended with the Ordinance of March 11, 2020, no. 4, and extended, limited to point 2) relating to the suspension of outpatient activity (April 3, 2020), by the Ordinance of April 3, 2020, no. 23.
- (7) The Ordinance of March 11 2020, no. 7, by adopting new urgent measures for the prevention and management of the epidemiological emergency caused by COVID-19, to encourage the greatest possible use of Intensive Care and the availability of healthcare personnel for the emergency caused by COVID-19, has arranged for, among other things, the suspension – with immediate effect and until April 3, 2020 – of both medical and surgical scheduled hospitalizations at DEA/PLS public facilities, ordering the accredited private facilities, for the entire emergency period, to accept NON-COVID patients if transferred from the public facilities of the regional emergency network with correlative rescheduling of their respective elective services. This latter suspension was extended to April 13, 2020 by the Ordinance of April 3, 2020, no. 23.

- (8) It should also be noted that in said Agreement it was defined as plausible, by way of relief, for the facilities that had to suspend their services, pursuant to Ordinances nos. 7/2020 and 23/2020, to increase the monthly budget of the private facility, again within the limits of the annual spending ceilings and for the residual period until the end of 2020, equal to the monthly rate with the lowest production value for the period with respect to the monthly spending limit authorized for the year 2020 with protocol note no. 40357 of February 11, 2020.
- (9) In this regard, it should be noted that the Department of Health, with Notice of March 27, 2020, protocol 16500, authorized payment to each accredited private facility, following the stipulation of the aforementioned Memorandum of Understanding and the consequent implementation agreements stipulated by private operators with the Health Authorities, aimed at regulating the relationships for the special employment of healthcare personnel at Sicilian public hospitals, as well as for the intake, when necessary, of patients not affected by COVID-19 from public facilities, limited to the period linked to the emergency, of 90% of one-twelfth of the budget provisionally allocated for the current year by each A.S.P., suspending, exclusively for the aforementioned period, the deductions of inappropriate services not recognized with reference to the previous year, which will, in any case, be subsequently adjusted.
- (10) The Department of Health deemed it appropriate to make clarifications relating to the content of the Agreement signed on March 30, 2020, in order to make it more immediately traceable to the provisions of Resolution 85/2020, signed with AIOP, on April 8, 2020, an **Appendix** aimed at clarifying the remuneration paid to the accredited private facilities involved in the management of the COVID emergency, including the monthly advance payment (90% of one-twelfth of the budget provisionally allocated for the current year by each A.S.P.), also specifying the duration of the Agreement to be no more than 60 days from its signing and renewable if necessary.
- (11) It should also be noted that, on April 3, 2020, the Region of Campania and AIOP signed an **Addendum to the Agreement** with which, given that the aims of the agreement reached between the parties also pertain to ensuring financial support for the private hospital centers which, due to the ordered suspension of elective and outpatient specialist services, and that the facilities have been operating while having to bear the fixed management costs to ensure the entire operation of the private facilities, as well as additional costs dictated by procedures and needs induced by the emergency, consequently experiencing a moment of serious hardship with the risk of not being able to ensure the employment levels of their staff, it established that the settlement between the Region and private facilities will take place following the outcome of the joint assessment of production and the above factors during the fiscal year 2022.
- (12) The Crisis Unit of the Region of Campania, on April 3, 2020, with note no. 1436, specified that the quarter in which the Agreement and the related Addendum are implemented is included between the months of March 2020 and May 2020 and, therefore, March 2020 is established as being the month in which fulfillment of the obligations will begin. In this regard, moreover, the Region and AIOP, following a meeting held on May 3, 2020, agreed that the Memorandum of Understanding will expire on the its original expiration date of May 31, 2020, considering the month of May as a transitional period for the gradual resumption of regular services, and for the remuneration of services under the conditions set out therein.
- (13) It should be noted that following the issuance of Decree-Law 23/2020 it was agreed, in accordance with the provisions of Art. 32, to reduce to 70% the twelve monthly payments of the current budget paid to the facilities (see note no. 191548 of the DG for health protection and the coordination of Regional Health System of April 14, 2020) which, subsequently, pending the adoption of the Ministerial Decree that sets rates and methods of anti-COVID-19 services, as required by Art. 32 of Decree-Law 23/2020, it was decided to increase to 95% (see note no. 196977 of the DG for health protection and the coordination of Regional Health System of April 20, 2020), although, subsequent to the issuance of Decree-Law 34/2020, this amount was reformulated pursuant to Art. 4, paragraph 4, to 90% of one-twelfth of the allocated budget (see note no. 239658 of the DG for health protection and the coordination of Regional Health System of May 20, 2020).

Source: survey by *Ermeniea – Studi & Strategie di Sistema, 2020*

A special survey of the AIOP regional Presidents was also conducted on this experience, some of the data from this was also previously used in section 1.3 as well as section 2.1 (in this case on the specific issue of waiting lists).

Further results from the aforementioned survey related to the management consequences on accredited facilities are reported below. In this regard, Table 24 shows how the AIOP hospitals of the Regions (or Autonomous Provinces):

- a) were largely involved through specific agreements (in 72.2% of cases) or without formalized agreements but in a de facto manner (16.7%), and only a minority was not involved at all (at least with reference to the 18 Regions and/or Autonomous Provinces who responded). See the first group of data in Table 24;
- b) made available on average up to 30% of their acute and post-acute care patient beds in 66.7% of cases and more than 40% of the these beds in 33.3% of cases; and similarly this was the case for patient beds intended for intensive and sub-intensive care and for “technical patient beds”: with a similar incidence (72.7% and 27.3%, respectively), as evidenced by the second group of data in Table 24;
- c) had to suspend or at least reduce some services and this occurred on average, on a regional basis, in 84.6% of cases in the case of regular hospitalization for acute cases, in 83.3% of cases for post-acute regular hospital admissions, and in 81.8% of cases for deferred and non-urgent outpatient services. In the case of a reduction, this occurred on average in 27.3% of cases for acute care services, 62.5% for post-acute care services, and 22.2% of cases for outpatient services (see third group of data in Table 24).

Table 25 below contains further information of a strictly managerial-administrative type, specifically:

- a) the incurring of higher expenses for structural adjustments and/or for the remodeling of the regular departments and/or for the conversion of operating rooms to serve the intensive care needs of Covid patients occurred to a “very significant” extent in 26.7% of cases, to which, however, is added a “fairly significant” expenditure for another 46.6%: which means that almost 3/4 of the regional facilities involved incurred significant costs (see first group of data in Table 25);
- b) obviously there was also a great impact on personnel, as evidenced by the second group of data in Table 25, namely:
 - an average of 33.3% of AIOP regional facility staff was placed at the disposal of public facilities;

- a request was made for social safety nets for personnel (CIGO, FIS) in approximately 66.7% of the regional AIOP facilities, obtaining the relative authorization to use these instruments (in 73.3% of cases); the facilities subsequently proceeded to advance the CIGO and FIS amounts due to their staff in 75.0% of cases (the differences between the Regions most affected by the pandemic and other Regions are completely evident);
 - and, parallel to this, “smart working” was engaged in by administrative staff (64.7%), special training was provided specifically on account of the health emergency (70.6%), and additional forms of support were provided to healthcare workers experiencing hardships due to the Covid crisis (in 37.5% of cases);
- c) finally, the resumption of regular services by AIOP facilities, from the end of June 2020 onwards, after the effort made for Covid patients, affected almost all of them (see the last group of data in Table 25).

The pandemic event constituted a significant emergency scenario test of the value of the alignment of the public component and the (accredited) private component of the hospital system, but it also caused a significant deviation from forecasts in the financial statements of each structure, as these had already been determined on the basis of the specific agreements in place or in the process of being signed, as is the case every year. Furthermore, in many Regions there were reduced cash flows which, in normal times, serve to ensure the financial sustainability of the facilities that have to bear particularly demanding fixed costs.

More precisely, Art. 13 (paragraph 1) of Decree-Law no. 14/2020 had stipulated that the private healthcare facilities and public facilities would re-schedule/suspend hospitalization and deferrable and non-urgent outpatient services. At the same time, Art. 3 (paragraph 3) of Decree-Law no. 18/2020 provided that the aforementioned facilities, accredited or not, at the request of the Regions and/or the Autonomous Provinces of Trento and Bolzano as well as the Hospital Authorities make their healthcare personnel, premises and the equipment present in the structures themselves available. All of these rules meant that private facilities (whether contracted or simply authorized) underwent some necessary conversions of the type mentioned above, namely:

- some facilities, especially those in the most affected regions, were transformed completely or partially into Covid hospitals, setting up special departments and increasing the number of intensive care beds and consequently they underwent a significant organizational effort and a significant increase in costs;

Table 24 – Involvement of AIOIP accredited hospital facilities in relation to Covid-19 patients with the consequent suspension or reduction of ordinary services (val.%)

Phenomena	Data		
-	Regional AIOIP facilities involved by the respective Regional Health Service:	72.2	{ 88.9
	• Yes, with specific agreements	16.7	
	• Yes, without formalized agreements		
-	Estimate of the number of patient beds for Covid-19 patients out of the total of AIOIP patient beds belonging to the facilities involved:		For intensive care, sub-intensive care and "technical patient beds" out of the total of the corresponding patient beds in the regional AIOIP facilities
	• Up to 10%	22.3	27.2
	• Over 10% and up to 20%	22.2	{ 18.2
	• Over 20% and up to 30%	{ 66.7	{ 72.7
	• Over 30% and up to 40%	22.2	27.3
	• Over 40% and up to 50%	-	-
	• Over 50%	11.1	{ 9.1
	Total	22.2	18.2
		100.0	100.0
-	Suspension and/or reduction of the regular services of the AIOIP facilities:	Yes, suspended and/or reduced	Average reduction percentage
	• Ordinary inpatient admissions for acute cases	reduced	27.3
	• Ordinary inpatient admissions for post-acute cases	84.6	72.7
	• Deferrable and non-urgent outpatient services	83.3	37.5
		81.8	77.8

(1) Based on a panel survey conducted in September-October 2020 to which 18 AIOIP regional presidents responded (Piedmont, Aosta Valley, Lombardy, Liguria, Autonomous Province of Trento, Autonomous Province of Bolzano, Veneto, Emilia Romagna, Tuscany, Umbria, Marche, Lazio, Molise, Campania, Apulia, Calabria, Sicily, Sardinia).
Source: survey by *Ermeneta – Studi & Strategie di Sistema, 2020*

Table 25 – Impact on Expenses and Staff of AIOP facilities that placed part of their services at the disposal of Covid patients (val.%)

Phenomena	Data		
- Expenses incurred for structural adjustments and/or for the remodelling of the regular wards and/or for the conversion of the operating rooms for intensive care:			
• Yes, very significant expenses on average			26.7
• Yes, fairly significant expenses on average			46.6
• Yes, quite low costs on average			20.0
• No, no additional costs			6.7
Total			100.0
- Impact on the staff of AIOP facilities for the provision of services due to Covid-19 patients:			
• Part of the staff placed at the disposal of public healthcare facilities (% average out of the total of regional AIOP facilities)	Total	Regions most involved	Other Regions
	33.3	80.0	15.4
• Request made for social safety nets such as CIGO, FIS (% average out of the total of regional AIOP facilities)	66.7	80.0	61.5
• Obtained authorization for the social safety nets requested (% average out of the total of the regional AIOP facilities that requested the measure)	73.3	80.0	70.0
• Advances paid to their staff once the authorization for the social safety nets was obtained (% of the average of the regional AIOP facilities that obtained authorization)	75.0	100.0	66.7
• Use of "smart working" by the administrative staff of the regional AIOP facilities (% average out of the total facilities)	64.7	80.0	58.3
• Special training provided on account of the health emergency (% of the total of regional AIOP facilities)	70.6	80.0	66.7
• Other forms of support provided to healthcare workers experiencing hardships due to the Covid emergency, such as psychological help (% of the average out of the total of regional facilities)	37.5	60.0	27.3
	<i>Resumed, but on average at % of ...</i>		
- Resumption of services by the AIOP facilities starting from the end of June 2020, after the effort made for Covid patients:	Total	Regions most involved	Other Regions
• Ordinary inpatient admissions for acute cases	94.1	79.8	82.9
• Ordinary inpatient admissions for post-acute cases	100.0	80.0	82.9
• Outpatient services	94.4	80.0	82.9

(1) Based on a panel survey conducted in September-October 2020 to which 18 AIOP regional presidents responded (Piedmont, Aosta Valley, Lombardy, Liguria, Autonomous Province of Trento, Autonomous Province of Bolzano, Veneto, Emilia Romagna, Tuscany, Umbria, Marche, Lazio, Molise, Campania, Apulia, Calabria, Sicily, Sardinia). Source: survey by *Ermeneta – Studi & Strategie di Sistema, 2020*

- other facilities were transformed into treatment centers for patients transferred from other, mostly under public, hospitals, adapting their facility based on the logic of accreditation in order to provide the necessary services to new types of patients;
- still other facilities had to completely interrupt their services, while remaining fully operational, with the consequence of having to assume all the related economic burdens, as they had to remain at the disposal of the regional health authorities.

In light of the significant commitment provided by accredited hospital facilities and in particular by those belonging to AIOP, it was therefore natural to arrive at some form of economic “relief”, which was effectively recognized through the “Ristoro Bis” Decree-Law of November 4, 2020, intended to cover the expenses incurred by the aforementioned accredited facilities and even 90% of the fixed costs of those that have made their patient beds available, which were not subsequently used.

This was followed by the definition, by the Regions, of a specific Covid DRG, as well as reimbursement for Covid “by-function activities”.

Furthermore, it should be noted that there has been a ministerial opening regarding the possibility of the private component of the National Health Service to work together with the public one in order to gradually reabsorb the waiting lists which in the meantime have significantly lengthened for non-Covid patients following the suspension of regular services due to the special effort made for Covid patients as revealed by the statements of the population sample interviewed on the subject (see section 2.1 above).

In addition to the emergency and the related responses in terms of services for first and second wave Covid patients, however, there is the need to address the critical issues of the system that have accumulated over time, certainly in terms of current financing, but also, and above all, with regard to the quantity, quality and inadequate minimum uniformity of the services provided in the various areas of the country (on the comparison between average results in increasing complexity and the unsatisfactory “average”, see section 1.3 above).

It is thus a question of undertaking a complete overhaul of the health “machine”, also due to the Covid emergency phase which has caused a change of approach by Europe by granting greater flexibility in the national budget, but above all through the resources of the *Recovery Fund* and, potentially, the *ESM*.

It might therefore be time to change perspective, bringing “financial healthcare” (such as that experienced in the Spending review) together with “real healthcare” (that made up of patients, families and operators): defining and above all implementing some completely reformed project lines that

would entail the beginning of a re-funding period in contrast to the previous period of defunding. But this must take place in exchange for a series of investments across the board and in the medium term, involving research, technology, organization, personnel, management and certainly not least the relationship with accredited private facilities, precisely in order to make the most of the resources of the healthcare services that exist today, within the framework of the mixed system we are familiar with.

In short, we need a change of pace that does more than merely injecting financial resources or bolstering the number of employees but without changing the *governance*, organization, management and, above all, verifying the results obtained in terms of health first of all, but also in terms of efficiency, extending also – and finally – to greater transparency of the Financial Statements, as described in the next section.

3.2. Monitoring areas of inefficiency by examining the Financial Statements of public Hospital Centers

Starting with the *2009 Health&Hospitals* Report, every year attention is paid to the final Income statements of public Hospital Centers in order to identify (and monitor) possible areas of inefficiency, so as to be able to estimate the overall impact on the entire public hospital system.

However, the year 2020 has a very different profile than years past, given that the continuity of the positive features as well as the problems already described in the past converged while, at the same time, there were new non-permanent features brought into play by the Corona virus pandemic, the impact of these latter features, however, can only be fully assessed in 2021 by verifying whether or not the healthcare services provided to both Covid patients and non-Covid patients are valid, as well as the performance of the Income Statements, referring to the entire 2020 financial year.

But the fact that this is a transition year does not mean “suspending” the assessment: on the contrary, it is necessary to uphold them and begin to expand the analysis to the Balance Sheet. And this decision is supported by at least three reasons.

The first is that the monitoring constitutes a resource of the ongoing assessment that has been activated for some time, to the extent that this year the items of the Income Statements from 7 fiscal years (from 2013 to 2019) can be compared.

The second reason is that the need to have greater transparency and comparability of financial statements remains a fundamental issue (and matter of

principle), but still far from having been applied concretely and extensively up to certifiability and therefore certification level, as per various regulations introduced over time and in particular to Legislative Decree 2011/118 and subsequent provisions¹.

The third – and most important – reason is that perhaps there is a return to allocating financial resources to healthcare: both as a result of the special needs linked to the Corona virus (which will certainly extend to 2021, having to address not only the needs of Covid patients but also those of non-Covid patients who have suffered interruptions and delays in regular services) and following the European opening in terms of greater flexibility of the public budget and above all in terms of special resources from the *Recovery Fund* and (hopefully) the part of the ESM concerned with healthcare.

Overall, therefore, this could be the moment that interrupts the (disastrous) process of defunding the Italian Health System and thus allows for the allocation of additional resources to redesign this system and above all to make new investments in structures, technologies, research, and qualification (not just hiring) of staff.

But all of this can become effective if we leave behind purely “additive” logic (more personnel, more services, more current expenditure) and embark on a “reorganization” logic: starting from the hospital/local territory relationship and investing in the functioning of services, the methods of providing services and the relationship with private institutions, intended not only as accredited hospital facilities but also as service companies (IT, logistics, call centers, and help desks), beyond the use of private service companies strictly for catering and the laundry.

It is obvious that all this also requires a reorganization logic to be applied to the Financial Statements and the related information flows upstream (as was also highlighted in the previous Report):

- making the level of efficiency/inefficiency in the management of public hospitals more transparent and consequently being able to compare the different performance levels between different facilities (public and accredited), since the average data can be deceptive and underestimate the differences not presenting a true picture of the actual situation and, therefore, making it impossible to “reward” the better facilities and penalize the worst ones (for which the real contextual conditions must of course be carefully evaluated);

¹ See “Health&Hospitals/2016” Report, Part One/Section 2.2, p. 93 et seq.

- being able to intervene in a timely manner and not only after the fact when the results of inefficient management have already become manifest and are often accumulated over the years, with the inevitable consequence of being placed under compulsory administration;
- freeing up potential hidden financial resources that can and must be better used to reorganize and better equip hospital facilities, as well as to perform regular and extraordinary maintenance as needed: but also introducing any additional special resources into a “machine” that does not waste them or in any case does know how to take full advantage of them due to having undergone a radical reorganization;
- contributing to transforming a collective culture that accepts public inefficiency too easily instead of making the best use of the resources available;
- evaluating what the public service really costs, examining and weighing all the legitimate expenditure components (in relation to the services actually rendered and their quality) in order to make “how much is spent to obtain something” transparent and justified;
- and finally, unifying the payment schemes used for public facilities with those for the accredited private facilities for the same services provided: please note that the latter are paid exclusively on the basis of the DRGs that include not only operating but also investment costs, whereas the former also receive capital contributions in addition to the DRGs and, traditionally, also contributions for contract renewals, in addition to many other forms of implicit budget covering, as has been stated many times in previous “Health&Hospitals” Reports.

This year, as in more recent years, the Income Statements of 33 public Hospital Centers were taken into consideration, and are distributed as follows:

- 12 for the North (6 in Piedmont, 2 in Veneto and 4 in Emilia Romagna);
- 7 in Central Italy (2 in Marche and 5 in Lazio);
- and finally, 14 in the South (2 in Apulia, 4 in Calabria and 8 in Sicily).

The values of the individual items on the Income Statements of the public Hospital Centers just mentioned are reported in the Table Appendix 1 in Section 1 of the Appendices and refer to 7 fiscal years ranging from 2013 to 2019. On the basis of these data, some indicators were processed, in the sense that the Index Numbers were calculated (Year 2013 = 100.0), starting from the Number of Admissions and thus of Revenues and Costs.

Subsequently, some comparisons were made within the Items of the Income Statement and precisely the Index Numbers relating to the 7 Fiscal Years were reported, in order to compare:

- the trend of the number of in-hospital stays compared to the trend of revenues from healthcare services and social health services (Table 26);
- the trend in the number of in-hospital stays and the trend in costs for the purchase of goods and services (see Table 27);
- the trend of the number of in-hospital stays compared to the trend of revenues from “by function” activities (Table 28);
- and finally, the trend of the Operating Results of the Hospital Centers over the 7 years considered (Table 29).

If we look at the first of the tables mentioned, the one relating to the comparison between the trend of Hospital Admissions and the trend of Revenues from healthcare services and health-related social health services, corresponding to the years 2013-2019 (see Table 26) the following phenomena emerge:

- a) a substantial stabilization of Inpatient admissions and *day hospital* admissions at the national average level, given that once their value reached 100.0 in 2013 (as an Index Number) it dropped to 93.9 in 2014 and then, substantially more or less stable it was 93.4 in 2019; contrasting this stabilization, there was an increase in Revenues from health and social and healthcare services, going from – in terms of Index Numbers – from 100.0 in 2013 to 99.0 in 2014 and to 115.1 in 2019 (with constant growth in the intervening years). Thus, the difference between the Index Number of Revenues and the Index Number of Admissions in 2019 is equal to +21.7 points for all Italian Hospital Centers.

However, it should be noted that if average Admission number decreased and Revenues from health and non-health services increased at the same time, there is initially a possible “anomaly”: consequently, it is legitimate to ask whether the increase in Revenues is actually linked to an increase in the complexity of the services provided or not;

- b) but the possible “anomaly” may be explained (perhaps in a significant manner) if the Hospital Centers are considered when grouped by geographic area. Compared to an Index Number of Revenues in 2019 at the national level, equal to 115.1, this corresponds to 115.5 for the North, 111.8 for the Center and 116.8 for the South, without substantial differences. But, looking at the last column of Table 26, the average value of 21.7 points higher for Revenues than Admissions:
- drops to 10.5 points for the North;
 - rises to 25.8 points for Central Italy;
 - and further increases to 32.0 points for the South and the Islands.

It is evident that the upward trend, especially for the Hospital Centers of the South, helps to better explain the “anomaly” mentioned above, unless

Table 26 – Comparison of the trend in admissions and trend in corresponding revenues in the period 2013-2019 (IN 2013 = 100.0)

Hospital Centers (1)	Number of inpatient admissions and day-hospital admissions									Revenues from healthcare services and health-related social health services as per the IS (Cod. A0320)									Index Number difference between Revenues and Admissions in 2019
	2014	2015	2016	2017	2018	2019	2014	2015	2016	2017	2018	2019	2014	2015	2016	2017	2018	2019	
H.C. 1	95.1	88.6	87.3	86.9	88.5	88.7	97.7	101.0	101.8	100.1	108.6	116.6							27.9
H.C. 2	96.6	111.6	97.6	112.4	115.3	117.3	100.8	104.9	106.3	107.9	119.0	126.1							8.8
H.C. 3	95.8	95.8	95.3	94.8	97.7	98.8	96.8	100.2	102.8	103.9	110.1	112.3							13.5
H.C. 4	96.5	98.5	98.3	97.8	113.4	116.6	96.9	100.7	105.6	107.5	113.8	120.1							3.5
H.C. 5	95.3	98.3	90.1	98.2	96.1	101.1	94.9	94.9	98.8	102.8	99.8	106.2							5.1
H.C. 6	84.1	95.0	94.7	94.3	90.6	92.5	97.9	100.3	99.9	99.5	101.8	107.2							14.7
Piedmont Total	90.7	97.4	94.5	96.8	97.7	99.8	97.7	100.5	102.0	102.6	107.2	112.8							13.0
H.C. 7	98.6	107.6	105.4	110.7	110.4	113.6	98.0	99.3	99.8	105.1	106.2	108.6							-5.0
H.C. 8	100.9	115.1	125.3	124.9	125.9	124.1	101.9	108.7	112.4	116.2	120.1	124.5							0.4
Veneto total	99.8	111.3	115.2	117.7	118.1	118.8	99.9	103.9	105.9	110.5	112.9	116.3							-2.5
H.C. 9	98.9	99.0	98.4	92.0	93.1	90.9	102.0	103.4	104.1	104.3	105.7	105.7							14.8
H.C. 10	96.7	95.5	94.0	123.2	137.8	140.1	99.7	99.8	99.4	157.3	157.8	159.5							19.4
H.C. 11	97.9	97.2	98.4	97.9	98.5	95.5	101.0	101.6	104.1	106.8	108.5	109.8							14.3
H.C. 12	98.8	97.9	96.3	95.8	100.0	100.9	101.9	102.3	101.8	104.5	107.7	110.0							9.1
E. Romagna Total (9)	98.1	97.5	97.2	100.6	104.6	103.4	101.2	101.9	102.8	115.0	116.7	117.9							14.5
NORTH ITALY TOTAL	95.2	100.3	99.7	102.4	104.3	105.0	99.5	101.8	103.3	108.9	112.0	115.5							10.5
H.C. 13	116.4	112.7	112.6	119.8	118.9	115.6	95.4	93.1	95.8	106.0	115.1	118.9							3.3
H.C. 14	97.4	93.6	93.8	97.5	97.7	96.7	93.6	92.6	97.6	101.2	107.1	107.9							11.2
Marche Total	104.1	100.4	100.4	105.4	105.2	103.3	94.2	92.8	96.9	102.9	110.0	111.8							8.5
H.C. 15	96.6	78.0	69.7	77.8	77.3	78.3	98.7	96.3	92.7	92.9	96.0	96.8							18.5
H.C. 16	91.2	86.0	77.7	77.3	85.3	94.4	93.2	106.1	103.3	103.4	102.2	127.9							33.5
H.C. 17	93.7	80.1	74.7	90.5	82.7	78.7	95.8	98.9	99.3	101.9	105.4	105.7							27.0
H.C. 18	97.9	83.9	77.9	77.5	81.5	83.8	100.1	103.6	106.2	112.1	118.3	122.6							38.8
H.C. 19	102.6	90.4	86.1	69.4	69.4	68.6	104.9	111.6	114.4	118.3	121.9	124.7							56.1
Lazio Total	96.2	82.6	76.2	80.4	79.3	79.6	98.3	102.0	101.7	104.0	107.3	111.8							32.2
CENTRAL ITALY TOTAL	98.4	87.4	82.9	87.2	86.3	86.0	97.1	99.2	100.3	103.7	108.1	111.8							25.8

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(Continued) Table 26 – Comparison of the trend in admissions and trend in corresponding revenues in the period 2013-2019 (IN 2013 = 100.0)

Hospital Centers (1)	Number of inpatient admissions and day-hospital admissions										Revenues from healthcare services and health-related social health services as per the IS (Cod. A0320)					Index Number difference between Revenues and Admissions in 2019
	2014	2015	2016	2017	2018	2019	2014	2015	2016	2017	2018	2019				
H.C. 20	95.0	89.3	88.8	67.6	64.4	64.0	101.9	105.9	99.5	94.4	89.2	97.5	33.5			
H.C. 21	93.3	89.2	88.4	88.0	87.3	79.0	100.0	105.8	99.0	104.5	100.5	102.9	23.9			
Apulia total	94.4	89.3	88.7	74.8	72.5	69.3	101.2	105.9	99.3	98.0	93.2	99.4	30.1			
H.C. 22	94.2	92.6	100.2	92.7	88.0	88.1	99.1	98.6	119.7	120.6	128.0	127.4	39.3			
H.C. 23	95.2	94.3	88.9	88.5	87.4	102.7	100.2	100.4	106.8	116.4	117.7	140.4	37.7			
H.C. 24	95.4	95.8	95.6	95.2	96.2	98.5	100.4	119.8	130.8	162.0	162.4	196.5	98.0			
H.C. 25	94.0	92.1	86.7	86.3	87.4	90.0	99.0	98.0	109.6	118.4	135.1	146.7	56.7			
Calabria Total	94.6	93.3	92.4	89.9	88.6	94.1	99.6	101.3	114.2	123.3	130.9	144.5	50.4			
H.C. 26	83.4	78.9	85.3	82.3	79.6	83.9	96.3	102.9	102.9	111.5	110.7	115.3	31.4			
H.C. 27	84.2	80.7	94.4	93.9	85.9	86.0	97.2	105.1	113.9	113.7	114.6	117.3	31.3			
H.C. 28	87.2	84.9	94.1	93.7	90.2	86.6	100.6	110.6	113.6	111.6	116.3	117.7	31.1			
H.C. 29	83.0	76.4	84.9	84.6	79.3	81.2	95.9	99.5	102.5	99.5	95.1	101.3	20.1			
H.C. 30	90.1	89.6	102.8	102.3	126.6	128.0	104.0	116.7	124.1	122.6	128.8	134.3	6.3			
H.C. 31	85.0	80.8	78.6	78.5	77.3	76.0	98.2	105.3	110.4	110.6	116.4	110.1	34.1			
H.C. 32	86.1	76.5	88.0	87.6	80.6	78.1	99.5	99.7	106.2	103.7	110.2	106.6	28.5			
H.C. 33	86.5	89.3	113.7	113.2	103.6	95.8	99.9	116.3	137.1	127.8	132.2	126.2	30.4			
Sicily Total	85.8	82.2	92.5	91.8	89.7	88.4	99.1	107.1	113.8	112.5	115.9	116.1	27.7			
SOUTH ITALY TOTAL	89.8	86.2	91.5	87.1	85.1	84.8	99.7	105.8	110.4	110.8	113.0	116.8	32.0			
OVERALL TOTAL	93.9	92.3	92.9	93.4	93.3	93.4	99.0	102.4	104.7	108.4	111.4	115.1	21.7			

Source: survey by Ermeneia – Studi & Strategie di Sistema, 2020

we imagine there being an extraordinary increase in the complexity of the services, for example for the Hospital Centers of Calabria (with 50.4 points more than the national average of 21.7) or even 98.0 points more for a specific Center in the same area mentioned!

And yet there are other even more pronounced differences within the individual Regions: for example with Hospital Center 1 (at 27.9 points compared to the 13.0 Piedmont average), or for Hospital Center 19 (at 56.1 points compared to an average of 32.2 in Lazio).

Turning to the comparison between the trend in the 7 years considered of the Costs for the Purchase of Goods and Services with the trend of the Number of Admissions, one can only note the presence of a further potential “anomaly” considering that (see Table 27):

- a) there is an even more pronounced gap between the Index Numbers referring to 2019: 130.1 for the Cost of the Purchase of Goods and Services compared to 93.4 for the Number of Admissions, for a difference of 36.7 points (higher than the 21.7 points in Table 26 above); moreover, while the Index Numbers relating to the trend of Admissions gradually grew smaller year by year, from 2013 to 2019, the Index Numbers relating to the Purchase of Goods and Services grew steadily in the same period;
- b) some downward differences emerge when considering the Hospital Centers, with regard to the different territorial districts. The value of the 2019 Index Number for the Purchase Cost of Goods and Services is 130.1 as a national average compared to:
 - 137.5 for the Hospital Centers in the North (with a difference between the two Index Numbers of 32.5 points);
 - 118.1 for the Hospital Centers in Central Italy (with a difference between the two Index Numbers of 32.1 points);
 - and 128.9 for the Hospital Centers in the South (but with a difference between the two Index Numbers equal to 44.1 points).

In addition to the average differences of the local districts, it is necessary to take a look inside the individual Regions. Which makes it possible to observe how:

- there is, for example, one Hospital in Piedmont that with a difference between the two Index Numbers of 59.1 points compared to the regional average of 30.8;
- there are two Hospital Centers in Lazio which display a difference between the two Index Numbers of 61.4 and 66.6 points, respectively, compared to a regional average of 34.3;
- there is a Hospital Center in Calabria with a difference between the two index numbers of 71.7 points compared to (an already very high)

Table 27 – Comparison of trends for the number of in-hospital stays and costs for the purchase of goods and services in the period 2013-2019 (I.N. 2013 = 100.0)

Hospital Centers	Number of inpatient admissions and day-hospital admissions					Cost for the Purchase of Goods and services (Cod. BA010)					Index Number difference between Purchase of Goods and services and admissions in 2019		
	2014	2015	2016	2017	2018	2019	2014	2015	2016	2017		2018	2019
H.C. 1	95.1	88.6	87.3	86.9	88.5	88.7	99.1	110.8	119.1	123.4	132.0	147.8	59.1
H.C. 2	96.6	111.6	97.6	112.4	115.3	117.3	105.4	120.5	123.8	127.8	139.5	157.4	40.1
H.C. 3	95.8	95.8	95.3	94.8	97.7	98.8	99.2	105.0	110.5	112.3	124.0	129.5	30.7
H.C. 4	96.5	98.5	98.3	97.8	113.4	116.6	95.1	100.9	113.0	116.6	125.7	131.7	15.1
H.C. 5	95.3	98.3	90.1	98.2	96.1	101.1	95.8	102.5	106.6	113.4	114.1	119.9	18.8
H.C. 6	84.1	95.0	94.7	94.3	90.6	92.5	96.8	106.3	105.9	109.3	115.7	121.2	28.7
Piedmont Total	90.7	97.4	94.5	96.8	97.7	99.8	98.1	107.5	110.9	114.6	122.4	130.6	30.8
H.C. 7	98.6	107.6	105.4	110.7	110.4	113.6	96.3	109.1	107.1	112.3	114.6	121.5	7.9
H.C. 8	100.9	115.1	125.3	124.9	125.9	124.1	105.1	126.3	124.8	134.8	137.4	148.1	24.0
Veneto total	99.8	111.3	115.2	117.7	118.1	118.8	100.0	116.4	114.6	121.8	124.3	132.8	14.0
H.C. 9	98.9	99.0	98.4	92.0	93.1	90.9	107.5	103.5	111.0	118.0	131.9	125.9	35.0
H.C. 10	96.7	95.5	94.0	123.2	137.8	140.1	103.7	110.9	114.2	192.9	191.7	186.6	46.5
H.C. 11	97.9	97.2	98.4	97.9	98.5	95.5	105.7	136.6	128.6	139.1	153.9	165.7	70.2
H.C. 12	98.8	97.9	96.3	95.8	100.0	100.9	102.8	118.5	113.6	118.7	130.7	130.6	29.7
Emilia Romagna Total	98.1	97.5	97.2	100.6	104.6	103.4	105.3	120.5	118.9	138.7	150.1	152.4	49.0
NORTH ITALY TOTAL	95.2	100.3	99.7	102.4	104.3	105.0	100.8	113.8	114.3	123.6	130.9	137.5	32.5
H.C. 13	116.4	112.7	112.6	119.8	118.9	115.6	103.2	107.9	110.3	123.3	128.6	126.1	10.5
H.C. 14	97.4	93.6	93.8	97.5	97.7	96.7	103.6	116.7	114.7	120.2	130.3	132.4	35.7
Marche Total	104.1	100.4	100.4	105.4	105.2	103.3	103.4	113.8	113.2	121.2	129.7	130.3	27.0
H.C. 15	96.6	78.0	69.7	77.8	77.3	78.3	100.9	98.9	95.2	87.1	95.5	97.6	19.3
H.C. 16	91.2	86.0	77.7	77.3	85.3	94.4	98.1	110.6	116.1	122.0	139.8	155.8	61.4
H.C. 17	93.7	80.1	74.7	90.5	82.7	78.7	98.3	104.8	102.5	109.6	105.7	106.6	27.9
H.C. 18	97.9	83.9	77.9	77.5	81.5	83.8	107.6	104.6	107.8	126.4	145.2	150.4	66.6
H.C. 19	102.6	90.4	86.1	69.4	69.4	68.6	105.2	103.6	96.6	97.6	100.7	102.9	34.3
Lazio Total	96.2	82.6	76.2	80.4	79.3	79.6	101.5	103.9	101.7	105.9	110.6	113.9	34.3
CENTRAL ITALY TOTAL	98.4	87.4	82.9	87.2	86.3	86.0	102.0	106.4	104.6	109.9	115.5	118.1	32.1

(Continued) Table 27 – Comparison of trends for the number of in-hospital stays and costs for the purchase of goods and services in the period 2013-2019 (I.N. 2013 = 100.0)

Hospital Centers	Number of inpatient admissions and day-hospital admissions						Cost for the Purchase of Goods and services (Cod. BA010)						Difference between I.N. Index Number difference between Costs for the Purchase of Goods and services, and Admissions in 2019								
	2014		2015		2016		2017		2018		2019			2016		2017		2018		2019	
H.C. 20	95.0	89.3	88.8	67.6	64.4	64.0	64.0	97.4	112.6	97.4	84.3	89.0	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	25.6
H.C. 21	93.3	89.2	88.4	88.0	87.3	79.0	87.3	108.5	114.4	102.7	111.5	97.1	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	20.5
Apulia total	94.4	89.3	88.7	74.8	72.5	69.3	69.3	100.9	113.1	99.1	92.9	91.6	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	23.4
H.C. 22	94.2	92.6	100.2	92.7	88.0	88.1	97.7	105.1	109.8	109.8	115.9	125.7	139.9	139.9	139.9	139.9	139.9	139.9	139.9	139.9	51.8
H.C. 23	95.2	94.3	88.9	88.5	87.4	102.7	98.5	93.8	108.5	104.4	109.7	119.1	124.6	124.6	124.6	124.6	124.6	124.6	124.6	124.6	21.9
H.C. 24	95.4	95.8	95.6	95.2	96.2	98.5	96.4	99.0	139.1	162.0	158.2	158.2	158.2	158.2	158.2	158.2	158.2	158.2	158.2	158.2	59.7
H.C. 25	94.0	92.1	86.7	86.3	87.4	90.0	108.1	107.4	113.0	128.8	148.0	161.7	161.7	161.7	161.7	161.7	161.7	161.7	161.7	161.7	71.7
Catabria Total	94.6	93.3	92.4	89.9	88.6	94.1	99.2	105.1	107.4	121.9	136.5	145.1	145.1	145.1	145.1	145.1	145.1	145.1	145.1	145.1	31.0
H.C. 26	83.4	78.9	85.3	82.3	79.6	83.9	101.8	107.7	113.4	122.4	128.5	125.3	125.3	125.3	125.3	125.3	125.3	125.3	125.3	125.3	41.4
H.C. 27	84.2	80.7	94.4	93.9	85.9	86.0	105.3	127.4	129.3	133.6	143.2	146.6	146.6	146.6	146.6	146.6	146.6	146.6	146.6	146.6	60.6
H.C. 28	87.2	84.9	94.1	93.7	90.2	86.6	104.5	124.9	125.3	124.0	135.5	143.1	143.1	143.1	143.1	143.1	143.1	143.1	143.1	143.1	56.5
H.C. 29	83.0	76.4	84.9	84.6	79.3	81.2	105.8	114.1	116.2	123.7	125.1	135.3	135.3	135.3	135.3	135.3	135.3	135.3	135.3	135.3	54.1
H.C. 30	90.1	89.6	102.8	102.3	126.6	128.0	105.7	141.6	139.1	152.0	178.7	189.6	189.6	189.6	189.6	189.6	189.6	189.6	189.6	189.6	61.6
H.C. 31	85.0	80.8	78.6	78.5	77.3	76.0	103.6	116.8	113.0	123.3	126.3	130.4	130.4	130.4	130.4	130.4	130.4	130.4	130.4	130.4	54.4
H.C. 32	86.1	76.5	88.0	87.6	80.6	78.1	109.9	106.0	116.2	123.2	123.2	123.2	123.2	123.2	123.2	123.2	123.2	123.2	123.2	123.2	45.1
H.C. 33	86.5	89.3	113.7	113.2	103.6	95.8	111.9	149.2	156.7	141.7	144.8	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	56.7
Sicily Total	85.8	82.2	92.5	91.8	89.7	88.4	105.5	122.6	124.8	126.5	141.6	141.6	141.6	141.6	141.6	141.6	141.6	141.6	141.6	141.6	53.2
SOUTH ITALY TOTAL	89.8	86.2	91.5	87.1	85.1	84.8	103.2	117.2	115.1	116.7	123.8	128.9	128.9	128.9	128.9	128.9	128.9	128.9	128.9	128.9	44.1
OVERALL TOTAL	93.9	92.3	92.9	93.4	93.3	93.4	101.9	113.2	112.2	118.1	124.9	130.1	130.1	130.1	130.1	130.1	130.1	130.1	130.1	130.1	36.7

Source: survey by *Ermeneia – Studi & Strategie di Sistema*, 2020

regional average of 51.0 points; or, almost all the Hospital Centers in Sicily display a difference between the two Index Numbers that is much higher than the (already high) regional average of 53.2 points.

Therefore, even from the comparison between the trend in Purchases for Goods and Services and the trend in the Number of Admissions, one cannot help but detect some “anomaly”: certainly the cost of many new drugs has significantly increased but, nevertheless, a pronounced difference emerges between the Center-North and the South which cannot be traced back to this single cause.

Subsequently the third type of comparison was carried out, as is illustrated by the data contained in Table 28. It considers a particular entry in the Income Statement, that of Revenues conceded to the Hospital Centers for the performance of so-called “by function” activities, for which – as in the previous cases – the Index Numbers were calculated and summarize the 7-year trend of such Revenues compared to the trend in the Number of Admissions. The result of this comparison shows:

- a) a national average decrease in Revenues from “by function” activities in the period 2015-2019 (from 109.5 to 102.0), following an increase in 2014 compared to 2013 (from 100.0 to 112.7): with the result of bringing the difference between Revenues and Number of Admissions to 8.6 Index Number points in the year 2019, a little lower than the corresponding points in the North (12.5) and Central Italy (10.4), but higher than those in the South (6.0);
- b) an anomalous growth in Revenues for “by-function” activities, not balanced by a parallel increase in Admissions and this is evident, for example:
 - for 4 out of 6 Hospital Centers in Piedmont;
 - for 1 Hospital Center in Emilia Romagna;
 - for 1 Hospital Center in Lazio;
 - and for 1 Hospital Center in Calabria and Sicily, respectively.

The conclusion is that the item of “by-function” activities has been used over the last few years as an implicit rebalancing tool on the Income Statements and that it does not have much further to go up.

