

12. Quality of services¹

The indicators in this domain address different types of services, health and social services, public services and mobility services, each with its different trend.

The indicators referring to health services confirm the persistence of criticalities in their supply and availability.

In the last year, hospital migrations, the share of general practitioners with a number of patients above the maximum threshold, and the unmet need for medical examination have increased (Table 1). In 2023, 7.6% of the population claims to have waived medical care. After the exceptional pandemic period, when rates almost doubled (from 6.3% in 2019 to 11.0% in 2021), in 2022 the percentage of people with unmet health need had dropped to 7.0% and had almost realigned to the pre-*COVID* value. Doctors with an overload of activity, i.e. with a number of patients above the maximum threshold, continued to increase: they were 36.0% in 2019 and rose to 47.7% in 2022. Hospital migrations to other regions, after the reduction observed in 2020 and 2021 due to the restrictions imposed by the pandemic, returned to pre-*COVID* levels (8.3%).

Positive signals are instead recorded in the supply of medical and nursing staff and in the supply of hospital beds in high-care wards, which are continually growing. In 2022, on a national average level, there are 4.2 doctors per 1,000 inhabitants and 6.8 nurses and midwives (they were 4.1 and 6.4 respectively in 2019). Beds in high-care wards are increasing, from 3.0 in 2019 to 3.5 per 10,000 inhabitants in 2021. The supply of social and socio-health services is stable or slightly improving, both compared to the previous year and compared to 2019: beds in residential social-healthcare and social-welfare facilities remain unchanged (70.1 beds per 10,000 inhabitants), while integrated home care for the elderly increases, rising from 2.7% in 2019 to 3.3% in 2022.

Table 1. Quality of services indicators: value for the latest available year and percentage changes compared with the previous year and 2019

INDICATORS	Year	Value	Unit of measurement	Polarity	Percentage changes	
					compared with previous year	compared with 2019
Beds in the residential social-healthcare and social-welfare facilities	2021	70.1	Per 10,000 inhabitants	+		
Integrated home assistance service	2022	3.3	%	+		
Composite index of service accessibility	2022	4.9	%	-		
Irregularities in water supply	2023	8.9	%	-		
Irregularities in electric power distribution	2022	2.2	Average number per user	-		
Seat-Km of public transport networks	2022	4696	Values per inhabitant	+		
Satisfaction with public transport services	2023	23.3	%	+		
Frequent users of public transport	2023	12.9	%	+		
Overall Fixed Very High Capacity Network (VHCN) coverage	2023	59.6	%	+		
Separate collection service for municipal waste	2022	60.2	%	+		
Hospital beds in high-care wards	2021	3.5	Per 10,000 inhabitants	+		
Hospital patient emigration to a different region	2022	8.3	%	-		
Unmet need for medical examination	2023	7.6	%	-		
GP with a number of patients above the maximum threshold	2022	47.7	%	-		
Physicians	2022	4.2	Per 1,000 inhabitants	+		
Nurses and midwives	2022	6.8	Per 1,000 inhabitants	+		

Source: Istat, Bes Indicators

Note: The green colour indicates improvement, red worsening and grey stability, taking into account the polarity of the indicator. The indicators have positive polarity if the increase in their value shows an improvement in well-being, negative polarity if the increase in their value shows a deterioration in well-being. For variations within $\pm 1\%$ the indicators are considered stable in the reference period.