At the conclusion of the examination of the Income Statements of the Hospital Centers, the results for the fiscal year were taken into consideration, again with reference to the last 7 years (Table 29). Some ideas that emerge in this regard include:

- a) The comparison between Revenues and Costs ends up in perfect balance in some Regions. This situation appears to be in itself quite unlikely on any type of Income Statement, whether public or private. It is evident that

Table 28 – Comparison of the trend in admissions and trend in corresponding Revenues for “by-function” activities in the period 2013-2019 (IN 2013 = 100.0)

Hospital Centers	Number of inpatient admissions and day-hospital admissions					Revenues from transfers for “by function” activities as per the IS (Code AA0030)					Index Number difference between Revenues for “by function” activities and Admissions in 2019		
	2014	2015	2016	2017	2018	2019	2014	2015	2016	2017		2018	2019
H.C. 1	95.1	88.6	87.3	86.9	88.5	88.7	86.2	94.1	111.5	113.6	123.2	117.2	28.5
H.C. 2	96.6	111.6	97.6	112.4	115.3	117.3	103.4	115.7	140.3	105.3	151.6	156.1	38.8
H.C. 3	95.8	95.8	95.3	94.8	97.7	98.8	101.0	102.9	112.4	115.2	111.9	116.5	17.7
H.C. 4	96.5	98.5	98.3	97.8	113.4	116.6	96.3	104.9	116.1	120.9	121.0	120.0	3.4
H.C. 5	95.3	98.3	90.1	98.2	96.1	101.1	112.0	111.8	136.6	121.6	133.7	128.5	27.4
H.C. 6	84.1	95.0	94.7	94.3	90.6	92.5	97.4	98.8	100.7	107.6	80.4	82.4	-10.1
Piedmont Total	90.7	97.4	94.5	96.8	97.7	99.8	98.4	102.0	110.1	110.5	100.2	101.4	1.6
H.C. 7	98.6	107.6	105.4	110.7	110.4	113.6	147.4	144.8	175.6	127.4	118.6	117.4	3.8
H.C. 8	100.9	115.1	125.3	124.9	125.9	124.1	110.8	134.2	124.8	110.8	135.4	109.8	-14.3
Veneto total	99.8	111.3	115.2	117.7	118.1	118.8	128.8	139.4	149.8	118.9	127.1	113.5	-5.3
H.C. 9	98.9	99.0	98.4	92.0	93.1	90.9	131.1	121.6	123.3	132.1	149.3	153.3	62.4
H.C. 10	96.7	95.5	94.0	123.2	137.8	140.1	127.4	132.6	135.5	187.8	173.7	188.6	48.5
H.C. 11	97.9	97.2	98.4	97.9	98.5	95.5	117.1	120.1	127.7	135.7	132.2	155.5	60.0
H.C. 12	98.8	97.9	96.3	95.8	100.0	100.9	210.6	232.2	199.0	192.3	194.6	217.1	116.2
Emilia Romagna Total	98.1	97.5	97.2	100.6	104.6	103.4	140.0	143.8	141.4	154.6	155.3	172.3	68.9
NORTH ITALY TOTAL	95.2	100.3	99.7	102.4	104.3	105.0	112.3	117.3	123.8	120.7	116.1	117.5	12.5
H.C. 13	116.4	112.7	112.6	119.8	118.9	115.6	117.7	111.1	128.3	126.1	80.3	78.8	-36.8
H.C. 14	97.4	93.6	93.8	97.5	97.7	96.7	124.5	139.4	129.1	121.2	101.7	106.2	9.5
Marche Total	104.1	100.4	100.4	105.4	105.2	103.3	121.5	127.1	128.7	123.4	92.4	94.3	-9.0
H.C. 15	96.6	78.0	69.7	77.8	77.3	78.3	116.0	88.8	76.5	81.2	86.3	91.5	13.2
H.C. 16	91.2	86.0	77.7	77.3	85.3	94.4	141.8	97.5	81.2	75.7	79.9	104.7	10.3
H.C. 17	93.7	80.1	74.7	90.5	82.7	78.7	111.8	89.2	85.7	85.2	89.4	88.9	10.2
H.C. 18	97.9	83.9	77.9	77.5	81.5	83.8	123.2	103.1	95.9	95.8	132.1	98.0	14.2
H.C. 19	102.6	90.4	86.1	69.4	68.6	68.6	112.5	109.0	108.9	124.8	128.3	131.0	62.4
Lazio Total	96.2	82.6	76.2	80.4	79.3	79.6	116.8	93.8	86.9	89.6	96.7	97.6	78.0
CENTRAL ITALY TOTAL	98.4	87.4	82.9	87.2	86.3	86.0	118.5	105.9	102.1	101.8	95.1	96.4	10.4

(Continued) Table 28 – Comparison of the trend in admissions and trend in corresponding revenues for “by-function” activities in the period 2013-2019 (IN 2013 = 100.0)

Hospital Centers	Number of inpatient admissions and day-hospital admissions					Revenues from transfers for “by function” activities as per the IS (Code AA0030)					Index Number difference between costs for the Purchase of Goods and services, and admissions in 2019		
	2014	2015	2016	2017	2018	2019	2014	2015	2016	2017		2018	2019
H.C. 20	95.0	89.3	88.8	67.6	64.4	64.0	117.1	97.4	96.5	99.5	94.9	95.7	31.7
H.C. 21	93.3	89.2	88.4	88.0	87.3	79.0	103.6	93.2	92.8	99.0	89.0	95.7	16.7
Apulia total	94.4	89.3	88.7	74.8	72.5	69.3	112.7	96.0	95.3	99.3	93.0	95.7	26.4
H.C. 22	94.2	92.6	100.2	92.7	88.0	88.1	99.4	104.0	78.6	85.4	71.4	68.4	-19.7
H.C. 23	95.2	94.3	88.9	88.5	87.4	102.7	98.1	98.1	86.6	64.7	64.7	58.9	-43.8
H.C. 24	95.4	95.8	95.6	95.2	96.2	98.5	96.6	3.0	154.1	118.5	118.5	149.6	51.1
H.C. 25	94.0	92.1	86.7	86.3	87.4	90.0	100.0	91.7	91.5	92.7	77.6	81.6	-8.4
Calabria Total	94.6	93.3	92.4	89.9	88.6	94.1	99.0	92.4	89.4	83.5	74.2	74.5	-19.6
H.C. 26	83.4	78.9	85.3	82.3	79.6	83.9	106.6	106.2	106.5	92.3	89.4	88.9	5.0
H.C. 27	84.2	80.7	94.4	93.9	85.9	86.0	112.5	104.1	104.7	103.9	106.9	101.6	15.6
H.C. 28	87.2	84.9	94.1	93.7	90.2	86.6	102.1	106.1	103.8	93.7	97.0	100.9	14.3
H.C. 29	83.0	76.4	84.9	84.6	79.3	81.2	130.8	111.1	100.2	82.8	78.4	72.3	-8.9
H.C. 30	90.1	89.6	102.8	102.3	126.6	128.0	99.8	95.0	94.4	106.6	127.0	115.0	-13.0
H.C. 31	85.0	80.8	78.6	78.5	77.3	76.0	112.5	104.5	93.2	90.5	99.7	100.7	24.7
H.C. 32	86.1	76.5	88.0	87.6	80.6	78.1	114.3	112.8	101.8	88.8	104.3	69.6	-8.5
H.C. 33	86.5	89.3	113.7	113.2	103.6	95.8	151.9	150.2	128.0	127.1	130.7	132.0	36.2
Sicily Total	85.8	82.2	92.5	91.8	89.7	88.4	114.4	110.4	102.9	95.7	102.4	94.3	5.9
SOUTH ITALY TOTAL	89.8	86.2	91.5	87.1	85.1	84.8	111.3	104.1	98.8	94.1	95.1	90.8	6.0
OVERALL TOTAL	93.9	92.3	92.9	93.4	93.3	93.4	112.7	109.5	109.0	105.6	103.3	102.0	8.6

(*) Ministerial Decree implementing Art. 1, paragraph 526 of the 2016 Stability Law, starting from Art. 8-sexies of Legislative Decree 502/1992 and subsequent amendments.

(†) Processing of the Income Statement data of the individual Hospital Centers and University Hospital Centers, shown in Table App. 1.

Source: survey by *Ermeneia – Studi & Strategie di Sistema, 2020*

an accounting adjustment of the items has been put in place during preparation of the final balance data. However, this does not mean that there is always and in any case an “improper” solution for the covering of losses. But it is probable that in some cases compensatory support interventions of various kinds have been carried out, and this happened, especially in the years 2013-2018, through the Revenues item of “by-function” activities.

In any case, a perfect balancing of the Income Statement for all 7 fiscal years examined was found for all the hospitals in Emilia Romagna, Marche and Sicily, except for one Hospital Center in this last instance that closed with a balanced budget for the 6 fiscal years 2013-2018, however, showing a loss of EUR 50.7 million, moreover, it was carried over from the preliminary balance sheet, since the final balance sheet returns to balance thanks to a greater recognition of the “by-function” activities. In other cases, such as that of Veneto, a gradual recovery process can be sensed, one that probably started even before 2013, and which gradually sees a reduction in Losses in the first four years of the seven-year period examined to then break even in 2017 and 2018 and even has a surplus in 2019;

- b) in other Regions we see the presence of an effort that has gradually led to reducing Losses but with results that do not necessarily affect all the Hospital Centers of the individual Region: this is the case of Piedmont which substantially shows an (important) exception of a Hospital Center that shows increasing losses between 2013 and 2014, a reduction in 2015 and 2016 and then a rise in these losses up to EUR 121 million in 2018 which then drop to EUR 103 million in 2019; and this sort of alternation also affects a Hospital Center in Apulia which, after breaking even in 2013 and 2014, explicitly lost EUR 28 million in 2015, winding up with a loss of EUR 14.9 million in 2019.

Then there is the case of Calabria which in turn displays a very ponderous process for the recovery of losses which, however, leaves 3 out of 4 Hospital Centers in a negative situation in 2019, one of which is exposed for more than EUR 101 million.

Finally, the Lazio Region presents a picture of constant losses over the 7 fiscal years examined, even if the effort put in place to cover all the Hospital Centers is evident, with a substantial gradual decrease in losses between 2013 and 2019, for which year, however, the losses still amount to a total of EUR 328 million overall.

This year we also decided to touch on the theme of the Balance Sheets of the public Hospital Centers. This is in all actuality merely a “glimpse” as

these documents are more difficult to analyze than the Income Statements. In fact, the administrative organizations of the Hospital Centers have gained more than a few years of accounting experience working in the field with these latter. Which represents – and it should be emphasized – a step forward compared to the antiquated logic of the public administration which kept its accounts according to Financing/Expenses/Residues. Naturally, the Income Statements still contain accounting “impurities”, relating in particular to the investments that still pass through them, but through the annual reporting on the Final Balance of a double entry:

- that present in Revenues, in the form of “Investment Loans”;
- and that present in Costs, in the form of the so-called “Sterilization”, for an amount corresponding to the item present in Revenues.

It is clear that the regulatory push towards normal civil-type accounting (Income Statement + Balance Sheet) still has a long way to go: both for the reasons just mentioned and because the Income Statements are used in Hospital Centers but not in directly managed Hospitals or by the Local health authorities (with some praiseworthy exceptions).

Activating an accounting system based effectively on the Income Statement and Balance Sheet, if only for Hospital Centers, thus requires perfecting the former and, above all, reconstructing the latter, an operation of enormous undertaking that would require:

- actually pursuing the path of certifiability (actually explicitly envisaged in 2011 by Legislative Decree 118) which, however, implies a (credible) re-valorization of the various Balance Sheet Items present in the Assets and Liabilities;
- formalizing the investment procedures in tangible and intangible durable Assets, whose resources are presently “dispersed” by the self-financing of directly managed Hospitals, Hospital Centers and Local health authorities, as well as the funding coming directly from the Regions, state funding and loans from private individuals (such as donations, bequests, etc.): with logic linked to *ad hoc* laws and above all to the financial resources of the year which should be divided with a balance between current expenses and investment expenses (the latter having been revealed to be anything but easy during the long defunding process that the National Health System has experienced over the past 10-15 years);
- formalizing the procedures that follow in terms of inventory, regular maintenance and extraordinary maintenance that the investment assets require so that they do not inevitably deteriorate.

Table 29 — Operating results of the Hospital Centers in the seven years considered (in thousands of euros)

Hospital Centers	Operating results as per the IS (A.V.)						
	2013	2014	2015	2016	2017	2018	2019
H.C. 1	0	-10,147	-7,716	0	1,926	0	0
H.C. 2	-5,990	-12,852	-18,864	-6,428	-2,406	0	1,814
H.C. 3	0	-5,619	0	0	0	1,156	0
H.C. 4	0	-5,737	-4,486	0	1,180	0	0
H.C. 5	0	-8,432	-6,568	0	-1,495	-3,818	511
H.C. 6	-12,750	-30,648	-15,081	-11,040	-17,478	-120,997	-102,504
Piedmont Total	-18,740	-73,435	-52,715	-17,468	-18,273	-123,659	-100,179
H.C. 7	-25,609	-22,835	-17,047	-10,491	0	0	5,637
H.C. 8	-24,950	-13,451	1,000	0	0	0	1,425
Veneto total	-50,559	-36,286	-16,047	-10,491	0	0	7,062
H.C. 9	0	0	0	0	0	0	0
H.C. 10	0	0	0	0	0	0	0
H.C. 11	0	0	0	0	0	0	0
H.C. 12	0	0	0	0	0	0	0
Emilia Romagna Total	0	0	0	0	0	0	0
NORTH ITALY TOTAL	-69,299	-109,721	-68,762	-27,959	-18,273	-123,659	-93,117
H.C. 13	0	0	0	0	0	0	0
H.C. 14	0	0	0	0	0	0	0
Marche Total	0	0	0	0	0	0	0
H.C. 15	-151,274	-158,632	-161,799	-155,718	-130,712	-116,314	-113,719
H.C. 16	-91,594	-102,291	-98,853	-81,733	-83,599	-77,401	-57,726
H.C. 17	-77,273	-74,610	-92,543	-140,252	-104,166	-87,743	-88,327
H.C. 18	-102,291	-53,708	-54,160	-49,108	-41,510	-40,432	-48,230
H.C. 19	-55,349	-73,601	-62,567	-41,794	-24,902	-19,500	-19,589
Lazio Total	-477,781	-462,842	-469,922	-468,605	-384,889	-341,390	-327,591
CENTRAL ITALY TOTAL	-477,781	-462,842	-469,922	-468,605	-384,889	-341,390	-327,591

(Continued) Table 29 – Operating results of the Hospital Centers in the seven years considered (in thousands of euros)

Hospital Centers	Operating results as per the IS (A.V.)						
	2013	2014	2015	2016	2017	2018	2019
H.C. 20	0	0	-28,102	-19,736	-9,740	-41,114	-14,876
H.C. 21	0	0	0	0	0	0	0
Apulia total	0	0	-28,102	-19,736	-9,740	-41,114	-14,876
H.C. 22	-4,584	-6,007	-1,880	0	0	0	-12,231
H.C. 23	-1,682	-3,764	-2,265	0	-12,930	-27,743	-14,544
H.C. 24	-15,516	-14,562	-29,858	-42,000	-12,319	-20,942	-101,787
H.C. 25	0	-17,377	-20,279	0	0	0	0
Calabria Total	-21,782	-41,710	-54,282	-42,000	-23,249	-48,685	-128,562
H.C. 26	0	0	0	0	0	0	0
H.C. 27	0	0	0	0	0	0	0
H.C. 28	0	788	0	0	0	0	0
H.C. 29	0	0	0	0	0	0	0
H.C. 30	0	0	0	0	0	0	0
H.C. 31	0	2,456	2,680	0	0	0	0
H.C. 32	0	0	0	0	0	0	-50,699
H.C. 33	0	2,209	0	1,120	0	1,666	0
Sicily Total	0	5,453	2,680	1,120	0	1,666	-50,699
SOUTH ITALY TOTAL	-21,782	-36,257	-79,704	-60,616	-34,989	-88,133	-194,137
OVERALL TOTAL	-568,862	-608,820	-618,388	-557,180	-438,151	-553,182	-614,845

(1) Processing of the Income Statement data of the individual Hospital Centers and University Hospital Centers, shown in Table App. 1.
Source: survey by *Ermeneta – Studi & Strategie di Sistema, 2020*

These brief glimpses serve to justify the fact that we have limited this look here to “mentioning” the theme of the Balance Sheet and that what follows (based on the data in Table 30) should be interpreted as a sort of reminder of a substantial passage and it is important that it must, sooner or later, be addressed and completed if we want to implement not only the provisions of the aforementioned Legislative Decree of 23 June 2011, no. 118 and subsequent provisions, but also significantly improve management through the orderly and transparent accounting of the Health System.

Add to this the opportunity of the current situation which (perhaps) could bring – through the Ministry’s budget, the *Recovery Fund* or the ESM itself – additional resources to be allocated to investments, precisely to innovate, renew and maintain the related tangible and intangible assets of the Hospital Centers and the other healthcare facilities, including those of local territorial care facilities.

In light of what has been mentioned so far, here are some simple considerations on the data relating to the percentage composition of the Balance Sheet items of the Italian Hospital Centers over the last 3 years (see Table 30):

- a) the first concerns a comparison of the total Revenues of the Income Statement of the Hospital Centers in 2019 (equal to EUR 10.9 billion) with the Assets shown on their Balance Sheets (EUR 10.2 billion): the first case is essentially based on the various types of services provided, while in the second refers to estimates, in particular on Fixed Assets that rarely correspond to the real value, especially as regards the Real Estate assets such as healthcare Equipment, items that would require regular evaluation that takes into account the state in which they are found, complete with the relative maintenance status (regular and extraordinary) and the corresponding depreciation on the Income Statement;
- b) the second consideration concerns the two macro-items of the Assets (Fixed assets and Current assets) during the three-year period 2017-2019. For the sake of simplicity, the percentage value of the total Assets of these items is shown below, but considering their average value referring to the Hospitals of the North, Center and South (while reference is made to Table 30 to detect the percentage amount of each of them)²:

² The absolute values and the percentage compositions of the various items for each individual Hospital Center are shown in Table App. 2 of the Appendices).

<i>Geographical Areas</i> <i>Hospital Centers</i>	<i>% Fixed assets</i>			<i>Incidence on Current Assets</i>			<i>of which % of Receivables from Regions for Investments</i>		
	<i>'17</i>	<i>'18</i>	<i>'19</i>	<i>'17</i>	<i>'18</i>	<i>'19</i>	<i>'17</i>	<i>'18</i>	<i>'19</i>
North	54.9	55.9	55.0	42.7	40.1	41.5	7.30	6.67	7.43
Center	41.2	40.5	37.5	58.6	59.3	62.5	7.66	9.80	8.81
South and Islands	44.9	45.1	46.8	51.3	51.7	53.1	8.95	7.78	7.47
Italy	48.8	49.1	48.6	48.7	47.9	49.8	7.93	7.68	7.73

As can be seen:

- the national average incidence of fixed assets is around 48%-49%, but is higher (in 2019) in the North, where it is about 55%, followed by the South (45%-47%) and then by the Center (approximately 41% in the first two-year period 2017-2018 and then, down to 37% in 2019);
 - however, if we look at the individual Regions (Table 30), the incidence of Fixed Assets on Total Assets tends to exceed 60% in Veneto (for one of the two Hospital Centers of the Region) and in Emilia Romagna (for almost all the Hospital Centers): while it definitely tends to fall in Lazio, Calabria and Sicily;
- c) the third consideration regards the incidence of Current Assets on Total Assets which remains at values equal to 48%-49% of the national average, just as for Fixed Assets, but with a greater incidence, in 2019, for the Hospital Centers of Central Italy (62.5%), followed by those of the South (53.1%) and then by those of the North (41.5%): the part of Current Assets consisting of Receivables from the Regions for Investments (7%-8% as a national average) is higher for the Center (8.8%), slightly lower for the South (7.5%) and even lower for the North (7.4%).

But an overview of the individual Regions allows us to detect, again in 2019, thanks to the data in Table 30:

- a higher incidence of Current Assets compared to the national average in almost all the Hospital Centers in Piedmont, Lazio, Calabria and Sicily;
 - and a greater incidence of Receivables from the Region for Investments which is manifested according to a “precise” logic, within almost all of the Regions;
- d) the fourth consideration concerns the incidence of the Liabilities items on the Total Liabilities plus Net assets over the three years examined. Also in this case, the following is a summary of the average incidence of Hospital Centers grouped by geographical area (please refer to Table 30 for information on the individual Hospital Centers):

<i>Geogr. Areas Hospital Centers</i>	<i>Debts</i>			<i>Provision for Liabilities and Charges</i>			<i>Net Equity</i>			<i>of which Investment Loans from Regions</i>		
	<i>'17</i>	<i>'18</i>	<i>'19</i>	<i>'17</i>	<i>'18</i>	<i>'19</i>	<i>'17</i>	<i>'18</i>	<i>'19</i>	<i>'17</i>	<i>'18</i>	<i>'19</i>
North	40.3	38.0	36.7	6.2	6.4	6.1	50.6	51.3	52.8	17.4	15.1	15.1
Center	70.9	87.5	66.8	31.7	29.7	29.5	-8.4	-17.7	2.5	20.3	21.6	19.3
South and Islands	33.4	34.9	35.4	14.0	14.9	14.0	53.3	52.4	55.3	28.1	27.9	28.8
Italy	43.9	46.8	42.5	13.8	14.0	13.6	39.9	37.9	43.1	21.6	20.8	20.6

As we can see:

- the national average incidence of Debts is 43%-47%, but is more marked in the Center (67%), followed by the North (37%) and then by the South (35%);
 - however, if we look at the regional averages, it is possible to see in 2019 (Table 30) a decidedly higher incidence for Lazio (80.2%, due to the losses that have gradually accumulated over time) and for Calabria (68.3%);
- e) the fifth consideration concerns the Provision for Liabilities and Charges on Total Liabilities plus Net Equity, which is around 14% as a national average, but presents significant differences: in 2019 it is 29.5% for Hospital Centers in Central Italy, followed by 14% for those of the South and, at a distance, from those of the North (with 6.1%);
- f) the sixth and final consideration concerns the comparison of the incidence of Net Equity on Total Liabilities plus Net Assets which is included, as an average national value, between 40% and 43% in the three-year periods, but with differences in the last year that see a higher incidence for the South (55.3%), a little less high for the North (52.8%), decidedly tiny (only 2.5%) in the Center, due to the recovery of negative Equity which was present in the previous two years. From the point of view of the individual Regions, it can be verified that (Table 30):
- there are Hospital Centers with a much higher incidence than the average of the respective district and these are: one Hospital Center in Veneto and one in Emilia Romagna, in the North, and one in Calabria and Sicily, respectively, in the South;
 - but there are also Hospital Centers with negative Net Equity as is the case with those of Lazio which carry the high Losses of the past and those that are being disposed of over time.

The conclusion for now is very simple, limited and essentially aimed at the future, in the sense that we hope to be able to get out of making a

“glimpse” examination and to instead have more complete and updated Balance Sheets that are also physiologically connected to the respective Income Statements in order to arrive at an accounting situation pursuing the path to certifiability, citing the well-known Einaudi statement contained in the *Prediche Inutili (Useless Sermons)*: “First Know, then Discuss, and finally, Deliberate”. This may also apply to the case of healthcare budgets.

Table 30 – Comparison of the public Hospital Centers through the percentage composition of the Assets and Liabilities items on their Balance Sheets in the years 2017, 2018 and 2019

Hospital Centers and University Hospital Centers (1)	Number of inpatient admissions and day hospital admissions			Total Fixed Assets			Current Assets					
							Total Current Assets			Of which from receivables from Investments		
	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
H.C. 1	16,715	17,032	17,063	38.7	41.9	42.1	61.3	58.1	57.9	10.3	8.4	8.6
H.C. 2	32,807	33,675	34,247	48.8	43.9	43.5	51.0	56.0	56.5	10.54	9.4	9.0
H.C. 3	27,210	28,050	28,363	38.9	39.8	39.9	61.1	60.1	60.0	9.4	6.5	6.3
H.C. 4	25,430	29,476	30,311	53.8	53.7	52.6	46.2	46.0	47.3	10.0	8.7	7.9
H.C. 5	22,880	22,395	23,555	41.0	44.8	44.6	58.2	54.5	54.9	7.4	5.6	5.80
H.C. 6	94,325	90,687	92,554	42.4	43.9	41.0	45.7	35.9	42.1	10.8	9.4	9.8
Piedmont Total	219,367	221,315	226,093	43.9	44.6	42.9	49.9	45.2	48.5	10.3	8.7	8.8
H.C. 7	58,765	58,618	60,310	38.3	47.3	47.5	61.6	52.6	52.5	9.4	8.0	11.2
H.C. 8	64,312	64,855	63,933	63.3	62.5	62.4	36.7	37.5	37.6	5.4	4.7	5.0
Veneto total	123,077	123,473	124,243	53.3	56.1	56.2	46.7	43.9	43.8	7.0	6.4	7.6
H.C. 9	44,143	44,651	43,612	64.4	65.6	69.0	35.6	34.4	31.0	2.9	2.4	3.7
H.C. 10	41,500	46,430	47,198	59.3	63.3	62.7	40.7	36.7	37.3	4.2	4.2	3.3
H.C. 11	68,392	68,800	66,700	68.3	63.7	61.2	31.7	36.3	38.3	5.8	7.2	11.0
H.C. 12	31,133	32,494	32,780	78.7	79.4	79.2	21.3	20.6	20.8	4.3	4.1	4.2
E. Romagna Total**	185,168	192,375	190,290	67.0	67.2	66.8	33.0	32.8	33.1	4.4	4.7	5.9
North Italy Total	527,612	537,163	540,626	54.9	55.9	55.0	42.7	40.1	41.5	7.3	6.7	7.4
H.C. 13	32,108	31,867	30,971	53.1	57.2	55.6	45.9	42.7	44.4	5.8	6.3	5.2
H.C. 14	47,939	48,026	47,537	52.4	54.8	57.1	47.3	44.9	42.6	5.7	7.4	6.1
Marche Total	80,047	79,893	78,508	52.7	55.7	56.5	46.8	44.1	43.3	5.7	7.0	5.8
H.C. 15	38,592	38,340	38,855	53.5	46.9	45.1	46.5	53.0	54.9	5.3	7.8	7.8
H.C. 16	19,684	21,720	24,031	61.3	62.9	61.8	38.6	37.1	38.1	14.3	20.0	18.1
H.C. 17	59,175	54,083	51,460	16.9	16.7	15.2	83.0	83.3	84.8	4.4	4.3	3.9
H.C. 18	21,071	22,137	22,781	31.5	31.5	30.4	68.4	68.4	69.6	22.6	22.8	22.9
H.C. 19	24,001	24,000	23,728	20.5	20.0	10.5	78.0	76.1	89.4	2.2	14.9	8.5
Lazio Total	162,523	160,280	160,855	37.2	35.7	32.1	62.6	64.1	67.9	8.3	10.7	9.7
Central Italy Total	242,570	240,173	239,363	41.2	40.5	37.5	58.6	59.3	62.5	7.7	9.8	8.8

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(Continued) Table 30 – Comparison of the public Hospital Centers through the percentage composition of the Assets and Liabilities items on their Balance Sheets in the years 2017, 2018 and 2019

Hospital Centers and University Hospital Centers (1)	Number of inpatient admissions and day hospital admissions			Total Fixed Assets			Total Current Assets			Of which from receivables from the Region for Investments		
	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
H.C. 20	50,432	48,041	47,798	67.5	66.7	61.8	32.5	33.3	38.2	16.9	18.3	17.9
H.C. 21	36,020	35,739	32,327	40.6	51.3	54.2	59.4	48.6	45.8	32.6	26.7	21.2
Apulia total	86,452	83,780	80,125	58.1	61.5	59.4	41.9	38.5	40.6	22.4	21.2	18.9
H.C. 22	26,115	24,796	24,830	41.8	43.8	45.2	58.2	56.1	54.7	21.1	11.5	10.8
H.C. 23	24,160	23,850	28,043	60.3	60.7	59.0	39.0	38.9	40.3	3.9	4.3	2.8
H.C. 24	9,810	9,910	9,869	9.5	7.8	16.9	30.4	29.2	83.1	-	-	-
H.C. 25	23,450	23,750	24,455	37.9	38.7	40.6	62.1	61.3	59.4	15.3	13.2	8.6
Catabria Total	83,535	82,306	87,197	38.3	38.4	45.1	46.7	45.8	54.7	9.4	7.0	6.0
H.C. 26	21,243	20,536	21,656	38.2	41.5	40.9	61.6	58.5	59.1	4.2	4.3	4.2
H.C. 27	32,055	29,319	29,353	52.7	55.6	52.8	42.9	44.4	47.2	4.5	4.4	4.4
H.C. 28	43,986	42,359	40,660	46.9	47.8	47.7	53.1	52.2	52.3	5.2	2.6	2.2
H.C. 29	16,850	15,791	16,173	46.7	45.4	45.3	53.2	54.5	54.6	2.3	1.7	1.7
H.C. 30	26,552	32,847	33,221	35.4	25.7	36.1	64.6	74.2	63.8	6.6	7.2	9.4
H.C. 31	27,150	26,729	26,278	24.2	25.4	24.4	68.6	74.6	75.6	7.2	5.1	4.8
H.C. 32	31,055	28,550	27,080	49.0	46.2	47.3	49.4	52.0	52.6	1.6	1.8	2.1
H.C. 33	30,150	27,598	25,530	36.6	37.5	38.8	63.4	62.5	61.2	2.4	3.8	4.0
Sicily Total	229,041	223,729	220,551	42.4	41.7	42.5	56.0	58.0	57.4	4.2	3.6	3.6
South Italy Total	399,028	389,815	387,873	44.9	45.1	46.8	51.3	51.7	53.1	9.0	7.8	7.5
ITALY	1,169,210	1,167,151	1,167,862	48.8	49.1	48.6	48.7	47.9	49.8	7.9	7.7	7.7

(Continued) Table 30 – Comparison of the public Hospital Centers through the percentage composition of the Assets and Liabilities items on their Balance Sheets in the years 2017, 2018 and 2019

Hospital Centers and University Hospital Centers (1)	Number of inpatient admissions and day hospital admissions			Other activities as per the BS (Accruals and Deferrals)			Total Assets		
	2017	2018	2019	2017	2018	2019	2017	2018	2019
H.C. 1	16,715	17,032	17,063	0.002	0.007	0.019	100.0	100.0	100.0
H.C. 2	32,870	33,675	34,247	0.165	0.023	0.036	100.0	100.0	100.0
H.C. 3	27,210	28,050	28,363	0.040	0.030	0.077	100.0	100.0	100.0
H.C. 4	25,430	29,476	30,311	0.006	0.330	0.018	100.0	100.0	100.0
H.C. 5	22,880	22,395	23,555	0.754	0.646	0.481	100.0	100.0	100.0
H.C. 6	94,325	90,687	92,554	11.924	20.185	16.837	100.0	100.0	100.0
Piedmont Total	219,367	221,315	226,093	6.189	10.236	8.664	100.0	100.0	100.0
H.C. 7	58,765	58,618	60,310	0.018	0.042	0.005	100.0	100.0	100.0
H.C. 8	64,312	64,855	63,933	0.003	0.006	0.010	100.0	100.0	100.0
Veneto total	123,077	123,473	124,243	0.009	0.021	0.008	100.0	100.0	100.0
H.C. 9	44,143	44,651	43,612	-	0.009	0.011	100.0	100.0	100.0
H.C. 10	41,500	46,430	47,198	0.010	0.020	0.015	100.0	100.0	100.0
H.C. 11	68,392	68,800	66,700	0.011	0.001	0.546	100.0	100.0	100.0
H.C. 12	31,133	32,494	32,780	0.015	-	-	100.0	100.0	100.0
E. Romagna Total**	185,168	192,375	190,290	0.010	0.008	0.172	100.0	100.0	100.0
North Italy Total	527,612	537,163	540,626	2.461	3.968	3.459	100.0	100.0	100.0
H.C. 13	32,108	31,867	30,971	1.006	0.010	0.010	100.0	100.0	100.0
H.C. 14	47,939	48,026	47,537	0.270	0.281	0.296	100.0	100.0	100.0
Marche Total	80,047	79,893	78,508	0.550	0.182	0.186	100.0	100.0	100.0
H.C. 15	38,592	38,340	38,855	0.012	0.004	0.002	100.0	100.0	100.0
H.C. 16	19,684	21,720	24,031	0.074	0.029	0.124	100.0	100.0	100.0
H.C. 17	59,175	54,083	51,460	0.061	0.043	0.029	100.0	100.0	100.0
H.C. 18	21,071	22,137	22,781	0.037	0.061	0.010	100.0	100.0	100.0
H.C. 19	24,001	24,000	23,728	1.535	3.890	0.082	100.0	100.0	100.0
Lazio Total	162,523	160,280	160,855	0.146	0.275	0.034	100.0	100.0	100.0
Central Italy Total	242,570	240,173	239,363	0.249	0.253	0.068	100.0	100.0	100.0

(Continued) Table 30 – Comparison of the public Hospital Centers through the percentage composition of the Assets and Liabilities items on their Balance Sheets in the years 2017, 2018 and 2019

Hospital Centers and University Hospital Centers (1)	Number of inpatient admissions and day hospital admissions			Other activities as per the BS (Accruals and Deferrals)			Total Assets		
	2017	2018	2019	2017	2018	2019	2017	2018	2019
H.C. 20	50,432	48,041	47,798	-	0.000	0.000	100.0	100.0	100.0
H.C. 21	36,020	35,739	32,327	0.015	0.023	0.007	100.0	100.0	100.0
Apulia total	86,452	83,780	80,125	0.005	0.008	0.002	100.0	100.0	100.0
H.C. 22	26,115	24,796	24,830	0.063	0.074	0.060	100.0	100.0	100.0
H.C. 23	24,160	23,850	28,043	0.666	0.333	0.644	100.0	100.0	100.0
H.C. 24	9,810	9,910	9,869	60.079	63.065	-	100.0	100.0	100.0
H.C. 25	23,450	23,750	24,455	0.006	0.006	0.006	100.0	100.0	100.0
Catabria Total	83,535	82,306	87,197	14.917	15.843	0.243	100.0	100.0	100.0
H.C. 26	21,243	20,536	21,656	0.120	0.019	0.032	100.0	100.0	100.0
H.C. 27	32,055	29,319	29,353	4.471	0.027	0.027	100.0	100.0	100.0
H.C. 28	43,986	42,359	40,660	0.014	0.011	0.014	100.0	100.0	100.0
H.C. 29	16,850	15,791	16,173	0.030	0.033	0.064	100.0	100.0	100.0
H.C. 30	26,552	32,847	33,221	0.080	0.072	0.058	100.0	100.0	100.0
H.C. 31	27,150	26,729	26,278	7.233	0.003	-	100.0	100.0	100.0
H.C. 32	31,055	28,550	27,680	1.555	1.786	0.086	100.0	100.0	100.0
H.C. 33	30,150	27,598	25,530	0.017	-	0.004	100.0	100.0	100.0
Sicily Total	229,041	223,729	220,551	1.619	0.308	0.034	100.0	100.0	100.0
South Italy Total	399,028	389,815	387,873	3.839	3.264	0.062	100.0	100.0	100.0
ITALY	1,169,210	1,167,151	1,167,862	2.498	2.985	1.616	100.0	100.0	100.0

(Continued) Table 30 – Comparison of the public Hospital Centers through the percentage composition of the Assets and Liabilities items on their Balance Sheets in the years 2017, 2018 and 2019

Hospital Centers and University Hospital Centers (1)	Number of impatient admissions and day hospital			Net Equity					Provisions for Liabilities and Charges			
				Total Net Equity		of which Investment Loans from Regions						
	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
H.C. 1	16,715	17,032	17,063	43.9	47.6	49.3	37.3	25.5	27.3	3.3	3.3	3.3
H.C. 2	32,807	33,675	34,247	54.5	55.1	55.4	14.1	15.2	14.9	2.8	3.1	3.1
H.C. 3	27,210	28,050	28,363	46.1	48.7	47.8	20.2	20.1	18.1	2.6	2.7	1.9
H.C. 4	25,430	29,476	30,311	50.8	51.0	50.3	19.1	18.7	17.5	5.1	4.2	3.0
H.C. 5	22,880	22,395	23,555	49.6	51.7	51.9	36.3	40.4	40.5	4.0	4.9	4.2
H.C. 6	94,325	90,687	92,554	47.8	39.3	39.4	22.6	23.4	22.7	4.0	4.8	5.0
Piedmont Total	219,367	221,315	226,093	48.8	45.3	45.3	22.9	22.6	22.0	3.8	4.2	4.0
H.C. 7	58,765	58,618	60,310	44.8	52.9	56.2	18.7	16.1	8.0	13.0	11.6	7.7
H.C. 8	64,312	64,855	63,933	62.6	67.8	72.7	8.5	8.1	12.1	6.7	7.9	10.5
Veneto total	123,077	123,473	124,243	55.4	61.5	65.8	12.6	11.5	10.4	9.2	9.5	9.3
H.C. 9	44,143	44,651	43,612	62.1	66.8	72.4	2.7	3.9	4.2	5.0	4.5	4.2
H.C. 10	41,500	46,430	47,198	51.0	53.6	52.0	25.9	13.1	12.7	3.7	4.1	3.8
H.C. 11	68,392	68,800	66,700	42.6	43.2	47.1	13.2	9.7	13.8	14.4	12.9	12.5
H.C. 12	31,133	32,494	32,780	46.2	45.7	45.1	9.9	9.7	9.4	3.7	4.1	3.1
E. Romagna Total**	185,168	192,375	190,290	49.7	51.3	52.8	14.5	9.6	10.8	7.0	6.8	6.4
North Italy Total	527,612	537,163	540,626	50.6	51.3	52.8	17.4	15.1	15.1	6.2	6.4	6.1
H.C. 13	32,108	31,867	30,971	50.5	51.3	49.3	22.6	23.7	22.4	30.9	30.4	33.3
H.C. 14	47,939	48,026	47,537	53.1	53.1	54.9	30.1	31.0	31.4	26.0	21.7	23.2
Marche Total	80,047	79,893	78,508	52.1	52.5	52.7	27.2	28.4	28.0	27.9	24.9	27.0
H.C. 15	38,592	38,340	38,855	-21.5	-36.0	-2.6	15.5	13.9	13.0	9.6	8.2	8.8
H.C. 16	19,684	21,720	24,031	-29.1	-1.1	-4.4	61.9	69.2	69.5	24.8	22.3	21.4
H.C. 17	59,175	54,083	51,460	-33.2	-50.4	-19.1	7.9	7.7	6.9	69.9	68.5	65.4
H.C. 18	21,071	22,137	22,781	-23.2	-48.6	-29.2	10.7	13.9	8.7	16.2	17.5	20.3
H.C. 19	24,001	24,000	23,728	-60.1	-69.6	-5.2	8.9	19.9	10.5	20.0	21.7	12.4
Lazio Total	162,523	160,280	160,855	-29.2	-39.8	-11.6	17.9	19.5	16.9	32.9	31.3	30.3
Central Italy Total	242,570	240,173	239,363	-8.4	-17.7	2.5	20.3	21.6	19.3	31.7	29.7	29.5

(Continued) Table 30 – Comparison of the public Hospital Centers through the percentage composition of the Assets and Liabilities items on their Balance Sheets in the years 2017, 2018 and 2019

Hospital Centers and University Hospital Centers (I)	Number of impatient admissions and day hospital admissions				Net Equity					Provisions for Liabilities and Charges			
					Total Net Equity		of which Investment Loans from Regions						
	2017	2018	2019		2017	2018	2019	2017	2018	2019	2017	2018	2019
H.C. 20	50,432	48,041	47,798		70.8	68.6	66.9	64.6	67.3	61.7	3.3	4.8	4.6
H.C. 21	36,020	35,739	32,327		67.5	69.4	71.6	32.4	33.0	36.3	6.5	6.8	4.9
Apulia total	86,452	83,780	80,125		69.7	68.9	68.4	53.4	55.7	53.8	4.4	5.5	4.7
H.C. 22	26,115	24,796	24,830		50.7	49.5	39.8	-	4.5	4.6	7.3	6.6	13.4
H.C. 23	24,160	23,850	28,043		45.1	41.9	39.0	4.1	2.9	-	1.9	1.7	1.6
H.C. 24	9,810	9,910	9,869		55.6	52.6	124.1	-	0.6	0.6	1.6	1.2	16.6
H.C. 25	23,450	23,750	24,455		40.2	37.5	39.0	37.8	35.2	36.0	30.0	28.2	27.1
Catabria Total	83,535	82,306	87,197		47.6	45.0	50.2	10.7	10.9	11.4	10.0	9.4	13.5
H.C. 26	21,243	20,536	21,656		43.3	46.0	47.5	21.0	22.1	16.7	24.9	22.7	20.4
H.C. 27	32,055	29,319	29,353		54.6	58.1	59.3	10.4	10.8	10.5	19.6	20.4	14.4
H.C. 28	43,986	42,359	40,660		60.8	61.2	63.4	34.9	32.9	34.9	14.9	14.5	13.0
H.C. 29	16,850	15,791	16,173		52.1	51.5	56.7	37.5	36.4	35.4	22.9	22.1	17.7
H.C. 30	26,552	32,847	33,221		36.5	27.9	37.6	26.0	19.6	25.6	17.3	14.9	12.4
H.C. 31	27,150	26,729	26,278		35.7	36.7	39.9	17.1	16.1	14.5	9.2	26.3	21.7
H.C. 32	31,055	28,550	27,680		52.7	51.6	48.7	29.3	29.4	30.8	26.7	24.8	25.1
H.C. 33	30,150	27,598	25,530		39.7	43.6	46.1	9.1	10.3	10.8	17.3	18.2	15.9
Sicily Total	229,041	223,729	220,551		49.6	49.2	51.8	25.0	24.0	24.4	18.5	19.9	17.6
South Italy Total	399,028	389,815	387,873		53.3	52.4	55.3	28.1	27.9	28.8	14.0	14.9	14.0
ITALY	1,169,210	1,167,151	1,167,862		39.9	37.9	43.1	21.6	20.8	20.6	13.8	14.0	13.6

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(Continued) Table 30 – Comparison of the public Hospital Centers through the percentage composition of the Assets and Liabilities items on their Balance Sheets in the years 2017, 2018 and 2019

Hospital Centers and University Hospital Centers (1)	Number of inpatient admissions and day hospital		Debits				Other liabilities as per the BS (Accruals and Deferrals, Severance indemnity)				Total Liabilities and Net Equity			
	2017	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
	H.C. 1	16,715	17,032	49.6	45.0	42.7	3.2	4.1	4.7	100.0	100.0	100.0	100.0	100.0
H.C. 2	32,807	33,675	42.6	41.7	41.5	0.1	0.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0
H.C. 3	27,210	28,050	51.3	48.6	50.3	0.0	0.0	-	100.0	100.0	100.0	100.0	100.0	100.0
H.C. 4	25,430	29,476	30,311	44.0	44.5	46.6	0.1	0.4	0.2	100.0	100.0	100.0	100.0	100.0
H.C. 5	22,880	22,395	23,555	46.4	43.3	43.9	0.0	0.0	0.0	100.0	100.0	100.0	100.0	100.0
H.C. 6	94,325	90,687	92,554	35.4	35.8	37.8	12.8	20.1	17.8	100.0	100.0	100.0	100.0	100.0
Piedmont Total	219,367	221,315	226,093	40.6	40.0	41.2	6.8	10.4	9.4	100.0	100.0	100.0	100.0	100.0
H.C. 7	58,765	58,618	60,310	40.5	33.9	30.5	1.7	1.6	5.6	100.0	100.0	100.0	100.0	100.0
H.C. 8	64,312	64,855	63,933	30.7	24.2	16.7	0.0	0.1	0.1	100.0	100.0	100.0	100.0	100.0
Veneto total	123,077	123,473	124,243	34.6	28.3	22.5	0.7	0.7	2.4	100.0	100.0	100.0	100.0	100.0
H.C. 9	44,143	44,651	43,612	32.9	28.7	23.3	-	0.1	0.1	100.0	100.0	100.0	100.0	100.0
H.C. 10	41,500	46,430	47,198	44.8	41.7	43.7	0.5	0.6	0.5	100.0	100.0	100.0	100.0	100.0
H.C. 11	68,392	68,800	66,700	42.9	43.7	39.9	0.0	0.1	0.5	100.0	100.0	100.0	100.0	100.0
H.C. 12	31,133	32,494	32,780	50.1	50.3	51.5	-	-	0.3	100.0	100.0	100.0	100.0	100.0
E. Romagna Total**	185,168	192,375	190,290	43.1	41.6	40.5	0.2	0.2	0.4	100.0	100.0	100.0	100.0	100.0
North Italy Total	527,612	537,163	540,626	40.3	38.0	36.7	2.9	4.3	4.4	100.0	100.0	100.0	100.0	100.0
H.C. 13	32,108	31,867	30,971	18.0	17.7	16.8	0.6	0.6	0.7	100.0	100.0	100.0	100.0	100.0
H.C. 14	47,939	48,026	47,537	19.8	24.0	20.7	1.0	1.2	1.3	100.0	100.0	100.0	100.0	100.0
Marche Total	80,047	79,893	78,508	19.1	21.7	19.2	0.8	1.0	1.0	100.0	100.0	100.0	100.0	100.0
H.C. 15	38,592	38,340	38,855	111.8	127.7	93.6	0.1	0.1	0.1	100.0	100.0	100.0	100.0	100.0
H.C. 16	19,684	21,720	24,031	46.2	76.6	74.2	58.1	2.1	8.8	100.0	100.0	100.0	100.0	100.0
H.C. 17	59,175	54,083	51,460	63.3	81.9	53.7	0.0	0.0	0.0	100.0	100.0	100.0	100.0	100.0
H.C. 18	21,071	22,137	22,781	107.0	131.1	108.9	-	0.0	0.1	100.0	100.0	100.0	100.0	100.0
H.C. 19	24,001	24,000	23,728	140.1	147.9	91.9	-0.0	-	1.0	100.0	100.0	100.0	100.0	100.0
Lazio Total	162,523	160,280	160,855	88.7	108.2	80.2	7.6	0.3	1.2	100.0	100.0	100.0	100.0	100.0
Central Italy Total	242,570	240,173	239,363	70.9	87.5	66.8	5.8	0.5	1.2	100.0	100.0	100.0	100.0	100.0

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(Continued) Table 30 – Comparison of the public Hospital Centers through the percentage composition of the Assets and Liabilities items on their Balance Sheets in the years 2017, 2018 and 2019

Hospital Centers and University Hospital Centers (1)	Number of inpatient admissions and day hospital			Debits			Other liabilities as per the BS (Accruals and Deferrals, Severance indemnity)			Total Liabilities and Net Equity		
	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
	H.C. 20	50,432	48,041	47,798	24.6	26.4	28.2	1.3	0.2	0.4	100.0	100.0
H.C. 21	36,020	35,739	32,327	25.6	23.5	23.3	0.4	0.3	0.3	100.0	100.0	100.0
Apulia total	86,452	83,780	80,125	24.9	25.4	26.6	1.0	0.2	0.3	100.0	100.0	100.0
H.C. 22	26,115	24,796	24,830	41.5	43.6	45.9	0.5	0.3	0.9	100.0	100.0	100.0
H.C. 23	24,160	23,850	28,043	59.0	56.3	59.4	-6.0	0.1	0.1	100.0	100.0	100.0
H.C. 24	9,810	9,910	9,869	99.6	101.3	207.5	-56.8	- 55.1	- 248.1	100.0	100.0	100.0
H.C. 25	23,450	23,750	24,455	29.8	34.3	33.9	-	-	-	100.0	100.0	100.0
Catabria Total	83,535	82,306	87,197	57.9	59.3	68.3	- 15.5	- 13.7	- 32.1	100.0	100.0	100.0
H.C. 26	21,243	20,536	21,656	31.7	31.3	32.0	0.1	0.0	0.0	100.0	100.0	100.0
H.C. 27	32,055	29,319	29,353	21.4	21.5	22.9	4.4	-	3.4	100.0	100.0	100.0
H.C. 28	43,986	42,359	40,660	24.2	24.1	23.5	0.2	0.2	0.1	100.0	100.0	100.0
H.C. 29	16,850	15,791	16,173	24.9	26.3	25.1	0.1	0.1	0.5	100.0	100.0	100.0
H.C. 30	26,552	32,847	33,221	46.2	57.2	50.0	0.0	0.0	0.0	100.0	100.0	100.0
H.C. 31	27,150	26,729	26,278	34.0	36.0	37.3	21.1	1.0	1.1	100.0	100.0	100.0
H.C. 32	31,055	28,550	27,680	19.1	21.8	22.9	1.6	1.8	3.3	100.0	100.0	100.0
H.C. 33	30,150	27,598	25,530	42.1	37.4	37.0	0.9	0.8	1.0	100.0	100.0	100.0
Sicily Total	229,041	223,729	220,551	28.4	30.3	29.5	3.4	0.6	1.2	100.0	100.0	100.0
South Italy Total	399,028	389,815	387,873	33.4	34.9	35.4	- 0.7	- 2.3	- 4.7	100.0	100.0	100.0
ITALY	1,169,210	1,167,151	1,167,862	43.9	46.8	42.6	2.3	1.3	0.7	100.0	100.0	100.0

Source: survey by *Ermeneia – Studi & Strategie di Sistema*, 2020

Part Two
Statistical Indicators

1. Facility data

1.1. Number of public and accredited private medical institutions

The updating of the facility data for the hospitals of the National Health Service to reflect 2018 values once again made use of one of the two sources made available by the Ministry of Health, namely the updated 2010-2018 “Open Data”. Processing the information available in this area of the ministerial portal makes it possible (albeit in a more limited manner than in previous years) to get an overview of the gradual reorganization of the Italian hospital and healthcare institutes which, since 2004, has focused mainly on the entire public hospital network. This network has, as has already been mentioned several times, in fact been subject to aggregations and transformations into new types of institutions, mainly from a hospital system directly managed by local health authorities towards organizational forms within variously articulated Hospital-Center systems (Hospital Centers, Centers integrated with universities, Centers integrated with the NHS). In the privately-operated component, however, the trend, already found in some Regions, especially Lazio, of the reconversion or the actual downgrading of many accredited facilities, has been relegated to less qualified production activities such as long-term care or residential care. More in general, the data of the Ministry of Health for 2018 indicate a halt to the reduction of the presence of hospitals directly managed by local health authorities and accredited hospitals. Compared to 2014, the new reference year for the data presented, it can be seen that the total of public and private healthcare institutions decreased from 1,056 to 1,000 units in 2018, a total reduction of -5.3%. Tables S/1 and S/2 show, in particular:

- in the public sector, above all a decrease in the number of Hospital Centers (-10.2%) and directly managed Hospitals (-6.6%), followed by the Hospital Centers integrated with universities (-5.6%); overall, public

healthcare and assimilated institutions have seen a gradual decline during the period considered, with a final change of -6.4%, although it must be pointed out that there are more reconversions of types or aggregations than of real divestments;

- in the context of accredited hospitals in the strict sense (those that the Ministry classifies as accredited healthcare facilities), there is confirmation of the trend towards a less pronounced downsizing, which saw its presence in the hospital system decrease from 506 units in 2014 to 485 in 2018 (-4.2%).

The ratio of publicly-operated hospital component to privately-operated hospital component of the National Health Service within the total number of hospital institutions shows a national average of 43.3% for the former and 56.7% for the latter (Table S/4), and is fairly well balanced in most Italian regions, again keeping in mind the larger size and the average number of patient beds found in the public institutions.

Considering the ratio of public/private institutions from Region to Region as reported in the data for 2018, we can see in which geographical areas there is a greater number of public institutions and where there is a sort of balance of the ‘somewhat mixed system’ between these two sectors (Table S/4):

- a greater number of public facilities is found especially in Basilicata, Sardinia, Friuli Venezia Giulia, Abruzzo, Umbria, Tuscany and in the autonomous provinces of Bolzano and Trento;
- the presence of a somewhat mixed system (with greater balance between the types of institutions) is instead found mainly in the Aosta Valley, Liguria, Apulia, and Sicily.

1.2. Bed distribution

Focusing on the analysis of number of patient beds, rather than on the number of facilities, whose public/private ratios are, as has already been mentioned, strongly affected by institutions’ size, it can be seen that in Italy in 2018, the hospital system had more than 188,000 patient beds available for regular in-patient admission services, with a rather steady composition over time of 69.5% from public facilities and 30.5% from private facilities (Table S/5).

With the exception of Lazio, a situation which sees a truly mixed system in operation also in terms of patient beds, the territorial distribution throughout the rest of Italy sees a more or less clear prevalence of public facilities, a

prevalence accentuated also by the penalizing measures relating to the reorganization of the hospital network guided by Ministerial Decree 70 of 2015, which have already undergone complete transposition in many regions.

For the supply sector covered by the private facilities, represented in this case solely by facilities belonging to AIOP, it is instead possible to present an update to 2020, with a comparison limited to 2018 compared to the other private service components in Table S/6. This shows almost 29,000 beds for inpatient-admission purposes out of a total of just over 40,000, a percentage amounting to nearly 72%. In this specific instance, the comparison relates to ‘Healthcare facilities’.

The Regional distribution of AIOP’s network of institutions in 2020 shows a concentration among NHS accredited facilities according to the most prevalent nosological classifications (Table S/7):

- multi-specialist (172 out of 476 institutions);
- RSA/assisted living homes (108 out of 476 institutions);
- surgical (68 out of 476 institutions);
- rehabilitation (64 out of 476 institutions);
- neuro-psychiatry (27 out of 476 institutions);
- long-stay care (20 out of 476 institutions);
- medical (17 out of 476 institutions).

If we consider the different types of activities (see Tables S/8 and S/9), also belonging to the AIOP-associated institutions (2020), the greater concentrations of patient beds at the national level are: surgical, medical, rehabilitation, assisted living homes (R.S.A., *Residenze Sanitarie Assistenziali*), neuro-psychiatry, and long-stay care. There is also a large and significant amount for highly specialized areas (almost 1,000 patient beds), especially cardiac surgery.

1.3. Medical equipment

The description of the distribution of equipment still refers to the latest update available, that of 2017. It attests to the solidity of the technological mechanism that supports and qualifies the hospital services and that, in most of the Italian regions, also makes a decisive contribution in terms of assistance locally. The availability by Region and by type of equipment are shown in Tables S/10 (Public facilities), S/11 (Code 5.1 Institutes, or private accredited healthcare facilities) and S/13 (Private non-accredited healthcare facilities).

The data for the first two types of facilities confirm the significance of the contribution that the private hospital component provides to the supply of advanced technological services, continuing to ensure significant territorial compensation within the repeatedly invoked concept of the “mixed system”.

Table S/10 (Public facilities) highlights that the bulk of the most sophisticated equipment (Computerized Axial Tomography – CT, Hemodialysis machines – HD, Magnetic Resonance Tomography – MRT, Linear Accelerators – LINACs) are mainly concentrated in hospitals in the North of Italy, except for Hyperbaric Chambers, which are much widespread in the South.

Table S/1 – Evolution in the number of public and assimilated, and accredited hospitals

	2014		2015		2016		2017		2018	
	A.V.	%	A.V.	%	A.V.	%	A.V.	%	A.V.	%
- Hospital Centers	59	5.6	57	5.4	57	5.5	55	5.5	53	5.3
- Directly managed hospitals	350	33.1	351	33.5	347	33.6	327	32.6	327	32.7
- Hospital Centers integrated with the NHS	9	0.9	9	0.9	9	0.9	9	0.9	9	0.9
- Hospital Centers integrated with universities	18	1.7	18	1.7	18	1.7	16	1.6	17	1.7
- University Polyclinics	2	0.2	2	0.2	2	0.2	2	0.2	2	0.2
- Institutes for Treatment and Research	62	5.9	64	6.1	63	6.1	63	6.3	63	6.3
- Religiously-affiliated classif. hospitals	28	2.7	27	2.6	26	2.5	27	2.7	28	2.8
- Institutes-ASL Facilities	19	1.8	18	1.7	18	1.7	17	1.7	14	1.4
- Research facilities	3	0.3	2	0.2	2	0.2	2	0.2	2	0.2
- Total public and assimilated institutions	550	52.1	548	52.2	542	52.4	518	51.5	515	51.5
- Accredited hospitals (1)	506	47.9	501	47.8	492	47.6	487	48.5	485	48.5
Grand total	1,056	100.0	1,049	100.0	1,034	100.0	1,005	100.0	1,000	100.0

(1) Code 5.1 Institutes (Private accredited healthcare facility) in the ministerial classification.

Source: processing based on data from the Ministry of Health – Open Data 2014-2018

Table S/2 – Evolution in the number of public and assimilated, and accredited hospitals (% increase)

	2015/2014	2016/2015	2017/2016	2018/2017	2018/2014
- Hospital Centers	-3.4	0.0	-3.5	-3.6	-10.2
- Directly managed hospitals	0.3	-1.1	-5.8	0.0	-6.6
- Hospital Centers integrated with the NHS	0.0	0.0	0.0	0.0	0.0
- Hospital Centers integrated with universities	0.0	0.0	-11.1	6.3	-5.6
- University Polyclinics	0.0	0.0	0.0	0.0	0.0
- Institutes for Treatment and Research	3.2	-1.6	0.0	0.0	1.6
- Religiously-affiliated classif. hospitals	-3.6	-3.7	3.8	3.7	0.0
- Institutes-ASL Facilities	-5.3	0.0	-5.6	-17.6	-26.3
- Research facilities	-33.3	0.0	0.0	0.0	-33.3
- Total public and assimilated institutions	-0.4	-1.1	-4.4	-0.6	-6.4
- Accredited hospitals (1)	-1.0	-1.8	-1.0	-0.4	-4.2
<i>Grand total</i>	<i>-0.7</i>	<i>-1.4</i>	<i>-2.8</i>	<i>-0.5</i>	<i>-5.3</i>

(1) Code 5.1 Institutes (Private accredited healthcare facility) in the ministerial classification.

Source: processing based on data from the Ministry of Health – Open Data 2014-2018

Table S/3 – Publicly-operated and privately-operated agencies of the NHS by region. Year 2018 (A.F.)

Regions	Publicly-operated agencies				Privately-operated agencies					Total public institutions		
	Hospital Centers	Directly managed hospitals	Hospital Centers integrated with the NHS	Hospital Centers with integrated universities	Scientific and public institutes and foundations	Private University Polytechnics	Research Institutes for Treatment and Research	Religiously-affiliated hospitals	ASL Facilities		Research facilities	Accredited private hospitals ¹
Piedmont	3	21	-	3	-	-	3	-	6	-	37	73
Aosta Valley	-	1	-	-	-	-	-	-	-	-	1	2
Lombardy	27	-	-	-	5	-	21	5	-	-	65	123
A.P. of Bolzano	-	7	-	-	-	-	-	-	-	-	6	13
A.P. of Trento	-	7	-	-	-	-	-	1	-	-	5	13
Veneto	1	11	-	1	2	-	1	5	2	-	17	40
Friuli V.G.	-	8	-	-	2	-	-	-	-	-	5	15
Liguria	-	6	-	-	2	-	1	2	-	-	7	18
Emilia R.	-	15	-	4	2	-	1	-	1	-	44	67
Tuscany	-	31	-	4	1	-	1	-	2	1	21	61
Umbria	2	8	-	-	-	-	-	-	-	-	6	16
Marche	1	5	-	1	1	-	-	-	-	-	14	22
Lazio	2	32	1	2	3	2	3	8	2	-	59	114
Abruzzo	-	17	-	-	-	-	-	-	-	-	10	27
Molise	-	3	-	-	-	-	1	-	-	1	3	8
Campania	6	32	2	1	1	-	1	4	-	-	62	109
Apulia	-	24	1	1	4	-	1	2	-	-	26	59
Basilicata	1	7	-	-	1	-	-	-	-	-	1	10
Calabria	4	17	-	-	1	-	-	-	-	-	27	49
Sicily	5	53	3	-	2	-	2	1	1	-	59	126
Sardinia	1	22	2	-	-	-	-	-	-	-	10	35
North	31	76	-	8	13	-	27	13	9	-	187	364
Center	5	76	1	7	5	2	4	8	4	1	100	213
South	17	175	8	2	9	-	5	7	1	1	198	423
Italy	53	327	9	17	27	2	36	28	14	2	485	1,000

(1) Code 5.1 Institutes (Private accredited healthcare facility) in the ministerial classification. Source: processing by *Ermeneta*, based on data from the *Ministry of Health – Open Data 2018*

Table S/4 – Publicly-operated and privately-operated agencies of the NHS by region, Year 2018 (%)

Regions	Publicly-operated agencies				Privately-operated agencies					Total public institutions			
	Hospital Centers managed hospitals with the NHS	Hospital Centers integrated with univ. NHS	Hospital Centers and public institutes and found.	Private University Polyclinics	Institutes for Treatment and Research	Religiously-affiliated hospitals	Institutes-ASL Facilities	Research facilities	Accredited private hospitals ¹		Publicly-operated component	Privately-operated component	
Piedmont	4.1	28.8	0.0	4.1	0.0	4.1	0.0	8.2	0.0	50.7	37.0	63.0	100.0
Aosta Valley	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0	50.0	100.0
Lombardy	22.0	0.0	0.0	0.0	4.1	17.1	4.1	0.0	0.0	5.8	26.0	74.0	100.0
A.P. of Bolzano	0.0	53.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.2	53.8	46.2	100.0
A.P. of Trento	0.0	53.8	0.0	0.0	0.0	0.0	7.7	0.0	0.0	38.5	53.8	46.2	100.0
Veneto	2.5	27.5	0.0	2.5	5.0	2.5	12.5	5.0	0.0	42.5	37.5	62.5	100.0
Friuli V.G.	0.0	53.3	0.0	0.0	13.3	0.0	0.0	0.0	0.0	33.3	66.7	33.3	100.0
Liguria	0.0	33.3	0.0	0.0	11.1	5.6	11.1	0.0	0.0	38.9	44.4	55.6	100.0
Emilia R.	0.0	22.4	0.0	6.0	3.0	1.5	0.0	1.5	0.0	65.7	31.3	68.7	100.0
Tuscany	0.0	50.8	0.0	6.6	1.6	0.0	0.0	3.3	1.6	34.4	59.0	41.0	100.0
Umbria	12.5	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.5	62.5	37.5	100.0
Marche	4.5	22.7	0.0	4.5	4.5	0.0	0.0	0.0	0.0	63.6	36.4	63.6	100.0
Lazio	1.8	28.1	0.9	1.8	2.6	1.8	7.0	1.8	0.0	51.8	35.1	64.9	100.0
Abruzzo	0.0	63.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.0	63.0	37.0	100.0
Molise	0.0	37.5	0.0	0.0	0.0	12.5	0.0	0.0	12.5	37.5	37.5	62.5	100.0
Campania	5.5	29.4	1.8	0.9	0.9	0.9	3.7	0.0	0.0	56.9	38.5	61.5	100.0
Apulia	0.0	40.7	1.7	1.7	6.8	1.7	3.4	0.0	0.0	44.1	50.8	49.2	100.0
Basilicata	10.0	70.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	10.0	90.0	10.0	100.0
Calabria	8.2	34.7	0.0	0.0	2.0	0.0	0.0	0.0	0.0	55.1	44.9	55.1	100.0
Sicily	4.0	42.1	2.4	0.0	1.6	1.6	0.8	0.8	0.0	46.8	50.0	50.0	100.0
Sardinia	2.9	62.9	5.7	0.0	0.0	0.0	0.0	0.0	0.0	28.6	71.4	28.6	100.0
North	8.5	20.9	0.0	2.2	3.6	7.4	3.6	2.5	0.0	51.4	35.2	64.8	100.0
Center	2.3	35.7	0.5	3.3	2.3	0.9	3.8	1.9	0.5	46.9	44.1	55.9	100.0
South	4.0	41.4	1.9	0.5	2.1	1.2	1.7	0.2	0.2	46.8	49.9	50.1	100.0
Italy ¹	5.3	32.7	0.9	1.7	2.7	3.6	2.8	1.4	0.2	48.5	43.3	56.7	100.0

(1) Code 5.1 Institutes (Private accredited healthcare facility) in the ministerial classification. Source: processing by *Ermeneta*, based on data from the *Ministry of Health – Open Data 2018*

Table S/5 – Patient beds of publicly- and privately-operated components of the NHS used for inpatient admissions, by Region, Year 2018

Regions	2018				2017			
	Publicly-operated component of the NHS		Privately-operated component of the NHS		Publicly-operated component of the NHS		Privately-operated component of the NHS	
	Patient beds (1)	% of the total	Patient beds (1)	% of the total	Patient beds	% of the total	Patient beds	% of the total
Piedmont	10,181	69.2	4,526	30.8	14,707	100.0	69.2	30.8
Aosta Valley	374	83.5	74	16.5	448	100.0	84.3	15.7
Lombardy	21,862	62.8	12,969	37.2	34,831	100.0	62.4	37.6
A.P. of Bolzano	1,580	84.8	283	15.2	1,863	100.0	84.5	15.5
A.P. of Trento	1,243	65.9	643	34.1	1,886	100.0	66.1	33.9
Veneto	13,045	81.4	2,977	18.6	16,022	100.0	80.5	19.5
Friuli V.G.	3,433	90.1	376	9.9	3,809	100.0	89.5	10.5
Liguria	4,123	82.2	895	17.8	5,018	100.0	83.1	16.9
Emilia R.	12,409	75.6	3,995	24.4	16,404	100.0	75.7	24.3
Tuscany	8,474	82.3	1,817	17.7	10,291	100.0	82.7	17.3
Umbria	2,600	90.5	273	9.5	2,873	100.0	91.0	9.0
Marche	3,808	82.1	829	17.9	4,637	100.0	82.4	17.6
Lazio	9,035	49.3	9,310	50.7	18,345	100.0	49.6	50.4
Abruzzo	3,034	76.2	949	23.8	3,983	100.0	76.3	23.7
Molise	553	58.2	397	41.8	950	100.0	62.4	37.6
Campania	9,093	59.5	6,187	40.5	15,280	100.0	58.8	41.2
Apulia	8,406	72.0	3,270	28.0	11,676	100.0	72.2	27.8
Basilicata	1,573	97.5	40	2.5	1,613	100.0	97.6	2.4
Calabria	3,219	64.8	1,746	35.2	4,965	100.0	65.9	34.1
Sicily	8,994	65.1	4,813	34.9	13,807	100.0	65.4	34.6
Sardinia	4,096	81.2	947	18.8	5,043	100.0	81.0	19.0
North	68,250	71.9	26,738	28.1	94,988	100.0	71.6	28.4
Center	23,917	66.2	12,229	33.8	36,146	100.0	66.5	33.5
South	38,968	68.0	18,349	32.0	57,317	100.0	68.0	32.0
Italy	131,135	69.6	57,316	30.4	188,451	100.0	69.5	30.5

(1) For the classification of the institutions see Table S/3.

Source: processing by *Ermeneta*, based on data from the *Ministry of Health – Open Data 2018*

Table S/6 – NHS Accredited Hospitals (1). Institutions and Patient beds – by Region, Year 2018

	AIOP			ARDS			Other			Total	
	Institutions	Accred. patient beds	Institutions	Accred. patient beds	Institutions	Accred. patient beds	Institutions	Accred. patient beds	Institutions	Accred. patient beds	
– Piedmont	24	1,870	6	603	7	627	37	3,100			
– Aosta Valley	1	74	-	-	-	-	1	74			
– Lombardy	37	4,452	14	1,911	14	1,055	65	7,418			
– Bolzano	3	176	1	31	2	76	6	283			
– Trento	3	310	1	83	1	145	5	538			
– Veneto	17	1,616	-	-	-	-	17	1,616			
– Friuli V.G.	2	162	-	-	3	214	5	376			
– Liguria	2	135	1	11	4	161	7	307			
– Emilia R.	41	3,606	1	76	2	127	44	3,809			
– Tuscany	12	895	7	259	2	290	21	1,444			
– Umbria	4	148	1	60	1	65	6	273			
– Marche	11	596	1	35	2	198	14	829			
– Lazio	41	3,169	5	300	13	1,249	59	4,718			
– Abruzzo	2	392	2	87	6	470	10	949			
– Molise	2	100	-	-	1	40	3	140			
– Campania	52	4,690	-	-	10	801	62	5,491			
– Apulia	14	1,202	1	54	11	1,063	26	2,319			
– Basilicata	1	40	-	-	-	-	1	40			
– Calabria	15	946	-	-	12	800	27	1,746			
– Sicily	49	3,450	-	-	10	442	59	3,892			
– Sardinia	9	897	-	-	1	50	10	947			
– North	130	12,401	24	2,715	33	2,405	187	17,521			
– Center	68	4,808	14	654	18	1,802	100	7,264			
– South	144	11,717	3	141	51	3,666	198	15,524			
– Italy	342	28,926	41	3,510	102	7,873	485	40,309			
%	70.5	71.8	8.5	8.7	21.0	19.5	100.0	100.0			

(1) Code 5.1 Institutes (Accredited private healthcare facilities) in the ministerial classification.

Source: processing by Ermeneta, based on data from the Ministry of Health, Open Data 2018 and AIOP

Table S7 – Regional distribution of AIOP-associated institutions according to the most prevalent nosological classifications–Year 2020

Regions	RSA/ Assisted living residences														
	Multi-specialist		Medical		Surgical		Neuro-psychiatry		Long-stay care pts		Rehabilitation		Totals		
	Accredited	Non- accredited	Accredited	Non- accredited	Accredited	Non- accredited	Accredited	Non- accredited	Accredited	Non- accredited	Accredited	Non- accredited	Accredited	Non- accredited	
– Piedmont	14	3	–	–	1	4	–	–	3	–	5	–	32	4	
– Aosta V.	–	–	–	–	–	–	–	–	–	–	1	–	1	–	
– Lombardy	26	2	2	1	2	2	–	–	–	–	13	–	77	6	
– Bolzano	–	–	–	–	–	–	–	–	–	–	3	–	3	–	
– Trento	1	–	–	–	–	–	–	2	–	–	–	–	3	–	
– Veneto	11	1	–	–	–	3	–	–	–	–	4	–	21	1	
– Friuli V.G.	2	–	–	–	–	–	–	–	–	–	–	–	1	1	
– Liguria	1	2	–	–	–	–	–	–	–	–	–	–	2	2	
– Emilia R.	24	1	1	–	1	6	–	3	–	7	7	–	49	2	
– Tuscany	5	1	7	2	2	2	–	1	–	1	1	–	17	2	
– Umbria	1	–	2	–	–	–	–	–	–	–	1	–	6	–	
– Marche	7	–	–	–	–	1	–	1	–	1	–	–	10	–	
– Lazio	18	9	9	9	9	7	–	4	–	6	–	39	90	19	
– Abruzzo	2	–	–	–	–	–	–	–	–	–	1	–	4	2	
– Molise	3	–	–	–	–	–	–	–	–	–	1	–	4	–	
– Campania	24	–	2	–	2	–	–	3	–	–	7	–	53	2	
– Apulia	9	–	1	–	1	–	–	–	–	–	1	–	17	6	
– Basilicata	–	–	–	–	–	–	–	–	1	–	–	–	1	–	
– Calabria	1	–	1	–	1	–	–	–	–	–	5	–	18	1	
– Sicily	18	–	21	–	21	2	–	–	–	6	–	7	56	–	
– Sardinia	5	–	3	–	–	–	–	1	–	–	–	–	9	–	
– North	79	9	3	4	2	15	–	8	–	–	34	–	48	5	
– Center	31	9	8	11	10	10	–	7	–	9	–	40	123	21	
– South	62	–	6	–	46	3	–	5	–	21	–	20	162	3	
– Italy	172	18	17	16	68	27	–	20	–	64	–	108	476	40	
– Rehabilitation Centers	–	–	–	–	–	–	–	–	–	–	–	–	–	–	17

Source: AIOP

Table S/8 – Regional distribution of patient beds of the AIOF-associated institutions according to the different types of activities – Year 2020

Regions	High Specialty			Medical			Surgical			Neuro-psychiatry			Long-stay care ps			Rehabilitation			Assisted living resid.			Totals			Rehabilitation Centers				
	Accredited	Non-accredited		Accredited	Non-accredited		Accredited	Non-accredited		Accredited	Non-accredited		Accredited	Non-accredited		Accredited	Non-accredited		Accredited	Non-accredited		Accredited	Non-accredited	Accredited	Non-accredited	Accredited	Non-accredited		
- Piedmont	90	10	404	86	692	259	264	32	413	18	617	10	560	30	3,040	445	-	-	-	-	-	-	-	-	-	-	-	-	-
- Aosta Valley	-	-	-	12	4	-	-	-	-	-	-	64	-	-	76	4	-	-	-	-	-	-	-	-	-	-	-	-	-
- Lombardy	441	18	2,819	106	3,013	185	103	20	13	-	2,098	55	3,896	344	12,383	728	60	-	-	-	-	-	-	-	-	-	-	-	-
- Bolzano	-	-	15	8	-	-	-	-	20	22	169	33	-	-	204	63	-	-	-	-	-	-	-	-	-	-	-	-	-
- Trento	-	-	98	15	38	-	-	-	167	17	25	-	21	-	349	32	-	-	-	-	-	-	-	-	-	-	-	-	-
- Veneto	-	-	460	85	645	197	372	18	40	-	652	48	348	-	2,517	348	28	-	-	-	-	-	-	-	-	-	-	-	-
- Friuli V.G.	-	-	62	17	153	20	-	-	-	-	12	-	75	77	302	114	-	-	-	-	-	-	-	-	-	-	-	-	-
- Liguria	15	-	41	47	15	73	-	-	-	-	67	-	-	-	138	120	-	-	-	-	-	-	-	-	-	-	-	-	-
- Emilia R.	73	2	1,052	35	1,504	159	625	2	570	5	919	51	541	190	5,284	444	-	-	-	-	-	-	-	-	-	-	-	-	-
- Tuscany	21	-	224	1	687	91	105	1	182	-	412	10	20	20	1,631	103	126	-	-	-	-	-	-	-	-	-	-	-	-
- Umbria	-	-	3	130	-	-	50	-	43	-	132	-	20	20	328	20	-	-	-	-	-	-	-	-	-	-	-	-	-
- Marche	-	-	202	-	279	-	50	-	112	-	98	-	104	-	845	-	40	-	-	-	-	-	-	-	-	-	-	-	-
- Lazio	-	50	1,246	400	1,653	1,108	563	8	551	3	1,076	433	3,453	215	8,542	2,217	684	-	-	-	-	-	-	-	-	-	-	-	-
- Abruzzo	-	-	144	44	140	73	100	-	-	-	84	100	28	27	496	244	303	-	-	-	-	-	-	-	-	-	-	-	-
- Molise	40	-	157	52	114	-	-	-	-	-	89	100	-	-	400	152	-	-	-	-	-	-	-	-	-	-	-	-	-
- Campania	81	13	936	152	2,173	392	-	-	557	55	1,203	12	439	258	5,389	624	80	-	-	-	-	-	-	-	-	-	-	-	-
- Apulia	78	-	542	67	502	126	-	-	-	-	140	28	583	258	1,845	479	1,163	27	-	-	-	-	-	-	-	-	-	-	-
- Basilicata	-	-	-	-	-	-	-	-	16	-	166	-	120	-	302	-	54	-	-	-	-	-	-	-	-	-	-	-	-
- Calabria	-	-	48	3	434	30	-	-	125	-	456	-	76	-	1,139	33	-	-	-	-	-	-	-	-	-	-	-	-	-
- Sicily	77	2	1,235	26	1,770	21	109	23	101	1	614	43	335	78	4,241	194	-	-	-	-	-	-	-	-	-	-	-	-	-
- Sardinia	-	-	169	8	359	21	-	-	90	-	147	-	-	-	765	29	-	-	-	-	-	-	-	-	-	-	-	-	-
- North	619	30	4,951	399	6,072	897	1,364	72	1,223	62	4,623	197	5,441	641	24,293	2,298	88	-	-	-	-	-	-	-	-	-	-	-	-
- Center	21	50	1,675	401	2,749	1,199	718	9	888	5	1,718	443	3,577	235	11,346	2,340	850	-	-	-	-	-	-	-	-	-	-	-	-
- South	276	15	3,231	352	5,492	663	209	23	889	56	2,899	283	1,581	363	14,577	1,755	1,600	27	-	-	-	-	-	-	-	-	-	-	-
- Italy	916	95	9,857	1,152	14,313	2,759	2,291	104	3,000	121	9,240	923	10,599	1,239	50,216	6,393	2,538	27	-	-	-	-	-	-	-	-	-	-	-

Source: AIOF

Table S/9 – Regional distribution of patient beds of the AIOIP-associated institutions according to the different types of activities and regions. Year 2020 (Composition %)

Regions	RSA/															
	High Speciality		Medical		Surgical		Neuro-psychiatry		Long-stay care p.is		Rehabilitation		Assisted living residences		Total	
	Accredited	Non-accredited	Accredited	Non-accredited	Accredited	Non-accredited	Accredited	Non-accredited	Accredited	Non-accredited	Accredited	Non-accredited	Accredited	Non-accredited	Accredited	Non-accredited
- Piedmont	3.0	2.2	13.3	19.3	22.8	58.2	8.7	7.2	13.6	4.0	20.3	2.2	18.4	6.7	100.0	100.0
- Aosta Valley	-	-	-	-	15.8	100.0	0.8	-	-	-	84.2	-	-	-	100.0	100.0
- Lombardy	3.6	2.5	22.8	14.6	24.3	25.4	0.8	2.7	0.1	-	16.9	7.6	31.5	47.3	100.0	100.0
- A.P. of Bolzano	-	-	7.4	12.7	-	-	-	-	9.8	34.9	82.8	52.4	-	-	100.0	100.0
- A.P. of Trento	-	-	28.1	46.9	10.9	56.6	14.8	-	47.9	53.1	7.2	-	6.0	-	100.0	100.0
- Veneto	-	-	18.3	24.4	25.6	56.6	14.8	5.2	1.6	-	25.9	13.8	24.8	67.5	100.0	100.0
- Friuli V.G.	-	-	20.5	14.9	50.7	17.5	-	-	-	-	4.0	-	-	-	100.0	100.0
- Liguria	10.9	-	29.7	39.2	10.9	60.8	11.8	0.5	10.8	1.1	17.4	11.5	10.2	42.8	100.0	100.0
- Emilia R.	1.4	0.5	19.9	7.9	28.5	35.8	6.4	1.0	11.2	-	25.3	9.7	-	-	100.0	100.0
- Tuscany	1.3	-	13.7	1.0	42.1	88.3	6.4	1.0	11.2	-	40.2	-	6.1	100.0	100.0	
- Umbria	-	-	0.9	-	39.6	-	-	-	13.1	-	11.6	-	12.3	-	100.0	-
- Marche	-	-	23.9	-	33.0	-	5.9	-	13.3	-	11.6	-	12.3	-	100.0	-
- Lazio	-	2.3	14.6	18.0	19.4	50.0	6.6	0.4	6.5	0.1	12.6	19.5	40.4	9.7	100.0	100.0
- Abruzzo	-	-	29.0	18.0	28.2	29.9	20.2	-	-	-	16.9	41.0	5.6	11.1	100.0	100.0
- Molise	10.0	-	39.3	34.2	28.5	-	-	-	-	-	22.3	65.8	-	-	100.0	100.0
- Campania	1.5	2.1	17.4	24.4	40.3	62.8	-	-	10.3	8.8	22.3	1.9	8.1	-	100.0	100.0
- Apulia	4.2	-	29.4	14.0	27.2	26.3	-	-	-	-	7.6	5.8	31.6	53.9	100.0	100.0
- Basilicata	-	-	-	-	-	-	-	-	5.3	-	55.0	-	39.7	-	100.0	-
- Calabria	-	-	4.2	9.1	38.1	90.9	-	-	11.0	-	40.0	-	6.7	-	100.0	100.0
- Sicily	1.8	1.0	29.1	13.4	41.7	10.8	2.6	11.9	2.4	0.5	14.5	22.2	7.9	40.2	100.0	100.0
- Sardinia	-	-	22.1	27.6	46.9	72.4	-	-	11.8	-	19.2	-	-	-	100.0	100.0
- North	2.5	1.3	20.4	17.4	25.0	39.0	5.6	3.1	5.0	2.7	19.0	8.6	22.4	27.9	100.0	100.0
- Center	0.2	2.1	14.8	17.1	24.2	51.2	6.3	0.4	7.8	0.1	15.1	18.9	31.5	10.0	100.0	100.0
- South	1.9	0.9	22.2	20.1	37.7	37.8	1.4	1.3	6.1	3.2	19.9	16.1	10.8	20.7	100.0	100.0
- Italy	1.8	1.5	19.6	18.0	28.5	43.2	4.6	1.6	6.0	1.9	18.4	14.4	21.1	19.4	100.0	100.0

Source: AIOIP

Table S/10 – Technical and biomedical equipment for diagnosis and treatment in public hospital and assimilated facilities. Year 2017

Regions	HC	Echo	CT	HD	ACCA	MON	MRI	OT	RU	LV	PXU	LINAC	RCT	AIA	CGC	AM	SF	ADC
Piedmont	1,094	86	1,265	182	3,599	40	526	212	1,040	196	30	98	343	24	647	1,148	95	
Aosta Valley	36	2	26	5	153	3	17	5	38	7	1	1	23	21	21	40	6	
Lombardy	2,821	179	2,274	332	9,538	127	1,126	588	2,418	430	68	202	689	49	1,270	3,318	198	
A.P. of Bolzano	180	8	115	22	657	5	63	44	150	30	35	1	88	1	88	414	16	
A.P. of Trento	135	12	133	13	550	7	79	6	210	20	4	9	38	2	67	348	15	
Veneto	1,384	83	1,028	200	4,774	69	748	201	1,963	235	29	88	324	22	728	2,154	100	
Friuli V.G.	377	22	436	55	1,438	13	232	41	323	50	11	19	130	4	160	760	33	
Liguria	431	37	538	73	1,553	27	230	95	506	91	14	38	178	7	249	527	52	
Emilia R.	1,210	84	1,173	120	4,560	54	683	176	1,799	220	28	96	408	13	755	1,902	118	
Tuscany	1,414	86	1,165	178	4,424	51	553	227	1,695	238	25	89	522	23	619	1,740	96	
Umbria	311	22	459	37	729	13	147	32	254	38	8	30	165	5	160	349	40	
Marche	509	32	405	41	1,104	22	156	83	367	64	10	38	152	16	170	478	47	
Lazio	1,242	119	1,177	161	4,547	81	575	248	1,404	231	43	143	499	27	761	1,611	158	
Abruzzo	368	25	448	96	845	10	151	49	358	64	8	30	141	12	130	336	37	
Molise	70	8	102	46	217	9	45	19	60	25	2	6	24	5	46	104	15	
Campania	932	88	553	224	3,209	24	484	224	1,090	201	18	103	322	12	640	969	157	
Apulia	960	72	1,304	345	2,340	38	373	211	852	143	19	108	377	23	431	816	173	
Basilicata	169	13	166	19	376	8	84	45	157	25	3	22	57	5	77	169	20	
Calabria	314	34	431	70	915	14	143	51	265	53	11	47	144	22	192	257	47	
Sicily	1,058	111	671	262	3,955	58	502	242	1,161	270	23	121	321	32	679	1,246	144	
Sardinia	466	35	551	126	1,263	25	175	87	401	77	8	45	169	11	205	466	56	
North	7,668	513	6,988	1,002	26,822	345	3,704	1,368	8,447	1,279	185	560	2,168	122	3,985	10,611	633	
Center	7	3,476	259	3,206	417	10,804	167	1,431	590	3,720	571	86	300	1,338	71	1,710	4,178	341
South	29	4,337	386	4,226	1,188	13,120	186	1,957	928	4,344	858	92	482	1,555	122	2,400	4,363	649
Italy	41	15,481	1,158	14,420	2,607	50,746	698	7,092	2,886	16,511	2,708	363	1,342	5,061	315	8,095	19,152	1,623

HC: Hyperbaric Chamber, Echo: Echo-Tomography, CT: Computerized Axial Tomography, HD: Hemodialysis machine, ACCA: Automated Clinical Chemistry Analyzer, MON: Monitor, MRT: Magnetic Resonance Tomography, OT: Operating Table, RU: Radiological Unit, LV: Lung Ventilator, PXU: Portable X-ray Unit, LINAC: Linear Accelerator, RCT: Remote Controlled X-ray Table, AIA: Automated Immunoassay Analyzer, CGC: Computerized Gamma Camera, AM: Anesthesia Machine, SL: Shadowless Lamp, ADC: Automated Differential Cell counter.

Source: processing by *Ermeneta*, based on data from the *Ministry of Health*

Table S/11 – Technical and biomedical equipment for diagnosis and treatment in accredited hospitals*, Year 2017

Regions	HC	Echo	CT	HD	ACCA	MON	MRI	OT	RU	LV	PXU	LINAC	RCT	AIA	CGC	AM	SI	ADC
Piedmont	1	123	14	3	29	317	18	69	41	68	33	1	29	93	1	78	90	30
Aosta Valley	6	580	49	205	107	1,682	50	246	141	403	85	17	58	93	3	252	524	62
Lombardy		10	2		1	7	3		4		2	3	2	2			2	1
A.P. of Bolzano		17	3		2	14	3	4	4	4	2	2	2	2		4	9	4
A.P. of Trento		100	12	1	21	247	16	45	24	43	21	9	9	17	9	47	77	15
Veneto		44	4	23	10	60	8	22	9	14	5	5	5	9	9	21	26	7
Friuli V.G.		11	1	2	5	53			9	4	17	7	4	3	12	12	13	5
Liguria	1	178	23	77	24	561	33	134	48	191	71	2	38	21	2	146	241	23
Emilia R.		72	13	23	24	325	8	64	27	88	26	2	18	13	64	86	22	2
Tuscany		13	4		5	46	3	17	8	11	13		6	2	17	20	3	3
Umbria		52	9		10	148	9	31	22	41	22		12	16	32	56	11	11
Marche	1	176	36	526	67	581	31	151	128	134	64	3	62	71	6	170	233	62
Lazio		54	8	9	17	130	13	30	13	36	14		20	19	29	50	10	10
Abruzzo		10	3		7	16		4	5	10	3		4	3	5	6	3	3
Molise	5	265	52	60	83	648	28	206	102	244	66	4	68	77	21	245	295	79
Campania		137	22	57	47	369	13	68	45	142	37	3	30	39	2	78	130	30
Apulia		19			1	216	15	72	107	107	31		26					1
Basilicata	3	100	45	3	34	487	27	154	31	195	71	1	61	21	9	79	91	30
Calabria	2	205	5	23	99	125	2	35	85	33	11	6	10	50	6	184	243	69
Sicily		55	1	114	20	6		2	13	2	1		1	1	36	37	7	7
Sardinia		1			1				1						1	2	4	1
North	8	1,135	121	334	223	3,266	139	593	302	828	252	25	165	189	6	624	1,068	169
Center	1	295	57	535	99	905	56	229	171	222	113	3	100	108	6	248	359	86
South	10	773	147	257	292	1,867	85	541	282	733	220	14	200	202	38	629	806	220
Italy	19	2,203	325	1,126	614	6,038	280	1,363	755	1,783	585	42	465	499	50	1,501	2,233	475

(1) Code 5.1 Institutes (Private accredited healthcare facility) in the ministerial classification.

HC: Hyperbaric Chamber, Echo: Echo-Tomography, CT: Computerized Axial Tomography, HD: Hemodialysis machine, ACCA: Automated Clinical Chemistry Analyzer, MON: Monitor, MRT: Magnetic Resonance Tomography, OT: Operating Table, RU: Radiological Unit, LV: Lung Ventilator, PXU: Portable X-ray Unit, LINAC: Linear Accelerator, RCT: Remote Controlled X-ray Table, AIA: Automated Immunoassay Analyzer, CGC: Computerized Gamma Camera, AM: Anesthesia Machine, SL: Shadowless Lamp, ADC: Automated Differential Cell counter.

Source: processing by *Ermeneta*, based on data from the *Ministry of Health*

Table S/12 – Technical and biomedical equipment for diagnosis and treatment in non-accredited private healthcare facilities. Year 2017

Regions	HC	Echo	CT	HD	ACCA	MON	MRI	OT	RU	LV	PXU	LINAC	RCT	AIA	CGC	AM	SI	ADC
Piedmont	-	38	4	-	4	68	3	29	8	10	5	-	5	3	-	31	35	6
Lombardy	-	33	4	1	4	74	4	32	12	29	12	-	5	3	1	34	52	9
A.P. of Bolzano	-	10	3	-	1	45	4	11	11	7	4	-	2	1	-	11	13	2
A.P. of Trento	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Veneto	-	2	-	-	-	5	-	2	1	2	2	-	1	-	-	2	3	1
Friuli V.G.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Liguria	-	5	2	-	-	24	1	10	3	2	5	-	2	1	-	8	11	1
Emilia R.	-	16	2	-	3	40	2	10	5	18	4	-	3	2	-	16	30	1
Tuscany	-	25	3	1	1	31	2	10	3	8	3	1	2	1	-	13	22	2
Umbria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Marche	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lazio	-	143	23	68	25	371	21	113	38	96	40	4	23	26	5	124	175	30
Abruzzo	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Molise	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Campania	-	8	1	-	1	13	-	6	1	5	1	-	1	2	-	6	11	1
Apulia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Basilicata	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calabria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sicily	-	-	-	-	-	2	-	2	-	1	-	-	-	-	-	1	1	-
Sardinia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North	-	104	15	1	12	256	14	94	40	68	32	-	18	10	1	102	144	20
Center	-	168	26	69	26	402	23	123	41	104	43	5	25	27	5	137	197	32
South	-	8	1	-	1	15	-	8	1	6	1	-	1	2	-	7	12	1
Italy	-	280	42	70	39	673	37	225	82	178	76	5	44	39	6	246	353	53

HC: Hyperbaric Chamber; Echo: Echo-Tomography, CT: Computerized Axial Tomography, HD: Hemodialysis machine, ACCA: Automated Clinical Chemistry Analyzer, MON: Monitor, MRT: Magnetic Resonance Tomography, OT: Operating Table, RU: Radiological Unit, LV: Lung Ventilator, PXU: Portable X-ray Unit, LINAC: Linear Accelerator, RCT: Remote Controlled x-ray Table, AIA: Automated Immunoassay Analyzer, CGC: Computerized Gamma Camera, AM: Anesthesia Machine, SI: Shadowless Lamp, ADC: Automated Differential Cell counter.

Source: processing by Ermeneta, based on data from the Ministry of Health

2. Activity data

2.1. In-hospital days and patient bed occupancy rate

The data in Table S/13, now updated to the year 2017 thanks to the availability of Ministerial flows on the activity data referring to that period, confirm the trend towards a gradual but progressive decline in the number of patient beds available in the hospital system, which have gone from almost 199,000 in 2013 to 189,000 in 2017, for a decrease of -5.1%. This decrease seems to have affected the public and assimilated component slightly more (-5.3%), than the accredited component (-4.5%) as shown by the data in Table S/14. Values updated to 2018 on the availability of patient beds are however reported in the Section on facility data (Tab. S/5), which instead refer to the data of the other ministerial source, that of the SDO flows and the relative report.

The tables also show the continuous decrease of in-hospital stay days, which went from almost 56 million in 2013 to 53.6 million in 2017, with an overall decline of -4.1%; a decline at less marked rates than in previous years but which was in any case -4.3% for public facilities, and -3.6% for accredited hospitals. This phenomenon is, for the latter, still largely attributable to regional policies aimed at reducing the budget for accredited hospitals.

Table S/15 shows a comparison of the 2017 in-hospital stay values with the previous year.

The overall average in-hospital stay remains at the level of 8 days and is higher for accredited hospitals (9 days): the result is mainly linked to the focus of these facilities on covering areas such as long-term care and rehabilitation. The data changes when considering acute patient cases: in fact, Table S/16 shows that it is down to 7.3 days for public facilities and Table S/18 shows a number of 5.2 days for accredited hospitals.

The overall patient bed occupancy rate, again displayed in Table S/15, was 77.8% in 2017, a slight increase compared to the 77.3% of the previous year.

If we consider only the acute case admissions, the average length of stay remained substantially unchanged in 2017 for both public facilities (Table S/16) and private facilities (Table S/18). In the same period the utilization rate tends to decrease for accredited hospitals while it grows by almost one point for public facilities (Table S/18).

2.2. Types of admissions and discharges

Updated data can also be obtained for the values of in-hospital stay days and cases treated by processing hospital discharge forms (SDO), for which the most recent consolidated version available is that of 2018.

These calculations, again based again on the CMS 24.0 version of the Medicare DRGs adopted since 2009 (and still in use), provide a very detailed picture of the different service provider components of the National Health Service, making it possible to obtain some complexity and performance indicators, such as those of average weight and the case-mix index. The results are shown both for the totality of the healthcare institutions, and for AIOP-affiliated facilities, for which a more recent 2019 update is available.

Tables S/20 and S/21 offer the ability to observe how, in 2018, for the set of regimes and types of in-hospital stays, almost 8.7 million patients were treated by the hospital system; and of these, 2.2 million (or 26.5%) were discharged from all the accredited hospitals. It should be pointed out that, with reference to the SDO data flows and in contrast to its other publications, since 2009 the Ministry of Health has incorporated so-called private obligatorily affiliated institutions (otherwise known as ‘publicly assimilated’ institutions), such as private polyclinics, private research hospitals (IRCCS), private foundations, religiously affiliated hospitals, USL facilities and research facilities, into the column of private data in Table S/20 creating a new ‘expanded private’ sector which in 2018 accounted for almost 28.2% of the overall supply of in-hospital stay days. The “private” item in this table, on the other hand, also contains a residual portion pertaining to the non-accredited private sector shown in the two tables that follow.