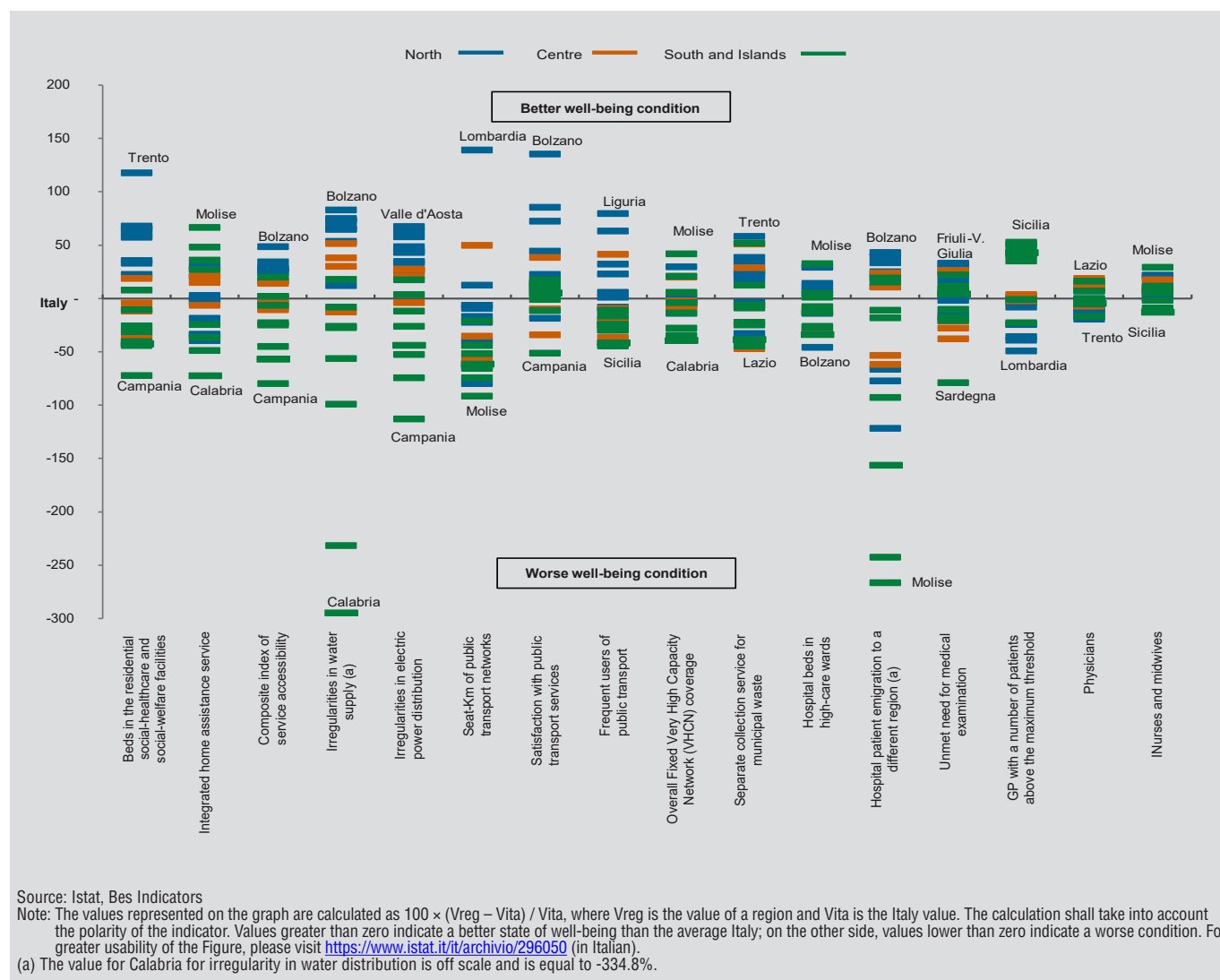
¹ This Chapter was edited by Manuela Michellini and Alessandra Burgio, with contributions from Alessia D'Errico, Lidia Gargiulo and Valentina Joffre. The box "Assistance to elder persons" is edited by Alessandra Battisti and Alessandra Burgio.

Indicators related to the quality of public services, such as water supply, waste collection, Internet coverage and access to essential services (pharmacies, emergency facilities, post offices, etc.), show improvements, both compared to the previous year and compared to 2019. The most significant increases concern the network infrastructure for ultra-fast Internet access: the percentage of families served almost doubles, from 30.0% in 2019 to 59.6% in 2023.

In 2023 the share of families reporting irregularities in the supply of water decreased to 8.9% (it was 9.7% in 2022), while irregularities in the provision of electricity services, although recording a slight increase compared to the previous year, remain below the 2019 level (2.2 long accidental service interruptions in 2023 versus 2.4).

In 2023, the availability of local public transport (LPT) decreased slightly compared to the previous year, returning to levels similar to those of 2019 (4696 LPT seats per km in 2023); on the demand side, the slight increase in the frequent use of public transport, which went from 11.8% in 2022 to 12.9% in 2023, still does not compensate for the loss recorded following the *COVID-19* pandemic.

Figure 1. Quality of services indicators: percentage differences between regional values and the Italian value. Latest available year (a). Italy = 0



Satisfaction with mobility services, after continuous improvement, declines slightly in 2023: 23.3% of people aged 14 and over who regularly use transport services is satisfied with the public transport services (they were 23.9% in 2022 and 19.5% in 2019).

Measuring the deviation of each region or autonomous province from the national average value reveals a very diverse situation, often to the detriment of the South and Islands (Figure 1). In the case of the water supply, for example, which shows the widest range of variation compared to the national data, Calabria and Sicilia are the regions with the worst values. Calabria, with 38.7% of families declaring irregularities in water supply, exceeds the Italian average by more than 3 times, and Sicilia, with 29.5%, has a more than double value. At the opposite end is Bolzano, where only 1.5% of families report interruptions to the water service. A strong variability to the detriment of the South and the Islands is also recorded in the access to essential services for citizens: in Campania the share of families who have difficulty in accessing essential services is almost double compared to the average of Italian families (8.8% compared to 4.9%), followed by families living in Calabria (7.7%) and Puglia (7.1%); at the other extreme, these difficulties are declared by only 2.5% of families in Bolzano.

Electricity service interruptions also constitute a disservice with a heterogeneous distribution across the national territory: in Campania they occur 4.7 times a year, while in the autonomous provinces of Trento and Bolzano and Valle d'Aosta less than once a year per inhabitant.

Regional differences also emerge in urban waste separate collection. Lazio is in the last position: the share of families living in a municipality that has exceeded 65% of separate waste collection is only 32.1% (50% less than the Italian average). In Sardegna and in Trento, percentages of over 90% are reached.

Molise leads the way in 2023 in availability of Internet access, where fast access is guaranteed to 84.6% of resident families; among families in Calabria, however, only 36.1% have the possibility of connecting to a new generation, very high capacity landline network. The northern regions also enjoy better levels for mobility indicators, both in terms of local public transport (LPT) supply and demand satisfaction. For example, the LPT supply in Lombardia is more than double the national figure.

The level of satisfaction with the quality of mobility services sees almost all regions distributed around the national average value, with some exceptions: the most satisfied are also the most frequent users of the services, i.e. the residents of the northern regions. Although slightly decreasing compared to last year, Bolzano, with 54.9% of satisfied users, is still the territory where the quality of transport services is most often evaluated positively, while Campania, with only the 11.4% of satisfied users, is the region with the worst rating for the quality of the transport services.

For social-healthcare and social-welfare facilities, Campania, with 19.5 residential beds per 10,000 inhabitants, is last in the regional ranking (-70% of beds compared to the Italian average figure) while Trento, with 152.8 beds per 10,000 inhabitants, stands in first place. The provision of integrated home care presents serious critical issues for the elderly in Calabria, where the service is guaranteed to less than 1% of people aged 65 and over. In Molise 5.5% of elderly people use the home care service, in Abruzzo 4.9%.

Regarding health services, the supply of medical and nursing staff shows a fair degree of homogeneity across the territory: it ranges from 5.0 doctors per 1,000 inhabitants in Lazio to 3.4 in Trento, and from 8.8 nurses and obstetrics nurses in Molise to 5.9 in Calabria.

A strong variability characterises instead the distribution of general practitioners (GPs) with an overload of patients, widespread especially in the North; it reaches 71.0% in Lombardia

(+50% compared to the national average), while it is more moderate in the southern regions, with a minimum in Sicilia (22.4%).

The availability of hospital beds in high-care wards ranges from 1.9 beds per 10,000 inhabitants in Bolzano to 4.6 in Molise.

Unmet need for medical examination represents a critical issue throughout the territory, with respect to the principles on which our National Health Service is based; the phenomenon is particularly widespread in Sardegna, where the share of people who had to give up visits or health examinations for economic or accessibility reasons (waiting lists or difficulties reaching the facility) rose to 13.7% in 2023.

Hospital emigration is a phenomenon that mainly characterises the smaller regions of the South: Molise has the highest percentage of hospital inpatients outside the region of residence (30.4% of discharges), followed by Basilicata (28.4%).

Insufficient supply of general practitioners and nurses and decline of trust in healthcare personnel

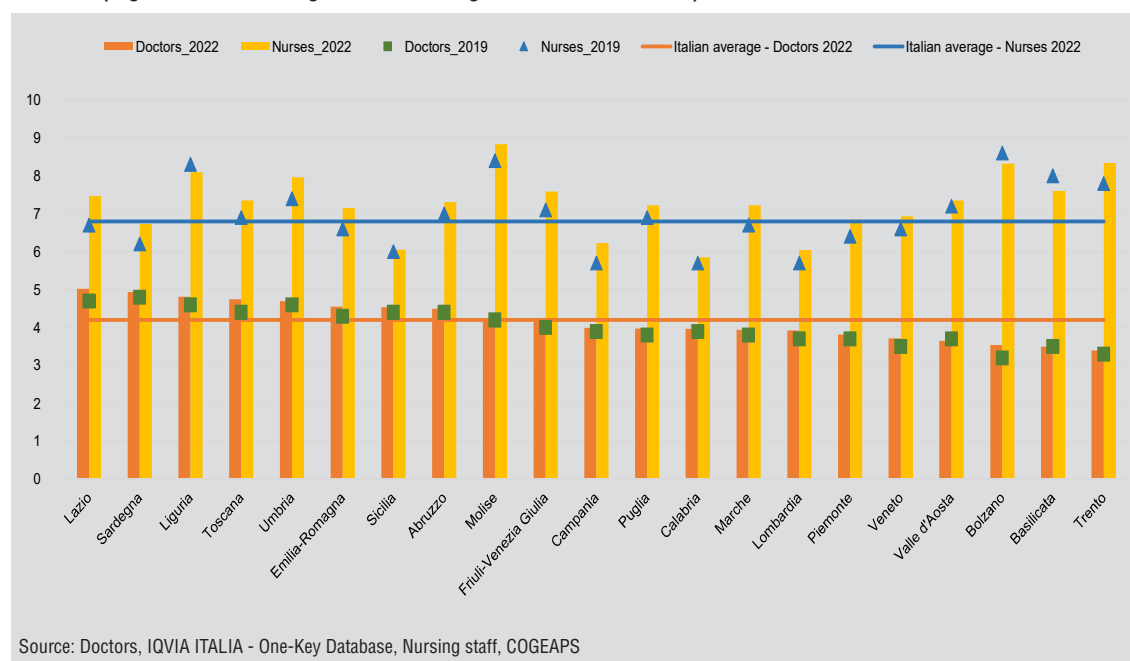
The issue of the provision of healthcare personnel in Italy occupies a high position on the political agenda, in particular after the pandemic highlighted problems in dealing with the health emergency due to the shortage of doctors and nurses. The actual situation is the consequence of policies to reduce public health spending prolonged for many years, which prevented the turnover of health professionals. For doctors, this has determined a marked aging of active professionals, many of whom are close to the retirement age. It must also be taken into account the growing complexity of the working context of those who practice this profession in the National Health Service, both as general practitioners and as specialists, with lower salaries than those in the private sector. For nurses, our country has suffered from the fact that for many years the provision has been insufficient and the university system has recently been unable to fill all the available places. This situation appears to become even more critical in the future, with an increase in demand for care due to the progressive aging of the population.