The number of in-hospital days for inpatient admissions breaks down to 38 million for public facilities and 15.3 million for the ‘expanded private’ facilities, whereas the volume of day hospital admissions is 3.8 million and 1.1 million, respectively.

The total data in Table S/20 also includes discharges (nearly 340,000) and in-hospital days (more than 1 million) related to DRG 391 (normal newborns) that the Ministry of Health does not report in subsequent tables by type of institution.

The number of discharged patients and in-hospital days given by type of institution, type of activity and admissions shows a greater proportional contribution by accredited hospitals relating to rehabilitation (76.3% inpatient admissions) and long-stay care (52.8% of in-hospital days) (see Tables S/21 and S/22).

2.3. Prevalent DRGs

The calculations on the Ministerial data flows from the hospital discharge sheets provided in the 2018 SDO Report allow us to quantify the activity of the entire hospital sector without disaggregations between the public and private components of the NHS (Table S/23), whereas for the data relating to AIOP area services, the data collecting resources of its regional offices and affiliated facilities make it possible to anticipate the 2019 results (Table S/24).

The two tables mentioned display the top 60 DRGs as they relate to number of discharges for inpatient admissions for acute cases for all hospitals and AIOP accredited hospitals, respectively. A North, Central, and South territorial breakdown is also provided for the latter (Tables S/25, S/26 and S/27).

Table S/28 illustrates in-hospital stay activity for acute patients receiving day hospital treatment in public and private healthcare institutions, with reference to the 30 most frequent DRGs. Tables S/29 and S/30 show the DRG classifications of patients who made use of rehabilitation treatment in public and private hospitals as a whole (2018) and, more specifically, in AIOP accredited hospitals (2019).

At the combined public-private level, the most common DRG is still childbirth with 269,831 discharges in 2018 (compared to 301,440 units in 2013) amounting to 4.4% of cases (Table S/23).

On the other hand, in AIOP accredited hospitals even during 2019, first place was occupied by major joint replacements or lower extremity replantation (59,330 cases, accounting for 9.2% of the sector total).

For the comparison of complexity indicators (average weight and case-mix index) for public institutions and accredited hospitals, please refer to the specific section of Part One of the Report.

2.4. Activities classified according to major diagnostic categories

Tables S/31 to S/35 contain a more aggregated classification of the same data relating to the analysis of hospital discharge records contained in the tables above, displayed in terms of the so-called Major Diagnostic Categories (MDC) of DRGs, as reported in the hospital discharge records (SDO) of the Ministry of Health.

In inpatient admissions for acute cases, once again illnesses and disorders of the cardiovascular system stand out with 875,574 cases in 2018, compared to 966,194 cases recorded in 2013, and for illnesses and disorders of the musculoskeletal system and connective tissue, with 808,633 cases in 2018 (compared to 832,369 in 2013), as shown by the data in Table S/31.

The greatest average hospital stay (well above the 7 days general total) is that for Pre MDC (36.4 days), HIV infections (16.8 days), multiple major trauma (14.4 days), burns (14 days), again as shown in Table S/31.

Day hospital activities for acute cases once again display illnesses and disorders of the musculoskeletal system and connective tissue (230,050 cases) (Table S/32).

Rehabilitation activities for inpatient admissions were greatest among illnesses and disorders of the musculoskeletal system and connective tissue (with 145,537 cases), followed by illnesses and disorders of the nervous system (with 69,656 cases) and illnesses and disorders of the cardiovascular system (with 45,748 cases), as shown in Table S/33.

Day hospital admissions for rehabilitation (Table S/34) show a greater concentration for the same diagnostic categories than inpatient admissions, although in a different order: in first place are illnesses and disorders of the nervous system (10,686 cases), second place are illnesses and disorders of the musculoskeletal system and connective tissue (5,532 cases), and finally the cases that fall within the MDC Factors influencing health status and use of health services (4,223 cases).

2.5. Activities classified according to specialty

In terms of classification by clinical discipline (or discharge ward), which constitutes a further interesting method of analyzing the activity data of hospital facilities, usually shown in Tables S/36 to S/60, a Ministerial update was finally made available which brought the reference year of these flows to 2017.

All of the information and related indicators keep providing a kind of real database to be used for information and/or further analysis, since we compare the results of the activities of the accredited hospitals as a whole to those specifically registered with AIOP both at the national level (Table S/36) and at the level of the individual Regions (Tables S/37 to S/57).

The data are then re-aggregated and divided for large areas of the country (Tables S/58, S/59 and S/60).

2.6. Patient mobility

The section of the Report dedicated to activity data is, as usual, rounded out by the issue of healthcare mobility; a perspective that offers an analysis of the topic by referring to aspects more properly connected with the characteristics of the demand for hospital admissions expressed by citizens, based on their perception of the quality of care offered by the various Regional Health Services. Thus, an alternative interpretation of the hospital production data depicted in the previous sections is rendered possible, by observing the dynamics of the inter-regional flows of patients, elaborated starting from the data contained in the Ministerial matrices on hospital mobility.

The analysis of inter-regional healthcare mobility, in addition to playing a key role as a tool for regional planning, helps us to assess, among other things, the propensity of citizens to make use of the principle of free choice that should be guaranteed by our system.

Table S/61 gives us a picture of the temporal evolution of this propensity, expressing it in terms of synthetic indices of attraction and flight over the last five years available, all completed by a final column showing the most recent net balance of the flow of acute patients entering and leaving their respective territorial areas.

The data extracted from the inter-regional mobility matrices of the SDO Report, referred to while there are as yet still no updates to 2018, confirm the historical attractiveness of Regions such as Lombardy, constantly at the top of this ranking with active balances of almost 75,000 units for the area of acute cases alone, Emilia Romagna, Tuscany, Veneto, Umbria and Friuli Venezia Giulia. Also appearing to be confirmed is the marked tendency to receive hospital care from other regional systems, evidently considered more reliable and more accessible, shown over time by the people of Campania, Calabria, Sicily, Apulia, Liguria, Abruzzo, Sardinia, Lazio, and Marche.

Considering the mobility flow data for all regimes and types of hospitalization as a whole, there were more than 726,000 patients, who, in 2018,

chose to go to other regional systems, with an active balance for Lombardy that in this case exceeds 100,000 units.

The phenomenon of mobility, as has often been pointed out, continues to be a sensitive topic in the debate on the reorganization of the hospital network performances, as is that of the freedom to choose the place for treatment. All of this increasingly motivates most Regions to sign agreements with the health systems of neighboring areas (but not only) in order to bring the flows of patients under control. The State-Regions Conference addressed this issue and intervened decisively to change the behavior of the most attractive Regions, cutting funding by 50% relative to the increases in flows reported for the accredited sector in the two-year period 2014-2015, and 60% for those observed in 2016, safeguarding only highly-specialized services. On this delicate matter, also due to the economic balances of many of the privately-operated agencies of the NHS, the AIOP regional Presidents were once again this year requested to address the orientation of the citizens and to evaluate their effects on the incoming mobility flows.

Table S/13 – Patient beds, in-hospital days, and occupancy rate – Inpatient admissions

	2013		2014		2015		2016		2017		
	Patient beds	In-hospital days	O.R. %	Patient beds	In-hospital days	O.R. %	Patient beds	In-hospital days	O.R. %	Patient beds	In-hospital days
Public Hospitals	156,762	45,685,829	79.8	155,927	45,034,198	79.1	152,434	44,770,385	80.5	151,037	44,117,257
Accredited Hospitals ¹	42,142	10,202,409	66.3	41,164	10,221,435	68.0	40,249	10,198,993	69.4	40,517	9,955,185
Total	198,904	55,888,238		197,091	55,255,633		192,683	54,969,378		191,554	54,072,442
	%	%	%	%	%	%	%	%	%	%	%
Public Hospitals	78.8	81.7	79.71	81.5	79.1	81.4	78.8	81.6	78.7	81.6	81.6
Accredited Hospitals ¹	21.2	18.3	20.9	18.5	20.9	18.6	21.2	18.4	21.3	18.4	18.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(1) Code 5.1 institutes (Accredited private healthcare facilities) in the ministerial classification.
Source: processing by Ermeneta of data contained in the Report “Attività gestionali ed economiche delle Usl e Aziende Ospedaliere”, Ministry of Health, Years 2013, 2014, 2015, 2016 and 2017

Table S/14 – Annual increase of activity, patient beds, and in-hospital days

	2014/2013		2015/2014		2016/2015		2017/2016		2017/2013	
	Patient beds	In-hospital days	Patient beds	In-hospital days	Patient beds	In-hospital days	Patient beds	In-hospital days	Patient beds	In-hospital days
- Public hospitals	-0.5	-1.4	-2.2	-0.6	-0.9	-1.5	-1.7	-0.9	-5.3	-4.3
- Accredited hospitals ¹	-2.3	0.2	-2.2	-0.2	0.7	-2.4	-0.6	-1.2	-4.5	-3.6
Total	-0.9	-1.1	-2.2	-0.5	-0.6	-1.6	-1.5	-0.9	-5.1	-4.1

(1) Code 5.1 institutes (Accredited private healthcare facilities) in the ministerial classification.
Source: processing by Ermeneta of data contained in the Report “Attività gestionali ed economiche delle Usl e Aziende Ospedaliere”, Ministry of Health, Years 2013, 2014, 2015, 2016 and 2017

Table S/15 – Public and accredited hospitals – Activity data for inpatient admissions. Year 2017

Type of institution	2017			2016		
	Patient beds	Discharged pts	Days	Average length of stay	Occupancy rate %	Occupancy rate %
- Total public and assimilated hospitals	148,487	5,535,546	43,735,099	7.9	80.7	80.0
- Accredited hospitals ¹	40,261	1,069,707	9,835,873	9.2	66.9	67.3
Total public and accredited institutions	188,748	6,605,253	53,570,972	8.1	77.8	77.3

(1) Code 5.1 institutes (Accredited private healthcare facilities) in the ministerial classification.
Source: processing by Ermeneta, based on data from the Ministry of Health

Table S/16 – Activities of acute hospital-stay (*) in public hospital facilities, by region. Year 2017 and comparison with the year 2013

Regions	Patient beds actually used	Admissions	Days spent in hospital	2017			2013		
				Average length of stay	Occupancy rate (%)	Hospitalization rate (per 1,000 inhab.)	Average length of stay	Occupancy rate (%)	Hospitalization rate (per 1,000 inhab.)
- Piedmont	10,263	360,822	2,815,120	7.8	75.2	82.1	7.6	74.5	87.6
- Aosta Valley	369	13,100	98,217	7.5	72.9	103.2	7.7	72.4	115.4
- Lombardy	23,079	900,302	6,671,435	7.4	79.2	89.9	7.1	79.3	98.3
- A.P. of Bolzano	1,526	59,411	413,625	7.0	74.3	113.3	6.8	73.1	125.2
- A.P. of Trento	1,259	50,360	363,952	7.2	79.2	93.5	7.7	76.0	89.2
- Veneto	12,138	467,185	3,573,978	7.7	80.7	95.2	8.1	76.0	91.8
- Friuli V.G.	3,252	128,636	911,271	7.1	76.8	105.6	7.4	72.8	106.7
- Liguria	4,267	166,517	1,283,105	7.7	82.4	106.4	7.9	83.3	108.0
- Emilia R.	10,954	471,233	3,254,389	6.9	81.4	105.9	6.6	75.2	107.7
- Tuscany	8,866	366,180	2,448,466	6.7	75.7	97.8	6.5	74.2	104.1
- Umbria	2,157	97,626	672,709	6.9	85.4	109.8	6.4	81.5	123.6
- Marche	3,752	141,165	1,069,040	7.6	78.1	91.8	7.4	77.7	96.6
- Lazio	12,434	452,016	3,468,059	7.7	76.4	76.6	7.5	82.7	94.8
- Abruzzo	2,767	113,787	827,679	7.3	82.0	86.1	7.3	81.3	94.1
- Molise	789	32,548	233,525	7.2	81.1	104.8	7.1	87.4	118.0
- Campania	9,141	384,594	2,693,095	7.0	80.7	65.9	6.7	80.6	75.2
- Apulia	8,452	365,441	2,551,958	7.0	82.7	89.9	6.7	84.3	102.2
- Basilicata	1,395	55,043	371,521	6.7	73.0	96.5	6.9	74.3	96.9
- Calabria	3,045	125,658	882,597	7.0	79.4	63.9	6.8	80.7	69.0
- Sicily	9,290	358,041	2,731,357	7.6	80.6	70.8	6.9	79.4	81.0
- Sardinia	4,063	151,201	1,084,004	7.2	73.1	91.5	6.9	67.7	99.5
- North	67,107	2,617,566	19,385,092	7.4	79.1	94.4	7.3	77.0	98.3
- Center	27,209	1,056,987	7,658,274	7.2	77.1	87.6	7.1	79.2	100.1
- South	38,942	1,586,313	11,375,736	7.2	80.0	76.3	6.8	79.7	85.7
- Italy	133,258	5,260,866	38,419,102	7.3	79.0	86.8	7.1	78.2	94.3

(*) The following specialities are excluded: 22 – Residual mental health facilities; 28 – Spinal care unit; 56 – Functional recovery and rehabilitation; 60 – Long-stay care pts; 75 – Neurological rehabilitation.

Note: latest Ministry data available at the date of publication of the Report.

Source: data from the Ministry of Health

Table S/17 – Activities of non-acute hospital stay (*) in public hospital facilities, by region. Year 2017 and comparison with the year 2013

Regions	Patient beds actually used	Admissions	Days spent in hospital	2017			2013		
				Average length of stay	Occupancy rate (%)	Occupancy rate (%)	Average length of stay	Occupancy rate (%)	
– Piedmont	1,879	20,598	579,383	28.1	84.5	28.3	83.9		
– Aosta Valley	30	406	9,979	24.6	91.1	24.8	42.7		
– Lombardy	3,869	52,628	1,284,916	24.4	91.0	24.4	91.4		
– A.P. of Bolzano	114	1,743	31,992	18.4	76.9	19.0	70.2		
– A.P. of Trento	114	1,234	36,573	29.6	87.9	30.0	102.2		
– Veneto	1,873	23,159	588,357	25.4	86.1	25.4	85.2		
– Friuli V.G.	251	3,469	100,628	29.0	109.8	26.7	100.9		
– Liguria	722	11,308	224,369	19.8	85.1	19.5	85.8		
– Emilia Romagna	1,634	22,577	499,332	22.1	83.7	32.4	121.4		
– Tuscany	517	6,260	155,069	24.8	82.2	23.5	83.3		
– Umbria	311	5,097	109,631	21.5	96.6	25.6	94.4		
– Marche	276	3,997	82,068	20.5	81.5	18.7	76.9		
– Lazio	1,383	10,996	383,162	34.8	75.9	35.9	93.9		
– Abruzzo	246	4,324	75,217	17.4	83.8	16.9	62.7		
– Molise	126	1,049	30,461	29.0	66.2	29.2	81.0		
– Campania	443	5,067	134,067	26.5	82.9	29.1	87.7		
– Apulia	651	7,599	199,354	26.2	83.9	24.9	80.4		
– Basilicata	274	2,309	74,742	32.4	74.7	28.6	74.1		
– Calabria	137	1,407	24,939	17.7	49.9	15.7	80.8		
– Sicily	1,030	8,014	312,871	39.0	83.2	36.3	71.7		
– Sardinia	109	1,046	36,076	34.5	90.7	37.1	82.9		
– North	10,486	137,122	3,355,529	24.5	87.7	26.3	93.6		
– Center	2,487	26,350	729,930	27.7	80.4	27.5	88.5		
– South	3,016	30,815	887,727	28.8	80.6	27.8	76.6		
– Italy	15,989	194,287	4,973,186	25.6	85.2	26.7	89.9		

(*) The following specialties are included: 22 – Residual mental health facilities, 28: Spinal care unit, 56 – Functional recovery and rehabilitation, 60 – Long-stay care pts, 75 – Neurological rehabilitation.

Note: latest Ministry data available at the date of publication of the Report.

Source: data from the Ministry of Health

Table S/18 – Activities of acute hospital-stay (*) in accredited hospitals¹, by region, Year 2017 and comparison with the year 2013

Regions	2017			2013					
	Patient beds actually used	Admissions	Days spent in hospital	Average length of stay	Occupancy rate (%)	Hospitalization rate (per 1,000 inhab.)	Average length of stay	Occupancy rate (%)	Hospitalization rate (per 1,000 inhab.)
– Piedmont	573	23,817	104,329	4.4	49.9	5.4	3.9	41.4	8.3
– Aosta Valley	10	763	1,866	2.4	51.1	6.0	1.7	36.3	6.0
– Lombardy	4,162	195,070	917,069	4.7	60.4	19.5	4.7	59.4	21.0
– A.P. of Bolzano	22	662	7,406	11.2	92.2	1.3	10.3	67.7	1.5
– A.P. of Trento	120	2,838	20,999	7.4	47.9	5.3	6.6	49.2	5.3
– Veneto	906	25,708	232,835	9.1	70.4	5.2	11.3	75.5	3.7
– Friuli V.G.	284	8,537	42,490	5.0	41.0	7.0	5.3	33.0	6.2
– Liguria	60	2,247	12,960	5.8	59.2	1.4	5.4	42.8	1.1
– Emilia R.	2,053	92,946	451,888	4.9	60.3	20.9	5.7	53.1	20.5
– Tuscany	806	30,655	146,988	4.8	50.0	8.2	5.1	48.3	9.0
– Umbria	176	6,296	18,247	2.9	28.4	7.1	2.9	26.8	6.8
– Marche	360	15,216	74,909	4.9	57.0	9.9	4.7	52.4	11.8
– Lazio	2,336	66,920	384,885	5.8	45.1	11.3	6.4	54.9	13.8
– Abruzzo	494	21,425	115,308	5.4	63.9	16.2	5.7	64.1	17.2
– Molise	80	2,124	11,865	5.6	40.6	6.8	5.5	50.4	8.5
– Campania	4,069	160,456	949,868	5.9	64.0	27.5	5.6	63.8	30.8
– Apulia	1,561	66,944	311,015	4.6	54.6	16.5	4.5	62.7	19.8
– Basilicata	–	–	–	–	–	0.0	3.4	31.0	2.8
– Calabria	885	25,945	123,179	4.7	38.1	13.2	4.8	52.3	18.1
– Sicily	2,691	75,716	399,573	5.3	40.7	15.0	5.6	48.9	18.5
– Sardinia	683	18,156	79,149	4.4	31.7	11.0	5.0	38.1	13.2
– North	8,190	352,588	1,791,842	5.1	59.9	12.7	5.2	56.0	13.3
– Center	3,678	119,087	625,029	5.2	46.6	9.9	5.7	51.8	11.5
– South	10,463	370,766	1,989,957	5.4	52.1	17.8	5.3	56.8	21.1
– Italy	22,331	842,441	4,406,828	5.2	54.1	13.9	5.4	55.7	15.6

(*) The following specialities are excluded: 22 – Residual mental health facilities, 28 – Spinal care unit, 56 – Functional recovery and rehabilitation, 60 – Long-stay care pts, 75 – Neurological rehabilitation.

(1) Code 5.1. Institutes (Private accredited healthcare facility) in the ministerial classification.

Note: latest Ministry data available at the date of publication of the Report.

Source: data from the Ministry of Health

Table S/19 – Activities of non-acute hospital stay (*) in accredited hospitals¹, by region, Year 2017 and comparison with the year 2013

Regions	Patient beds actually used	Admissions	Days spent in hospital	2017		2013	
				Average length of stay	Occupancy rate (%)	Average length of stay	Occupancy rate (%)
- Piedmont	2,241	17,675	522,313	29.6	63.9	29.9	73.0
- Aosta Valley	61	815	14,389	17.7	64.6	20.1	66.2
- Lombardy	3,218	49,061	1,120,566	22.8	95.4	23.5	92.8
- A.P. of Bolzano	255	4,221	90,572	21.5	97.3	24.5	104.8
- A.P. of Trento	418	7,184	154,841	21.6	101.5	22.2	107.1
- Veneto	626	9,724	197,669	20.3	86.5	22.4	84.4
- Friuli V.G.	104	1,511	29,545	19.6	77.8	21.7	55.4
- Liguria	207	2,872	54,639	19.0	72.3	11.0	70.2
- Emilia Romagna	1,610	28,007	539,851	19.3	91.9	22.0	96.0
- Tuscany	572	7,855	167,190	21.3	80.1	25.2	83.8
- Umbria	51	813	11,114	13.7	59.7	12.1	51.1
- Marche	451	4,961	145,978	29.4	88.7	31.2	86.4
- Lazio	2,393	28,046	788,108	28.1	90.2	29.7	90.0
- Abruzzo	414	5,367	127,504	23.8	84.4	25.3	85.2
- Molise	60	617	15,057	24.4	68.8	24.4	53.4
- Campania	1,387	11,818	377,663	32.0	74.6	35.5	69.5
- Apulia	642	8,269	191,966	23.2	81.9	23.2	81.0
- Basilicata	40	106	3,072	29.0	21.0	34.4	87.2
- Calabria	831	8,671	229,112	26.4	75.5	26.8	64.6
- Sicily	862	12,216	264,260	21.6	84.0	21.9	87.0
- Sardinia	229	3,382	60,147	17.8	72.0	19.5	73.7
- North	8,740	121,070	2,724,385	22.5	85.4	23.9	87.8
- Center	3,467	41,675	1,112,390	26.7	87.9	28.7	87.9
- South	4,465	50,446	1,268,781	25.2	77.9	26.2	75.4
- Italy	16,672	213,191	5,105,556	23.9	83.9	25.2	84.4

(*) The following specialities are included: 22 – Residual mental health facilities, 28 – Spinal care unit, 56 – Functional recovery and rehabilitation, 60 – Long-stay care plus, 75 – Neurological rehabilitation.

(1) Code 5.1. Institutes (Private accredited healthcare facility) in the ministerial classification.

Note: latest Ministry data available at the date of publication of the Report.

Source: data from the Ministry of Health

Table S/20 – Hospital Discharge Records (SDO): recorded activity, national grand total, and totals for public and private institutions – Discharged pts and in-hospital days, Year 2018

	Number of cases			Number of days		
	Public	Private	Total	Public	Private	Total
– Inpatient admissions for acute cases	4,678,113	1,461,473	6,139,586	34,942,143	7,996,252	42,938,395
– Day hospital for acute cases	1,265,910	495,948	1,761,858	3,667,578	856,173	4,523,751
– Rehabilitation for inpatient admissions	73,892	238,435	312,327	1,952,813	6,211,465	8,164,278
– Rehabilitation – Day hospital	11,404	16,852	28,256	142,997	287,961	430,958
– Long-term care	50,665	46,594	97,259	1,101,444	1,255,561	2,357,005
– Normal newborns ⁽¹⁾	264,393	69,670	334,063	797,157	207,662	1,004,819
Total	6,344,377	2,328,972	8,673,349	42,604,132	16,815,074	59,419,206

Public institutions: Hospital Centers, University Hospital Centers and Public Polyclinics, Public I.R.C.C.S. and Public Foundations, Directly Managed Hospitals,
Private institutions: Private Polyclinics, Private I.R.C.C.S. and Private Foundations, Classified Hospitals, USL Facilities, Research Facilities, Accredited Hospitals², and Non-accredited Private Healthcare Facilities.

The item “Long-stay care” includes discharged pts from inpatient admissions and day-hospital.

(1) Classified in the DRG 391.

(2) Code 5.1 Institutes (Private accredited healthcare facility) in the ministerial classification.

Source: data from the Ministry of Health – SDO 2018

Table S/21 – Distribution of discharged pts classified according to type of institution, activity, and admissions⁽¹⁾, Year 2018

Type of institution	Acute cases						Rehabilitation					
	Inpatient admissions		Day hospital		%		Inpatient admissions		Day hospital		%	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
– Public institutions	4,678,113	76.2	1,265,910	71.9	73,892	23.7	11,404	40.4	50,665	52.1	46,243	47.5
– Accredited hospitals (as a whole)	1,401,753	22.8	488,836	27.7	238,303	76.3	16,852	59.6	351	0.4	97,259	100.0
– Non-accr. Private Healthcare Facilities	59,720	1.0	7,112	0.4	132	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	6,139,586	100.0	1,761,858	100.0	312,327	100.0	28,256	100.0	97,259	100.0	97,259	100.0

(1) Data for healthy infants is not included.

Source: data from the Ministry of Health – SDO 2018

Table S/22 – Distribution of in-hospital days classified according to type of institution, activity, and admissions⁽¹⁾, Year 2018

Type of institution	Acute cases						Rehabilitation					
	Inpatient admissions		Day hospital		%		Inpatient admissions		Day hospital		%	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
– Public institutions	34,942,143	81.4	3,667,578	81.1	1,952,813	23.9	142,997	33.2	1,101,444	46.7	1,244,794	52.8
– Accredited hospitals (as a whole)	7,806,066	18.2	848,594	18.7	6,208,319	76.1	287,961	66.8	10,767	0.5	10,767	0.5
– Non-accr. Private Healthcare Facilities	190,186	0.4	7,579	0.2	3,146	0.0	-	0.0	0.0	0.0	0.0	0.0
Total	42,938,395	100.0	4,523,751	100.0	8,164,278	100.0	430,958	100.0	2,357,005	100.0	2,357,005	100.0

(1) Data for healthy infants is not included.

Source: data from the Ministry of Health – SDO 2018

Table S/23 – Total number of public and private healthcare institutions: top 60 DRGs according to the number of discharges (DRG Version 24.0) – Inpatient admissions for acute cases. Year 2018

Rank	DRG	Number	Discharges %	% cumul.	% in-hospital days	Average length of stay
1	373 Vaginal Delivery W/O Complicating Diagnoses	269,831	4.4	4.4	2.2	3.5
2	544 Major Joint Replacement or Reattachment of Lower Extremity	180,215	2.9	7.3	3.4	8.2
3	127 Heart Failure & Shock	167,047	2.7	10.0	3.6	9.3
4	087 Pulmonary Edema & Respiratory Failure	165,911	2.7	12.7	3.9	10.1
5	371 Cesarean Section W/O Cc	131,950	2.1	14.9	1.4	4.6
6	359 Uterine & Adnexa Proc For Non-Malignancy W/O Cc	95,365	1.6	16.4	0.8	3.4
7	014 Intracranial Hemorrhage Or Cerebral Infarction	88,747	1.4	17.9	2.1	10.3
8	089 Simple Pneumonia & Pleurisy Age >17 W/ Cc	86,215	1.4	19.3	2.2	11.1
9	494 Laparoscopic Cholecystectomy W/O C.D.I.E. W/O Cc	80,682	1.3	20.6	0.6	3.2
10	576 Septicemia W/O Mv 96+ Hours Age >17	78,508	1.3	21.9	2.4	13.3
11	430 Psychoses	77,351	1.3	23.1	2.4	13.3
12	316 Renal failure	75,425	1.2	24.3	1.7	9.8
13	311 Transurethral Procedures W/O Cc	73,182	1.2	25.5	0.6	3.2
14	125 Circulatory Disorders Except Ami, W Card Cath W/O Complex Diag	66,610	1.1	26.6	0.5	3.3
15	557 Percutaneous Cardiovascular Proc W Drug-Eluting Stent W Major Cv Dx	61,982	1.0	27.6	1.1	7.4
16	219 Lower Extrem & Humerus Proc Except Hip, Foot, Femur Age >17 W/O Cc	52,002	0.8	28.5	0.8	6.5
17	558 Percutaneous Cardiovascular Proc W Drug-Eluting Stent W/O Maj Cv Dx	50,942	0.8	29.3	0.5	4.1
18	390 Neonate W Other Significant Problems	48,004	0.8	30.1	0.4	4.0
19	183 Esophagitis, Gastroent & Misc Digest Disorders Age >17 W/O Cc	47,309	0.8	30.8	0.6	5.3
20	162 Inguinal & Femoral Hernia Procedures Age >17 W/O Cc	46,045	0.7	31.6	0.2	1.7
21	225 Foot Procedures	45,305	0.7	32.3	0.2	2.0
22	503 Knee Procedures W/O Pdx Of Infection	44,720	0.7	33.1	0.2	1.8
23	467 Other Factors Influencing Health Status	43,260	0.7	33.8	0.3	3.0
24	224 Shoulder, Elbow Or Forearm Proc, Except Major Joint Proc, W/O Cc	42,958	0.7	34.5	0.3	2.8
25	211 Hip & Femur Procedures Except Major Joint Age >17 W/O Cc	40,065	0.7	35.1	1.0	10.3
26	203 Malignancy Of Hepatobiliary System Or Pancreas	39,812	0.6	35.8	0.9	9.7
27	082 Respiratory Neoplasms	39,411	0.6	36.4	1.0	10.4
28	410 Chemotherapy W/O Acute Leukemia As Secondary Diagnosis	39,386	0.6	37.0	0.5	5.0
29	552 Other Permanent Cardiac Pacemaker Implant W/O Major Cv Dx	37,617	0.6	37.6	0.4	5.0
30	395 Red Blood Cell Disorders Age >17	37,400	0.6	38.3	0.7	8.5

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(Continued) Table S/23 – Total number of public and private healthcare institutions: top 60 DRGs according to the number of discharges (DRG Version 24.0) – Inpatient admissions for acute cases, Year 2018

Rank	DRG	Discharges		% in-hospital days	Average length of stay
		Number	% cumul.		
31	518 Perc Cardio Proc W/O Coronary Artery Stent Or Ami	36,062	38.8	0.3	3.3
32	149 Major Small & Large Bowel Procedures W/O Cc	35,386	39.4	0.8	9.6
33	337 Transurethral Prostatectomy W/O Cc	34,372	40.0	0.3	4.1
34	090 Simple Pneumonia & Pleurisy Age >17 W/O Cc	34,112	40.5	0.7	8.5
35	158 Anal & Stomal Procedures W/O Cc	33,106	41.1	0.2	2.0
36	124 Circulatory Disorders Except Ami, W Card Cath & Complex Diag	32,539	41.6	0.5	7.0
37	290 Thyroid Procedures	32,424	42.1	0.2	3.0
38	055 Miscellaneous Ear, Nose, Mouth & Throat Procedures	32,269	42.6	0.1	1.9
39	210 Hip & Femur Procedures Except Major Joint Age >17 W Cc	31,943	43.2	1.0	13.2
40	524 Transient Ischemia	31,516	43.7	0.5	6.9
41	260 Subtotal Mastectomy For Malignancy W/O Cc	30,962	44.2	0.2	2.1
42	500 Back & Neck Procedures Except Spinal Fusion W/O Cc	30,348	44.7	0.3	4.0
43	208 Disorders Of The Biliary Tract W/O Cc	30,087	45.2	0.5	6.6
44	088 Chronic Obstructive Pulmonary Disease	29,645	45.6	0.6	8.6
45	012 Degenerative Nervous System Disorders	29,600	46.1	0.6	8.5
46	381 Abortion W D&C, Aspiration Curettage Or Hysterotomy	28,066	46.6	0.1	1.7
47	174 G.I. Hemorrhage w CC	27,041	47.0	0.6	9.3
48	139 Cardiac Arrhythmia & Conduction Disorders W/O Cc	26,125	47.4	0.2	3.8
49	479 Other Vascular Procedures W/O Cc	25,499	47.9	0.3	4.7
50	288 O.R. Procedures For Obesity	25,424	48.3	0.2	3.9
51	389 Full Term Neonate W Major Problems	25,199	48.7	0.4	6.9
52	098 Bronchitis & Asthma Age 0-17	24,931	49.1	0.3	4.5
53	207 Disorders Of The Biliary Tract W Cc	24,915	49.5	0.6	10.2
54	204 Disorders Of Pancreas Except Malignancy	24,880	49.9	0.5	9.2
55	296 Nutritional & Misc Metabolic Disorders Age >17 W Cc	24,180	50.3	0.5	8.7
56	379 Threatened Abortion	24,162	50.7	0.3	4.7
57	160 Hernia Procedures Except Inguinal & Femoral Age >17 W/O Cc	24,111	51.1	0.2	3.1
58	234 Other Musculosket Sys & Conn Tiss O.R. Proc W/O Cc	24,059	51.5	0.2	3.9
59	202 Cirrhosis & Alcoholic Hepatitis	24,042	51.9	0.6	10.2
60	227 Soft Tissue Procedures W/O Cc	23,985	52.2	0.1	2.6
	Total (top 60 DRGs)	3,214,247	52.2	48.5	
	Grand Total	6,151,722	100.0	100.0	7.0

Source: data from the Ministry of Health – SDO 2018

Table S24 – AIOF accredited hospitals: top 60 DRGs according to the number of discharges (DRG Version 24.0) – Inpatient admissions for acute cases, Year 2019

Rank	DRG	Discharges		% cumul.	% in-hospital days	Average length of stay	In-hospital days
		Number	%				
1	544	59,330	9.2	9.2	10.6	6.0	354,106
2	468	15,746	2.5	11.7	3.0	6.3	99,955
3	225	15,719	2.5	14.2	0.6	1.2	18,533
4	373	15,409	2.4	16.6	1.6	3.4	52,585
5	127	12,960	2.0	18.6	3.4	8.8	114,185
6	371	12,369	1.9	20.5	1.5	4.0	49,760
7	359	12,194	1.9	22.4	1.0	2.8	34,572
8	503	11,297	1.8	24.2	0.5	1.5	17,048
9	125	10,204	1.6	25.8	0.7	2.2	22,158
10	288	10,103	1.6	27.3	1.0	3.3	33,352
11	224	9,189	1.4	28.8	0.5	1.7	15,315
12	494	8,799	1.4	30.1	0.7	2.6	23,035
13	245	8,400	1.3	31.4	1.5	5.9	49,756
14	311	8,212	1.3	32.7	0.6	2.6	21,082
15	558	7,787	1.2	33.9	0.7	3.0	23,235
16	518	7,364	1.1	35.1	0.6	2.6	19,430
17	498	6,765	1.1	36.1	0.9	4.5	30,473
18	087	6,745	1.1	37.2	1.9	9.2	62,205
19	477	6,112	1.0	38.1	1.0	5.4	32,753
20	243	6,062	0.9	39.1	0.9	5.1	31,169
21	223	5,848	0.9	40.0	0.2	1.4	8,133
22	337	5,823	0.9	40.9	0.6	3.4	19,659
23	430	5,545	0.9	41.8	2.2	13.3	73,674
24	012	5,317	0.8	42.6	1.2	7.4	39,393
25	479	5,053	0.8	43.4	0.5	3.1	15,888
26	500	5,041	0.8	44.2	0.5	3.2	16,350
27	104	4,934	0.8	44.9	1.7	11.6	57,248
28	467	4,473	0.7	45.6	0.5	3.7	16,355
29	234	4,429	0.7	46.3	0.3	2.5	10,991
30	297	4,396	0.7	47.0	0.6	4.7	20,562

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(Continued) Table S/24 – AIOP accredited hospitals: top 60 DRGs according to the number of discharges (DRG Version 24.0) – Inpatient admissions for acute cases, Year 2019

Rank	DRG	Discharges		% in-hospital days	Average length of stay	In-hospital days
		Number	% cumul.			
31	139 Cardiac Arrhythmia & Conduction Disorders W/O Cc	4,391	0.7	47.7	3.0	13,046
32	089 Simple Pneumonia & Pleurisy Age >17 W Cc	4,336	0.7	48.4	1.4	47,270
33	120 Other Circulatory System O.R. Procedures	4,285	0.7	49.0	0.6	21,784
34	232 Arthroscopy	4,095	0.6	49.7	0.1	4,528
35	162 Inguinal & Femoral Hernia Procedures Age >17 W/O Cc	4,026	0.6	50.3	1.5	5,841
36	158 Anal & Stomal Procedures W/O Cc	4,011	0.6	50.9	0.2	6,832
37	545 Revision Of Hip Or Knee Replacement	3,851	0.6	51.5	0.9	30,118
38	461 O.R. Proc W Diagnoses of Other Contact W Health Services	3,655	0.6	52.1	3.1	11,170
39	316 Renal failure	3,476	0.5	52.6	0.8	27,646
40	227 Soft Tissue Procedures W/O Cc	3,422	0.5	53.2	0.2	5,423
41	491 Major Joint & Limb Reattachment Procedures Of Upper Extremity	3,382	0.5	53.7	4.0	13,587
42	552 Other Permanent Cardiac Pacemaker Implant W/O Major Cv Dx	3,288	0.5	54.2	0.4	12,552
43	133 Atherosclerosis W/O Cc	3,165	0.5	54.7	0.4	14,275
44	183 Esophagitis, Gastroent & Misc Digest Disorders Age >17 W/O Cc	3,126	0.5	55.2	0.5	16,998
45	014 Intracranial Hemorrhage Or Cerebral Infarction	3,083	0.5	55.7	0.8	28,425
46	219 Lower Extrem & Humerus Proc Except Hip, Foot, Femur Age >17 W/O Cc	2,881	0.4	56.1	0.3	11,433
47	090 Simple Pneumonia & Pleurisy Age >17 W/O Cc	2,683	0.4	56.5	0.7	23,428
48	538 Local Excis & Remove of Int Fix Dev Except Hip & Femur W/O Cc	2,664	0.4	57.0	0.2	5,342
49	136 Cardiac Congenital & Valvular Disorders Age >17 W/O Cc	2,586	0.4	57.4	0.6	21,092
50	055 Miscellaneous Ear, Nose, Mouth & Throat Procedures	2,554	0.4	57.8	0.1	3,566
51	053 Sinus & Mastoid Procedures Age >17	2,547	0.4	58.2	0.1	4,620
52	335 Major Male Pelvic Procedures W/O Cc	2,475	0.4	58.5	0.5	15,312
53	408 Myeloprolif Disord Or Poor Diff Neopl W/Other O.R. Proc	2,472	0.4	58.9	0.3	9,242
54	557 Percutaneous Cardiovascular Proc W Drug-Eluting Stent W Major Cv Dx	2,431	0.4	59.3	0.5	17,793
55	248 Tendonitis, Myositis & Bursitis	2,407	0.4	59.7	0.3	9,022
56	088 Chronic Obstructive Pulmonary Disease	2,393	0.4	60.1	0.6	20,198
57	017 Nonspecific Cerebrovascular Disorders W/O Cc	2,377	0.4	60.4	0.4	14,031
58	149 Major Small & Large Bowel Procedures W/O Cc	2,322	0.4	60.8	0.5	18,034
59	131 Peripheral Vascular Disorders W/O Cc	2,313	0.4	61.2	0.4	13,341
60	145 Other Circulatory System Diagnoses W/O Cc	2,193	0.3	61.5	0.3	11,538
	Total (top 60 DRGs)	394,515	61.5		4.7	1,840,447
	Grand Total	641,565			5.2	3,356,247

Source: processing by Ermeneta, based on data from AIOP

Table S/25 – AIOF accredited hospitals: top 60 DRGs according to the number of discharges (DRG Version 24.0) – Inpatient admission for acute cases in the North of Italy. Year 2019

Rank	DRG	Discharges		Average length of stay	In-hospital days	
		Number	% cumul.			
1	544 Major Joint Replacement or Reattachment of Lower Extremity	41,573	12.6	12.6	13.5	247,316
2	225 Foot Procedures	11,002	3.3	16.0	0.6	10,906
3	503 Knee Procedures W/O Pds Of Infection	7,644	2.3	18.3	0.7	11,924
4	288 O.R. Procedures For Obesity	7,021	2.1	20.4	1.2	21,412
5	224 Shoulder, Elbow Or Forearm Proc. Except Major Joint Proc, W/O Cc	6,720	2.0	22.5	0.6	10,337
6	359 Uterine & Adnexa Proc For Non-Malignancy W/O Cc	6,093	1.9	24.3	0.8	14,298
7	127 Heart Failure & Shock	5,829	1.8	26.1	3.2	58,365
8	311 Transurethral Procedures W/O Cc	5,472	1.7	27.8	0.7	12,305
9	518 Perc Cardio Proc W/O Coronary Artery Stent Or Ami	5,308	1.6	29.4	0.8	14,170
10	498 Spinal Fusion Except Cervical W/O Cc	4,113	1.3	30.6	1.1	19,316
11	373 Vaginal Delivery W/O Complicating Diagnoses	3,956	1.2	31.9	0.7	13,271
12	232 Arthroscopy	3,917	1.2	33.0	0.2	4,264
13	558 Percutaneous Cardiovascular Proc W Drug-Eluting Stent W/O Maj Cv Dx	3,882	1.2	34.2	0.7	12,061
14	430 Psychoses	3,875	1.2	35.4	3.2	59,148
15	125 Circulatory Disorders Except Ami, W Card Cath W/O Complex Diag	3,744	1.1	36.5	0.5	8,968
16	494 Laparoscopic Cholecystectomy W/O C.D.E. W/O Cc	3,580	1.1	37.6	0.5	8,506
17	223 Major Shoulder/Elbow Proc. Or Other Upper Extremity Proc W Cc	3,559	1.1	38.7	0.2	4,457
18	337 Transurethral Prostatectomy W/O Cc	3,542	1.1	39.8	0.6	10,746
19	104 Cardiac Valve & Oth Major Cardiothoracic Proc W Card Cath	3,274	1.0	40.8	2.1	37,668
20	479 Other Vascular Procedures W/O Cc	3,154	1.0	41.7	0.6	10,187
21	139 Cardiac Arrhythmia & Conduction Disorders W/O Cc	3,062	0.9	42.7	0.5	8,862
22	500 Back & Neck Procedures Except Spinal Fusion W/O Cc	3,053	0.9	43.6	0.5	8,738
23	545 Revision Of Hip Or Knee Replacement	2,851	0.9	44.5	1.2	21,706
24	243 Medical Back Problems	2,831	0.9	45.3	1.0	18,338
25	087 Pulmonary Edema & Respiratory Failure	2,788	0.8	46.2	1.7	30,635
26	158 Anal & Stomal Procedures W/O Cc	2,657	0.8	47.0	0.2	3,731
27	089 Simple Pneumonia & Pleurisy Age >17 W Cc	2,541	0.8	47.8	1.7	30,325
28	227 Soft Tissue Procedures W/O Cc	2,540	0.8	48.5	0.2	3,906
29	012 Degenerative Nervous System Disorders	2,527	0.8	49.3	1.1	20,759
30	234 Other Musculoskelet Sys & Conn Tiss O.R. Proc W/O Cc	2,305	0.7	50.0	0.2	3,608
31	467 Other Factors Influencing Health Status	2,259	0.7	50.7	0.7	11,995
32	245 Bone Diseases & Specific Arthropathies W/O Cc	2,239	0.7	51.4	1.0	17,666
33	297 Nutritional & Misc Metabolic Disorders Age >17 W/O Cc	2,223	0.7	52.0	0.6	11,486

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(Continued) Table S/25 – AIOF accredited hospitals: top 60 DRGs according to the number of discharges (DRG Version 24.0) – Inpatient admission for acute cases in the North of Italy, Year 2019

Rank	DRG	Discharges		% in-hospital days	Average length of stay	In-hospital days
		Number	% cumul.			
34	491 Major Joint & Limb Reattachment Procedures Of Upper Extremity	2,096	0.6	52.7	4.2	8,819
35	219 Lower Extrem & Humer Proc Except Hip, Foot, Femur Age >17 W/O Cc	1,969	0.6	53.3	0.4	7,642
36	538 Local Excis & Remov of Int Fix Dev Except Hip & Femur W/O Cc	1,946	0.6	53.9	0.2	4,155
37	014 Intracranial Hemorrhage Or Cerebral Infarction	1,903	0.6	54.5	1.0	18,046
38	053 Sinus & Mastoid Procedures Age >17	1,901	0.6	55.0	0.2	3,183
39	133 Atherosclerosis W/O Cc	1,890	0.6	55.6	0.5	9,242
40	136 Cardiac Congenital & Valvular Disorders Age >17 W/O Cc	1,810	0.6	56.2	1.0	18,272
41	055 Miscellaneous Ear, Nose, Mouth & Throat Procedures	1,799	0.5	56.7	0.1	2,350
42	428 Disorders Of Personality & Impulse Control	1,755	0.5	57.2	2.8	50,226
43	552 Other Permanent Cardiac Pacemaker Implant W/O Major Cv Dx	1,731	0.5	57.8	0.4	7,320
44	335 Major Male Pelvic Procedures W/O Cc	1,698	0.5	58.3	0.6	10,584
45	365 Other Female Reproductive System O.R. Procedures	1,696	0.5	58.8	0.0	716
46	090 Simple Pneumonia & Pleurisy Age >17 W/O Cc	1,672	0.5	59.3	0.8	15,247
47	371 Cesarean Section W/O Cc	1,671	0.5	59.8	0.4	7,517
48	461 O.R. Proc W Diagnoses of Other Contact W Health Services	1,624	0.5	60.3	0.2	4,233
49	557 Percutaneous Cardiovascular Proc W Drug-Eluting Stent W Major Cv Dx	1,564	0.5	60.8	0.6	11,730
50	162 Inguinal & Femoral Hernia Procedures Age >17 W/O Cc	1,564	0.5	61.3	0.1	2,048
51	131 Peripheral Vascular Disorders W/O Cc	1,552	0.5	61.7	0.5	9,829
52	088 Chronic Obstructive Pulmonary Disease	1,466	0.4	62.2	0.7	13,377
53	576 Septicemia W/O Mv 96+ Hours Age >17	1,424	0.4	62.6	1.2	15,2
54	523 Aic/Drug Abuse Or Depend W/O Rehabilitation Therapy W/O Cc	1,366	0.4	63.0	0.8	14,882
55	183 Esophagitis, Gastroent & Misc Digest Disorders Age >17 W/O Cc	1,363	0.4	63.4	0.5	8,358
56	149 Major Small & Large Bowel Procedures W/O Cc	1,313	0.4	63.8	0.6	10,146
57	042 Intraocular Procedures Except Retina, Iris & Lens	1,289	0.4	64.2	0.2	2,874
58	008 Periph & Cranial Nerve & Other Nerv Syst Proc W/O Cc	1,270	0.4	64.6	0.1	2,030
59	395 Red Blood Cell Disorders Age >17	1,268	0.4	65.0	0.6	11,388
60	117 Cardiac Pacemaker Revision Except Device Replacement	1,251	0.4	65.4	0.1	2,118
Total (top 60 DRGs)		214,985	65.4		4.9	1,059,385
Grand Total (North)		328,813			5.6	1,826,343