Doctors in Italy are among the oldest in Europe: in 2022, approximately 54% of doctors in Italy are at least 55 years old. Among specialist doctors, the percentage drops to 50%, while for general practitioners (GPs) it is 77%. This data give rise to a strong concern regarding GPs, whose number has decreased in the last ten years by over 6,000 units, from 45,437 in 2012 to 39,366 in 2022, and is expected to further decrease in the coming years. The progressive shortage of GPs (from 7.5 per 10 thousand inhabitants in 2012 to 6.7 in 2022) is common to all geographic areas of the country, but the North is the most disadvantaged, with 6.0 GPs per 10 thousand inhabitants in 2022, compared to 6.4 in the Centre and 7.2 in the South and Islands. Over the years, workloads have therefore increased significantly, going from 1,156 patients per GP in 2012 to 1,301 in 2022. The share of GPs with more than 1,500 patients (upper limit set by current national legislation) is very high, and increased from 27.3 % in 2012 to 47.7% in 2022. This indicator shows a marked territorial variability, with almost 34 percentage points of difference between the 61.7% recorded in the North-West (71.0% in Lombardia) and the 27.8% of the Islands (22.4% in Sicilia).

The overall number of doctors (general practitioners and specialists) in 2022 is equal to 4.2 per 1,000 inhabitants, 0.2 points more than the pre-pandemic year 2019. For nursing staff, the indicator is equal to 6.8 per 1,000 in 2022, 0.4 points more than in 2019.

For doctors the number is highest in the Centre (4.8) and lowest in the North-West and the South (4.0); also for nursing staff the number is highest in the Centre (7.4), but lowest in the Islands (6.2). At a regional level, Liguria, Emilia-Romagna, Toscana, Umbria, Lazio and Abruzzo are the areas with a rate higher than the national average for both health professions (Figure 2). Furthermore, Sicilia and Sardegna have a higher than average rate only for doctors (4.5 and 4.9 respectively), while for nurses and midwives higher rates are recorded in Valle d'Aosta (7.4), autonomous provinces of Bolzano and Trento (8.3), Veneto (6.9), Friuli-Venezia Giulia (7.6), Marche (7.2), Molise (8.8), Puglia (7.2) and Basilicata (7.6). With few exceptions, an increase in rates was recorded in all regions between 2019 and 2022.

Figure 2. Doctors and nursing staff (nurses and midwives) by region. Years 2019, 2022. Values per 1,000 inhabitants (regions in decreasing order according to doctor rate in 2022)

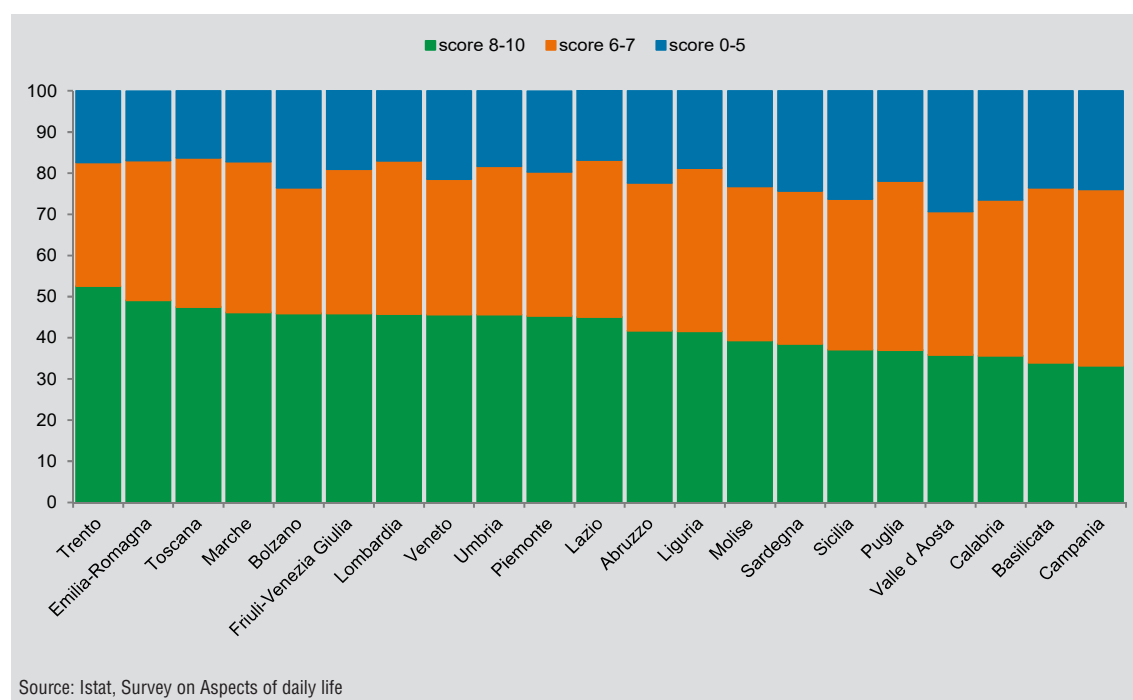


In recent years, the indicator on trust towards doctors and other healthcare personnel declined. The average score (on a scale of 0 to 10) for doctors went from 7.3 in 2021 to 6.9 in 2023 and, similarly for non-medical healthcare personnel, from 7.2 to 6.8. The gap increases in some geographic areas, with a more pronounced decrease in the average score in the South and Islands (from 7.1 to 6.7 for doctors, from 6.9 to 6.5 for other healthcare personnel), which already had lower values in 2021.

In 2023, approximately one in five people assigned an insufficient score (between 0 and 5), 20.1% for doctors and 21.3% for other healthcare personnel respectively. The highest percentage is recorded in the South and Islands, 24.2% and 26.6% respectively for the two professional figures. Average values in the North equal to 18.5% and 18.9% respectively, whereas in the Centre are 16.8% and 18.0%. Trento, Emilia-Romagna, Toscana and Marche achieve the highest levels of trust for both healthcare professions (Figure 3). Bolzano could also be added, because 45.9% of people expressed a score between 8 and 10 for doctors and 44.5% for other healthcare personnel, but there was also a percentage of over 23% of people who expressed a negative score (between 0 and 5). Less than one in five people declared low trust in doctors and healthcare personnel also in Lombardia and Lazio.

On the other side, Campania and Basilicata are the regions with the lowest share of people who express a significant trust in healthcare professionals. Scores between 0 and 5 were assigned most frequently by residents in Valle d'Aosta, Calabria, Sicilia and Sardegna for medical staff; Sicilia, Calabria, Campania and Molise for non-medical healthcare personnel.

Figure 3. People aged 14 and over by level of trust (rated from 0 to 10) in doctors by region. Year 2023. Values per 100 people (regions in decreasing order by the percentage of score 8-10)



Wide gap in the provision of hospital beds for severe patients between North and South

In the hospital system, the pandemic has made clear the need, on one hand, to quickly strengthen the supply of health care services to deal with the emergency situation and, on the other hand, to use resources (beds and healthcare personnel) in a flexible way.

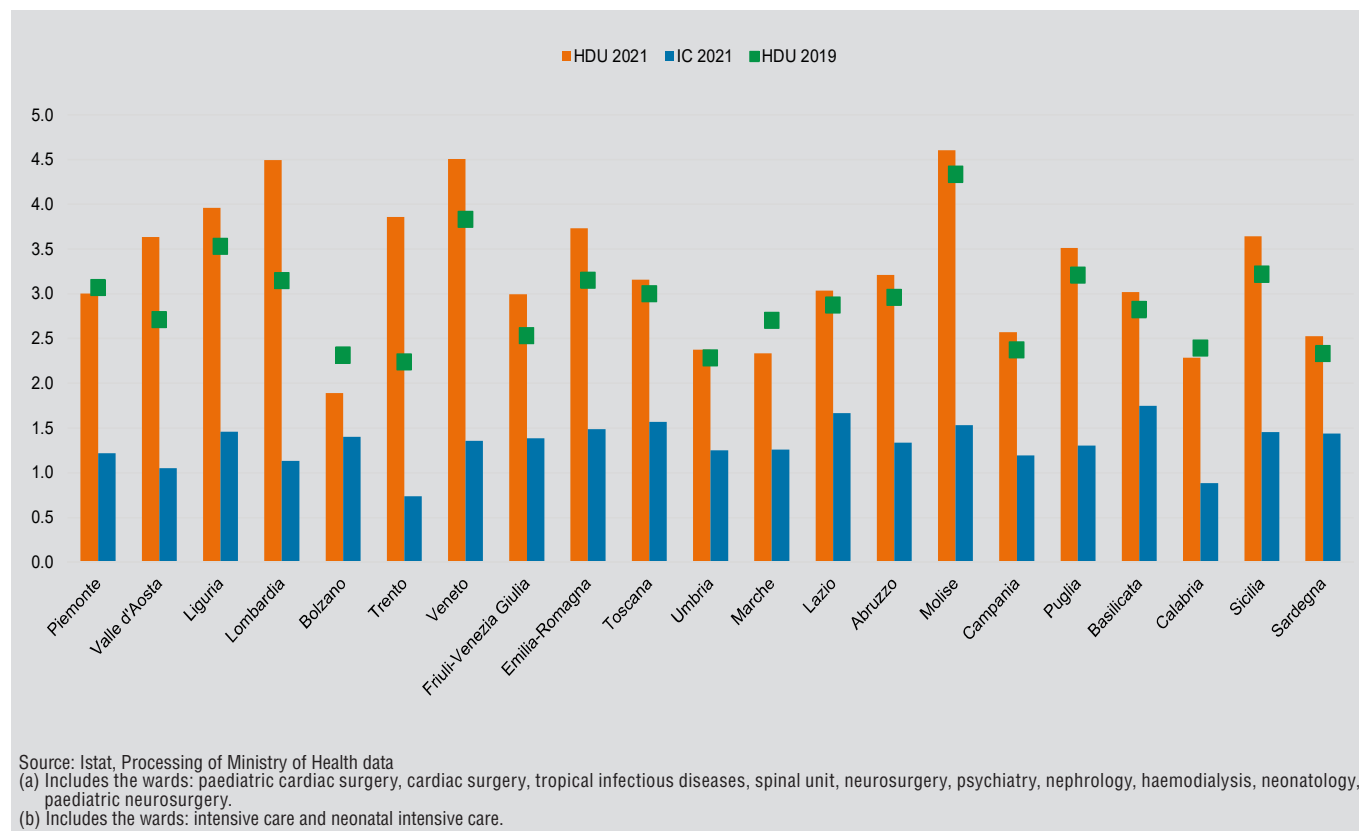
In 2021, after years of decrease in the overall supply of hospital beds, a stable figure was recorded compared to 2019: approximately 33 inpatient and day hospital beds per 10,000 inhabitants. At the same time, there is a significant increase in the hospital availabilities for most severe patients: the beds in high-care wards raised from 3.0 to 3.5 per 10,000 inhabitants. The greatest increase was achieved in the North (from 3.2 to 4.0), where the provision was already higher than the national average, while in the Centre the rate went from 2.8 to 2.9 and in the South and Islands from 2.8 to 3.1.