Source: processing by *Ermenetia*, based on data from *AIOF*

Table S/26 – AIOF accredited hospitals: top 60 DRGs according to the number of discharges (DRG Version 24.0) – Inpatient admissions for acute cases in the Center of Italy, Year 2019

Rank	DRG	Discharges		in-hospital days	Average length of stay	In-hospital days	
		Number	% cumul.				
1	544	8,856	17.3	17.3	20.8	5.9	52,112
2	225	3,098	6.1	23.4	2.0	1.6	5,103
3	503	1,590	3.1	26.5	0.7	1.1	1,735
4	127	1,395	2.7	29.2	5.2	9.4	13,148
5	223	1,381	2.7	31.9	0.7	1.3	1,822
6	089	1,201	2.3	34.3	4.6	9.5	11,428
7	224	1,187	2.3	36.6	0.9	1.9	2,249
8	337	1,123	2.2	38.8	1.4	3.2	3,562
9	498	1,107	2.2	41.0	1.7	3.9	4,309
10	245	1,038	2.0	43.0	1.7	4.0	4,156
11	234	782	1.5	44.5	0.7	2.2	1,720
12	087	774	1.5	46.0	2.7	8.6	6,651
13	494	757	1.5	47.5	0.7	2.4	1,790
14	162	751	1.5	49.0	0.3	1.1	856
15	311	705	1.4	50.4	0.8	2.7	1,891
16	359	678	1.3	51.7	0.7	2.8	1,871
17	470	654	1.3	53.0	0.3	1.3	848
18	491	649	1.3	54.2	0.9	3.3	2,165
19	288	576	1.1	55.4	1.0	4.3	2,503
20	243	573	1.1	56.5	1.0	4.5	2,551
21	545	521	1.0	57.5	1.7	8.1	4,242
22	090	446	0.9	58.4	1.5	8.4	3,743
23	316	426	0.8	59.2	1.6	9.2	3,903
24	297	395	0.8	60.0	0.8	5.2	2,058
25	055	378	0.7	60.7	0.2	1.2	462
26	158	374	0.7	61.5	0.4	2.6	954
27	296	374	0.7	62.2	1.2	7.9	2,939
28	373	360	0.7	62.9	0.5	3.7	1,346
29	538	348	0.7	63.6	0.2	1.6	570
30	320	339	0.7	64.2	1.0	7.7	2,605
31	014	334	0.7	64.9	1.4	10.7	3,584
32	395	327	0.6	65.5	1.1	8.2	2,684
33	227	327	0.6	66.2	0.2	1.4	453
34	085	310	0.6	66.8	1.2	9.5	2,954
35	467	300	0.6	67.4	0.1	1.0	314

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(Continued) Table S/26 – AIOIP accredited hospitals: top 60 DRGs according to the number of discharges (DRG Version 24.0) – Inpatient admissions for acute cases in the Center of Italy, Year 2019

Rank	DRG	Discharges		% in-hospital days	Average length of stay	In-hospital days
		Number	% cumul.			
36	249 Aftercare, Musculoskeletal System & Connective Tissue	300	0.6	67.9	6.0	1,794
37	335 Major Male Pelvic Procedures W/O Cc	282	0.6	68.5	5.9	1,677
38	149 Major Small & Large Bowel Procedures W/O Cc	279	0.5	69.0	6.5	1,825
39	500 Back & Neck Procedures Except Spinal Fusion W/O Cc	279	0.5	69.6	3.1	859
40	248 Tendonitis, Myositis & Bursitis	250	0.5	70.1	0.1	361
41	219 Lower Extrem & Humerus Proc Except Hip, Foot, Femur Age >17 W/O Cc	249	0.5	70.6	0.3	738
42	211 Hip & Femur Procedures Except Major Joint Age >17 W/O Cc	246	0.5	71.0	0.6	1,606
43	082 Respiratory Neoplasms	239	0.5	71.5	1.0	2,582
44	371 Cesarean Section W/O Cc	237	0.5	72.0	0.4	930
45	160 Hernia Procedures Except Inguinal & Femoral Age >17 W/O Cc	233	0.5	72.4	0.2	2.0
46	019 Cranial & Peripheral Nerve Disorders W/O Cc	222	0.4	72.9	0.2	2.6
47	254 Fx, sprn, strn & Disl Up arm, low leg Ex Foot Age >17 W/O CC	220	0.4	73.3	0.1	1.4
48	147 Rectal Resection W/O Cc	219	0.4	73.7	0.4	4.2
49	385 Neonates, died or transferred to another acute care facility	212	0.4	74.1	0.3	3.4
50	524 Transient Ischemia	206	0.4	74.5	0.7	8.3
51	183 Esophagitis, Gastroent & Misc Digest Disorders Age >17 W/O Cc	199	0.4	74.9	0.5	6.3
52	305 Kidney And Ureter Procedures For Non-Neoplasm Without Cc	199	0.4	75.3	0.2	3.1
53	576 Septicemia W/O Mv 96+ Hours Age >17	198	0.4	75.7	1.0	13.1
54	053 Sinus & Mastoid Procedures Age >17	192	0.4	76.1	0.2	2.3
55	313 Urethral Procedures, Age >17 W/O Cc	190	0.4	76.5	0.1	1.9
56	309 Minor Bladder Procedures W/O Cc	187	0.4	76.8	0.2	3.0
57	290 Thyroid Procedures	183	0.4	77.2	0.2	3.2
58	182 Esophagitis, Gastroent & Misc Digest Disorders Age >17 W Cc	174	0.3	77.5	0.6	8.6
59	341 Penis procedures	173	0.3	77.9	0.2	3.0
60	119 Vein Ligation & Stripping	170	0.3	78.2	0.2	2.5
Total (top 60 DRGs)		39,972				181,228
Grand Total (Center)		51,120	78.2		4.9	250,659

Source: processing by Ermenèia, based on data from AIOIP

Table S27 – AIOF accredited hospitals: top 60 DRGs according to the number of discharges (DRG Version 24.0) – Inpatient admissions for acute cases in the South of Italy, Year 2019

Rank	DRG	Number	Discharges %	% cumul.	% in-hospital days	Average length of stay	In-hospital days
1	468 Extensive O.R. Procedure Unrelated to Principal Diagnosis	15,619	6.0	6.0	7.7	6.3	98,871
2	373 Vaginal Delivery W/O Complicating Diagnoses	11,453	4.4	10.3	3.1	3.4	39,314
3	371 Cesarean Section W/O Cc	10,698	4.1	14.4	3.3	3.9	42,243
4	544 Major Joint Replacement or Reattachment of Lower Extremity	10,666	4.1	18.5	5.0	6.0	63,682
5	125 Circulatory Disorders Except Ami, W Card Cath W/O Complex Diag	6,460	2.5	21.0	2.0	2.0	13,190
6	127 Heart Failure & Shock	6,320	2.4	23.4	3.8	7.7	48,647
7	477 Non-extensive O.R. Proc Unrelated To Principal Diagnosis	5,975	2.3	25.7	2.5	5.4	32,103
8	359 Uterine & Adnexa Proc For Non-Malignancy W/O Cc	5,809	2.2	27.9	1.5	3.4	19,468
9	245 Bone Diseases & Specific Arthropathies W/O Cc	5,127	2.0	29.9	2.2	5.4	27,942
10	494 Laparoscopic Cholecystectomy W/O C.D.E. W/O Cc	4,786	1.8	31.7	1.1	2.8	13,558
11	558 Percutaneous Cardiovascular Proc W Drug-Eluting Stent W/O Maj Cv Dx	3,905	1.5	33.2	0.9	2.9	11,174
12	120 Other Circulatory System O.R. Procedures	3,526	1.3	34.5	1.4	5.0	17,571
13	087 Pulmonary Edema & Respiratory Failure	3,485	1.3	35.9	2.2	8.0	27,952
14	012 Degenerative Nervous System Disorders	2,700	1.0	36.9	1.4	6.7	18,054
15	243 Medical Back Problems	2,683	1.0	37.9	0.8	3.9	10,515
16	288 O.R. Procedures For Obesity	2,513	1.0	38.9	0.7	3.8	9,456
17	311 Transurethral Procedures W/O Cc	2,373	0.9	39.8	0.6	3.3	7,897
18	503 Knee Procedures W/O Pdx Of Infection	2,210	0.8	40.6	0.3	1.6	3,566
19	518 Perc Cardio Proc W/O Coronary Artery Stent Or Ami	2,056	0.8	41.4	0.4	2.6	5,260
20	467 Other Factors Influencing Health Status	2,045	0.8	42.2	0.3	2.1	4,217
21	316 Renal failure	2,018	0.8	43.0	1.0	6.4	12,906
22	408 Myeloprolif Disord Or Poor Diff Neopl W/Other O.R. Proc	1,995	0.8	43.7	0.6	4.1	8,191
23	461 O.R. Proc W Diagnoses of Other Contact W Health Services	1,994	0.8	44.5	0.5	3.4	6,762
24	017 Nonspecific Cerebrovascular Disorders W/O Cc	1,952	0.7	45.2	0.9	5.8	11,264
25	479 Other Vascular Procedures W/O Cc	1,870	0.7	46.0	0.4	3.0	5,637
26	297 Nutritional & Misc Metabolic Disorders Age >17 W/O Cc	1,831	0.7	46.7	0.6	4.0	7,375
27	500 Back & Neck Procedures Except Spinal Fusion W/O Cc	1,800	0.7	47.3	0.6	3.9	7,076
28	162 Inguinal & Femoral Hernia Procedures Age >17 W/O Cc	1,765	0.7	48.0	0.2	1.7	3,059
29	410 Chemotherapy W/O Acute Leukemia As Secondary Diagnosis	1,759	0.7	48.7	0.3	2.5	4,342
30	016 Nonspecific Cerebrovascular Disorders W Cc	1,684	0.6	49.3	0.9	6.5	11,013
31	183 Esophagitis, Gastroent & Misc Digest Disorders Age >17 W/O Cc	1,673	0.6	50.0	0.6	4.8	8,080

(Continued) Table S27 – AIOP accredited hospitals: top 60 DRGs according to the number of discharges (DRG Version 24.0) – Inpatient admissions for acute cases in the South of Italy, Year 2019

Rank	DRG	Discharges		% in-hospital days	Average length of stay	In-hospital days
		Number	%			
32	Cardiac Valve & Oth Major Cardiothoracic Proc W Card Cath	1,660	0.6	50.6	1.5	19,580
33	Spinal Fusion Except Cervical W/O Cc	1,656	0.6	51.2	0.6	7,245
34	Foot Procedures	1,652	0.6	51.9	0.2	2,579
35	Psychoses	1,646	0.6	52.5	1.1	13,793
36	Other Permanent Cardiac Pacemaker Implant W/O Major Cv Dx	1,557	0.6	53.1	0.4	5,232
37	Transurethral Prostatectomy W/O Cc	1,555	0.6	53.7	0.5	6,737
38	Benign Prostatic Hypertrophy W/O Cc	1,543	0.6	54.3	0.5	6,021
39	Menstrual & Other Female Reproductive System Disorders	1,516	0.6	54.9	0.4	4,766
40	Kidney & Urinary Tract Neoplasms W/O Cc	1,453	0.6	55.4	0.4	5,145
41	Shoulder, Elbow Or Forearm Proc, Except Major Joint Proc, W/O Cc	1,449	0.6	56.0	0.2	3,096
42	Other Musculoskelet Sys & Conn Tiss O.R. Proc W/O Cc	1,392	0.5	56.5	0.5	5,864
43	Other kidney & urinary tract O.R. procedures	1,364	0.5	57.0	0.4	4,516
44	Abortion W D&C, Aspiration Curettage Or Hysterotomy	1,319	0.5	57.5	0.1	1,221
45	Respiratory Neoplasms	1,295	0.5	58.0	0.6	7,949
46	Cardiac Arrhythmia & Conduction Disorders W/O Cc	1,293	0.5	58.5	0.3	3,970
47	Nonspecific Cva. & Precerebral Occlusion W/O Infant	1,282	0.5	59.0	0.5	6,670
48	Atherosclerosis W/O Cc	1,270	0.5	59.5	0.4	5,013
49	Simple Pneumonia & Pleurisy Age > 17 W Cc	1,193	0.5	59.9	0.9	11,696
50	Minor Bladder Procedures W/O Cc	1,174	0.4	60.4	0.3	3,611
51	Major Shoulder/Elbow Proc, Or Other Upper Extremity Proc W Cc	1,169	0.4	60.8	0.2	2,274
52	Urinary Stones W/O Cc	1,166	0.4	61.3	0.3	3,559
53	Other Circulatory System Diagnoses W/O Cc	1,157	0.4	61.7	0.4	5,465
54	Thyroid Procedures	1,129	0.4	62.2	0.3	3,440
55	Disorders Of The Biliary Tract W/O Cc	1,123	0.4	62.6	0.4	4,663
56	Anal & Stomal Procedures W/O Cc	1,110	0.4	63.0	0.2	2,732
57	Kidney And Ureter Procedures For Non-Neoplasm Without Cc	1,099	0.4	63.4	0.3	3,631
58	Transient Ischemia	1,078	0.4	63.8	0.5	6,933
59	Tendonitis, Myositis & Bursitis	1,047	0.4	64.2	0.2	2,769
60	Endocrine Disorders W/O Cc	1,045	0.4	64.6	0.2	3,026
	Total (top 60 DRGs)	169,142	64.6			763,581
	Grand Total (South)	261,632			4.9	1,279,245

Source: processing by Ermeneta, based on data from AIOP

Table S/28 – Total number of public and private healthcare institutions: top 30 DRGs according to the number of discharges (DRG Version 24.0) – Day hospital admissions for acute cases. Year 2018

Rank	DRG	Discharges		Accesses		Average number of accesses
		Number	%	% cumul.	%	
1	410	97,180	5.5	5.5	21.1	9.9
2	359	88,012	5.0	10.5	2.5	1.3
3	381	73,277	4.1	14.6	2.1	1.3
4	162	63,905	3.6	18.2	1.9	1.4
5	266	52,208	3.0	21.2	1.9	1.6
6	467	42,588	2.4	23.6	1.8	1.9
7	503	38,671	2.2	25.8	1.2	1.4
8	364	32,165	1.8	27.6	1.0	1.5
9	225	31,220	1.8	29.4	1.0	1.4
10	039	29,773	1.7	31.1	1.2	1.4
11	538	29,735	1.7	32.8	0.9	1.3
12	229	29,579	1.7	34.4	0.9	1.4
13	055	28,846	1.6	36.1	0.9	1.4
14	270	26,130	1.5	37.5	0.8	1.4
15	042	25,542	1.4	39.0	0.9	1.5
16	119	24,228	1.4	40.4	0.7	1.4
17	036	24,109	1.4	41.7	0.8	1.6
18	158	22,670	1.3	43.0	0.7	1.5
19	395	21,169	1.2	44.2	3.7	7.8
20	169	20,881	1.2	45.4	0.7	1.4
21	466	19,540	1.1	46.5	1.1	2.6
22	380	17,902	1.0	47.5	0.9	2.2
23	139	16,944	1.0	48.5	0.5	1.4
24	301	16,394	0.9	49.4	0.7	2.0
25	227	15,649	0.9	50.3	0.5	1.4
26	365	15,578	0.9	51.2	0.4	1.0
27	267	14,628	0.8	52.0	0.5	1.6
28	339	14,561	0.8	52.8	0.4	1.4
29	040	14,399	0.8	53.6	0.5	1.5
30	404	13,579	0.8	54.4	1.7	5.7
	Total (top 30 DRGs)	961,062	54.4		53.8	
	Grand Total	1,767,074	100.0		100.0	2.6

Source: data from the Ministry of Health – SDO 2018

Table S29 – Total number of public and private healthcare institutions: top 30 DRGs according to the number of discharges (DRG Version 24.0) – Inpatient admissions for rehabilitation treatment, Year 2018

Rank	DRG	Discharges			% cumul.	% in-hospital days	Average length of stay
		Number	%	%			
1	256	89,321	28.6	28.6	19.3	17.7	
2	012	36,923	11.8	40.4	18.6	41.1	
3	249	26,904	8.6	49.0	8.9	26.9	
4	145	19,058	6.1	55.1	3.9	16.7	
5	144	14,278	4.6	59.7	3.5	19.8	
6	462	11,276	3.6	63.3	3.3	23.6	
7	009	9,842	3.2	66.4	6.3	51.9	
8	247	8,320	2.7	69.1	2.4	24.0	
9	087	7,841	2.5	71.6	2.3	23.9	
10	430	7,614	2.4	74.1	2.7	28.5	
11	236	7,610	2.4	76.5	2.8	29.7	
12	035	6,570	2.1	78.6	3.0	37.9	
13	127	6,130	2.0	80.6	1.5	20.3	
14	088	4,895	1.6	82.1	1.4	23.3	
15	034	4,449	1.4	83.6	2.3	41.5	
16	245	3,660	1.2	84.7	0.8	17.3	
17	248	3,334	1.1	85.8	1.1	27.4	
18	014	2,780	0.9	86.7	1.5	45.1	
19	243	2,694	0.9	87.5	0.9	25.8	
20	467	2,557	0.8	88.4	0.7	22.1	
21	428	2,300	0.7	89.1	0.9	31.7	
22	013	1,914	0.6	89.7	0.8	33.4	
23	297	1,605	0.5	90.2	0.5	25.1	
24	019	1,526	0.5	90.7	0.6	29.6	
25	023	1,506	0.5	91.2	1.8	99.6	
26	133	1,482	0.5	91.7	0.3	17.1	
27	429	1,456	0.5	92.1	0.4	24.6	
28	522	1,263	0.4	92.5	0.4	25.1	
29	073	1,241	0.4	92.9	0.2	12.1	
30	244	1,150	0.4	93.3	0.3	21.4	
Total (top 30 DRGs)		291,499	93.3		93.2		
Grand Total		312,423	100.0		100.0	26.1	

Source: data from the Ministry of Health – SDO 2018

Table S/30 – AIOF accredited hospitals: top 30 DRGs according to the number of discharges (DRG Version 24.0) – Inpatient admissions for rehabilitation treatment. Year 2019

Rank	DRG	Discharges		% in-hospital days	Average length of stay	In-hospital days
		Number	%			
1	256 Other Musculoskeletal System & Connective Tissue Diagnoses	32,282	32.4	19.9	14.4	465,143
2	012 Degenerative Nervous System Disorders	7,476	7.5	39.9	41.0	306,611
3	145 Other Circulatory System Diagnoses W/O Cc	5,568	5.6	45.5	16.6	92,428
4	249 Aftercare, Musculoskeletal System & Connective Tissue	5,457	5.5	50.9	6.1	141,385
5	477 Non-extensive O.R. Proc Unrelated To Principal Diagnosis	4,993	5.0	55.9	4.4	103,413
6	430 Psychoses	4,603	4.6	60.6	5.8	134,848
7	247 Signs & Symptoms Of Musculoskeletal System & Conn Tissue	3,139	3.1	63.7	3.5	82,384
8	462 Rehabilitation	2,979	3.0	66.7	3.1	71,354
9	144 Other Circulatory System Diagnoses W Cc	2,865	2.9	69.6	2.5	58,161
10	245 Bone Diseases & Specific Arthropathies W/O Cc	2,837	2.8	72.4	2.8	66,231
11	236 Fractures Of Hip & Pelvis	2,525	2.5	74.9	3.4	79,783
12	087 Pulmonary Edema & Respiratory Failure	1,528	1.5	76.5	1.6	36,609
13	035 Other Disorders Of Nervous System W/O Cc	1,423	1.4	77.9	2.1	48,664
14	009 Spinal Disorders & Injuries	1,322	1.3	79.2	2.8	65,661
15	088 Chronic Obstructive Pulmonary Disease	1,321	1.3	80.6	1.3	31,249
16	428 Disorders Of Personality & Impulse Control	1,292	1.3	81.8	1.6	37,417
17	522 Alc/Drug Abuse Or Depend W Rehabilitation Therapy W/O Cc	1,052	1.1	82.9	1.1	25,379
18	127 Heart Failure & Shock	861	0.9	83.8	0.8	17,701
19	014 Intracranial Hemorrhage Or Cerebral Infarction	834	0.8	84.6	1.6	37,483
20	248 Tendinitis, Myositis & Bursitis	801	0.8	85.4	0.9	21,620
21	243 Medical Back Problems	772	0.8	86.2	0.8	19,372
22	467 Other Factors Influencing Health Status	739	0.7	86.9	0.7	15,610
23	234 Other Musculoskeletal Sys & Conn Tiss O.R. Proc W/O Cc	686	0.7	87.6	0.7	16,787

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(Continued) Table S/30 – AIOIP accredited hospitals: top 30 DRGs according to the number of discharges (DRG Version 24.0) – Inpatient admissions for rehabilitation treatment. Year 2019

Rank	DRG	Discharges		% in-hospital days	Average length of stay	In-hospital days
		Number	% cumul.			
24	019 Cranial & Peripheral Nerve Disorders W/O Cc	660	0.7	88.3	30.5	20,112
25	034 Other Disorders Of Nervous System W Cc	643	0.6	88.9	41.0	26,364
26	468 Extensive O.R. Procedure Unrelated to Principal Diagnosis	629	0.6	89.5	23.8	14,940
27	424 O.R. procedure W principal diagnoses of mental illness	594	0.6	90.1	21.2	12,567
28	297 Nutritional & Misc Metabolic Disorders Age >17 W/O Cc	591	0.6	90.7	24.1	14,232
29	244 Bone Diseases & Specific Arthropathies W Cc	513	0.5	91.3	21.6	11,062
30	523 Alc/Drug Abuse Or Depend W/O Rehabilitation Therapy W/O Cc	508	0.5	91.8	25.9	13,154
	<i>Total (top 30 DRGs)</i>	<i>91,493</i>	<i>91.8</i>		<i>22.8</i>	<i>2,087,724</i>
	<i>Grand Total</i>	<i>99,707</i>			<i>23.4</i>	<i>2,333,951</i>

Source: processing by Ermeneta, based on data from AIOIP

Table S/31 – Total number of public and private healthcare institutions: description of activities according to the Major Diagnostic Categories (MDC) – Inpatient admissions for acute cases, Year 2018

MDC	Number of cases	%	In-hospital days	Average length of stay
01 – Diseases and Disorders of the Nervous System	418,524	6.8	3,510,707	8.4
02 – Diseases and Disorders of the Eye	64,585	1.0	188,168	2.9
03 – Diseases and Disorders of The Ear, Nose, Mouth and Throat	202,735	3.3	625,951	3.1
04 – Diseases and Disorders of the Respiratory System	598,733	9.7	5,828,758	9.7
05 – Diseases and Disorders of the Circulatory System	875,574	14.2	6,273,970	7.2
06 – Diseases and Disorders of the Digestive System	551,938	9.0	3,961,312	7.2
07 – Diseases and Disorders of the Hepatobiliary System and Pancreas	287,399	4.7	2,248,949	7.8
08 – Diseases and Disorders of the Musculoskeletal System and Connective Tissue	808,633	13.1	4,996,322	6.2
09 – Diseases and Disorders of the Skin, Subcutaneous Tissue and Breast	177,446	2.9	746,174	4.2
10 – Endocrine, Nutritional and Metabolic Diseases and Disorders	160,389	2.6	862,389	5.4
11 – Diseases and Disorders of the Kidney and Urinary Tract	372,570	6.1	2,484,371	6.7
12 – Diseases and Disorders of the Male Reproductive System	108,565	1.8	495,246	4.6
13 – Diseases and Disorders of the Female Reproductive System	174,954	2.8	695,901	4.0
14 – Pregnancy, Childbirth and the Puerperium	545,223	8.9	2,086,830	3.8
15 – Newborns and other Neonates with Conditions Originating in Perinatal Period	109,209	1.8	894,543	8.2
16 – Diseases and Disorders of the Blood, Blood Forming Organs, Immunological disorders	68,910	1.1	558,640	8.1
17 – Myeloproliferative Diseases & Disorders, Poorly Differentiated Neoplasms	132,467	2.2	1,080,228	8.2
18 – Infectious and Parasitic Diseases, Systemic or Unspecified Sites	146,807	2.4	1,673,726	11.4
19 – Mental Diseases and Disorders	134,410	2.2	1,597,777	11.9
20 – Alcohol/Drug Use and Alcohol/Drug Induced Organic Mental Disorders	13,609	0.2	107,113	7.9
21 – Injuries, Poisonings and Toxic Effects of Drugs	47,993	0.8	301,773	6.3
22 – Burns	3,727	0.1	52,353	14.0
23 – Factors Influencing Health Status and Other Contacts with Health Services	90,204	1.5	401,328	4.4
24 – Multiple Significant Trauma	9,269	0.2	133,741	14.4
25 – HIV infections	5,210	0.1	87,606	16.8
Other DRGs	15,289	0.2	145,654	9.5
Pre MDC	27,350	0.4	994,845	36.4
Grand Total	6,151,722	100.0	43,034,375	7.0

Source: data from the Ministry of Health – SDO 2018

Table S/32 – Total number of public and private healthcare institutions: description of activities classified according to the Major Diagnostic Categories (MDC) – Day hospital admissions for acute cases. Year 2018

MDC	Number of cases	%	Accesses	Average number of accesses
01 – Diseases and Disorders of the Nervous System	67,434	3.8	172,379	2.6
02 – Diseases and Disorders of the Eye	113,106	6.4	190,488	1.7
03 – Diseases and Disorders of The Ear, Nose, Mouth and Throat	112,859	6.4	189,241	1.7
04 – Diseases and Disorders of the Respiratory System	31,314	1.8	90,858	2.9
05 – Diseases and Disorders of the Circulatory System	100,766	5.7	194,451	1.9
06 – Diseases and Disorders of the Digestive System	151,850	8.6	251,033	1.7
07 – Diseases and Disorders of the Hepatobiliary System and Pancreas	23,628	1.3	85,656	3.6
08 – Diseases and Disorders of the Musculoskeletal System and Connective Tissue	230,050	13.0	425,149	1.8
09 – Diseases and Disorders of the Skin, Subcutaneous Tissue and Breast	149,383	8.5	271,370	1.8
10 – Endocrine, Nutritional and Metabolic Diseases and Disorders	50,370	2.9	114,788	2.3
11 – Diseases and Disorders of the Kidney and Urinary Tract	65,366	3.7	164,597	2.5
12 – Diseases and Disorders of the Male Reproductive System	66,245	3.7	96,838	1.5
13 – Diseases and Disorders of the Female Reproductive System	164,547	9.3	216,367	1.3
14 – Pregnancy, Childbirth and the Puerperium	96,374	5.5	145,146	1.5
15 – Newborns and other Neonates with Conditions Originating in Perinatal Period	1,916	0.1	4,443	2.3
16 – Diseases and Disorders of the Blood, Blood Forming Organs, Immunological disorders	41,426	2.3	258,784	6.2
17 – Myeloproliferative Diseases & Disorders, Poorly Differentiated Neoplasms	148,090	8.4	1,214,628	8.2
18 – Infectious and Parasitic Diseases, Systemic or Unspecified Sites	5,801	0.3	22,615	3.9
19 – Mental Diseases and Disorders	35,679	2.0	173,061	4.9
20 – Alcohol/Drug Use and Alcohol/Drug Induced Organic Mental Disorders	853	0.0	8,595	10.1
21 – Injuries, Poisonings and Toxic Effects of Drugs	9,821	0.6	28,763	2.9
22 – Burns	303	0.0	1,149	3.8
23 – Factors Influencing Health Status and Other Contacts with Health Services	89,439	5.1	179,000	2.0
24 – Multiple Significant Trauma	4	0.0	7	1.8
25 – HIV infections	7,871	0.4	32,880	4.2
Other DRGs	2,515	0.1	5,220	2.1
Pre MDC	64	0.0	281	4.4
Grand Total	1,767,074	100.0	4,537,787	2.6

Source: data from the Ministry of Health – SDO 2018

Table S/33 – Total number of public and private healthcare institutions: description of activities classified according to the Major Diagnostic Categories (MDC) – Inpatient admissions for rehabilitation. Year 2018

MDC	Number of cases	%	In-hospital days	Average length of stay
01 – Diseases and Disorders of the Nervous System	69,656	22.3	3,013,901	43.3
02 – Diseases and Disorders of the Eye	63	0.0	662	10.5
03 – Diseases and Disorders of the Ear, Nose, Mouth and Throat	1,267	0.4	15,608	12.3
04 – Diseases and Disorders of the Respiratory System	15,987	5.1	368,429	23.0
05 – Diseases and Disorders of the Circulatory System	45,748	14.6	848,134	18.5
06 – Diseases and Disorders of the Digestive System	141	0.0	3,448	24.5
07 – Diseases and Disorders of the Hepatobiliary System and Pancreas	30	0.0	512	17.1
08 – Diseases and Disorders of the Musculoskeletal System and Connective Tissue	145,537	46.6	3,046,930	20.9
09 – Diseases and Disorders of the Skin, Subcutaneous Tissue and Breast	198	0.1	5,488	27.7
10 – Endocrine, Nutritional and Metabolic Diseases and Disorders	2,263	0.7	57,054	25.2
11 – Diseases and Disorders of the Kidney and Urinary Tract	510	0.2	5,901	11.6
12 – Diseases and Disorders of the Male Reproductive System	3	0.0	165	55.0
13 – Diseases and Disorders of the Female Reproductive System	5	0.0	201	40.2
14 – Pregnancy, Childbirth and the Puerperium	1	0.0	3	3.0
15 – Newborns and other Neonates with Conditions Originating in Perinatal Period	4	0.0	86	21.5
16 – Diseases and Disorders of the Blood, Blood Forming Organs, Immunological disorders	30	0.0	618	20.6
17 – Myeloproliferative Diseases & Disorders, Poorly Differentiated Neoplasms	50	0.0	1,356	27.1
18 – Infectious and Parasitic Diseases, Systemic or Unspecified Sites	102	0.0	2,645	25.9
19 – Mental Diseases and Disorders	13,286	4.3	380,739	28.7
20 – Alcohol/Drug Use and Alcohol/Drug Induced Organic Mental Disorders	2,496	0.8	57,490	23.0
21 – Injuries, Poisonings and Toxic Effects of Drugs	184	0.1	4,826	26.2
22 – Burns	6	0.0	153	25.5
23 – Factors Influencing Health Status and Other Contacts with Health Services	14,269	4.6	332,451	23.3
24 – Multiple Significant Trauma	127	0.0	5,021	39.5
25 – HIV infections	2	0.0	22	11.0
Other DRGs	450	0.1	13,256	29.5
Pre MDC	8	0.0	279	34.9
Grand Total	312,423	100.0	8,165,378	26.1

Source: data from the Ministry of Health – SDO 2018

Table S/34 – Total number of public and private healthcare institutions: description of activities classified according to the Major Diagnostic Categories (MDC) – Day hospital admissions for rehabilitation. Year 2018

MDC	Number of cases	%	Accesses	Average number of accesses
01 – Diseases and Disorders of the Nervous System	10,686	37.6	167,401	15.7
02 – Diseases and Disorders of the Eye	15	0.1	112	7.5
03 – Diseases and Disorders of The Ear, Nose, Mouth and Throat	18	0.1	86	4.8
04 – Diseases and Disorders of the Respiratory System	1,225	4.3	15,557	12.7
05 – Diseases and Disorders of the Circulatory System	3,637	12.8	48,881	13.4
06 – Diseases and Disorders of the Digestive System	258	0.9	1,354	5.2
07 – Diseases and Disorders of the Hepatobiliary System and Pancreas	0	0.0	0	0.0
08 – Diseases and Disorders of the Musculoskeletal System and Connective Tissue	5,532	19.5	113,295	20.5
09 – Diseases and Disorders of the Skin, Subcutaneous Tissue and Breast	27	0.1	492	18.2
10 – Endocrine, Nutritional and Metabolic Diseases and Disorders	134	0.5	1,767	13.2
11 – Diseases and Disorders of the Kidney and Urinary Tract	235	0.8	1,875	8.0
12 – Diseases and Disorders of the Male Reproductive System	1	0.0	7	7.0
13 – Diseases and Disorders of the Female Reproductive System	11	0.0	59	5.4
14 – Pregnancy, Childbirth and the Puerperium	1	0.0	45	45.0
15 – Newborns and other Neonates with Conditions Originating in Perinatal Period	0	0.0	0	0.0
16 – Diseases and Disorders of the Blood, Blood Forming Organs, Immunological disorders	4	0.0	33	8.3
17 – Myeloproliferative Diseases & Disorders, Poorly Differentiated Neoplasms	8	0.0	29	3.6
18 – Infectious and Parasitic Diseases, Systemic or Unspecified Sites	2	0.0	13	6.5
19 – Mental Diseases and Disorders	2,369	8.3	22,945	9.7
20 – Alcohol/Drug Use and Alcohol/Drug Induced Organic Mental Disorders	0	0.0	0	0.0
21 – Injuries, Poisonings and Toxic Effects of Drugs	8	0.0	211	26.4
22 – Burns	0	0.0	0	0.0
23 – Factors Influencing Health Status and Other Contacts with Health Services	4,223	14.9	57,698	13.7
24 – Multiple Significant Trauma	1	0.0	83	83.0
25 – HIV infections	0	0.0	0	0.0
Other DRGs	1	0.0	12	12.0
Pre MDC	0	0.0	0	0.0
Grand Total	28,396	100.0	431,955	15.2

Source: data from the Ministry of Health – SDO 2018

Table S/35 – Total number of public and private healthcare institutions: description of activities classified according to the Major Diagnostic Categories (MDC) – Long-stay care admissions, Year 2018

MDC	Number of cases	%	In-hospital days	Average length of stay
01 – Diseases and Disorders of the Nervous System	14,083	14.5	390,527	27.7
02 – Diseases and Disorders of the Eye	38	0.0	986	25.9
03 – Diseases and Disorders of The Ear, Nose, Mouth and Throat	252	0.3	5,742	22.8
04 – Diseases and Disorders of the Respiratory System	13,348	13.7	279,935	21.0
05 – Diseases and Disorders of the Circulatory System	10,666	11.0	241,686	22.7
06 – Diseases and Disorders of the Digestive System	3,550	3.7	73,741	20.8
07 – Diseases and Disorders of the Hepatobiliary System and Pancreas	2,385	2.5	47,731	20.0
08 – Diseases and Disorders of the Musculoskeletal System and Connective Tissue	24,457	25.1	688,436	26.9
09 – Diseases and Disorders of the Skin, Subcutaneous Tissue and Breast	1,412	1.5	34,153	24.2
10 – Endocrine, Nutritional and Metabolic Diseases and Disorders	1,988	2.0	42,166	21.2
11 – Diseases and Disorders of the Kidney and Urinary Tract	3,370	3.5	71,769	21.3
12 – Diseases and Disorders of the Male Reproductive System	244	0.3	5,687	23.3
13 – Diseases and Disorders of the Female Reproductive System	226	0.2	4,695	20.8
14 – Pregnancy, Childbirth and the Puerperium	6	0.0	92	15.3
15 – Newborns and other Neonates with Conditions Originating in Perinatal Period	10	0.0	186	18.6
16 – Diseases and Disorders of the Blood, Blood Forming Organs, Immunological disorders	1,170	1.2	24,305	20.8
17 – Myeloproliferative Diseases & Disorders, Poorly Differentiated Neoplasms	1,165	1.2	24,958	21.4
18 – Infectious and Parasitic Diseases, Systemic or Unspecified Sites	3,323	3.4	81,766	24.6
19 – Mental Diseases and Disorders	3,825	3.9	119,473	31.2
20 – Alcohol/Drug Use and Alcohol/Drug Induced Organic Mental Disorders	310	0.3	7,303	23.6
21 – Injuries, Poisonings and Toxic Effects of Drugs	982	1.0	23,824	24.3
22 – Burns	24	0.0	509	21.2
23 – Factors Influencing Health Status and Other Contacts with Health Services	10,231	10.5	210,352	20.6
24 – Multiple Significant Trauma	87	0.1	2,640	30.3
25 – HIV infections	24	0.0	660	27.5
Other DRGs	61	0.1	2,194	36.0
Pre MDC	22	0.0	1,489	67.7
Grand Total	97,259	100.0	2,357,005	24.2

Source: data from the Ministry of Health – SDO 2018

Table S/36 – Activities of private hospitals¹ (accredited healthcare facilities) classified according to specialty: Year 2017 (National Data)

Specialty	Total				AIOIP-associated Private hospitals (accredited healthcare facilities)				
	Patient beds	Inpatients	In-hospital days	Average length of stay	Occupancy rate %	Patient beds	In-hospital days	Average length of stay	Occupancy rate %
Angiology	25	345	1,344	3.9	14.7	25	345	1,344	14.7
Casualty department	12	450	4,608	10.2	105.2				
Heart Surgery	482	27,710	159,102	5.7	90.4	337	21,003	116,648	5.6
Cardiology	1,343	80,875	322,630	4.0	65.8	1,000	57,379	235,805	4.1
General Surgery	4,361	149,340	593,001	4.0	37.3	3,412	122,843	483,841	3.9
Maxillofacial surgery	42	2,818	4,491	1.7	27.6	37	1,186	2,809	2.4
Pediatric surgery	18	185	820	4.4	12.5				
Plastic surgery	56	2,717	8,750	3.2	42.8	34	1,385	5,956	4.3
Thoracic surgery	45	1,331	6,758	5.1	41.1	37	918	4,237	4.6
Vascular surgery	312	12,532	61,149	4.9	53.7	211	8,097	39,251	4.8
Gastroenterology	34	726	6,052	8.3	48.8	24	333	2,535	7.6
Geriatrics	479	15,871	129,092	8.1	73.8	344	10,001	89,175	8.9
Long-stay care pts	4,241	47,636	1,234,593	25.9	79.8	2,989	36,101	873,799	24.2
Endocrine, nutritional and metabolic diseases	40	893	6,937	7.8	47.5	40	893	6,937	7.8
General medicine	4,317	125,077	1,005,819	8.0	63.8	3,407	100,792	801,809	8.0
Nephrology	104	3,211	17,827	5.6	47.0	55	2,019	11,454	5.7
Neonatology	116	3,413	18,299	5.4	43.2	51	600	2,410	4.0
Neurosurgery	178	8,474	39,693	4.7	61.1	134	6,857	31,134	4.5
Neurology	916	15,077	222,587	14.8	66.6	801	10,644	195,870	18.4
Child Neuropsychiatry	10	1	10	10.0	0.3	10	1	10	0.3
Neurological rehabilitation	385	2,890	141,146	48.8	100.4	139	1,060	47,960	45.2
Day nursery	60	2,828	7,699	2.7	35.2	60	2,828	7,699	2.7
Ophthalmology	272	4,518	20,764	4.6	20.9	197	3,484	16,609	4.8
Oncohematology	23	668	6,166	9.2	73.4	23	668	6,166	9.2
Oncology	286	10,644	65,551	6.2	62.8	227	9,582	57,440	6.0
Orthopedics and Traumatology	4,398	203,048	822,237	4.0	51.2	3,654	169,298	687,491	4.1
Obstetrics and gynaecology	1,643	76,224	299,099	3.9	49.9	1,120	51,113	203,207	4.0
Otorhinolaryngology	444	14,803	35,757	2.4	22.1	330	10,570	27,314	2.6
Pediatrics	72	3,497	21,325	6.1	87.1	14	871	3,830	4.4
Pneumology	191	5,257	43,730	8.3	62.7	146	3,528	31,283	8.9
Psychiatry	1,155	15,762	316,055	20.1	75.0	955	13,704	262,526	19.2

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(Continued) Table S/36 – Activities of private hospitals¹ (accredited healthcare facilities) classified according to specialty. Year 2017 (National Data)

Specialty	Total			AOP-associated Private hospitals (accredited healthcare facilities)					
	Patient beds	Inpatients	In-hospital days	Patient beds	Inpatient is	In-hospital days	Average length of stay	Occupancy rate %	Occupancy rate %
Radiation Therapy	10	21	184	10	21	184	8.8	5.0	5.0
Oncological radiotherapy rehabilitation	7	244	1,247	7	244	1,247	5.1	48.8	48.8
Functional recovery and rehabilitation	12,007	162,476	3,718,528	7,599	108,519	2,388,433	22.9	84.8	86.1
Rheumatology	45	1,463	12,031	15	469	4,172	8.2	73.2	76.2
Intensive care	380	19,684	81,701	221	13,910	52,784	4.2	58.9	65.4
Neonatal intensive care	35	727	8,717	8	216	4,031	12.0	68.2	138.0
Coronary care unit	156	11,891	44,212	88	6,818	25,697	3.7	77.6	80.0
Spinal care unit	39	189	11,289	29	171	10,428	59.7	79.3	98.5
Urology	1,011	43,279	173,361	801	33,480	136,352	4.0	47.0	46.6
Total	39,730	1,057,219	9,674,361	28,591	795,712	6,879,877	9.2	66.7	65.9

(1) Code 5.1 Institutes (accredited private healthcare facilities) in the ministerial classification.

Source: processing by Ermeneta, based on data from the Ministry of Health

Table S/58 — Activities of private hospitals¹ (accredited healthcare facilities) classified according to specialty, Year 2017 (North)

Specialty	Total				AOP-associated Private hospitals (accredited healthcare facilities)					
	Patient beds	Inpatients	In-hospital days	Average length of stay	Occupancy rate %	Patient beds	Inpatients	In-hospital days	Average length of stay	Occupancy rate %
Heart Surgery	237	11,907	71,952	6.0	83.2	189	10,180	56,816	5.6	82.4
Cardiology	494	28,174	118,844	4.2	65.9	412	23,041	99,110	4.3	65.9
General Surgery	1,282	55,943	193,010	3.5	41.2	996	46,248	157,286	3.4	43.3
Maxillofacial surgery	30	931	1,792	1.9	16.4	30	931	1,792	1.9	16.4
Plastic surgery	26	1,647	5,214	3.2	54.9	14	850	4,013	4.7	78.5
Thoracic surgery	20	591	3,026	5.1	41.5	20	591	3,026	5.1	41.5
Vascular surgery	142	7,066	32,458	4.6	62.6	102	5,430	24,356	4.5	65.4
Gastroenterology	2	26	184	7.1	25.2	2	26	184	7.1	25.2
Geriatrics	169	7,304	55,930	7.7	90.7	114	3,894	37,516	9.6	90.2
Long-stay care pts	2,262	28,739	666,073	23.2	80.7	1,557	22,972	483,358	21.0	85.1
General medicine	1,871	51,179	458,375	9.0	67.2	1,461	39,819	359,479	9.0	67.5
Nephrology	10	341	2,512	7.4	68.8					
Neonatology	42	2,234	11,764	5.3	76.7					
Neurosurgery	79	4,551	21,042	4.6	73.0	59	3,444	14,807	4.3	68.8
Neurology	159	5,653	35,613	6.3	61.4	119	3,655	25,412	7.0	58.5
Neurological rehabilitation	247	2,104	87,121	41.4	96.6	109	781	37,125	47.5	93.3
Ophthalmology	64	2,136	4,469	2.1	19.1	38	1,573	3,279	2.1	23.6
Oncology	77	1,663	14,098	8.5	50.2	25	772	7,209	9	79.0
Orthopedics and Traumatology	1,803	108,608	419,113	3.9	63.7	1,482	93,175	362,115	4	66.9
Obstetrics and gynaecology	359	15,495	54,815	3.5	41.8	215	6,740	21,979	3.3	28.0
Otorhinolaryngology	174	8,845	18,621	2.1	29.3	136	6,589	14,325	2.2	28.9
Pediatrics	72	3,497	21,325	6.1	81.1	14	871	3,830	4.4	75.0
Pneumology	41	543	7,299	13.4	48.8	33	448	6,160	13.8	51.1
Psychiatry	575	8,564	161,235	18.8	76.8	575	8,564	161,235	18.8	76.8
Functional recovery and rehabilitation	6,217	90,190	1,968,330	21.8	86.7	3,948	60,275	1,277,742	21.2	88.7
Intensive care	201	10,660	40,909	3.8	55.8	139	8,672	33,186	3.8	65.4
Neonatal intensive care	18	497	4,593	9.2	69.9					
Coronary care unit	33	2,208	6,330	2.9	52.6	22	1,046	3,180	3.0	39.6
Spinal care unit	14	37	2,861	77.3	56.0	4	19	2,000	105.3	137.0
Urology	390	17,288	65,257	3.8	45.8	308	13,628	52,044	3.8	46.3
Total	17,110	469,049	4,554,165	9.7	72.9	12,123	356,949	3,252,564	9.1	73.5

(1) Code 5.1 Institutes (accredited private healthcare facilities) in the ministerial classification. Source: processing by Ermeneta, based on data from the Ministry of Health

Table S/59 – Activities of private hospitals¹ (accredited healthcare facilities) classified according to specialty, Year 2017 (Center)

Specialty	Total			AIDP-associated Private hospitals (accredited healthcare facilities)		
	Patient beds	Inpatients	In-hospital days	Occupancy rate %	Average length of stay	Occupancy rate %
Angiology	25	345	1,344	14.7	3.9	14.7
Casualty department	12	450	4,608	105.2	10.2	3.9
Heart Surgery	22	1,055	6,022	75.0	5.7	6.4
Cardiology	98	4,328	19,857	55.5	4.6	55.0
General Surgery	738	19,122	78,455	29.1	4.1	29.2
Plastic surgery	5	239	774	42.4	3.2	3.9
Vascular surgery	9	320	1,638	49.9	5.1	3.0
Geriatrics	26	774	6,721	70.8	8.7	8.1
Long-stay care pts	1,061	11,817	365,253	94.3	30.9	70.8
Endocrine, nutritional and metabolic diseases	10	49	452	12.4	9.2	8.1
General medicine	1,024	25,763	224,574	60.1	8.7	12.4
Nephrology	47	688	4,443	25.9	6.5	62.6
Neonatology	16	171	692	11.8	4.0	44.1
Neurosurgery	18	637	2,402	36.6	3.8	2.4
Neurology	8	333	1,819	62.3	5.5	80.3
Neurological rehabilitation	75	308	31,870	116.4	103.5	2.9
Ophthalmology	52	385	902	4.8	2.3	2.9
Oncology	35	1,174	7,088	55.5	6.0	2
Orthopedics and Traumatology	1,039	43,241	169,905	44.8	3.9	55.5
Obstetrics and gynaecology	191	8,199	27,800	39.9	3.4	43.8
Otorhinolaryngology	63	1,463	2,187	9.5	1.5	41.0
Pneumology	24	712	6,114	69.8	8.6	8.5
Psychiatry	94	1,465	32,447	94.6	22.1	69.8
Functional recovery and rehabilitation	2,331	29,550	715,267	84.1	24.2	95
Intensive care	31	1,678	8,574	75.8	5.1	89.0
Coronary care unit	139	6,857	23,692	46.7	3.5	229
Urology	7,220	159,563	1,751,313	66.5	11.0	86.0
Total						49.5
						63.2

(1) Code S.1 Institutes (Private accredited healthcare facility) in the ministerial classification.