At a regional level, the provision of beds for high-care specialties is highest in six of the nine northern regions, in Molise and Sicilia; the lowest values are recorded in Bolzano (1.9), in Marche and Calabria (2.3), Umbria (2.4), Sardegna (2.5) and Campania (2.6) (Figure 4). Piemonte, Bolzano, Marche and Calabria are the only territorial units in which a decrease in rates is observed between 2019 and 2021.

The strengthening of intensive care beds has also become very important during the pandemic to deal with the health emergency: the rate increased from 1.0 per 10,000

inhabitants in 2019 to 1.3 in 2021. The territorial gaps are very different compared to high-care hospital beds. A higher supply of intensive care beds is observed in Lazio and Basilicata (1.7); in Toscana (1.6); in Liguria, Emilia-Romagna, Molise and Sicilia (1.5); while Trento has only 0.7 per 10,000 inhabitants and Calabria 0.9.

Figure 4. Hospital beds in high-care (HDU) (a) and intensive care (IC) (b). Years 2019, 2021. Values per 10,000 inhabitants



Hospital mobility is stable, but with large differences between North and South

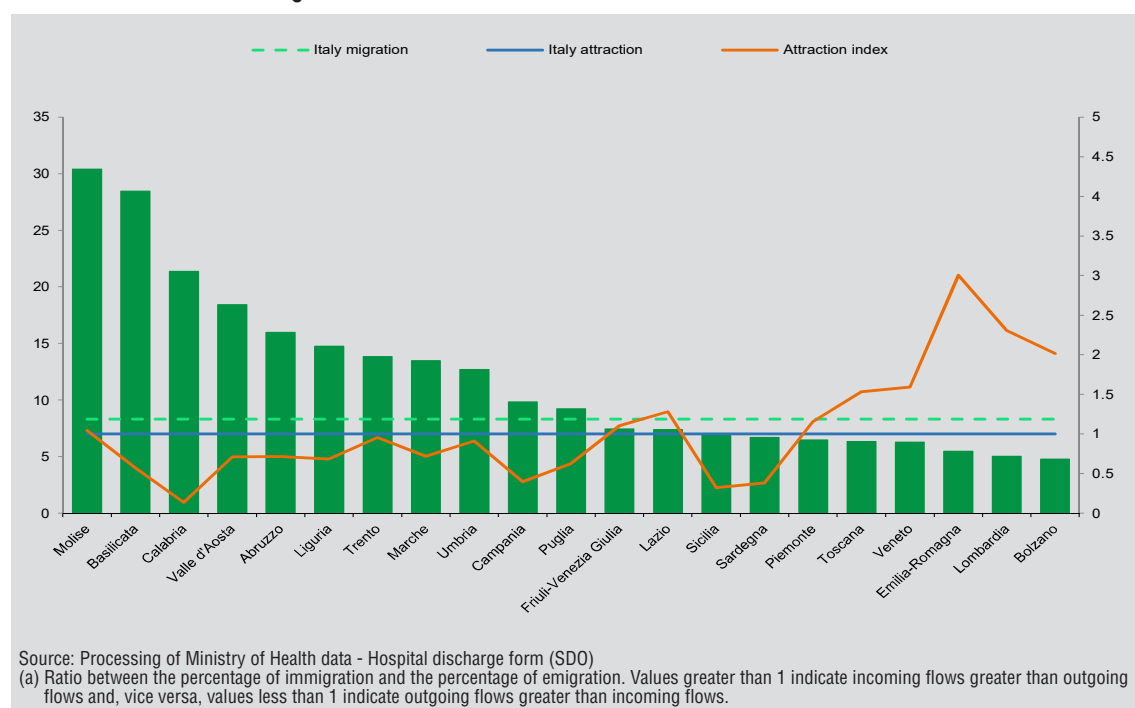
Hospital mobility outside of the region of residence could point out problems of equity and inequalities in the provision of regional health services. The indicator measures the difficulty in accessing hospitals in a given region of residence and the poor quality of the regional hospital system. However, not the entire phenomenon can be attributed to a problem of “bad” health care. The National Agency for Regional Health Services (Agenas), in the annual monitoring of the indicator², specifies that it is partly determined by hospitalisations carried out in the region of domicile of patients that reside elsewhere (“apparent mobility”); partly caused by sudden events, which require emergency hospitalisation (“casual” mobility); partly by the greater geographical proximity to hospital facilities outside the region (“proximity” mobility); and only partly by the patient’s choice (“effective” mobility).

2 <https://www.agenas.gov.it/comunicazione/primo-piano/2324-agenas-presenta-i-dati-2022-della-mobilita-sanitaria-interregionale> (in Italian).

However, effective mobility is the greater component, and in 2022 accounted for over 75% of the 2.7 billion euros of economic balance for interregional hospital mobility.