Source: processing by Ermeneia, based on data from the Ministry of Health

Table S/60 – Activities of private hospitals¹ (accredited healthcare facilities) classified according to specialty. Year 2017 (South)

Specialty	Total				AIOIP-associated Private hospitals (accredited healthcare facilities)					
	Patient beds	Inpatient s	In-hospital days	Average length of stay	Occupancy rate %	Patient beds	Inpatient s	In-hospital days	Average length of stay	Occupancy rate %
Heart Surgery	223	14,748	81,128	5.5	99.7	148	10,823	59,832	5.5	110.8
Cardiology	751	48,373	183,929	3.8	67.1	529	32,474	124,848	3.8	64.7
General Surgery	2,341	74,275	321,536	4.3	37.6	1,799	59,849	260,891	4.4	39.7
Maxillofacial surgery	12	1,887	2,699	1.5	55.7	7	255	1,017	4.0	39.8
Pediatric surgery	18	185	820	4.4	12.5					
Plastic surgery	25	831	2,762	3.3	30.3	20	535	1,943	4	26.6
Thoracic surgery	25	740	3,732	5.0	40.9	17	327	1,211	3.7	19.5
Vascular surgery	161	5,146	27,053	5.3	46.0	105	2,628	14,777	5.6	38.6
Gastroenterology	32	700	5,868	8.4	50.2	22	307	2,351	7.7	29.3
Geriatrics	284	7,793	66,441	8.5	64.1	204	5,333	44,938	8.4	60.4
Long-stay care pts	918	7,080	203,267	28.7	60.7	806	5,911	182,520	30.9	62.0
Endocrine, nutritional and metabolic diseases	30	844	6,485	7.7	59.2	30	844	6,485	7.7	59.2
General medicine	1,422	48,135	322,870	6.7	62.2	1,074	37,826	243,236	6.4	62.0
Nephrology	47	2,182	10,872	5.0	63.4	28	1,348	7,104	5.3	69.5
Neonatology	58	1,008	5,843	5.8	27.6	42	569	2,330	4.1	15.2
Neurosurgery	81	3,286	16,249	4.9	55.0	71	3,015	15,155	5.0	58.5
Neurology	749	9,091	185,155	20.4	67.7	682	6,989	170,458	24.4	68.5
Child Neuropsychiatry	10	1	10	10.0	0.3	10	1	10	10.0	0.3
Neurological rehabilitation	63	478	22,155	46.3	96.3	30	279	10,835	38.8	98.9
Day nursery	60	2,828	7,699	2.7	35.2	60	2,828	7,699	2.7	35.2
Ophthalmology	156	1,997	15,393	7.7	27.0	117	1,579	12,534	7.9	29.4
Oncematology	23	668	6,166	9.2	73.4	23	668	6,166	9.2	73.4
Oncology	174	7,807	44,365	5.7	69.9	167	7,636	43,143	5.6	70.8
Orthopedics and Traumatology	1,556	51,199	233,219	4.6	41.1	1,266	39,265	180,418	4.6	39.0
Obstetrics and gynaecology	1,093	52,530	216,484	4.1	54.3	760	37,998	159,540	4.2	57.5
Otorhinolaryngology	207	4,495	14,949	3.3	19.8	143	3,023	11,398	3.8	21.8
Pneumology	126	4,002	30,317	7.6	65.9	89	2,368	19,009	8.0	58.5
Psychiatry	486	5,733	122,373	21.3	69.0	286	3,675	68,844	18.7	65.9
Radiation Therapy	10	21	184	8.8	5.0	10	21	184	8.8	5.0
Oncological radiotherapy	7	244	1,247	5.1	48.8	7	244	1,247	5.1	48.8
Functional recovery and rehabilitation	3,459	42,736	1,034,931	24.2	82.0	2,447	30,099	719,666	23.9	80.6

(Continued) Table S/60 – Activities of private hospitals¹ (accredited healthcare facilities) classified according to specialty, Year 2017 (South)

Specialty	Total				AIOIP-associated Private hospitals (accredited healthcare facilities)					
	Patient beds	Inpatients	In-hospital days	Average length of stay	Occupancy rate %	Patient beds	Inpatients	In-hospital days	Average length of stay	Occupancy rate %
Rheumatology	45	1,463	12,031	8.2	73.2	15	469	4,172	8.9	76.2
Intensive care	148	7,346	32,218	4.4	59.6	78	4,492	16,260	3.6	57.1
Neonatal intensive care	17	230	4,124	17.9	66.5	8	216	4,031	18.7	138.0
Coronary care unit	96	7,987	31,469	3.9	89.8	59	5,190	20,319	3.9	94.4
Spinal care unit	25	152	8,428	55.4	92.4	25	152	8,428	55.4	92.4
Urology	482	19,134	84,412	4.4	48.0	392	14,211	66,068	4.6	46.2
Total	15,420	428,607	3,368,883	7.9	59.9	11,576	316,978	2,499,067	7.9	59.1

(1) Code 5.1 Institutes (Private accredited healthcare facility) in the ministerial classification.

Source: processing by Ermeneta, based on data from the Ministry of Health

Table S/61 – Differences of healthcare options across the country, assessed according to patient mobility, using data on hospital admissions^(a), Years 2014-2018

Regions	2014		2015		2016		2017		2018		Mobility balance ^(b)	
	Inflow	Outflow	Inflow	Outflow	Inflow	Outflow	Inflow	Outflow	Inflow	Outflow		Ratio
- Piedmont	0.86	1.17	0.84	1.19	0.88	1.14	0.86	1.17	0.88	1.13	1.3	-3,749
- Aosta Valley	0.69	1.45	0.69	1.45	0.78	1.28	0.83	1.20	0.75	1.33	1.8	-596
- Lombardy	2.44	0.41	2.53	0.39	2.64	0.38	2.63	0.38	2.60	0.38	0.1	74,947
- A.P. of Trento	0.63	1.60	0.65	1.54	0.65	1.55	0.68	1.46	0.67	1.49	2.2	-2,687
- Veneto	1.17	0.85	1.27	0.79	1.30	0.77	1.34	0.75	1.32	0.76	0.6	10,415
- Friuli V.G.	1.56	0.64	1.30	0.77	1.35	0.74	1.25	0.80	1.23	0.81	0.7	2,235
- Liguria	0.68	1.47	0.68	1.47	0.66	1.51	0.71	1.41	0.71	1.42	2.0	-8,005
- Emilia Romagna	2.44	0.41	2.41	0.41	2.39	0.42	2.40	0.42	2.43	0.41	0.2	49,151
- Tuscany	2.00	0.50	1.98	0.51	1.95	0.51	1.77	0.57	1.73	0.58	0.3	20,197
- Umbria	1.46	0.69	1.40	0.71	1.30	0.77	1.17	0.85	1.16	0.87	0.7	2,136
- Marche	0.92	1.09	0.84	1.19	0.80	1.24	0.77	1.30	0.84	1.19	1.4	-3,897
- Lazio	0.92	1.08	0.87	1.15	0.86	1.16	0.90	1.11	0.92	1.2	1.2	-4,457
- Abruzzo	0.64	1.57	0.67	1.49	0.68	1.48	0.69	1.44	0.65	1.55	2.4	-9,206
- Molise	1.17	0.85	1.16	0.86	1.04	0.96	1.03	0.97	1.05	0.96	0.9	582
- Campania	0.32	3.10	0.33	3.00	0.32	3.12	0.31	3.25	0.30	3.34	11.2	-38,879
- Apulia	0.55	1.82	0.55	1.81	0.57	1.74	0.54	1.86	0.53	1.90	3.6	-19,621
- Basilicata	0.83	1.20	0.82	1.22	0.79	1.27	0.74	1.36	0.72	1.38	1.9	-4,510
- Calabria	0.12	8.01	0.12	8.18	0.12	8.47	0.12	8.39	0.12	8.37	70.0	-33,510
- Sicily	0.31	3.24	0.28	3.61	0.25	3.98	0.25	4.03	0.24	4.10	16.8	-25,589
- Sardinia	0.33	3.02	0.33	3.05	0.33	2.99	0.34	2.97	0.36	2.77	7.7	-5,796

Data related to the Autonomous Province of Bolzano have not been provided here as they are strongly biased by migration abroad (notably to Austria).

(a) Mobility has been provided in percentage of incoming and outgoing acute patients, calculated on the inter-regional mobility matrices.

(b) Active and passive mobility balance of acute patients of each region.

Source: processing by *Ermeneta*, based on data from the *Ministry of Health*

3. Staff information

3.1. Staff fluctuation over the years

The 2018 calculations of employed staff indicated by the Ministry of Health confirm stabilization of the trend of progressive downsizing of the workforce recorded by the public hospital facilities as a whole starting from 2010, a downward trend that had led to an overall reduction of 10.3% in 2015. The 2018 values indicate a rapprochement with respect to those of 2014, which, although still decreasing, show a slight improvement also in terms of the amount of medical and nursing staff for inpatient beds. Thus, the decisive inversion of trend is further reduced with respect to the growth observed in 2009, which we had in any case mainly attributed to the creation of new hospital centers and to a radical reclassification undertaken with the inclusion, among the directly managed hospitals and among the hospital centers, of some institutions previously included among the so-called ‘assimilated’ public hospitals. As always, it should be stressed that the values indicated do not include freelance or similarly working personnel, which have nevertheless become part of the workforce over the last few years.

Instead, focusing the analysis on the trends described in Table S/62, which shows the data for the period 2014-2018, the decrease was 786 units, with a staff that had been reduced by 0.2% going from 456,879 to 456,093 employees.

Looking at the public facilities under consideration, that is the hospital centers (including those integrated with universities) and hospitals directly managed by local health authorities, and again taking into account what has already been explicitly stated, we can see the differences in the dynamics among the different professional figures during the period considered: an increase in the number of doctors by 1,062 units, of nurses by 2,025 units, and a decline in the number of other staff by 3,873 units, as shown by the data in the following table:

	<i>2014</i>	<i>2018</i>
– Medical doctors and Dentists	84,716	85,778
– Nurses	212,129	214,154
– Other staff	160,034	156,161

As previously shown, an analysis of the indicator that shows the relationship between the personnel of the public facilities and the corresponding data relating to the number of patient beds, illustrates that there is also a slight improvement for 2015 for both hospital centers and the hospitals of the local health authorities, noting however that the trend of these relationships continues to be strongly influenced by the change in the classifications and the changes of recent years in the public sphere (see Table S/64).

Analyzing parallel to this the staff of the facilities belonging to AIOP, on the other hand we see an increase between 2014 and 2019 of 6,549 units, equal to a + 10% increase (Table S/65). This is an increase that affects both the medical staff and, to a greater extent, the nurses and the other personnel, yet once again taking into account the fact that the overall number of staff and their compositional breakdown into the various professional roles is strongly influenced by the variability in the consistency and in the type of the entire grouping of facilities (Table S/66).

3.2. Staff distribution throughout Italy

Healthcare personnel working in the public and private hospitals of the National Health Service as a whole amounted to more than 633,000 units (Table S/67), as shown in the latest ISTAT survey available, which, however, shows the situation once again relate to 2013. It shows a significant variability by region and by professional figure compared to the previous period, most likely due to a change in the method of data collection and classification.

The North continues to distinguish itself from the other territorial areas, as the part of the country in which all the professional components are most represented in the hospital, with an incidence on the total amounting to 52%.

The numbers and distributions of the employees of AIOP facilities, for which we have data updated at the end of 2019, are instead shown in Table S/68, which makes it possible to observe that the total number of operators employed was 64,578 units. The overall workforce of these facilities is rounded out by 7,639 units of medical personnel and 4,941 units of non-medical personnel, whose services are offered through freelance collaboration agreements.

Table S/62 – Staff trends in Hospital Centers and in the local health service (ASL) hospitalization facilities^(a) (A.V.)

Type of institution	2014		2015		2016		2017		2018	
	Hospital Centers (*)	ASL hospitalization facilities (**)	Hospital Centers (*)	ASL hospitalization facilities (**)	Hospital Centers (*)	ASL hospitalization facilities (**)	Hospital Centers (*)	ASL hospitalization facilities (**)	Hospital Centers (*)	ASL hospitalization facilities (**)
Medical doctors and Dentists	34,646	50,070	33,640	50,095	33,785	50,956	34,264	50,664	35,145	50,633
Nurses	93,119	119,010	90,937	119,313	90,096	120,456	90,343	121,295	91,741	122,413
Other	79,862	80,172	76,894	79,721	77,163	82,646	77,098	80,868	76,722	79,439
Total	207,627	249,252	201,471	249,129	201,044	254,058	201,705	252,827	203,608	252,485

(a) Staff working as self-employed professionals or other contract types were not included.

(*) NHS staff and University staff.

(**) Residual mental health facilities are included.

Source: data processed by *Ermeneta* from the “Economic and Management Activities of Local Health Authorities and Hospital Centers”. Report of the Ministry of Health, Years 2014, 2015, 2016, 2017 and 2018

Table S/63 – Hospital Center and local health service (ASL) hospitalization facility staff (% var.)

	2015/2014		2016/2015		2017/2016		2018/2017		2018/2014	
	Hospital Centers (*)	ASL hospitalization facilities (**)	Hospital Centers (*)	ASL hospitalization facilities (**)	Hospital Centers (*)	ASL hospitalization facilities (**)	Hospital Centers (*)	ASL hospitalization facilities (**)	Hospital Centers (*)	ASL hospitalization facilities (**)
Medical doctors and Dentists	-2.9	0.0	0.4	1.7	1.4	-0.6	2.6	-0.1	1.4	1.1
Nurses	-2.3	0.3	-0.9	1.0	0.3	0.7	1.5	0.9	-1.5	2.9
Other	-3.7	-0.6	0.3	3.7	-0.1	-2.2	-0.5	-1.8	-3.9	-0.9
Total	-3.0	0.0	-0.2	2.0	0.3	-0.5	0.9	-0.1	-1.9	1.3

(a) Staff working as self-employed professionals or other contract types were not included.

(*) NHS staff and University staff.

(**) Residual mental health facilities are included.

Source: data processed by *Ermeneta* from the “Economic and Management Activities of Local Health Authorities and Hospital Centers”. Report of the Ministry of Health, Years 2014, 2015, 2016, 2017, and 2018

Table S/64 – Hospital Center and local health service (ASL) hospitalization, facility staff

	2014		2015		2016		2017		2018	
	Hospital Centers (*)	ASL hospitalization facilities (**)	Hospital Centers (*)	ASL hospitalization facilities (**)	Hospital Centers (*)	ASL hospitalization facilities (**)	Hospital Centers (*)	ASL hospitalization facilities (**)	Hospital Centers (*)	ASL hospitalization facilities (**)
Medical doctors per 10 patient beds	7.9	4.8	8.4	6.1	8.5	6.4	8.5	6.5	9.2	6.4
Nurses per 10 patient beds	21.3	11.4	22.8	14.6	22.6	15.0	22.5	15.4	24.0	15.5

(*) NHS staff and University staff.

(**) Residual mental health facilities are included.

Note: the numbers of medical doctors and nurses per patient bed has been calculated considering patient beds actually used.

Source: data processed by *Ermeneta* from the “Economic and Management Activities of Local Health Authorities and Hospital Centers” Report of the Ministry of Health, Years 2014, 2015, 2016, 2017, and 2018

Table S/65 – Staff working in medical institutions associated with AIOIP. Years 2014-2019

Role	2014	2015	2016	2017	2018	2019
Contract employee and self-employed doctors	11,815	11,948	12,191	12,340	12,136	12,364
Nurses	19,316	20,032	21,147	21,241	21,087	21,148
Other	34,537	34,445	36,307	36,572	38,015	38,705
Total	65,668	66,425	69,645	70,153	71,238	72,217

Note: surveying data related to staff can be significantly affected by institutions entering or leaving AIOIP over the years.

Source: processing by *Ermeneta* – Data from AIOIP

Table S/66 – Staff working in medical institutions associated with AIOIP. Years 2014 - 2019 (% var.)

	2015/2014		2016/2015		2017/2016		2018/2017		2019/2018	
	2015/2014	2016/2015	2016/2015	2017/2016	2017/2016	2018/2017	2018/2017	2019/2018	2019/2018	2019/2018
Contract employee and self-employed doctors	1.1	2.0	1.2	1.2	1.2	-1.7	1.9	1.9	0.3	4.6
Nurses	3.7	5.6	0.4	0.4	0.4	-0.7	0.3	-0.7	1.8	9.5
Other	-0.3	5.4	0.7	0.7	0.7	3.9	1.8	3.9	1.8	12.1
Total	1.2	4.8	0.7	0.7	0.7	1.5	1.4	1.5	1.4	10.0

Note: surveying data related to staff can be significantly affected by institutions entering or leaving AIOIP over the years.

Source: processing by *Ermeneta* – Data from AIOIP

Table S/67 – Total number of healthcare personnel employed in various healthcare institutions, by region, 2013

Regions	Medical personnel	Nursing staff	Other staff	Total staff
– Piedmont	9,477	20,078	21,750	51,305
– Aosta Valley	354	591	657	1,602
– Lombardy	22,026	48,097	54,356	124,479
– Trentino-Alto Adige	1,906	5,871	8,035	15,812
– Autonomous Prov. of Bolzano	948	3,203	4,785	8,936
– Autonomous Prov. of Trento	958	2,668	3,250	6,876
– Veneto	8,494	22,445	19,530	50,469
– Friuli Venezia Giulia	2,715	6,527	6,555	15,797
– Liguria	3,702	8,879	7,053	19,634
– Emilia Romagna	9,854	21,905	18,513	50,272
– Tuscany	8,362	17,898	13,588	39,848
– Umbria	1,933	3,827	2,827	8,587
– Marche	3,586	8,760	6,472	18,818
– Lazio	13,243	26,276	22,904	62,423
– Abruzzo	2,530	6,023	3,940	12,493
– Molise	651	1,482	1,345	3,478
– Campania	9,817	19,299	13,735	42,851
– Apulia	7,093	16,084	12,203	35,380
– Basilicata	1,085	2,650	2,137	5,872
– Calabria	3,221	6,273	4,949	14,443
– Sicily	10,223	17,923	14,206	42,352
– Sardinia	4,156	7,282	5,377	16,815
– North	58,528	134,393	136,449	329,370
– Center	27,124	56,761	45,791	129,676
– South	38,776	77,016	57,892	173,684
– Italy	124,428	268,170	240,132	632,730

Source: ISTAT, healthcare institution facilities and activities

Table S/68 – Staff working in medical institutions associated with A.I.O.P., Updated to December, 31st 2019

Regions	Contract employee operators										Self-employed professionals	
	Medical personnel		Nurses	Technicians	Auxiliary staff in Health and Social Care Settings			Other caregiver staff	Other staff	Total	Medical personnel	Non-medical personnel
– Piedmont	210	1,107	322	457	597	1,057	3,750	573	345			
– Aosta Valley	1	12	4	3	14	9	43	2	23			
– Lombardy	1,368	5,813	1,780	2,207	2,111	4,810	18,089	2,274	1,139			
– A.P. of Bolzano	3	67	33	21	33	39	196	10	19			
– A.P. of Trento	17	81	25	37	88	72	320	5	15			
– Veneto	286	1,417	407	215	811	941	4,077	314	169			
– Friuli V. Giulia	41	131	46	15	93	140	466	48	24			
– Liguria	3	128	17	9	12	150	319	16	41			
– E. Romagna	154	1,997	475	384	980	1,094	5,084	664	544			
– Tuscany	132	670	180	130	415	391	1,918	398	179			
– Umbria	13	86	61	11	96	44	311	71	10			
– Marche	78	340	69	77	150	265	979	123	82			
– Lazio	663	3,363	1,212	1,697	1,156	2,593	10,684	1,303	845			
– Abruzzo	68	380	129	154	47	174	952	33	47			
– Molise	102	288	84	50	19	212	755	7	417			
– Campania	781	2,025	731	718	628	1,468	6,351	539	489			
– Apulia	206	916	427	265	756	649	3,219	98	140			
– Basilicata	10	68	27	7	133	70	315	2	3			
– Calabria	121	322	142	131	194	278	1,188	193	117			
– Sicily	365	1,536	367	854	203	1,172	4,497	801	194			
– Sardinia	103	401	63	84	179	235	1,065	165	99			
– Italy	4,725	21,148	6,601	7,526	8,715	15,863	64,578	7,639	4,941			

Source: A.I.O.P.

4. Spending data

4.1. Economic flow trends over the years

The expenditure of the National Health Service, described in the usual analytical components at consolidated values, was also determined for 2018 on the basis of the information coming from different institutional sources, due to the lack of updates to the “Health Report” contained in the various editions of the General Report on the Country’s Economic Situation. From this work, published by the Ministry of Economy and Finance until the year 2012, it was possible to extract the historical series of coordinated data flows on healthcare expenditure, with a specific detail dedicated to the various functions that make it up. The historical series of data provided in Table S/69, which this year concerns the data for the period 2014-2018, is therefore no longer influenced by the methodological break that occurred in 2012 and the methods for defining the various components of healthcare spending adopted by the sources used since 2013 – Court of Auditors, Agenas and MEF – are characterized by their temporal consistency.

Total public spending for the area of hospitalizations is estimated at just over EUR 64.9 billion for 2018, compared to EUR 63.6 million a year earlier (with a 1.9% increase) (Table S/69).

Within this funding aggregate, the amount assigned to the activity of accredited hospitals alone (thus excluding the other types that fall under the “Accredited hospital” expenditure item such as, for example, Institutes for Treatment and Research and religiously-affiliated classified hospitals) is EUR 4.4 billion, or 6.7% of total public hospital expenditure; this amount then sees a slight decrease after the more marked one reported in 2013 as a direct consequence of the effects of the spending review measure (Law 135/12), described in previous editions of the Report, and of the subsequent penalizing measures to contain healthcare spending in the following years.

The analysis at constant prices, which presents the levels of expenditure in real terms (Table S/70), is always based on the calculation on the GDP deflator which, however, is aligned, from last year Report, with the new ISTAT series linked to 2015; the change in total public hospital expenditure between the new base year and 2018 is slightly up (1.2%), compared to a decrease of the same amount recorded by overall healthcare spending. In the same period, on the other hand, spending for accredited hospitals experienced, in real terms, a more marked reduction (-2.3%), above all due to the cuts in the fees paid in this area (both in terms of fee levels and budgeting). The real GDP evaluation continues to affect the generally negative trend of spending data at constant prices; according to the estimates confirmed also in the 2020 Economic and Financial Document (DEF), in fact, the national wealth indicator significantly reversed its negative trend only starting from 2015, starting to record a slight increase from 2018 compared to 2010 (0.5%).

4.2. Health expenditure comparisons

The November 2020 edition of OECD “Health Data” allows us to construct the usual framework for comparing healthcare spending within the group of 24 of the largest member countries of the organization. Table S/71 shows those most commonly health funding indicators observed by industry analysts: the incidence of total health expenditure and of public health expenditure compared to GDP.

In 2018, the propensity for the gradual decline in resources in terms of GDP assigned to the NHS continues to be seen for Italy, thereby accentuating the gap accumulated over time compared to the average for both OECD Europe countries and those of the G7 group (6.5% compared to 7.1% and 9.2%, respectively). This propensity is destined to be decisively reversed, but only as a consequence of the maneuvers planned to deal with the dramatic effects that the spread of Covid 19 is causing on the stability of almost all regional health systems: in fact, in contrast to the forecasts contained in the Economic and Financial Document released by the MEF in April 2019, which indicated a trend in the spending curve – GDP projected towards a value of 6.4% for 2022, the DEF version released in April 2020 indicates values for 2020 and 2021 of 7.2% (+ 3.6%) and 6.9% (+ 1.3%), respectively, with a nominal funding value of the National Health Service which should be slightly in excess of EUR 121 billion in 2021. These values that are still far from the average of the G7 countries and will probably be even lower than those of the

OECD European countries, which are also being forced to adapt their health systems to the new critical issues caused by the pandemic. Returning to the comparisons with 2018, even in terms of total health expenditure, Italy shows a ratio to GDP below the average of the G7 countries (8.7% compared to 11.4%), still remaining below the average of OECD Europe (which is 9.2%).

The trend towards stabilization of the overall Italian health expenditure indicated by the OECD for the three-year period 2016-2018 shows how, in the face of the progressive reduction of public commitment, a significant part of healthcare needs continue to be financed directly by citizens or through old and new forms of intermediation. Again in terms of total health expenditure, Italy is still below the 2018 values of the most industrialized countries, the United States, France, Germany and Canada (which present values of 16.9%, 11.3%, 11.5% and 10.8%, respectively). And, although with different relative positions, this is particularly true for the first three countries mentioned also with regard to public healthcare spending.

Finally, taking into consideration the amount of healthcare spending reserved for hospital activities provided by the publicly-operated and privately-operated components of the NHS (Table S/72), and again with reference to the year 2018, it can be seen that Italy has:

- a higher proportion (56.5%) of total public healthcare spending compared to the average for the G7 countries (42.1%), and compared to that of European OECD countries (45.4%);
- a GDP spending ratio slightly below the average of the G7 countries but still higher than that of European OECD countries (3.8% and 3.2%, respectively).

The new historical phase we are experiencing will hopefully lead to a reversal of the trend with respect to the old policies of downsizing the commitment in terms of the use of resources for health in relation to the wealth produced; the drift towards undeclared defunding was threatening to bring the Italian health system towards a selective universal care model, inside of which new tools still in the planning phase and attributable to the so-called “Second pillar”, would, according to some lines of thinking, redefine the overall sustainability of the Italian healthcare system.

Table S/69 – Current health spending, Years 2014-2018 (in billions of euro)

	2014	2015	2016	2017	2018
Public hospital facilities	52.744	53.847	54.566	55.226	56.378
Accredited hospitals (as a whole)	8.425	8.466	8.484	8.419	8.493
of which: accredited hospitals ¹	4.289	4.335	4.351	4.321	4.359
Total public hospital system expenditure	61.169	62.313	63.050	63.645	64.871
Other expenditure features	51.504	50.354	50.681	50.694	51.094
Total public healthcare expenditure	112.673	112.667	113.731	114.339	115.965

(1) Code 5.1 institutes (Accredited private healthcare facilities) in the ministerial classification.

Source: data processed by Ermeneta from the 2015, 2016, 2017, 2018, 2019 and 2020 "Report on the coordination of public finance" by the Court of Auditors, the 2018-2019 Agenas Report on the monitoring of the health spending of the Regions and the 2020 MEF Report on the monitoring of the healthcare spending

Table S/70 – Healthcare expenditure at constant prices (*), Years 2014-2018 (in billions of euro)

	2014	2015	2016	2017	2018
Public hospital facilities	53.236	53.847	53.954	54.213	54.779
Accredited hospitals (as a whole)	8.504	8.466	8.389	8.265	8.252
of which: accredited hospitals ¹	4.329	4.335	4.302	4.242	4.235
Total public hospital system expenditure	61.739	62.313	62.343	62.477	63.031
Other expenditure features	51.984	50.354	50.113	49.764	49.645
Total public healthcare expenditure	113.723	112.667	112.455	112.241	112.676

(*) GDP deflator calculated on the basis of the new ISTAT series in a chained series with reference to 2015, November 2020.

(1) Code 5.1 institutes (Accredited private healthcare facilities) in the ministerial classification.

Source: data processed by Ermeneta from the 2015, 2016, 2017, 2018, 2019 and 2020 "Report on the coordination of public finance" by the Court of Auditors, the 2018-2019 Agenas Report on the monitoring of the health spending of the Regions and the 2020 MEF Report on the monitoring of the healthcare spending

Table S/71 – Amount of total healthcare expenditure and public healthcare spending in relation to the GDP

% Values	Total healthcare expenditure			Public healthcare expenditure		
	2016	2017	2018	2016	2017	2018
United States	17.0	17.0	16.9	14.4	14.4	14.3
Japan	10.8	10.8	11.0	9.1	9.1	9.2
Germany	11.2	11.4	11.5	9.5	9.6	9.7
France	11.5	11.4	11.3	9.6	9.5	9.4
Italy	8.7	8.7	8.7	6.7	6.5	6.5
United Kingdom	9.9	9.8	10.0	7.9	7.7	7.8
Canada	11.0	10.8	10.8	7.7	7.6	7.6
Average of G7 countries (*)	11.5	11.4	11.4	9.3	9.2	9.2
Australia	9.2	9.2	9.3	6.1	6.1	6.2
Austria	10.4	10.4	10.3	7.7	7.7	7.7
Belgium	10.3	10.4	10.3	7.8	7.9	7.8
Denmark	10.1	10.1	10.1	8.5	8.5	8.5
Finland	9.4	9.1	9.0	7.1	7.0	7.0
Greece	8.2	8.0	7.7	5.0	4.8	4.5
Iceland	8.2	8.3	8.5	6.7	6.8	7.0
Ireland	7.4	7.2	6.9	5.4	5.2	5.1
Luxembourg	5.2	5.3	5.3	4.3	4.4	4.4
Holland	10.3	10.1	10.0	8.3	8.2	8.2
New Zealand	9.3	9.0	9.2	7.3	7.1	7.3
Norway	10.6	10.3	10.0	9.0	8.8	8.6
Portugal	9.4	9.3	9.4	5.8	5.7	5.8
Spain	9.0	8.9	9.0	6.4	6.3	6.3
Sweden	10.8	10.8	10.9	9.2	9.2	9.3
Switzerland	11.7	11.9	11.9	7.7	7.8	7.6
Turkey	4.3	4.2	4.2	3.4	3.3	3.2
Average of European OECD countries (*)	9.3	9.2	9.2	7.2	7.1	7.1
Average of all OECD countries (*)	9.7	9.7	9.7	7.5	7.5	7.5

(*) Averages are calculated as unweighted arithmetic means.

Source: *Ermeneia processing of "OECD Health Data 2020", OECD, Paris, November 2020*

Table S/72 –Public and accredited hospital expenditure in relation to the public healthcare spending and the GDP

% Values	Public and accredited hospital expenditure / Total public healthcare spending			Public and accredited hospital expenditure/GDP		
	2016	2017	2018	2016	2017	2018
	United States	37.1	37.2	37.0	5.3	5.3
Japan	44.0	44.0	-	4.0	4.0	-
Germany	32.8	32.0	31.8	3.1	3.1	3.1
France	43.8	43.8	43.1	4.2	4.2	4.1
Italy	57.7	57.1	56.5	3.7	3.7	3.6
United Kingdom	48.6	49.5	48.7	3.8	3.8	3.8
Canada	36.0	35.9	35.7	2.8	2.7	2.7
Average of G7 countries (*)	42.9	42.8	42.1	3.9	3.8	3.8
Australia	49.4	50.0	-	3.0	3.1	-
Austria	46.9	47.2	46.9	3.6	3.6	3.6
Belgium	34.4	34.1	34.4	2.7	2.7	2.7
Denmark	49.5	49.5	49.2	4.2	4.2	4.2
Finland	43.6	45.4	46.5	3.1	3.2	3.2
Greece	49.9	48.5	49.1	2.5	2.3	2.2
Iceland	46.9	47.4	47.7	3.1	3.2	3.4
Ireland	35.7	36.0	36.4	1.9	1.9	1.9
Luxembourg	35.4	35.6	37.3	1.5	1.6	1.7
Holland	38.8	38.2	38.2	3.2	3.1	3.1
New Zealand	-	-	-	-	-	-
Norway	45.6	44.6	44.1	4.1	3.9	3.8
Portugal	54.2	54.5	54.5	3.1	3.1	3.2
Spain	56.0	55.7	55.5	3.6	3.5	3.5
Sweden	44.9	44.7	44.8	4.1	4.1	4.2
Switzerland	44.2	44.6	44.1	3.4	3.5	3.4
Turkey	55.6	55.8	54.5	1.9	1.8	1.8
Average of European OECD countries (*)	45.5	45.5	45.4	3.2	3.2	3.2
Average of all OECD countries (*)	44.8	44.8	44.6	3.3	3.3	3.3

(*) Averages are calculated as unweighted arithmetic means.

Source: *Ermeneia processing of "OECD Health Data 2020", OECD, Paris, November 2020*

Appendices

1. Methods applied

The 2020 Report was completed in a very particular situation, straddling two waves of the Covid-19 pandemic.

In fact, the year began with the unfolding of an extensive viral attack, originating in China and then gradually spreading to Europe and the rest of the world.

Italy experienced its first wave between February and May 2020 with an (apparent) summer respite, only to find itself immersed in a second, equally if not even more severe fall wave, with the additional problem (dissimilar to the first wave), of having to protect citizens' health and at the same time resume production activities. This resulted in the accentuation of the measures already adopted during the first wave (masks, distancing, hand and room hygiene) but also partial, local, regional, and national lockdowns, and a nighttime curfew.

When the time came to prepare the Report during the months of June-July 2020, the dual main-theme of the year had already become apparent, namely that of how not only Covid patients were being cared for, but also the non-Covid patients, who, in the wake of the extraordinary impact of the pandemic were experiencing the total or partial interruption of regular services.

The Report has, therefore, tried to account for this new situation which, moreover, became dangerously aggravated with a return of the virus in the fall.

The work proceeded in the following manner:

- a brief analysis of the trend of the hospital services supplied was prepared, showing the relative positive and problematic aspects of these up to the outbreak of the pandemic, noting its negative impact but also the positive collaboration between accredited facilities and public facilities aimed at providing the best possible care for the Covid patients;

- a single field survey was carried out on a representative sample of the adult population to detect the access and/or lack of access to health services of non-Covid patients, and this was done by administering a lengthy questionnaire. This was completed by September 21, 2020, and the results have been placed in Part Two of the Report (as well as in the Appendices, for the cross-reference tables of the mentioned survey);
- finally, Part Three, as per tradition, has been devoted to updating the battery of usual statistical indicators.

Part One has shown:

- the evolutionary phenomena of the Italian hospital system, looking at both the “continuity” and “discontinuity” of the supply of services, in order to account for the strength and weakness of this system independent of the current pandemic and the commitment of AIOP facilities to providing patient beds for Covid patients in support of public facilities (Section 1);
- the experiences and assessments of non-Covid patients who experienced the interruption and, therefore, the postponing of the regular services they needed due to the pandemic emergency (Section 2);
- and finally, the phenomena relating to the delicate issue of the funding of the health system (and hospitals in particular), which in 2020 showed some signs of reversal in the trend as a direct result of the necessity imposed by the pandemic, accompanied by the opening up of Europe to greater flexibility in the public budget and the launch of the *Recovery Fund*: it being understood that improvement of the financial management of public hospitals must be addressed, a topic we have been dealing with for some years now, starting with the analysis of the Income Statements of Hospitals (Section 3).

As regards the latter, the items of the aforementioned Income Statements of 33 public Hospital Centers were analyzed (Revenues, Costs, Operating results), over a seven-year period (from 2013 to 2019). Table 1 below shows the absolute values of the items (in thousands of euros) for the individual Hospital Centers, grouping the results by the Regions they belong to and by the territorial areas of reference. It should be mentioned that the 33 Hospital Centers represent more than 3/4 of the national total, with 12 units located in the North, 7 in Central Italy, and 14 in the South. Not all of the Hospital Centers that were examined in the last Report were used this time, as Lombardy (with 29 Hospital Centers) has changed its organizational system, incorporating territorial-type activities within the Centers. This has also been the case for some specific Centers in the Region of Friuli Venezia Giulia, Sardinia and Emilia Romagna.

In the aforementioned Table App. 1, some indicators were obtained by calculating the Index Numbers (2013 = 100.0) in order to measure the existence of possible areas of inefficiency as has been done in recent years (see in particular section 3.2 of Part One).

Additionally, this year it was also decided to take a look at the Balance Sheets of the public Hospital Centers, although this was limited to an initial, simple comparison based on the percentage composition of the aggregate items of Assets and Liabilities for the years 2017, 2018 and 2019 (see Table App. 2).

Aware of the many difficulties getting into the Balance Sheets may cause, for many reasons, the most important (perhaps) may be that there is now the possibility of making new and sizeable investments in hospitals and equipment, technologies, physical structures and not just employees following the opening up of new credit lines by Europe. If this happens (also given the actual ability of Italy to access these resources), it will also be necessary to make an effort to adjust the management of the Financial Statements, meaning the Income Statements as well as the Balance Sheets, entailing greater detail when filling them out and, with a view to the certifiability/certification envisaged by the rules relating to healthcare budgets, which have been enacted for some time (see again section 3.2 of Part One).

Table Appendix 1 – 2013-2019 comparison of the data relating to the Revenues and Costs items in the Income Statements of the Hospital Centers (in thousands of euros)*

Hospital Centers and University Hospital Centers (U)	Inpatient admissions and day-hospital admissions (2)										Revenues from healthcare services and health-related social health services as per the IS (3)									
	2013	2014	2015	2016	2017	2018	2019	2014	2015	2016	2017	2018	2019	2014	2015	2016	2017	2018	2019	
Piedmont Total	100,070	84,150	95,050	94,800	94,325	90,687	92,554	125,885	119,436	124,437	129,356	125,654	133,662	542,128	542,128	542,128	542,128	542,128	542,128	
Emilia Romagna Total**	183,988	180,490	179,374	178,909	185,168	192,375	190,290	197,332	1,140,740	1,140,740	1,140,740	1,140,740	1,140,740	1,140,740	1,140,740	1,140,740	1,140,740	1,140,740	1,140,740	
North Italy Total	515,077	490,260	516,424	513,394	521,612	537,163	540,626	542,245	3,206,601	3,206,601	3,206,601	3,206,601	3,206,601	3,206,601	3,206,601	3,206,601	3,206,601	3,206,601	3,206,601	
Central Italy Total	278,170	273,601	243,235	230,472	242,570	240,173	239,363	1,415,784	1,374,215	1,404,145	1,419,376	1,468,145	1,530,072	1,468,145	1,468,145	1,468,145	1,468,145	1,468,145	1,468,145	
South Italy Total	459,951	411,125	394,968	419,089	299,028	389,815	388,154	1,126,504	1,126,504	1,126,504	1,126,504	1,126,504	1,126,504	1,126,504	1,126,504	1,126,504	1,126,504	1,126,504	1,126,504	
TOTAL	1,251,198	1,174,986	1,154,627	1,162,955	1,169,210	1,167,151	1,168,143	6,565,478	6,565,478	6,565,478	6,565,478	6,565,478	6,565,478	6,565,478	6,565,478	6,565,478	6,565,478	6,565,478	6,565,478	

(Continued) Table Appendix 1 – 2013-2019 comparison of the data relating to the Revenues and Costs items in the Income Statements of the Hospital Centers (in thousands of euros)*

Hospital Centers and Centers (I)	Revenues from co-payment charges for external specialist services as per the IS (Code A0940) (4)				Revenues from FSR transfer for "by function" activities as per the IS (Code AA0030) (5)								
	2013	2014	2015	2016	2017	2018	2019	2014	2015	2016	2017	2018	2019
H.C. 1	2.601	2.511	2.615	2.569	2.033	2.100	2.190	36.673	31.600	34.500	40.908	41.647	45.163
H.C. 2	6.534	6.900	6.564	5.598	5.267	5.875	6.088	64.002	66.200	74.041	89.816	67.365	97.021
H.C. 3	5.441	5.227	5.067	5.007	5.084	5.349	5.538	48.028	48.500	53.977	55.340	53.734	55.984
H.C. 4	3.336	3.142	3.297	3.142	3.250	3.174	3.400	62.321	60.010	65.400	72.369	75.350	74.788
H.C. 5	4.035	4.039	3.862	3.738	3.597	4.035	3.580	37.884	42.438	42.360	51.755	46.076	48.686
H.C. 6	14.648	15.181	13.454	12.178	12.072	12.714	12.455	366.810	357.400	362.282	369.228	394.630	294.928
H.C. 7	36.595	37.000	34.859	32.363	31.603	33.247	33.271	615.218	606.148	627.983	678.053	680.408	624.346
H.C. 8	8.663	8.821	8.635	8.373	8.047	10.495	11.131	94.209	138.893	136.414	165.421	20.010	111.750
H.C. 9	6.541	6.800	6.974	7.510	9.804	10.208	10.382	19.711	107.648	130.392	121.234	107.626	131.529
H.C. 10	15.704	15.621	15.609	15.983	20.651	20.703	21.513	191.380	246.541	266.655	227.636	243.279	217.300
H.C. 11	6.669	6.889	6.739	6.794	6.431	6.875	6.273	47.817	62.711	58.155	58.978	63.145	71.374
H.C. 12	3.138	3.152	3.255	3.849	3.566	3.769	3.515	33.897	43.200	44.960	45.929	65.663	63.940
H.C. 13	7.177	7.393	6.805	7.103	7.846	7.267	6.851	76.387	89.465	91.752	97.560	103.694	100.959
H.C. 14	6.094	6.129	6.085	6.043	5.703	5.397	5.379	36.703	71.290	80.221	73.050	70.575	71.417
H.C. 15	23.678	23.563	22.884	23.789	25.346	25.308	22.018	194.804	272.666	280.088	275.517	301.077	302.613
H.C. 16	75.477	76.184	73.552	72.035	77.600	79.258	76.802	1.001.902	1.125.355	1.174.877	1.240.225	1.209.121	1.162.831
H.C. 17	3.286	3.186	3.603	3.607	3.729	3.769	3.791	56.448	66.451	62.730	72.419	71.190	45.344
H.C. 18	4.504	4.432	4.318	4.437	4.441	4.543	4.809	73.269	91.200	102.162	94.570	88.831	74.503
H.C. 19	7.700	7.608	7.682	8.044	8.170	8.312	8.600	129.717	157.651	164.892	166.989	160.021	119.817
H.C. 20	6.418	6.222	5.336	4.743	4.119	4.106	4.062	60.354	69.985	69.985	46.153	49.027	52.080
H.C. 21	3.515	3.370	3.179	2.980	2.720	2.780	2.994	21.463	30.429	20.918	17.432	16.244	17.150
H.C. 22	11.307	10.950	10.188	10.386	10.060	8.152	7.771	95.541	106.828	85.192	81.914	81.444	85.428
H.C. 23	4.760	4.464	4.168	4.146	3.784	4.260	4.618	19.436	23.952	20.043	18.632	18.618	25.684
H.C. 24	6.009	5.580	5.572	5.213	4.528	4.130	4.162	31.207	35.118	34.016	33.981	38.947	40.050
H.C. 25	32.009	30.586	28.443	27.468	25.211	23.428	23.607	228.001	266.312	213.774	198.112	204.280	220.392
H.C. 26	39.709	38.194	36.125	35.512	33.381	31.740	32.207	357.718	423.963	378.666	365.101	364.301	340.239
H.C. 27	5.989	5.708	5.675	4.569	4.899	5.284	5.344	160.843	188.356	156.616	155.241	160.050	152.643
H.C. 28	2.820	2.806	2.793	2.437	2.657	2.858	2.999	78.809	81.625	73.454	78.004	70.138	75.249
H.C. 29	8.809	8.574	8.468	7.006	7.556	8.142	8.343	239.652	269.949	230.070	228.395	238.054	222.781
H.C. 30	2.042	2.054	1.849	2.036	1.945	2.767	1.937	84.427	83.950	87.790	66.398	72.140	60.264
H.C. 31	2.560	2.332	2.451	2.310	2.338	2.479	2.578	67.476	66.200	66.222	58.416	43.626	39.759
H.C. 32	1.778	1.610	1.560	1.508	1.564	1.713	1.791	14.849	14.349	444	22.888	17.594	17.594
H.C. 33	2.586	1.694	1.695	1.802	1.867	1.495	1.470	63.996	58.681	58.579	59.323	49.689	52.213
H.C. 34	7.966	7.690	7.555	7.234	8.454	7.776	7.776	230.428	228.495	213.137	206.281	192.683	171.173
H.C. 35	1.464	1.380	1.366	1.404	1.554	1.459	1.363	63.525	67.730	67.494	67.685	68.646	56.821
H.C. 36	2.430	2.303	2.333	2.333	2.362	2.388	2.388	71.728	80.684	74.643	75.078	74.559	76.706
H.C. 37	4.248	3.979	3.944	3.917	3.586	3.473	3.220	136.862	139.702	145.198	142.094	128.190	132.712
H.C. 38	1.322	1.231	1.237	1.161	995	1.045	1.008	79.540	103.931	88.302	79.646	65.797	62.287
H.C. 39	2.639	2.466	2.479	2.371	2.296	2.345	2.380	57.758	57.620	54.844	54.525	61.581	73.327
H.C. 40	2.033	1.985	1.873	1.744	1.838	1.752	1.765	171.156	131.790	122.478	109.141	106.019	116.767
H.C. 41	1.884	1.806	1.754	1.722	1.636	1.629	1.629	61.744	93.812	92.573	79.042	78.493	80.718
H.C. 42	32.879	33.244	32.758	30.945	30.747	32.185	31.380	1.205.022	1.341.545	1.354.309	1.191.267	1.134.449	1.094.350
H.C. 43	150.155	147.622	142.235	138.492	141.728	143.183	140.389	2.565.042	2.890.863	2.808.052	2.796.593	2.707.871	2.649.496
TOTAL													

(Continued) Table Appendix 1 – 2013–2019 comparison of the data relating to the Revenues and Costs items in the Income Statements of the Hospital Centers (in thousands of euros)*

Hospital Centers and University Hospital Centers (U)	Other revenues as per the IS (6)										Total Revenues as per the IS (Code A-Z999) (7)											
	2013	2014	2015	2016	2017	2018	2019	2013	2014	2015	2016	2017	2018	2019	2013	2014	2015	2016	2017	2018	2019	
H.C. 1	7.07	10.969	11.843	11.843	11.843	14.590	5.881	7.778	13.553	14.715	155.520	163.793	167.849	177.169								
H.C. 2	10.563	10.730	14.850	14.151	49.751	13.118	11.504	263.047	267.195	286.328	303.036	319.094	332.581	346.876								
H.C. 3	8.243	7.249	8.277	7.714	7.555	4.515	6.538	236.121	228.850	238.529	246.055	249.153	255.655	263.737								
H.C. 4	8.328	8.400	9.790	9.364	8.500	9.181	7.675	227.780	220.622	233.365	247.933	252.400	262.785	270.514								
H.C. 5	7.635	3.023	5.331	5.342	8.473	-3.456	1.612	1.705.549	1.688.936	1.711.079	1.852.272	1.871.502	1.76.887	1.87.540								
H.C. 6	80.607	73.454	94.942	94.845	63.887	84.042	88.727	1.012.806	1.012.806	1.012.806	1.012.806	1.008.322	941.909	982.730								
Piedmont Total	123,083	111,765	144,946	143,259	152,756	113,281	123,564	2,058,504	2,008,979	2,097,627	2,161,877	2,181,452	2,138,666	2,228,566								
H.C. 7	42.946	-6.708	17.972	11.858	17.972	45.018	44.331	566.177	552.840	580.552	581.423	605.275	613.825	622.641								
H.C. 8	15.710	10.969	9.347	17.958	31.643	63.643	45.018	1.080.219	1.080.218	1.156.343	1.171.557	1.212.514	1.225.652	1.254.490								
Veneto Total	58,656	4,261	27,319	6,100	13,817	15,833	20,333	376,978	381,621	386,033	387,458	390,235	404,694	410,399								
H.C. 9	28.629	12.199	17.145	15.817	14.260	15.853	20.333	376.978	381.621	386.033	387.458	390.235	404.694	410.399								
H.C. 10	20.628	8.957	10.375	11.308	18.361	33.690	32.557	264.136	261.182	266.564	266.564	272.288	272.288	281.448								
H.C. 11	46.192	29.029	48.824	29.688	29.095	48.252	57.801	558.234	558.028	581.445	579.743	597.993	624.239	651.057								
H.C. 12	62.889	21.445	25.967	28.387	26.430	27.725	24.809	304.804	304.804	307.768	310.299	310.859	319.032	327.019								
Emilia Romagna Total**	158,338	71,630	101,771	85,200	88,346	125,520	135,500	1,506,599	1,506,599	1,553,122	1,543,794	1,771,175	1,766,729	1,821,823								
North Italy Total	340,077	187,656	274,036	234,559	304,745	283,819	326,770	4,642,875	4,597,976	4,807,092	4,877,248	5,105,147	5,133,047	5,304,879								
H.C. 13	8.733	3.514	17.3	3.514	17.3	-3.929	11.692	11.901	220.167	218.782	231.819	235.483	240.515	240.515								
H.C. 14	14.683	20.208	18.638	10.794	13.453	18.451	23.877	370.901	376.362	382.876	381.445	388.573	395.786	406.871								
Marche Total	23,316	23,722	30,076	10,967	9,524	30,143	35,778	591,068	594,192	601,658	602,992	620,392	631,269	647,386								
H.C. 15	24.450	15.140	18.058	15.875	15.399	15.902	13.969	333.051	330.098	309.964	290.966	293.161	304.294	307.365								
H.C. 16	18.157	17.360	20.947	29.177	15.534	38.131	14.548	167.235	166.877	176.762	177.781	162.767	184.951	198.713								
H.C. 17	31.871	29.370	30.508	38.406	24.373	26.674	25.175	457.383	452.353	440.938	447.196	440.556	456.153	454.778								
H.C. 18	17.193	14.761	14.351	13.984	20.361	13.024	18.432	173.842	175.701	175.748	177.384	191.191	199.628	204.483								
H.C. 19	7.965	7.426	9.887	8.324	8.975	5.120	7.412	213.774	224.930	237.693	240.403	251.926	254.800	262.758								
Lazio Total	99,636	84,057	93,571	105,766	84,642	98,851	79,536	1,345,285	1,349,959	1,341,105	1,336,730	1,339,601	1,399,776	1,428,097								
Central Italy Total	123,052	107,729	123,827	116,733	94,166	128,994	115,314	1,936,333	1,944,151	1,942,763	1,936,722	1,959,993	2,031,045	2,075,483								
H.C. 20	6.530	1.858	7.969	23.895	31.489	29.676	473.014	501.282	476.073	465.932	471.837	456.794	480.998	480.998								
H.C. 21	3.600	2.973	2.871	7.642	7.375	8.964	10.226	249.592	251.845	259.949	246.023	257.445	247.083	257.762								
Apulia Total	10,130	4,833	2,871	15,617	15,617	40,453	39,902	722,606	733,127	729,022	717,953	737,582	703,877	738,760								
H.C. 22	2.517	5.549	4.765	4.330	4.280	7.917	10.586	187.043	188.765	191.056	190.139	196.633	196.497	195.229								
H.C. 23	4.165	6.454	12.201	6.109	5.438	3.466	7.467	169.213	170.224	176.279	168.555	162.027	161.421	183.172								
H.C. 24	12.731	5.969	9.588	4.996	6.952	6.364	1.859	654.529	657.952	645.500	763.319	848.212	83.936	96.348								
H.C. 25	4.415	8.886	12.708	8.822	5.760	7.475	8.073	164.590	168.219	165.804	170.596	184.212	186.435	200.473								
Calabria Total	23,828	26,858	39,262	22,237	22,430	25,222	27,985	586,705	583,160	587,689	605,609	621,324	628,289	675,222								
H.C. 26	6.084	11.715	5.580	10.539	8.203	11.479	12.030	188.700	194.076	195.444	200.658	199.501	199.957	205.472								
H.C. 27	8.684	4.172	8.629	2.739	10.125	9.890	14.728	238.370	238.366	249.091	257.290	263.810	267.125	272.401								
H.C. 28	27.166	32.415	19.009	14.562	16.383	40.637	40.297	582.315	591.492	404.849	401.666	386.942	425.838	463.622								
H.C. 29	5.143	3.524	3.641	7.606	11.621	13.918	12.415	176.683	197.698	183.504	181.447	168.682	165.602	162.812								
H.C. 30	6.450	5.403	3.505	6.174	3.837	4.426	17.086	185.093	188.143	198.845	209.778	212.710	232.377	244.753								
H.C. 31	13.994	5.403	4.157	8.624	18.710	17.018	17.018	290.827	293.922	294.569	300.870	319.007	312.887	312.887								
H.C. 32	23.346	19.446	20.861	36.929	39.298	25.102	13.065	333.721	349.751	349.262	355.626	338.746	337.661	289.002								
H.C. 33	14.122	-	-	8.459	7.017	9.401	11.379	199.133	212.679	233.128	255.682	242.300	252.247	247.706								
Sicily Total	104,989	83,217	65,382	95,632	115,194	131,871	2,066,127	1,994,842	2,066,127	2,108,637	2,161,709	2,113,561	2,217,910	2,168,657								
South Italy Total	138,947	115,608	107,515	133,500	168,894	197,546	2,066,570	3,303,523	3,404,114	3,428,348	3,479,223	3,466,467	3,549,980	3,582,637								
ITALY	602,076	410,843	505,378	484,792	567,805	610,359	650,641	9,946,561	9,946,561	10,175,203	10,293,223	10,531,601	10,714,072	10,962,999								

(Continued) Table Appendix 1 – 2013–2019 comparison of the data relating to the Revenues and Costs items in the Income Statements of the Hospital Centers (in thousands of euros)*

Hospital Centers and University Hospital Centers (I)	Cost for the Purchase of Goods (Code BA010)							Cost for the Purchase of Non-Health Services (Code BA1570)						
	2013	2014	2015	2016	2017	2018	2019	2013	2014	2015	2016	2017	2018	2019
H.C. 1	46,390	45,969	51,422	55,241	57,241	68,548	11,267	13,188	11,200	11,094	10,499	11,586	12,268	
H.C. 2	61,468	64,774	74,082	76,095	78,570	85,724	96,743	23,137	25,817	26,899	27,121	28,120	27,987	
H.C. 3	57,997	57,513	60,922	64,109	65,182	71,931	75,111	23,005	23,247	23,804	25,252	27,375	26,882	
H.C. 4	54,787	52,129	55,272	61,916	65,900	68,860	72,179	23,023	24,569	23,655	23,471	24,100	25,993	
H.C. 5	39,444	37,781	40,423	42,051	44,735	45,025	47,312	13,740	16,597	16,599	17,396	25,249	26,650	
H.C. 6	216,951	209,926	230,646	229,825	237,122	250,906	262,911	85,610	80,845	78,423	75,484	71,398	70,917	
H.C. 7	187,067	180,174	204,019	200,265	210,030	214,402	227,219	61,354	60,575	60,297	54,561	52,588	53,272	
H.C. 8	138,086	145,114	174,411	172,379	186,165	189,677	204,480	73,027	69,925	67,850	63,866	62,902	61,141	
H.C. 9	84,489	90,865	87,417	93,791	99,682	111,471	106,349	43,662	44,653	43,155	38,961	38,451	37,683	
H.C. 10	53,030	54,987	58,822	60,574	102,295	101,645	98,961	31,057	31,950	30,996	27,073	27,527	62,478	
H.C. 11	127,769	135,059	174,518	164,324	177,786	196,387	211,683	56,997	55,019	51,089	57,562	57,706	55,810	
H.C. 12	58,801	60,468	69,659	66,769	69,822	76,848	76,794	46,737	47,169	46,543	44,684	40,817	46,832	
H.C. 13	324,089	341,379	390,416	385,458	499,585	486,551	493,787	178,433	176,791	171,783	168,280	194,501	202,803	
H.C. 14	1,26,279	1,134,759	1,287,339	1,392,580	1,474,332	1,548,290	492,606	491,554	480,512	465,877	488,879	506,930	505,283	
H.C. 15	52,925	54,593	57,104	58,368	65,235	68,065	66,742	23,821	23,028	23,162	22,406	24,418	24,860	
H.C. 16	105,185	108,958	122,382	120,650	136,471	137,065	139,255	24,412	24,831	23,369	23,471	22,306	21,901	
H.C. 17	158,110	163,551	179,886	179,018	191,706	205,130	205,097	48,233	47,859	46,331	45,877	46,724	46,626	
H.C. 18	85,856	86,638	84,898	81,706	74,813	82,016	83,779	46,153	45,364	41,604	35,671	34,493	34,629	
H.C. 19	39,491	38,729	43,674	45,850	48,172	55,220	61,537	27,622	28,036	30,036	28,705	28,169	27,416	
H.C. 20	173,123	170,228	181,357	177,454	189,872	183,018	184,608	60,866	69,566	65,115	70,198	77,214	62,483	
H.C. 21	57,720	62,116	60,353	62,234	72,944	83,812	86,824	31,187	33,210	32,955	25,706	24,162	24,802	
H.C. 22	101,041	106,257	104,687	97,605	98,621	101,700	104,007	35,443	34,869	32,777	33,014	34,251	33,950	
H.C. 23	457,231	463,968	474,969	464,849	484,362	505,766	520,255	201,271	211,045	202,487	193,294	198,289	182,124	
H.C. 24	615,341	627,519	654,855	643,867	676,068	710,896	726,252	249,504	258,904	249,018	239,171	245,013	228,885	
H.C. 25	156,332	152,227	175,963	152,259	131,792	139,200	140,024	60,482	56,000	55,787	53,795	56,634	55,118	
H.C. 26	72,117	78,259	82,473	84,060	80,436	70,055	71,781	27,514	27,937	27,667	26,114	28,088	27,733	
H.C. 27	228,449	230,486	258,438	226,319	212,228	209,235	217,805	87,996	83,751	83,454	79,909	84,762	82,272	
H.C. 28	38,241	37,379	40,174	41,988	44,311	48,072	53,489	25,278	25,278	26,232	27,362	27,170	26,468	
H.C. 29	34,905	32,756	37,857	36,442	38,300	41,562	43,486	21,459	21,752	21,978	22,155	20,827	21,152	
H.C. 30	23,373	22,286	22,540	23,150	32,502	37,872	36,971	6,456	7,248	7,150	6,988	7,935	7,935	
H.C. 31	36,966	39,966	39,705	41,773	47,626	54,692	59,780	15,331	16,676	15,726	17,409	17,409	17,409	
H.C. 32	133,485	132,387	140,276	143,353	162,379	182,198	193,226	68,524	71,404	71,086	73,341	73,477	67,416	
H.C. 33	44,129	44,904	47,546	50,062	54,008	56,727	55,313	30,725	21,458	21,345	21,339	20,149	21,768	
H.C. 34	53,451	56,307	68,120	69,107	71,428	76,531	78,380	18,513	17,457	16,890	16,472	17,907	19,356	
H.C. 35	111,358	116,388	139,112	139,517	138,094	150,865	159,531	33,319	28,315	26,611	27,696	28,383	31,077	
H.C. 36	30,986	32,779	35,358	35,998	38,700	41,927	45,660	14,171	12,865	13,256	13,860	14,526	14,838	
H.C. 37	41,608	43,988	58,936	57,888	63,248	74,333	78,875	20,430	18,338	18,365	22,030	23,665	23,305	
H.C. 38	69,449	73,519	78,493	85,622	87,748	90,590	95,246	24,549	24,050	24,050	24,766	24,526	25,510	
H.C. 39	73,644	76,283	75,215	80,939	78,063	85,576	90,736	28,871	24,950	23,617	19,254	18,243	18,702	
H.C. 40	56,170	62,848	73,827	87,994	79,596	85,659	14,454	13,067	14,543	15,451	14,121	15,856	16,937	
H.C. 41	480,795	507,016	589,253	599,998	608,387	651,857	680,817	180,618	164,397	158,259	159,099	159,219	169,064	
H.C. 42	842,729	869,889	987,967	969,670	1,043,390	1,086,342	1,086,342	317,138	310,552	312,709	307,569	312,322	325,413	
TOTAL	2,584,349	2,632,167	2,924,435	2,900,876	3,052,002	3,228,518	3,350,138	1,079,248	1,070,010	1,042,327	1,014,617	1,051,228	1,088,279	

(Continued) Table Appendix 1 – 2013-2019 comparison of the data relating to the Revenues and Costs items in the Income Statements of the Hospital Centers (in thousands of euros)*

Hospital Centers and University Hospital Centers (I)	2013	2014	2015	2016	2017	2018	2019
Operating Results (Code ZZ999)							
(14)							
H.C.1	0	-10,147	-7,716	0	1,976	0	0
H.C.2	-5,990	-12,832	-18,864	-6,438	-2,406	-	1,814
H.C.3	0	-5,619	0	0	0	1,156	-
H.C.4	0	-5,737	-4,486	0	1,180	-	-
H.C.5	0	-8,432	-8,568	0	1,495	-3,818	511
H.C.6	-12,750	-30,648	-15,081	-11,040	-17,478	-120,997	-102,504
Piedmont Total	-18,740	-73,435	-17,468	-18,273	-123,659	-100,179	-
H.C.7	-25,609	-22,835	-17,047	-10,491	0	0	5,637
H.C.8	-24,950	-13,451	1,000	-10,491	0	0	1,425
Veneto Total	-50,559	-36,286	-16,047	-10,491	0	0	7,062
H.C.9	0	0	0	0	0	0	0
H.C.10	0	0	0	0	0	0	0
H.C.11	0	0	0	0	0	0	0
H.C.12	0	0	0	0	0	0	0
E. Romagna Total**	0	0	0	0	0	0	0
North Italy Total	-69,299	-109,721	-68,762	-27,959	-18,273	-123,659	0
H.C.13	0	0	0	0	0	0	0
H.C.14	-	-	-	-	-	-	-
Marche Total	-	0	0	0	0	0	0
H.C.15	-151,274	-158,632	-161,799	-155,718	-130,712	-116,314	-113,719
H.C.16	-91,594	-102,291	-98,853	-81,733	-83,599	-77,401	-87,726
H.C.17	-77,273	-74,610	-92,543	-140,252	-104,166	-87,743	-88,327
H.C.18	-102,291	-53,708	-54,160	-49,108	-41,510	-40,432	-48,230
H.C.19	-55,349	-73,601	-62,567	-41,794	-24,902	-19,500	-19,589
Lazio Total	-477,781	-462,842	-469,922	-468,605	-384,889	-341,390	-327,591
Central Italy Total	-477,781	-462,842	-469,922	-468,605	-384,889	-341,390	-327,591
H.C.20	0	0	-28,102	-19,736	-9,740	-41,114	-14,876
H.C.21	0	0	0	0	0	0	0
Apulia Total	0	0	-28,102	-19,736	-9,740	-41,114	-14,876
H.C.22	-4,584	-6,007	-1,880	0	0	0	-12,231
H.C.23	-1,682	-3,764	-2,265	-42,000	-12,930	-27,743	-14,544
H.C.24	-15,516	-14,562	-29,858	-42,000	-12,319	-20,942	-101,787
H.C.25	-	-17,377	-	-	0	0	0
Calabria Total	-21,782	-41,710	-54,282	-42,000	-25,249	-48,685	-128,562
H.C.26	0	0	0	0	0	0	0
H.C.27	0	0	0	0	0	0	0
H.C.28	0	788	0	0	0	0	0
H.C.29	0	0	0	0	0	0	0
H.C.30	0	0	0	0	0	0	0
H.C.31	0	2,456	2,680	0	0	0	0
H.C.32	0	0	0	0	0	0	0
H.C.33	0	2209	1120	0	0	1,666	0
Sicily Total	0	5,453	2,680	0	0	1,666	-50,699
South Italy Total	-21,782	-36,257	-70,704	-60,616	-34,989	-88,133	-194,137
TOTALY	-568,862	-608,820	-618,388	-557,180	-438,151	-553,182	-521,728

NOTES

(*) The data from the Income Statements refers to the approved and published Financial Statements.
(**) It should be mentioned that transformations took place in two Hospital Centers: in one case a Hospital Center became part of the AUSL in 2016 and is therefore no longer monitored. In another case, a joint organizational plan was activated between a Hospital Center and a smaller hospital in the year 2017: the data are thus not comparable, but it has become fully operational since 2019.

- 1 The Hospital Centers and University Hospitals that were monitored.
- 2 The total of inpatient and day-hospital admissions from 2013 to 2019.
- 3 The total of health and social and healthcare services with health relevance refers to Code A00320 on the Income Statement.
- 4 Revenues from co-payment charges (Ticket) - Code A0940 on the Income Statement.
- 5 Revenues from transfers of the FSR - "by-function activities" - Code A003 on the Income Statement.
- 6 Other income from the Income Statement is the result of the difference between column 7 and the sum of columns 3-4-5.
- 7 Total revenues shows the value of Code AZ999 on the Income Statement.
- 8 Purchase of goods shows the value of Code BA010 on the Income Statement.
- 9 Non-health services - These are mainly outsourced/contracted services referred to by Code BA1570 on the Income Statement.
- 10 Employee personnel costs referred to by Code BA2080 on the Income Statement.
- 11 Provisions for item Code BA2690 on the Income Statement.
- 12 Other costs - the value is the difference between column 13 and the sum of columns 8-9-10-11.
- 13 Total costs represents the value of Code BZ999 on the Income Statement.
- 14 Operating result Code ZZ999 on the Income Statement.

Source: *Survey by Ermeneia – Studi & Strategie di Sistema, 2020*

Table Appendix 2 - Comparison of aggregate Balance Sheet items and relative percentage compositions, with reference to public Hospital Centers in the years 2017, 2018 and 2019

Hospital Centers and University Hospital Centers (1)	Number of inpatient admissions and day hospital						Total Fixed Assets						Total Current Assets						
	2017		2018		2019		2017		2018		2019		2017		2018		2019		
	A.F.	%	A.F.	%	A.F.	%	A.F.	%	A.F.	%	A.F.	%	A.F.	%	A.F.	%	A.F.	%	
H.C.1	16,715	17,032	17,063	38,7	52,639	41,9	53,671	38,7	52,639	41,9	51,376	42,1	84,934	61,3	72,986	58,1	70,773	57,9	
H.C.2	32,807	33,675	34,247	48,8	121,471	34,247	125,913	48,8	121,471	34,247	118,950	43,5	131,755	51,0	154,936	56,0	154,626	56,5	
H.C.3	27,210	28,050	28,563	38,9	65,055	39,8	65,055	38,9	65,055	39,8	68,499	39,9	102,235	61,1	99,553	60,1	103,125	60,3	
H.C.4	25,430	29,476	30,311	115,036	53,8	109,481	53,7	115,036	53,8	109,481	53,7	106,383	52,6	98,634	46,2	93,826	46,0	95,638	47,3
H.C.5	22,880	22,395	23,555	59,699	41,0	56,303	44,8	59,699	41,0	56,303	44,8	53,699	44,6	84,641	58,2	68,510	54,5	66,188	54,9
H.C.6	94,325	90,687	92,554	410,616	42,4	398,213	43,9	410,616	42,4	398,213	43,9	382,763	41,0	442,345	45,7	325,758	35,9	393,026	42,1
Piedmont Total	219,367	221,315	226,093	43,9	894,076	44,6	708,170	43,9	894,076	44,6	719,670	42,9	944,544	49,9	815,569	45,2	883,376	48,5	
H.C.7	58,765	58,618	60,310	156,369	38,3	210,602	47,3	209,333	38,3	210,602	47,3	201,703	47,5	251,703	61,6	234,159	52,6	231,193	52,5
H.C.8	64,312	64,855	63,933	383,652	63,3	381,046	62,5	380,591	62,4	381,046	62,5	380,591	62,4	222,343	36,7	228,400	37,5	229,150	37,6
Veneto Total	123,077	123,473	124,243	53,3	591,648	56,1	589,944	53,3	591,648	56,1	589,944	56,2	474,046	46,7	462,559	43,9	460,343	43,8	
H.C.9	44,143	44,651	43,612	230,662	64,4	223,663	65,6	222,190	64,4	223,663	65,6	222,190	69,0	127,640	35,6	117,489	34,4	99,641	31,0
H.C.10	41,500	46,430	47,198	344,810	59,3	348,329	63,3	348,962	59,3	348,329	63,3	348,962	62,7	236,253	40,7	202,091	36,7	207,684	37,3
H.C.11	68,392	68,800	66,700	359,554	68,3	341,688	63,7	329,887	68,3	341,688	63,7	329,887	61,2	167,085	31,7	194,700	36,3	206,617	38,3
H.C.12	31,133	32,494	32,780	371,981	78,7	299,530	79,4	289,325	78,7	299,530	79,4	289,325	79,2	84,427	21,3	77,745	20,6	75,823	20,8
E. Romagna Total**	185,168	192,375	190,290	1,247,007	67,0	1,213,210	67,2	1,190,364	66,8	1,213,210	67,2	1,190,364	66,8	615,405	33,0	592,025	32,8	589,765	33,1
North Italy Total	522,612	537,163	540,626	2,617,218	54,9	2,608,934	55,9	2,561,978	55,0	2,608,934	55,9	2,561,978	55,0	2,033,993	42,7	1,870,153	40,1	1,933,484	41,5
H.C.13	32,108	31,867	30,971	104,387	53,1	101,939	57,2	98,783	53,1	101,939	57,2	98,783	55,6	90,079	45,9	76,129	42,7	78,847	44,4
H.C.14	47,939	48,026	47,537	168,069	52,4	170,295	54,8	164,094	52,4	170,295	54,8	164,094	57,1	151,691	47,3	139,326	44,9	122,361	42,6
Marche Total	80,047	79,893	78,508	272,456	52,7	272,234	55,7	262,877	52,7	272,234	55,7	262,877	56,5	241,770	46,8	215,455	44,1	201,208	43,3
H.C.15	38,592	38,340	38,855	271,132	53,5	260,200	46,9	251,640	53,5	260,200	46,9	251,640	45,1	235,773	46,5	293,988	53,0	306,542	54,9
H.C.16	19,084	21,720	24,031	119,112	61,3	126,014	62,9	120,913	61,3	126,014	62,9	120,913	61,8	74,916	38,6	74,555	37,1	74,465	38,1
H.C.17	59,175	54,083	51,460	83,235	59,175	82,278	16,7	81,007	59,175	82,278	16,7	81,007	15,2	409,295	83,0	410,284	83,3	453,169	84,8
H.C.18	21,071	22,137	22,781	64,563	31,5	63,773	31,5	61,200	31,5	63,773	31,5	61,200	30,4	140,078	68,4	138,521	68,4	140,223	69,6
H.C.19	24,001	24,000	23,728	21,504	20,5	19,756	20,0	17,811	20,5	19,756	20,0	17,811	10,5	81,940	78,0	75,195	76,1	151,597	89,4
Lazio Total	162,323	160,280	160,855	559,546	37,2	552,621	35,7	532,651	37,2	552,621	35,7	532,651	33,1	942,002	62,6	992,543	64,1	1,125,996	67,9
Central Italy Total	242,570	240,173	239,363	832,002	41,2	824,855	40,5	795,528	41,2	824,855	40,5	795,528	37,5	1,183,772	58,6	1,207,998	59,3	1,327,204	62,5

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(Continued) Table Appendix 2 – Comparison of aggregate Balance Sheet items and relative percentage compositions, with reference to public Hospital Centers in the years 2017, 2018 and 2019

Hospital Centers and University Hospital Centers (1)	Number of inpatient admissions and day hospital						Total Fixed Assets						Total Current Assets						
	2017		2018		2019		2017		2018		2019		2017		2018		2019		
	A.F.	%	A.F.	%	A.F.	%	A.F.	%	A.F.	%	A.F.	%	A.F.	%	A.F.	%	A.F.	%	
H.C. 20	50,432	48,041	47,798	317,836	67.5	314,948	66.7	320,212	61.8	152,794	32.5	157,271	33.3	203,618	38.2	203,618	38.2	203,618	38.2
H.C. 21	36,020	35,739	32,327	102,189	40.6	123,972	51.3	130,941	54.2	149,547	59.4	117,434	48.6	110,477	45.8	110,477	45.8	110,477	45.8
Apulia Total	86,452	83,780	80,125	420,025	58.1	438,920	61.5	460,153	59.4	302,341	47.9	274,705	38.5	314,095	40.6	314,095	40.6	314,095	40.6
H.C. 22	26,115	24,796	24,830	59,212	41.8	61,913	43.8	60,750	45.2	82,469	58.2	79,362	56.1	73,535	54.7	73,535	54.7	73,535	54.7
H.C. 23	24,160	23,850	28,043	119,685	60.3	119,789	60.7	121,062	59.0	77,356	39.0	76,789	38.9	82,665	40.3	82,665	40.3	82,665	40.3
H.C. 24	9,810	9,910	9,869	15,745	9.5	13,251	7.8	15,787	16.9	50,317	30.4	49,898	29.2	62,733	83.1	62,733	83.1	62,733	83.1
H.C. 25	23,450	23,750	24,455	64,506	37.9	68,049	38.7	67,175	40.6	105,864	62.1	107,814	61.3	98,269	59.4	98,269	59.4	98,269	59.4
Calabria Total	83,535	82,306	87,197	259,148	38.3	263,002	38.4	261,774	45.1	316,006	46.7	313,863	45.8	317,202	54.7	317,202	54.7	317,202	54.7
H.C. 26	21,243	20,536	21,656	64,628	38.2	67,901	41.5	68,528	40.9	104,189	61.6	95,772	58.5	99,002	59.1	99,002	59.1	99,002	59.1
H.C. 27	32,055	29,319	29,353	177,381	52.7	173,046	55.6	169,329	52.8	95,535	42.9	91,944	44.4	97,667	47.2	97,667	47.2	97,667	47.2
H.C. 28	43,986	42,359	40,660	261,683	46.9	252,356	47.8	239,993	47.7	296,207	53.1	275,131	52.2	263,335	52.3	263,335	52.3	263,335	52.3
H.C. 29	16,850	15,791	16,173	94,883	46.7	90,481	45.4	86,304	45.3	108,034	53.2	108,607	54.5	104,056	54.6	104,056	54.6	104,056	54.6
H.C. 30	26,552	32,847	33,221	52,463	35.4	54,088	25.7	56,842	36.1	95,753	64.6	156,209	74.2	100,348	63.8	100,348	63.8	100,348	63.8
H.C. 31	27,150	26,729	26,278	62,734	24.2	62,271	25.4	64,150	24.4	178,244	68.6	182,568	74.6	198,674	75.6	198,674	75.6	198,674	75.6
H.C. 32	31,055	28,550	27,680	163,750	49.0	160,603	46.2	161,555	47.3	164,968	49.4	180,492	52.0	179,480	52.6	179,480	52.6	179,480	52.6
H.C. 33	30,150	27,598	25,530	84,883	36.6	86,827	37.5	86,895	38.8	147,017	63.4	144,564	62.5	137,198	61.2	137,198	61.2	137,198	61.2
Sicily Total	229,041	223,729	220,551	902,405	42.4	899,513	41.7	873,596	42.5	1,189,947	56.0	1,235,287	58.0	1,179,760	57.4	1,179,760	57.4	1,179,760	57.4
South Italy Total	399,028	389,815	387,873	1,581,578	44.9	1,591,435	45.1	1,595,523	46.8	1,808,294	57.3	1,823,855	57.7	1,871,057	53.1	1,871,057	53.1	1,871,057	53.1
ITALY	1,169,210	1,167,151	1,167,862	5,030,798	48.8	5,025,224	49.1	4,953,029	48.6	5,026,061	48.7	4,902,006	47.9	5,071,745	49.8	5,071,745	49.8	5,071,745	49.8

(Continued) Table Appendix 2 – Comparison of aggregate Balance Sheet items and relative percentage compositions, with reference to public Hospital Centers in the years 2017, 2018 and 2019

Hospital Centers and University Hospital Centers (1)	Number of inpatient admissions and day hospital						Current Assets						Other activities as per the BS (Accruals and Deferrals)						
	2017		2018		2019		2017		2018		2019		2017		2018		2019		
	A.F.	% Val	A.F.	% Val	A.F.	% Val	A.F.	% Val	A.F.	% Val	A.F.	% Val	A.F.	% Val	A.F.	% Val	A.F.	% Val	
	of which from loans to the Region for investments						of which from loans to the Region for investments						of which from loans to the Region for investments						
H.C.1	16,715	17,032	17,063	8,41	10,561	8,64	14,227	10,26	10,561	8,41	10,552	8,64	3	0,002	9	0,007	23	0,019	
H.C.2	32,807	33,675	34,247	27,196	10,54	25,993	9,40	27,196	10,54	25,993	9,40	24,515	8,96	425	0,165	63	0,023	99	0,036
H.C.3	27,210	28,050	28,363	15,786	9,43	10,786	6,51	15,786	9,43	10,786	6,51	10,780	6,28	67	0,040	49	0,030	132	0,077
H.C.4	25,430	29,476	30,311	21,429	10,03	17,738	8,70	21,429	10,03	17,738	8,70	15,905	7,87	13	0,006	673	0,330	37	0,018
H.C.5	22,880	22,395	23,555	10,816	7,44	7,083	5,64	10,816	7,44	7,083	5,64	6,990	5,80	1,096	0,754	811	0,646	580	0,481
H.C.6	94,325	90,687	92,554	104,931	10,84	85,193	9,39	104,931	10,84	85,193	9,39	91,593	9,82	115,475	11,924	183,089	20,185	157,066	16,837
Piedmont Total	219,367	221,315	226,093	194,385	10,28	157,354	8,72	194,385	10,28	157,354	8,72	160,335	8,80	117,079	6,189	184,694	10,236	157,937	8,664
H.C.7	58,765	58,618	60,310	38,286	9,38	39,462	8,87	38,286	9,38	39,462	8,87	49,450	11,22	73	0,018	186	0,042	22	0,005
H.C.8	64,312	64,855	63,933	32,802	5,41	28,387	4,66	32,802	5,41	28,387	4,66	30,745	5,04	20	0,003	35	0,006	62	0,010
Veneto Total	123,077	123,473	124,243	71,088	7,01	67,849	6,43	71,088	7,01	67,849	6,43	80,195	7,63	93	0,009	221	0,021	84	0,008
H.C.9	44,143	44,651	43,612	10,519	2,94	8,207	2,41	10,519	2,94	8,207	2,41	11,768	3,66	-	-	32	0,009	34	0,011
H.C.10	41,500	46,430	47,198	24,505	4,22	23,262	4,23	24,505	4,22	23,262	4,23	18,668	3,35	59	0,010	112	0,020	81	0,015
H.C.11	68,302	68,800	66,700	30,376	5,77	38,832	7,24	30,376	5,77	38,832	7,24	59,530	11,04	57	0,011	7	0,001	2,948	0,546
H.C.12	37,133	32,494	32,780	17,108	4,32	15,494	4,11	17,108	4,32	15,494	4,11	15,495	4,24	61	0,015	-	-	-	-
E. Romagna Total**	185,168	192,375	190,290	82,508	4,43	85,815	4,75	82,508	4,43	85,815	4,75	105,461	5,91	177	0,010	151	0,008	3,063	0,172
North Italy Total	527,612	537,163	540,626	347,981	7,30	311,018	6,67	347,981	7,30	311,018	6,67	345,991	7,43	117,349	2,461	185,066	3,968	161,084	3,459
H.C.13	32,108	31,867	30,971	11,414	5,81	11,212	6,30	11,414	5,81	11,212	6,30	9,334	5,25	1,977	1,006	17	0,010	17	0,010
H.C.14	47,939	48,026	47,537	18,256	5,69	22,878	7,37	18,256	5,69	22,878	7,37	17,439	6,07	865	0,270	874	0,281	849	0,296
Marche Total	80,047	79,893	78,508	29,670	5,74	34,090	6,98	29,670	5,74	34,090	6,98	26,773	5,76	2,842	0,550	891	0,182	866	0,186
H.C.15	38,592	38,340	38,855	27,093	5,34	43,181	7,79	27,093	5,34	43,181	7,79	43,361	7,77	60	0,012	22	0,004	11	0,002
H.C.16	19,684	21,720	24,031	27,773	14,30	40,325	20,04	27,773	14,30	40,325	20,04	35,355	18,07	144	0,074	58	0,029	242	0,124
H.C.17	59,175	54,083	51,460	21,613	4,39	21,250	4,31	21,613	4,39	21,250	4,31	20,957	3,92	302	0,061	213	0,043	155	0,029
H.C.18	21,071	22,137	22,781	46,236	22,59	46,236	22,84	46,236	22,59	46,236	22,84	46,236	22,94	75	0,037	123	0,061	21	0,010
H.C.19	24,001	24,000	23,728	2,360	2,25	14,732	14,91	2,360	2,25	14,732	14,91	14,477	8,54	1,613	1,535	3,843	3,890	139	0,082
Lazio Total	162,523	160,280	160,855	125,075	8,32	165,724	10,70	125,075	8,32	165,724	10,70	160,386	9,67	2,194	0,146	4,239	0,275	568	0,034
Central Italy Total	242,570	240,173	239,363	154,745	7,66	199,814	9,80	154,745	7,66	199,814	9,80	187,159	8,81	5,036	0,249	5,150	0,253	1,434	0,068

(Continued) Table Appendix 2 – Comparison of aggregate Balance Sheet items and relative percentage compositions, with reference to public Hospital Centers in the years 2017, 2018 and 2019

Hospital Centers and University Hospital Centers (1)	Number of inpatient admissions and day hospital						Current Assets						Other activities as per the BS (Accruals and Deferrals)						
	2017		2018		2019		2017		2018		2019		2017		2018		2019		
	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	
H.C. 20	50,432	48,041	47,798	79,703	16,94	86,490	18,32	95,285	17,88	1	0,000	1	0,000	1	0,000	1	0,000	1	0,000
H.C. 21	36,020	35,739	32,327	81,966	32,56	64,473	26,70	51,130	21,18	55	0,023	38	0,015	55	0,023	16	0,007	16	0,007
Apulia Total	86,452	83,780	80,125	161,669	22,38	150,963	21,15	146,415	18,91	38	0,005	38	0,005	56	0,008	17	0,002	17	0,002
H.C. 22	26,115	24,796	24,830	29,920	21,10	16,196	11,46	14,560	10,84	90	0,063	90	0,063	105	0,074	80	0,060	80	0,060
H.C. 23	24,160	23,850	28,043	7,645	3,85	8,464	4,29	5,798	2,83	1,321	0,666	656	0,332	1,321	0,666	656	0,332	1,321	0,644
H.C. 24	9,810	9,910	9,869	-	-	-	-	-	-	99,419	60,079	-	-	99,419	60,079	-	-	99,419	60,079
H.C. 25	23,450	23,750	24,455	26,139	15,34	23,127	13,15	14,158	8,56	10	0,006	10	0,006	10	0,006	10	0,006	10	0,006
Calabria Total	83,535	82,306	87,197	63,704	9,42	47,787	6,97	34,516	5,95	100,840	14,917	108,595	15,843	100,840	14,917	108,595	15,843	100,840	14,917
H.C. 26	21,243	20,356	21,656	7,085	4,19	7,085	4,33	7,066	4,22	203	0,120	31	0,019	203	0,120	31	0,019	203	0,120
H.C. 27	32,055	29,319	29,353	9,964	4,47	9,049	4,37	9,049	4,37	9,964	4,471	56	0,027	9,964	4,471	56	0,027	9,964	4,471
H.C. 28	43,986	42,359	40,660	29,074	5,21	13,919	2,64	11,124	2,21	76	0,014	58	0,011	76	0,014	58	0,011	76	0,014
H.C. 29	16,850	15,791	16,173	4,586	2,26	3,312	1,66	3,312	1,74	61	0,030	66	0,033	61	0,030	66	0,033	61	0,033
H.C. 30	26,552	32,847	33,221	9,793	6,60	15,058	7,16	14,821	9,42	119	0,080	152	0,072	119	0,080	152	0,072	119	0,080
H.C. 31	27,150	26,729	26,278	18,790	7,23	12,543	5,12	12,543	4,77	18,790	7,233	7	0,003	18,790	7,233	7	0,003	18,790	7,233
H.C. 32	31,055	28,550	27,680	5,191	1,55	6,204	1,79	7,015	2,06	5,191	1,555	6,204	1,786	5,191	1,555	6,204	1,786	5,191	1,555
H.C. 33	30,150	27,598	25,530	5,593	2,41	8,853	3,83	8,853	3,95	39	0,017	-	-	39	0,017	-	-	39	0,017
Sicily Total	229,041	223,729	220,551	90,076	4,24	76,023	3,57	73,783	3,59	34,443	1,619	6,574	0,308	34,443	1,619	6,574	0,308	34,443	1,619
South Italy Total	399,028	389,815	387,873	315,449	8,95	274,773	7,78	254,714	7,47	135,321	3,839	115,225	3,264	135,321	3,839	115,225	3,264	135,321	3,839
ITALY	1,169,210	1,167,151	1,167,862	818,175	7,93	785,605	7,68	787,864	7,73	257,706	2,498	305,441	2,985	257,706	2,498	305,441	2,985	257,706	2,498

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(Continued) Table Appendix 2 – Comparison of aggregate Balance Sheet items and relative percentage compositions, with reference to public Hospital Centers in the years 2017, 2018 and 2019

Hospital Centers and University Centers (1)	Number of inpatient admissions and day hospital			Total Assets						Net Equity									
	2017		2018		2019		2017		2018		2019		2017		2018		2019		
	A.F.	% Val	A.F.	% Val	A.F.	% Val	A.F.	% Val	A.F.	% Val	A.F.	% Val	A.F.	% Val	A.F.	% Val	A.F.	% Val	
H.C.1	16,715	17,032	17,063	138,608	100.0	125,634	100.0	122,172	100.0	60,793	43.9	59,774	47.6	60,206	49.3				
H.C.2	32,807	33,675	34,247	258,093	100.0	276,470	100.0	273,675	100.0	140,632	54.5	152,352	55.1	151,628	55.4				
H.C.3	27,210	28,050	28,363	167,357	100.0	163,571	100.0	171,756	100.0	77,140	46.1	80,577	48.7	82,031	47.8				
H.C.4	25,430	29,476	30,311	213,683	100.0	203,980	100.0	202,058	100.0	108,469	50.8	104,091	51.0	101,564	50.3				
H.C.5	22,880	22,395	23,555	145,436	100.0	125,624	100.0	120,467	100.0	72,151	49.6	64,999	51.7	62,522	51.9				
H.C.6	94,325	90,687	92,554	968,436	100.0	907,060	100.0	932,855	100.0	463,039	47.8	356,256	39.3	367,506	39.4				
Piedmont Total	219,367	221,315	226,093	1,891,613	100.0	1,804,339	100.0	1,822,983	100.0	922,224	48.8	818,049	45.3	823,457	45.3				
H.C.7	58,765	58,618	60,310	408,345	100.0	444,947	100.0	440,568	100.0	183,013	44.8	235,528	52.9	247,620	56.2				
H.C.8	64,312	64,855	63,933	606,015	100.0	609,481	100.0	609,803	100.0	379,101	62.6	412,999	67.8	443,522	72.7				
Veneto Total	123,077	123,473	124,243	1,014,360	100.0	1,054,428	100.0	1,050,371	100.0	562,114	55.4	648,527	61.5	691,142	65.8				
H.C.9	44,143	44,651	43,612	358,302	100.0	341,184	100.0	321,865	100.0	222,638	62.1	227,789	65.8	232,940	72.4				
H.C.10	41,500	46,430	47,198	581,122	100.0	550,532	100.0	556,727	100.0	296,295	51.0	294,943	53.6	289,430	52.0				
H.C.11	68,392	68,800	66,700	526,696	100.0	536,395	100.0	539,452	100.0	224,400	42.6	231,836	43.2	254,166	47.1				
H.C.12	37,133	32,494	32,780	396,469	100.0	377,275	100.0	365,748	100.0	783,225	46.2	772,257	45.7	764,551	45.1				
E. Romagna Total**	185,168	192,375	190,290	1,862,589	100.0	1,805,386	100.0	1,783,192	100.0	926,558	49.7	926,825	51.3	941,087	52.8				
North Italy Total	527,612	537,163	540,626	4,768,562	100.0	4,664,153	100.0	4,656,516	100.0	2,410,896	50.6	2,393,401	51.3	2,457,686	52.8				
H.C.13	32,108	31,867	30,971	196,443	100.0	178,085	100.0	177,647	100.0	99,258	50.5	91,379	51.3	87,609	49.3				
H.C.14	47,939	48,026	47,537	320,625	100.0	310,495	100.0	287,304	100.0	170,355	53.1	165,022	52.1	157,598	54.9				
Marche Total	80,047	79,893	78,508	517,068	100.0	488,580	100.0	464,951	100.0	269,613	52.1	256,401	52.5	245,207	52.7				
H.C.15	38,592	38,340	38,855	506,965	100.0	554,210	100.0	558,193	100.0	108,941	21.5	199,458	36.0	14,248	-2.6				
H.C.16	19,684	21,720	24,031	194,172	100.0	201,227	100.0	195,620	100.0	56,424	29.1	52,148	26.2	52,148	26.2				
H.C.17	59,175	54,083	51,460	492,832	100.0	492,775	100.0	534,331	100.0	163,814	33.2	248,352	50.4	102,068	20.9				
H.C.18	21,071	22,137	22,781	204,716	100.0	202,417	100.0	201,524	100.0	47,453	23.2	48,413	24.0	48,413	24.0				
H.C.19	24,001	24,000	23,728	105,057	100.0	98,794	100.0	169,347	100.0	63,182	60.1	68,776	69.6	8,826	-5.2				
Lazio Total	162,523	160,280	160,855	1,503,742	100.0	1,549,423	100.0	1,659,215	100.0	439,814	28.2	439,814	28.2	439,814	28.2				
Central Italy Total	242,570	240,173	239,363	2,020,810	100.0	2,038,003	100.0	2,124,166	100.0	1,170,201	57.8	1,170,201	57.8	1,170,201	57.8				