In 2022, 8.3% of acute inpatient hospitalisations of patients resident in Italy occurred outside their region of residence. The figure has remained constant since 2016, with the exception of the *COVID-19* years, when it decreased to 7.3% in 2020 and 7.8% in 2021. The territorial gaps remained substantially unchanged over time, with values higher than the average in all the regions of the South, in Valle d'Aosta, Liguria, Trento, Marche and Umbria and much lower values in Lombardia, Emilia-Romagna, Veneto and Toscana. Also Bolzano has an emigration percentage of only 4.7%. However, this value is biased by the fact that the indicator does not take into account hospital migrations to neighbouring foreign countries. In Figure 5, hospital migration is represented together with the attraction index, because in some regions, such as Molise, Trento and Umbria, although high migration values are recorded, significant incoming flows are also observed, which indicate a geographical mobility determined above all by the small size of the territory, rather than by problems of quality of hospital care. Basilicata, Calabria, Campania and Puglia are the regions with high values of hospital migration and low attraction, in addition to Sicilia and Sardegna, which, despite having a migration percentage of 7.0% and 6.7% respectively, have an attraction index of less than 0.4. In the four regions with low outgoing flows, the attraction index is very high: 3.0 in Emilia-Romagna, 2.3 in Lombardia, 1.6 in Veneto and 1.5 in Toscana.

Figure 5. Hospital migration (left axis) and attraction index (right axis) (a) of inpatient acute hospitalisations by region. Year 2022. Percentage values



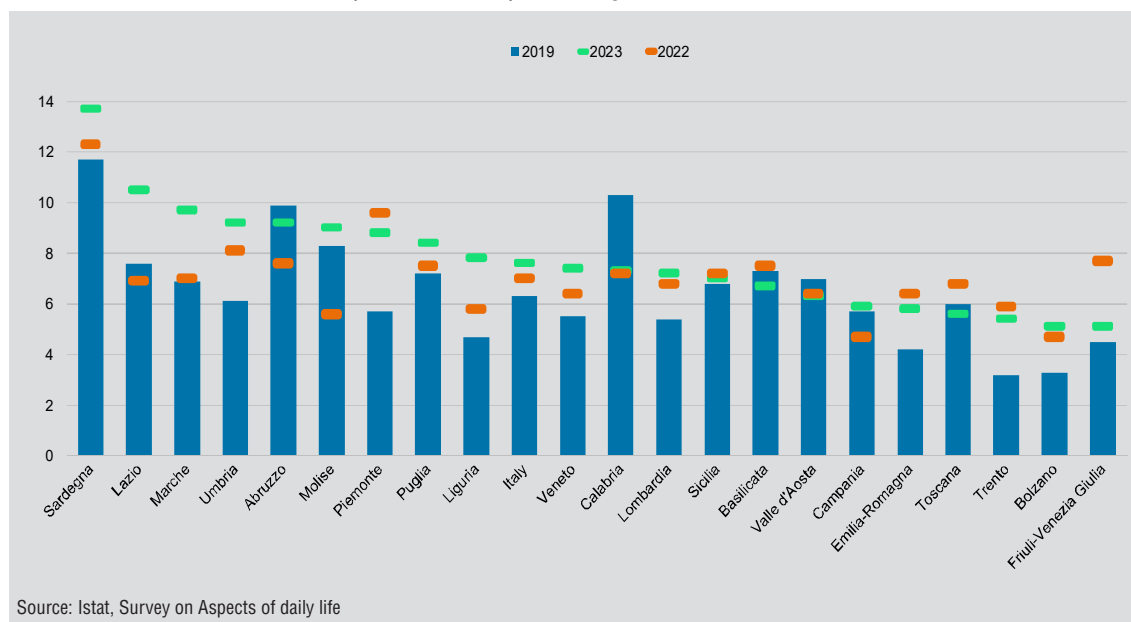
Increasing unmet needs for necessary healthcare services

The phenomenon of unmet need for medical examination contributes to measuring the level of equity in access to health services. The indicator includes the renounce to medical visits – excluding dental visits – or diagnostic tests deemed necessary in a year, due to economic problems or to long waiting lists, or difficulties in reaching health facilities. The share of people with unmet health needs amounted to 7.6% of the entire population in 2023, up from 7.0% recorded in the previous year. With an increase of 372,000 persons, the total sums up to 4.5 million citizens who didn't do medical visits or checks due to economic problems, waiting lists or access difficulties. This increase can be attributed to direct and indirect consequences of the pandemic shock, such as the increase in deferred services due to *COVID-19* or the difficulty of effectively reorganising healthcare, taking into account the constraints to cover the increase in demand of services with an adequate number of professional resources and, last but not least, the inflationary push of the economic situation, which has worsened the possibility to access health services. The rate of unmet need increases with age. In 2023, it is 1.3% among children up to 13 years of age, a peak is registered in the adult 55-59 year old group, in which it reaches 11.1%, and it remains high among elderly people aged 75 and over (9.8%). However, the increase between 2022 and 2023 only concerns the adult population (18-64 years), which shows an increase from 7.3% to 8.4%. The well-known gender differences are confirmed: the rate is equal to 9.0% among women and 6.2% among men, with a gap that has further widened in the last year due to the increase recorded among adult women.