(Continued) Table Appendix 2 – Comparison of aggregate Balance Sheet items and relative percentage compositions, with reference to public Hospital Centers in the years 2017, 2018 and 2019

Hospital Centers and University Hospital Centers (1)	Number of inpatient admissions and day hospital						Total Assets						Total Net Equity					
	2017		2018		2019		2017		2018		2019		2017		2018		2019	
	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val
H.C. 20	50,432	48,041	47,798	470,630	100.0	472,220	100.0	532,831	100.0	333,176	70.8	323,869	68.6	356,539	66.9			
H.C. 21	36,020	35,739	32,327	251,774	100.0	241,461	100.0	241,434	100.0	170,042	67.5	167,597	69.4	172,815	71.6			
APULIA Total	86,452	83,780	80,125	722,404	100.0	713,681	100.0	774,265	100.0	503,218	69.7	491,466	68.9	529,354	68.4			
H.C. 22	26,715	24,796	24,830	141,771	100.0	141,380	100.0	134,365	100.0	71,887	50.7	69,933	49.5	53,538	39.8			
H.C. 23	24,160	23,850	28,043	198,362	100.0	197,234	100.0	205,048	100.0	89,508	45.1	82,586	41.9	79,905	39.0			
H.C. 24	9,810	9,910	9,869	165,481	100.0	170,973	100.0	75,520	100.0	91,971	55.6	89,882	52.6	93,701	124.1			
H.C. 25	23,450	23,750	24,455	170,380	100.0	175,873	100.0	165,454	100.0	68,484	40.2	66,003	37.5	64,498	39.0			
Calabria Total	83,535	82,306	87,197	675,994	100.0	685,460	100.0	580,387	100.0	321,850	47.6	308,404	45.0	291,642	50.2			
H.C. 26	21,243	20,336	21,656	169,020	100.0	163,704	100.0	167,384	100.0	73,252	43.3	75,349	46.0	79,652	47.5			
H.C. 27	32,055	29,319	29,353	222,880	100.0	207,046	100.0	207,052	100.0	121,653	54.6	120,314	58.1	122,763	59.3			
H.C. 28	43,986	42,359	40,660	557,966	100.0	527,545	100.0	503,399	100.0	339,283	60.8	322,822	61.2	319,159	63.4			
H.C. 29	16,850	15,791	16,173	202,978	100.0	199,154	100.0	190,482	100.0	105,803	52.1	102,647	51.5	108,081	56.7			
H.C. 30	26,552	32,847	33,221	148,335	100.0	210,449	100.0	157,281	100.0	54,077	36.5	58,710	27.9	59,176	37.6			
H.C. 31	27,150	26,729	26,278	259,768	100.0	244,786	100.0	262,824	100.0	92,826	35.7	89,882	36.7	104,893	39.9			
H.C. 32	31,055	28,550	27,680	333,909	100.0	347,299	100.0	341,330	100.0	175,807	52.7	179,106	51.6	166,126	48.7			
H.C. 33	30,150	27,398	25,530	231,939	100.0	231,391	100.0	224,101	100.0	92,020	39.7	100,793	43.6	103,245	46.1			
Sicily Total	229,041	223,729	220,551	2,126,795	100.0	2,131,374	100.0	2,054,053	100.0	1,054,721	49.6	1,049,623	49.2	1,063,095	51.8			
South Italy Total	399,028	389,815	387,873	3,525,193	100.0	3,530,575	100.0	3,408,705	100.0	1,879,789	53.3	1,849,493	52.4	1,884,091	55.3			
ITALY	1,169,210	1,167,151	1,167,862	10,314,565	100.0	10,232,671	100.0	10,189,417	100.0	4,120,484	39.9	3,882,148	37.9	4,394,296	43.1			

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(Continued) Table Appendix 2 – Comparison of aggregate Balance Sheet items and relative percentage compositions, with reference to public Hospital Centers in the years 2017, 2018 and 2019

Hospital Centers and University Centers (1)	Number of inpatient admissions and day hospital			Net Equity						Provisions for Liabilities and Charges							
	2017		2018	2019		2017		2018		2019		2017		2018		2019	
	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	
H.C.1	16,715	17,032	17,063	51,668	37.3	32,077	25.5	33,401	27.3	4,175	3.3	4,601	3.3	4,062	3.3	4,062	3.3
H.C.2	32,807	33,675	34,247	36,429	14.1	42,034	15.2	40,857	14.9	8,694	3.1	7,168	2.8	8,530	3.1	8,530	3.1
H.C.3	27,210	28,050	28,363	33,739	20.2	33,241	20.1	31,140	18.1	4,452	2.7	4,380	2.6	4,452	2.7	3,255	1.9
H.C.4	25,430	29,476	30,311	40,810	19.1	38,065	18.7	35,370	17.5	10,973	5.1	10,973	5.1	8,489	4.2	6,015	3.0
H.C.5	22,880	22,395	23,555	52,771	36.3	50,732	40.4	48,734	40.5	5,760	4.0	5,760	4.0	6,179	4.9	5,003	4.2
H.C.6	94,325	90,687	92,554	218,570	22.6	212,058	23.4	211,602	22.7	38,713	4.0	38,713	4.0	43,592	4.8	46,745	5.0
Piedmont Total	219,367	221,315	226,093	433,987	22.9	408,207	22.6	401,104	22.0	71,595	3.8	75,581	4.2	73,610	4.0	73,610	4.0
H.C.7	58,765	58,618	60,310	76,268	18.7	71,525	16.1	35,325	8.0	53,001	13.0	51,416	11.6	33,926	7.7	33,926	7.7
H.C.8	64,312	64,855	63,933	51,743	8.5	49,401	8.1	73,683	12.1	40,815	6.7	48,439	7.9	64,220	10.5	64,220	10.5
Veneto Total	123,077	123,473	124,243	128,011	12.6	120,926	11.5	109,008	10.4	93,816	9.2	99,855	9.5	98,146	9.3	98,146	9.3
H.C.9	44,143	44,651	43,612	9,673	2.7	13,163	3.9	13,537	4.2	17,905	5.0	15,218	4.5	13,597	4.2	13,597	4.2
H.C.10	41,500	46,430	47,198	150,290	25.9	72,182	13.1	70,735	12.7	21,346	3.7	22,581	4.1	21,084	3.8	21,084	3.8
H.C.11	68,392	68,800	66,700	69,612	13.2	51,884	9.7	74,600	13.8	76,069	14.4	69,394	12.9	67,470	12.5	67,470	12.5
H.C.12	37,133	32,494	32,780	39,335	9.9	36,672	9.7	34,201	9.4	14,503	3.7	15,420	4.1	11,447	3.1	11,447	3.1
E. Romagna Total**	185,168	192,375	190,290	269,410	14.5	173,901	9.6	193,073	10.8	129,823	7.0	122,613	6.8	113,598	6.4	113,598	6.4
North Italy Total	527,612	537,163	540,626	831,408	17.4	703,034	15.1	703,485	15.1	295,234	6.2	298,049	6.4	285,354	6.1	285,354	6.1
H.C.13	32,108	31,867	30,971	44,364	22.6	42,283	23.7	39,764	22.4	60,785	30.9	54,093	30.4	59,085	33.3	59,085	33.3
H.C.14	47,939	48,026	47,537	96,489	30.1	96,316	31.0	90,334	31.4	83,507	26.0	67,440	21.7	66,587	23.2	66,587	23.2
Marche Total	80,047	79,893	78,508	140,853	27.2	138,599	28.4	130,098	28.0	144,292	27.9	121,533	24.9	125,672	27.0	125,672	27.0
H.C.15	38,592	38,340	38,855	78,494	15.5	76,887	13.9	72,448	13.0	48,623	9.6	45,293	8.2	49,039	8.8	49,039	8.8
H.C.16	19,684	21,720	24,031	120,250	61.9	139,262	69.2	136,036	69.5	48,076	24.8	44,963	22.3	41,816	21.4	41,816	21.4
H.C.17	59,175	54,083	51,460	39,083	7.9	37,867	7.7	36,835	6.9	344,460	69.9	337,522	68.5	349,279	65.4	349,279	65.4
H.C.18	21,071	22,137	22,781	21,841	10.7	28,223	13.9	17,596	8.7	33,194	16.2	35,479	17.5	40,861	20.3	40,861	20.3
H.C.19	24,001	24,000	23,728	9,357	8.9	19,689	19.9	17,855	10.5	21,023	20.0	21,471	21.7	20,951	12.4	20,951	12.4
Lazio Total	162,523	160,280	160,855	269,025	17.9	301,928	19.5	280,770	16.9	495,376	32.9	484,728	31.3	501,946	30.3	501,946	30.3
Central Italy Total	242,570	240,173	239,363	409,878	20.3	440,527	21.6	410,868	19.3	639,668	31.7	606,261	29.7	627,618	29.5	627,618	29.5

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(Continued) Table Appendix 2 – Comparison of aggregate Balance Sheet items and relative percentage compositions, with reference to public Hospital Centers in the years 2017, 2018 and 2019

Hospital Centers and University Hospital Centers (1)	Number of inpatient admissions and day hospital						Net Equity						Provisions for Liabilities and Charges					
	2017		2018		2019		2017		2018		2019		2017		2018		2019	
	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val
H.C. 20	50,432	48,041	47,798	303,861	317,825	67.3	328,701	61.7	15,606	22,582	3.3	22,582	4.8	24,337	4.6			
H.C. 21	36,020	35,739	32,327	81,687	79,657	33.0	87,618	36.3	16,309	16,533	6.5	16,533	6.8	11,733	4.9			
Apulia Total	86,452	83,780	80,125	385,548	397,482	55.7	416,319	53.8	31,915	39,115	4.4	39,115	5.5	36,070	4.7			
H.C. 22	26,115	24,796	24,830	-	6,379	4.5	6,232	4.6	10,350	9,297	7.3	9,297	6.6	17,988	13.4			
H.C. 23	24,160	23,850	28,043	8,159	5,627	2.9	486	-	3,744	3,428	1.9	3,428	1.7	3,296	1.6			
H.C. 24	9,810	9,910	9,869	-	978	0.6	486	0.6	2,671	2,025	1.6	2,025	1.2	12,517	16.6			
H.C. 25	23,450	23,750	24,455	64,394	61,949	35.2	59,483	36.0	51,145	49,606	30.0	49,606	28.2	44,826	27.1			
Calabria Total	83,535	82,306	87,197	72,533	74,933	10.9	66,201	11.4	67,910	64,356	10.0	64,356	9.4	78,627	13.5			
H.C. 26	21,243	20,356	21,656	35,445	36,213	22.1	28,033	16.7	42,047	37,087	24.9	37,087	22.7	34,201	20.4			
H.C. 27	32,055	29,319	29,353	23,172	22,376	10.8	21,677	10.5	43,713	42,194	19.6	42,194	20.4	29,826	14.4			
H.C. 28	43,986	42,359	40,660	194,966	173,693	32.9	175,582	34.9	82,859	76,508	14.9	76,508	14.5	65,463	13.0			
H.C. 29	16,850	15,791	16,173	76,097	72,535	36.4	67,477	35.4	46,481	43,932	22.9	43,932	22.1	33,676	17.7			
H.C. 30	26,552	32,847	33,221	38,621	41,325	19.6	40,251	25.6	25,641	31,379	17.3	31,379	14.9	19,462	12.4			
H.C. 31	27,150	26,729	26,278	44,446	39,462	16.1	38,199	14.5	23,842	23,842	9.2	23,842	26.3	56,963	21.7			
H.C. 32	31,055	28,550	27,680	97,735	102,073	29.4	105,083	30.8	89,065	86,181	24.8	86,181	24.8	85,712	25.1			
H.C. 33	30,150	27,598	25,530	21,096	23,887	10.3	24,237	10.8	40,171	42,068	18.2	42,068	18.2	35,563	15.9			
Sicily Total	229,041	223,729	220,551	531,578	511,564	24.0	500,539	24.4	393,819	423,710	18.5	423,710	19.9	360,866	17.6			
South Italy Total	399,028	389,815	387,873	989,679	983,059	27.9	983,059	28.8	493,644	527,181	14.0	527,181	14.0	475,563	14.0			
ITALY	1,169,210	1,167,151	1,167,862	2,230,965	2,127,540	20.8	2,097,112	20.6	1,428,546	1,431,491	13.8	1,431,491	14.0	1,388,535	13.6			

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(Continued) Table Appendix 2 – Comparison of aggregate Balance Sheet items and relative percentage compositions, with reference to public Hospital Centers in the years 2017, 2018 and 2019

Hospital Centers and University Centers (1)	Number of inpatient admissions and day hospital						Debts						Other liabilities as per the BS (Accruals and Deferrals, Severance Indemnity)					
	2017		2018		2019		2017		2018		2019		2017		2018		2019	
	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val
H.C. 1	16,715	17,032	17,063	49,6	56,477	45,0	68,713	49,6	56,477	45,0	52,168	42,7	4,501	3,2	5,208	4,1	5,736	4,7
H.C. 2	32,807	33,675	34,287	42,6	115,366	41,7	109,948	42,6	115,366	41,7	113,453	41,5	345	0,1	58	0,0	64	0,0
H.C. 3	27,210	28,050	28,363	85,810	51,3	80,516	48,6	85,810	51,3	80,516	48,6	86,470	50,3	27	0,0	26	0,0	-
H.C. 4	25,430	29,476	30,311	93,965	44,0	90,681	44,5	93,965	44,0	90,681	44,5	94,086	46,6	276	0,1	719	0,4	393
H.C. 5	22,880	22,395	23,555	67,498	46,4	54,436	43,3	67,498	46,4	54,436	43,3	52,897	43,9	27	0,0	10	0,0	45
H.C. 6	94,325	90,687	92,554	342,532	35,4	324,893	35,8	342,532	35,4	324,893	35,8	352,807	37,8	124,152	12,8	182,319	20,1	165,797
Piedmont Total	219,367	221,315	226,093	768,466	40,6	722,369	40,0	751,881	41,2	729,328	40,5	751,881	41,2	129,328	6,8	188,340	10,4	172,035
H.C. 7	58,765	58,618	60,310	165,251	40,5	150,670	33,9	165,251	40,5	150,670	33,9	134,234	30,5	7,080	1,7	7,333	1,6	24,788
H.C. 8	64,312	64,855	63,933	185,833	30,7	147,693	24,2	185,833	30,7	147,693	24,2	101,632	16,7	266	0,0	350	0,1	429
Veneto Total	123,077	128,473	124,243	351,084	34,6	298,363	28,3	351,084	34,6	298,363	28,3	235,866	22,5	7,346	0,7	7,683	0,7	25,217
H.C. 9	41,500	46,430	47,198	117,759	32,9	98,000	28,7	117,759	32,9	98,000	28,7	75,148	23,3	-	-	177	0,1	180
H.C. 10	68,392	68,800	66,700	226,100	42,9	234,567	43,7	226,100	42,9	234,567	43,7	215,153	39,9	127	0,0	598	0,1	2,663
H.C. 11	31,733	32,494	32,780	198,741	50,1	189,598	50,3	198,741	50,1	189,598	50,3	188,131	51,5	-	-	-	-	1,019
E. Romagna Total**	185,168	192,375	190,290	802,978	43,1	751,598	41,6	802,978	43,1	751,598	41,6	721,655	40,5	3,230	0,2	4,350	0,2	6,852
North Italy Total	527,612	537,163	540,626	1,922,528	40,3	1,772,330	38,0	1,922,528	40,3	1,772,330	38,0	1,709,402	36,7	139,904	2,9	200,373	4,3	204,104
H.C. 13	32,108	31,867	30,971	35,271	18,0	31,543	17,7	35,271	18,0	31,543	17,7	29,782	16,8	1,129	0,6	1,070	0,6	1,171
H.C. 14	47,939	48,026	47,537	63,585	19,8	74,378	24,0	63,585	19,8	74,378	24,0	59,456	20,7	3,178	1,0	3,655	1,2	3,663
Marche Total	80,047	79,893	78,508	98,856	19,1	105,921	21,7	98,856	19,1	105,921	21,7	89,238	19,2	4,307	0,8	4,725	1,0	4,834
H.C. 15	38,592	38,340	38,855	566,582	111,8	707,701	121,7	566,582	111,8	707,701	121,7	522,726	93,6	701	0,1	674	0,1	673
H.C. 16	19,684	21,720	24,031	89,646	46,2	154,087	76,6	89,646	46,2	154,087	76,6	145,160	74,2	112,874	58,1	4,325	2,1	17,272
H.C. 17	59,175	54,083	312,057	63,3	403,474	81,9	312,057	63,3	403,474	81,9	286,900	53,7	129	0,0	131	0,0	220	0,0
H.C. 18	21,071	22,137	22,781	218,975	107,0	265,350	131,1	218,975	107,0	265,350	131,1	219,473	108,9	-	-	1	0,0	111
H.C. 19	24,001	24,000	23,728	147,217	140,1	146,099	147,9	147,217	140,1	146,099	147,9	155,797	91,9	-1	-0,0	-	-	1,625
Lazio Total	162,523	160,280	160,855	1,334,477	88,7	1,676,711	108,2	1,334,477	88,7	1,676,711	108,2	1,330,056	80,2	173,703	7,6	5,131	0,3	19,901
Central Italy Total	242,570	240,173	239,363	1,433,333	70,9	1,782,632	87,5	1,433,333	70,9	1,782,632	87,5	1,419,294	66,8	118,010	5,8	9,856	0,5	24,735

(Continued) Table Appendix 2 – Comparison of aggregate Balance Sheet items and relative percentage compositions, with reference to public Hospital Centers in the years 2017, 2018 and 2019

Hospital Centers and University Centers (1)	Number of inpatient admissions and day hospital						Debits						Other liabilities as per the BS (Accruals and Deferrals, Severance indemnity)					
	2017		2018		2019		2017		2018		2019		2017		2018		2019	
	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val	A.V.	% Val
H.C. 20	50,432	48,041	47,798	115,757	24,6	124,834	26,4	150,007	28,2	6,091	1,3	935	0,2	1,948	0,4			
H.C. 21	36,020	33,739	32,327	64,431	25,6	56,672	23,5	56,212	23,3	992	0,4	659	0,3	674	0,3			
Apulia Total	86,452	83,780	80,125	180,188	24,9	181,506	25,4	206,219	26,6	7,083	1,0	1,594	0,2	2,622	0,3			
H.C. 22	26,115	24,796	24,830	58,819	41,5	61,709	43,6	61,693	45,9	715	0,5	441	0,3	1,146	0,9			
H.C. 23	24,160	23,850	28,043	116,965	59,0	111,076	56,3	121,703	59,4	-11,855	-6,0	144	0,1	144	0,1			
H.C. 24	9,810	9,910	9,869	164,782	99,6	173,249	101,3	156,704	207,5	-93,943	-56,8	94,183	-55,1	-187,402	-248,1			
H.C. 25	23,450	23,750	24,455	50,751	29,8	60,264	34,3	56,130	33,9	-	-	-	-	-	-			
Calabria Total	83,535	82,306	87,197	391,317	57,9	406,298	59,3	396,230	68,3	-105,083	-15,5	-93,598	-13,7	-186,172	-32,1			
H.C. 26	21,243	20,356	21,656	53,581	31,7	51,264	31,3	53,698	32,0	140	0,1	4	0,0	33	0,0			
H.C. 27	32,055	29,319	29,353	47,603	21,4	44,538	21,5	47,413	22,9	9,911	4,4	-	-	7,050	3,4			
H.C. 28	43,986	42,359	40,660	134,778	24,2	127,082	24,1	118,499	23,5	1,046	0,2	1,133	0,2	278	0,1			
H.C. 29	16,850	15,791	16,173	50,509	24,9	52,375	26,3	47,821	23,1	185	0,1	200	0,1	904	0,5			
H.C. 30	26,552	32,847	33,227	68,595	46,2	120,335	57,2	78,617	50,0	22	0,0	25	0,0	26	0,0			
H.C. 31	27,150	26,729	26,278	88,302	34,0	88,081	36,0	98,135	37,3	54,798	21,1	2,462	1,0	2,833	1,1			
H.C. 32	31,055	28,550	27,680	63,849	19,1	75,808	21,8	78,080	22,9	5,188	1,6	6,204	1,8	11,412	3,3			
H.C. 33	30,150	27,598	25,530	97,738	42,1	86,580	37,4	82,962	37,0	2,010	0,9	1,950	0,8	2,331	1,0			
Sicily Total	229,041	223,729	220,551	604,955	28,4	646,063	30,3	605,225	29,5	73,300	3,4	11,978	0,6	24,867	1,2			
South Italy Total	399,028	389,815	387,873	1,176,460	33,4	1,233,867	34,9	1,207,674	33,4	-24,700	-0,7	-80,026	-2,3	-158,632	-4,7			
ITALY	1,169,210	1,167,151	1,167,862	4,532,321	43,9	4,788,829	46,8	4,336,370	42,6	233,214	2,3	130,203	1,3	70,216	0,7			

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(Continued) Table Appendix 2 – Comparison of aggregate Balance Sheet items and relative percentage compositions, with reference to public Hospital Centers in the years 2017, 2018 and 2019

Hospital Centers and University Hospital Centers (1)	Number of inpatient admissions and day hospital			Total Liabilities and Net Equity						
	2017	2018	2019	2017		2018		2019		
	A.I.F.	A.I.F.	A.I.F.	A.I.F.	A.I.F.	A.I.F.	A.I.F.	A.I.F.	%	
H.C. 1	16,715	17,032	17,063	138,608	100.0	125,634	100.0	122,172	100.0	100.0
H.C. 2	32,807	33,675	34,247	258,093	100.0	276,470	100.0	273,675	100.0	100.0
H.C. 3	27,210	28,050	28,363	167,357	100.0	165,571	100.0	171,756	100.0	100.0
H.C. 4	25,430	29,476	30,311	213,683	100.0	203,980	100.0	202,058	100.0	100.0
H.C. 5	22,880	22,395	23,555	145,436	100.0	125,624	100.0	120,467	100.0	100.0
H.C. 6	94,325	90,687	92,554	968,436	100.0	907,060	100.0	932,855	100.0	100.0
Piedmont Total	219,367	221,315	226,093	1,891,613	100.0	1,804,339	100.0	1,822,983	100.0	100.0
H.C. 7	58,765	58,618	60,310	408,345	100.0	444,947	100.0	440,568	100.0	100.0
H.C. 8	64,312	64,855	63,933	606,015	100.0	609,481	100.0	609,803	100.0	100.0
Veneto Total	123,077	123,473	124,243	1,014,360	100.0	1,054,428	100.0	1,050,371	100.0	100.0
H.C. 9	44,143	44,651	43,612	358,302	100.0	341,184	100.0	321,865	100.0	100.0
H.C. 10	41,500	46,430	47,198	581,122	100.0	550,532	100.0	556,727	100.0	100.0
H.C. 11	68,392	68,800	66,700	526,696	100.0	536,395	100.0	539,452	100.0	100.0
H.C. 12	31,133	32,494	32,780	396,469	100.0	377,275	100.0	365,148	100.0	100.0
E. Romagna Total**	185,168	192,375	190,290	1,862,589	100.0	1,805,386	100.0	1,783,192	100.0	100.0
North Italy Total	522,612	537,163	540,626	4,768,562	100.0	4,664,153	100.0	4,656,546	100.0	100.0
H.C. 13	32,108	31,867	30,971	196,443	100.0	178,085	100.0	177,647	100.0	100.0
H.C. 14	47,939	48,026	47,537	320,625	100.0	310,495	100.0	287,304	100.0	100.0
Marche Total	80,047	79,893	78,508	517,068	100.0	488,580	100.0	464,951	100.0	100.0
H.C. 15	38,592	38,340	38,855	506,965	100.0	554,210	100.0	558,193	100.0	100.0
H.C. 16	19,084	21,720	24,031	194,172	100.0	201,227	100.0	195,620	100.0	100.0
H.C. 17	59,175	54,083	51,460	492,832	100.0	492,775	100.0	534,331	100.0	100.0
H.C. 18	22,071	22,137	22,781	204,716	100.0	202,417	100.0	201,524	100.0	100.0
H.C. 19	24,001	24,000	23,728	105,057	100.0	98,794	100.0	169,547	100.0	100.0
Lazio Total	162,323	160,280	160,855	1,503,742	100.0	1,549,423	100.0	1,659,215	100.0	100.0
Central Italy Total	242,570	240,173	239,363	2,020,810	100.0	2,038,003	100.0	2,124,166	100.0	100.0

(Continued) Table Appendix 2 – Comparison of aggregate Balance Sheet items and relative percentage compositions, with reference to public Hospital Centers in the years 2017, 2018 and 2019

Hospital Centers and University Hospital Centers (1)	Number of inpatient admissions and day hospital				Total Liabilities and Net Equity						
	2017	2018	2019		2017		2018		2019		
	A.I.	A.I.	A.I.	%	A.I.	A.I.	A.I.	A.I.	A.I.	A.I.	
H.C. 20	50,432	48,041	47,798	100.0	470,630	472,220	472,220	100.0	532,831	532,831	100.0
H.C. 21	36,020	35,739	32,327	100.0	251,774	241,461	241,461	100.0	241,434	241,434	100.0
Apulia Total	86,452	83,780	80,125	100.0	722,404	713,681	713,681	100.0	774,265	774,265	100.0
H.C. 22	26,115	24,796	24,830	100.0	141,771	141,380	141,380	100.0	134,365	134,365	100.0
H.C. 23	24,160	23,850	28,043	100.0	198,362	197,234	197,234	100.0	205,048	205,048	100.0
H.C. 24	9,810	9,910	9,869	100.0	165,481	170,973	170,973	100.0	75,520	75,520	100.0
H.C. 25	23,450	23,730	24,455	100.0	170,380	175,873	175,873	100.0	165,454	165,454	100.0
Calabria Total	83,535	82,306	87,197	100.0	675,994	685,460	685,460	100.0	580,387	580,387	100.0
H.C. 26	21,243	20,536	21,656	100.0	169,020	163,704	163,704	100.0	167,584	167,584	100.0
H.C. 27	32,055	29,319	29,353	100.0	222,880	207,046	207,046	100.0	207,052	207,052	100.0
H.C. 28	43,986	42,359	40,660	100.0	557,966	527,545	527,545	100.0	503,399	503,399	100.0
H.C. 29	16,850	15,791	16,173	100.0	202,978	199,154	199,154	100.0	190,482	190,482	100.0
H.C. 30	26,552	32,847	33,221	100.0	148,335	210,449	210,449	100.0	157,281	157,281	100.0
H.C. 31	27,150	26,729	26,278	100.0	259,768	244,786	244,786	100.0	262,824	262,824	100.0
H.C. 32	31,055	28,550	27,680	100.0	333,909	347,299	347,299	100.0	341,330	341,330	100.0
H.C. 33	30,150	27,598	25,530	100.0	231,939	231,391	231,391	100.0	224,101	224,101	100.0
Sicily Total	229,041	223,729	220,551	100.0	2,126,795	2,131,374	2,131,374	100.0	2,054,053	2,054,053	100.0
South Italy Total	399,028	389,815	387,873	100.0	3,325,193	3,530,515	3,530,515	100.0	3,408,705	3,408,705	100.0
ITALY	1,169,210	1,167,151	1,167,862	100.0	10,314,565	10,232,671	10,232,671	100.0	10,189,417	10,189,417	100.0

Source: Survey by Ermeneta – Studi & Strategie di Sistema, 2020

As regards Part Two, comments were made on the results of the field survey aimed at the adult population 18 years of age and older. The survey questionnaire dealt with the topics specified below:

- in Section 1: *The effects of the Corona virus on Covid patients and non-Covid patients*, through a series of questions that explored experiences with waiting lists for access to local health services, on the one hand, and hospital admissions on the other, taking into account both serious and less serious illnesses/surgeries, and also the length of such waits; the issue of the possible interruption of one or more of the regular services that was needed and the consequent duration of the interruption, along with all that resulted from it in terms of the state of health of non-Covid patients and the methods that these patients used to react. Some questions were then added aimed at assessing what was, in the opinion of the respondents, the reaction capacity of the healthcare facilities in their home Region (or Autonomous Province) with respect to Covid patients as well as the ability of the same facilities to ensure (or to resume after a possible interruption) the provision of regular services for non-Covid patients; finally, it was decided to verify the level of information among the population regarding the role played by accredited hospitals in support of public ones in dealing with the emergency of the Covid patients;
- in Section 2: *Attitudes, behaviors, and fears aroused in the population by the impact of the Corona virus pandemic*, with a view to measuring the problematic states of mind that people experienced during the months from February to September 2020, along with the positive states of mind that the new pandemic situation has brought about; furthermore, it was decided to measure the adequacy of the behavior of the respondents with respect to the intensely recommended indications given in order to defend against the Corona virus, in terms of frequent hand washing, use of disinfectants, use of masks, respect for social distancing and application of the quarantine: all while also trying to grasp the attitudes relating to the return to a more or less normal working life after the summer break; finally, some questions were asked relating to the actual knowledge of the impact of the Corona virus in terms of the number of infected people and the number of deaths, comparing everything with the average data of the impact of seasonal flu, to which some questions were added regarding people's dispositions to getting vaccinated against the latter or not, and also against the Corona virus.

The survey – carried out by means of a questionnaire – was conducted using a special panel (Telepanel) based on a representative sample of the Italian population of 2,000 families. The sample construction method was

based on a proportional stratification of “sampling cells” in order to guarantee representativeness according to the main social-demographic variables of sex (2 levels), age (6 levels), education (4 levels), work status (8 levels), geographical distribution (7 levels), and size of the municipality of residence (5 levels): for a total of 32 sampling cells. On the basis of the ISTAT 2016 demographic data, the number of adult Italians present in each of the aforementioned cells was determined both in absolute and percentage terms, with reference to a population of 49,424,499 individuals (see Table App. 3).

The questionnaire was administered over 10 days (11-21 September 2020), and 3,612 valid questionnaires were obtained, the numbers being subsequently adjusted by means of a specific weighting, referring to the above-mentioned social-demographic variables with which the sample was structured.

The sampling error, with a confidence interval of 95%, is equal to $\pm 1.63\%$.

The information thus collected was processed in order to obtain simple distribution tables, which were then used to make some cross-checks of variable groups considered particularly significant, as shown in Section 3 of the Appendices.

The complete results of the survey, with reference to answers to questionnaire, can be found, along with the relative commentary, in Part Two of the Report.

The social-personal profile of the respondents, appropriately weighted as just mentioned, is provided in the Tables from App. 4 to App. 10.

Table Appendix 3 – Universe-sample comparison, with reference to the population survey (individuals aged 18 years and older)

Structural variables	Universe		Raw respondents (2020)		Weighted respondents (2020)	
	A.V.	%	A.V.	%	A.V.	%
GENDER						
Male	23,586,982	47.7	1,737	48.1	1,918	47.7
Female	25,837,517	52.3	1,875	51.9	2,102	52.3
Total	49,424,499	100.0	3,612	100.0	4,020	100.0
SIZE OF THE MUNICIPALITY						
Up to 5,000 inhabitants	8,664,530	17.5	457	12.7	704	17.5
5,001-20,000 inhabitants	14,827,458	30.0	932	25.8	1,210	30.1
20,001-50,000 inhabitants	9,207,758	18.6	736	20.4	748	18.6
50,001-100,000 inhabitants	5,239,541	10.6	565	15.6	426	10.6
100,000 or more inhabitants	11,485,212	23.2	922	25.5	933	23.2
Total	49,424,499	100.0	3,612	100.0	4,020	100.0
NIELSEN REGION						
Piedmont+Liguria+Aosta Valley	5,150,039	10.4	338	9.4	418	10.4
Lombardy	8,065,824	16.3	594	16.4	656	16.3
Tri-veneto	5,901,062	11.9	379	10.5	479	11.9
Emilia Romagna	3,657,153	7.4	286	7.9	298	7.4
Tuscany+Marche+Umbria+Sardinia	6,548,538	13.2	423	11.7	531	13.2
Lazio	4,591,716	9.3	331	9.2	374	9.3
Abruzzo+Molise+Campania+Apulia	9,321,821	18.9	727	20.1	761	18.9
Sicily+Calabria+Basilicata	6,188,345	12.5	534	14.8	503	12.5
Total	49,424,499	100.0	3,612	100.0	4,020	100.0
QUALIFICATION						
No qualifications/Primary school	11,450,263	23.2	66	1.8	933	23.2
Lower secondary school certificate	17,545,950	35.5	540	15.0	1,427	35.5
Higher secondary school certificate	14,724,308	29.8	2,012	55.7	1,198	29.8
First cycle degree, Second cycle degree, Third cycle degree	5,703,978	11.5	994	27.5	462	11.5
Total	49,424,499	100.0	3,612	100.0	4,020	100.0
AGE RANGE						
18-24 years	4,240,198	8.6	375	10.4	346	8.6
25-34 years	7,057,113	14.3	461	12.8	575	14.3
35-44 years	9,360,064	18.9	799	22.1	760	18.9
45-54 years	8,915,288	18.0	737	20.4	724	18.0
55-64 years	7,467,295	15.1	614	17.0	607	15.1
>64 years	12,384,541	25.1	626	17.3	1,009	25.1
Total	49,424,499	100.0	3,612	100.0	4,020	100.0
OCCUPATIONAL ACTIVITY						
Self-employed	5,624,780	11.4	313	8.7	458	11.4
Employed	9,332,266	18.9	1,243	34.4	760	18.9
Laborer	7,602,018	15.4	267	7.4	619	15.4
Housewife	8,322,598	16.8	435	12.0	675	16.8
Pensioner	11,467,163	23.2	625	17.3	933	23.2
Job seekers	2,016,961	4.1	450	12.5	165	4.1
Other	5,058,713	10.2	279	7.7	410	10.2
Total	49,424,499	100.0	3,612	100.0	4,020	100.0

Source: Survey by Ermeneia – Studi & Strategie di Sistema, 2020

Table Appendix 4 – Gender of the respondents (%)

<i>Gender</i>	<i>Total</i>
– Male	47.7
– Female	52.3
Total	100.0
A.V.	4,020

Source: *Survey by Ermeneia – Studi & Strategie di Sistema, 2020*

Table Appendix 5 – Age of the respondents (%)

<i>Age range</i>	<i>Total</i>
– 18-24 years	8.6
– 25-34 years	14.3
– 35-44 years	18.9
– 45-54 years	18.0
– 55-64 years	15.1
– ≥ 65 years	25.1
Total	100.0
A.V.	4,020

Source: *Survey by Ermeneia – Studi & Strategie di Sistema, 2020*

Table Appendix 6 – Geographical breakdowns of residence of the respondents and Regions most affected by the Corona virus (Population) (% val.)

<i>Region</i>	<i>Total</i>
– North-West	26.8
– North-East	19.3
– Center	18.1
– South and Islands	35.8
– Total	100.0
– Piedmont + Lombardy + Veneto + Emilia Romagna + Marche	42.4
– Rest of Italy	57.6
Total	100.0
A.V.	4,020

Source: *Survey by Ermeneia – Studi & Strategie di Sistema, 2020*

Table Appendix 7 – Distribution of respondents by size of town of residence (%)

<i>Size</i>	<i>Total</i>
– Up to 5,000 inhabitants	17.5
– 5,001-20,000 inhabitants	30.1
– 20,001-50,000 inhabitants	18.6
– 50,001-100,000 inhabitants	10.6
– 100,000 or more inhabitants	23.2
Total	100.0
A.V.	4,020

Source: *Survey by Ermeneia – Studi & Strategie di Sistema, 2020*

Table Appendix 8 – Occupational activity of the respondents (%)

<i>Occupational Activity</i>	<i>Total</i>
– Self-employed	11.4
– Employed	18.9
– Laborer	15.4
– Housewife	16.8
– Pensioner	23.2
– Job seekers	4.1
– Other	10.2
Total	100.0
A.V.	4,020

Source: *Survey by Ermeneia – Studi & Strategie di Sistema, 2020*

Table Appendix 9 – Education of the respondents (%)

<i>Qualification</i>	<i>Total</i>
– No qualifications/Primary school	23.2
– Lower secondary school certificate	35.5
– High school diploma	29.8
– First cycle degree, Second cycle degree, Third cycle degree	11.5
Total	100.0
A.V.	4,020

Source: *Survey by Ermeneia – Studi & Strategie di Sistema, 2020*

Table Appendix 10 – Estimated socioeconomic status of the respondents (%)

<i>Status</i>	<i>Total</i>
– High socio-economic level	2.7
– Medium-High socio-economic level	6.5
– Medium socio-economic level	44.3
– Medium-Low socio-economic level	33.3
– Low socio-economic level	13.2
Total	100.0
A.V.	4,020

Source: *Survey by Ermeneia – Studi & Strategie di Sistema, 2020*

Finally, the Part Three of the Report was prepared, which relates to the statistical indicators and includes the most recent data available on the Italian hospital system.. These have to do with the number and type of facilities, the relevant activity data, the size of the staff and spending.

2. The complete list of contents of the 2020 Report

Presentation

by *Barbara Cittadini, National President of AIOP* page I

Part One

THE CONTINUITY AND DISCONTINUITY OF THE HOSPITAL SYSTEM IN THE YEAR OF THE PANDEMIC

1. The strain placed on the hospital system by the arrival of the Corona virus	»	11
1.1. Referencing the distinctive (and appreciated) characteristics of the mixed system of public and accredited private facilities	»	11
1.2. Confirmation of a continuous average improvement in the complexity and effectiveness of services notwithstanding the persistence of unequal “average” results	»	22
1.3. The added value of the convergence of public hospitals and accredited private hospitals to deal with the Covid-19 emergency	»	38
2. The suspension of services for non-Covid patients	»	47
2.1. The backlog of patients already on waiting lists at the beginning of the year	»	47
2.2. The interruption of services for regular patients and the consequences in terms of behaviors	»	54
2.3. Assessment of the ability of different healthcare facilities to respond to the needs of non-Covid patients and Covid patients	»	57

3. The opening up of resources driven by the pandemic	page	61
3.1. Signs of refinancing after a protracted defunding process	»	61
3.2. Monitoring areas of inefficiency by examining the financial statements of public Hospital Centers	»	84

Part Two
INDIRECT INCONVENIENCES
EXPERIENCED BY NON-COVID PATIENTS

1. The impact of the pandemic on the flow of regular services	»	115
1.1. The waiting list situation at the beginning of 2020	»	115
1.2. The emergency situation caused by the Corona virus and the interruption of one or more regular services for non-Covid patients from February until September 2020	»	126
1.3. Reactive behaviors by non-Covid patients who experienced an interruption of services in the period February-May 2020	»	130
1.4. Reactive behaviors of non-Covid patients who experienced a further interruption of services after the first phase of the Corona virus	»	135
1.5. Self-assessment of their health status by respondents who experienced an interruption of one or more regular services without having found any valid alternatives	»	136
2. Assessment of the reaction capacity of health facilities with respect to the two types of patients	»	139
2.1. The opinions expressed regarding the meeting of the needs of Covid patients and non-Covid patients in the Regions that had a real pandemic emergency in the first months of 2020	»	139
2.2. The opinions expressed regarding the meeting of the needs of non-Covid patients in the period February-September 2020, in the event that the home Region was not affected by an actual Corona virus emergency	»	145

2.3. The overall assessment of the responses to the needs of Covid patients and non-Covid patients, in the event that the home Region was affected by an actual Corona virus emergency	page	150
2.4. Awareness of the role played by accredited hospitals in support of public facilities for the Corona virus emergency	»	154
3. The ambivalent impact of the pandemic on the mindset of the population	»	157
3.1. The simultaneous presence of only apparently contradictory attitudes	»	157
3.2. The perception of the severity of the virus and the compliance with the recommended behaviors	»	164
3.3. Awareness of having to meet the dual need of protecting against the virus and of returning to a normal life	»	169
4. A comparison of the Seasonal flu and the Corona virus	»	172
4.1. The level of awareness among citizens about the spread and lethal nature of the two diseases	»	172
4.2. Tendencies and resistance to vaccines and serological and swab tests	»	175

Part Three STATISTICAL INDICATORS

1. Facility data	»	183
1.1. Number of public and accredited private medical institutions	»	183
1.2. Bed distribution	»	184
1.3. Medical equipment	»	185
2. Activity data	»	199
2.1. In-hospital days and patient bed occupancy rate	»	199
2.2. Types of admissions and discharges	»	200
2.3. Prevalent DRGs	»	201
2.4. Activities classified according to major diagnostic categories	»	202
2.5. Activities classified according to specialty	»	203
2.6. Patient mobility	»	203

3. Staff information	page	251
3.1. Staff fluctuation over the years	»	251
3.2. Staff distribution throughout Italy	»	252
4. Spending data	»	258
4.1. Economic flow trends over the years	»	258
4.2. Health expenditure comparisons	»	259

APPENDICES

1. Methods applied	»	267
2. Index of structural tables	»	295
3. Detailed tables of the survey on people	»	299

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La passione per le conoscenze

This is the 18th edition of the **Health&Hospitals Report**, which has, each year since the very beginning, sought to take stock of and review the performance of Italian hospitals, comprised of a public component and a private (accredited) component that coexist in a mixed system: the former with 131,000 patient beds and the latter with 57,000, in order to cope with 8.7 million yearly in-patient admissions and a public expenditure of EUR 64.9 billion, equal to 55.9% of total public healthcare spending.

Traditionally, the Report makes its assessment from two perspectives, one that considers the dynamics of the hospital-services supply system (with its inherent light and dark spots), and one that has sought out the opinions and evaluations of citizens and users with regard to the aforementioned services: all under the responsibility of a "third party" who independently conducts the necessary research, surveys and analyses.

The Health&Hospitals/2020 Report has had to contend with a very special year, one in which it encountered both the normal evolution of the system and the special developments that arose from the impact of the, still ongoing, pandemic. Thus the joint effort made by the public facilities and the accredited private facilities to meet the needs of Covid patients during the first phase of the Corona virus from February to September has been reported on: this is an initial study given that an overall assessment for 2020 will only be possible during the course of 2021, when the necessary data and information become fully available. Parallel to this - and in a continuous manner - the equally (if not more serious) issue of inpatient non-Covid patients was addressed by a field survey on the Italian population, for whom expected hospital and non-hospital services have been postponed, not infrequently with a hefty build-up of waiting lists, beginning already back in 2019 and being augmented by those appearing at the start of 2020.

This has led to the problems of the National Health Service that were already present before the pandemic (such as the prolonged defunding of the system and that of unsatisfactory levels relating to timeliness, quality and uniform availability throughout local areas of services) being compounded by those generated by the pandemic, with the result of an intertwining of inconveniences for both Covid patients and non-Covid patients.

Yet, the situation created by the impact of the Corona virus has contributed to calls for a certain "opening up" on the economic-financial resources front, potentially indicating a reverse of the trend of the recent past. The present situation gives hope for a rebalancing in terms of attention and financing of the health system, fully supported by the change in the European context that has taken place since the pandemic impact, which will, however, need to be transformed into resources effectively available through Italy's ability to access them and direct the flows towards significant medium-term investments in the health sector.

This means embarking on a transformation of the system that will promote the coexistence of public and private facilities to the fullest extent, as well as a parallel overhaul of the organizational, management and reporting methods by the public health administration, so that (ideally) the well-invested resources will achieve greater efficiency of the "machine" and, above all, result in added value to the services for patients.

Ermeneia – Studi & Strategie di Sistema is a company that specializes in providing analytical and consulting activities to trade associations and public and private clients, including those operating in the healthcare service sector, who are actively redesigning their presence and operational methods to remain in step with progressive changes in Italy.

AIOP – Associazione Italiana Ospedalità Privata (Italian Association of Private Hospitals) is a trade association that represents hospital facilities of the privately-operated component of the NHS and private healthcare facilities, throughout every region of Italy, which employ just over 70,000, accounting for 11% of the operators of the entire system, who provide hospital services to 15% of patients.



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