From a regional point of view, the increase in 2023 compared to the previous year mainly concerns the Centre (from 7.0% to 8.8%) and the South (from 6.2% to 7.3%), so that the geographical differences of the macro-areas, which had softened between 2020 and 2021 and were completely cancelled out in 2022, reappear. The Centre recorded the highest percentage of unmet health need (8.8%), followed by the South and Islands with 7.7%, while the North with 7.1% shows the same level as in 2022.

Only a few regions in 2023 return to lower levels than in 2019, although some have even managed to further reduce them (Figure 6). In the South, Calabria stands out, having reduced the share of people who forgo services compared to 2019 (-3 percentage points), with use rate of health services already much lower than the rest of the regions (in 2019 it was second only to Sardegna). Sardegna, with the highest rate of unmet need already in 2019 (11.7%), continues to experience an increase (13.7% in 2023), but partially recovered the highest level ever reached by any region in 2021 (18.3%). Among the regions of central Italy, apart from Toscana which returns to the 2019 value, Lazio reaches 10.5% (it was 6.9% in 2022 and 7.6% in 2019) and Marche 9.7% (it was about 7% in both 2022 and 2019). In the North, the highest value is recorded in Piemonte with 8.8%, followed by Liguria, with 7.8% (both regions show an increase by 3 percentage points compared to 2019).

Figure 6. People reporting, in the last 12 months, unmet need for medical examinations despite needing them, by region. Years 2019, 2022 and 2023 (provisional data). Percentage values



In 2023, 4.5% of the total population reported unmet needs due to long waiting lists, and 4.2% did so for economic reasons. Compared to 2019, the percentage referred to waiting times almost doubled (it was 2.8%), while the share referred to economic reasons remained unchanged (it was in fact 4.3%). Compared to 2022, the well-known problems of waiting lists were increased (+0.7 percentage points), but above all the share of those renouncing for economic reasons grew, gaining 1.3 percentage points in just one year. The share related to problems due to *COVID-19* became negligible (0.1%, it was 5.9% in 2021). In 2023, social inequalities show smaller differences than in the pre-*COVID* period and disappear completely among adults aged 45-64: unmet health need is 10.4% among people with lower school qualification and 10.6% among people with at least a university degree.

Home care for the elderly is constantly increasing, especially in the central regions

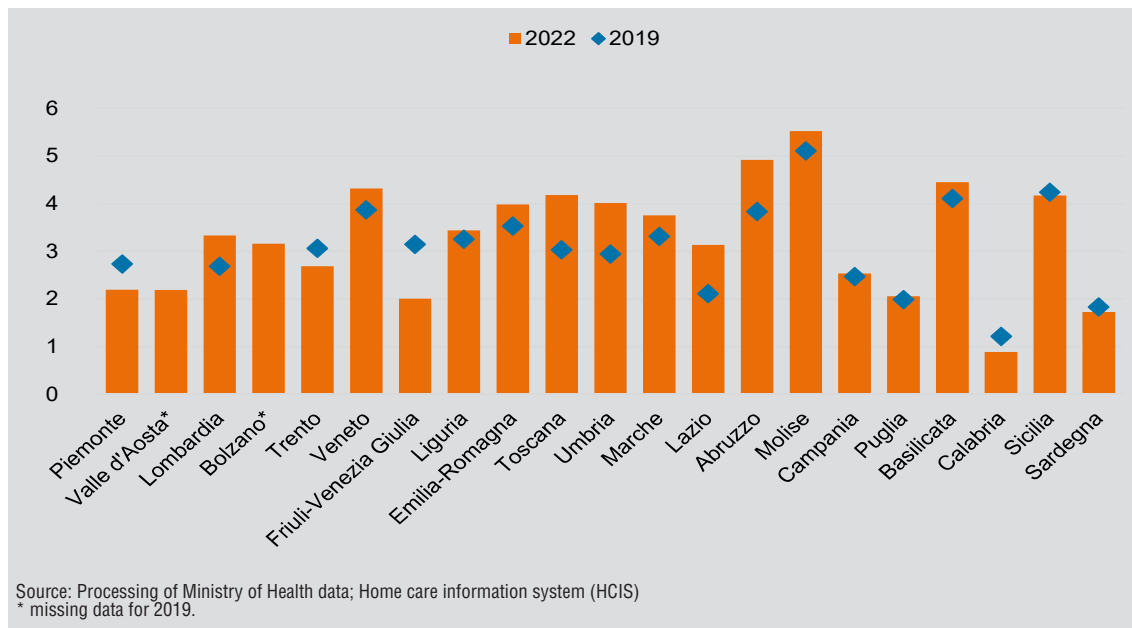
In recent years, health policies established that home care (HC) is the best setting to provide care to frail patients with chronic conditions, mainly elderly. On one hand, it allows patients to remain in their own home and family context, on the other, it ensures that the patient is adequately assisted by health and social-care personnel, with costs that are much lower than those provided in a residential setting and, above all, than the costs of hospitalisation. Therefore, the strengthening of HC is one of the targets of Mission 6 (Home as the first place of care and telemedicine) within the National Recovery and Resilience Plan (NRRP), to maintain a good quality of life for people needing assistance and, at the same time, ensure greater safety of care and promote the reduction of inappropriate hospitalisations. In 2022, approximately 459,000 elderly people were assisted in HC, 3.3% of the population aged over 64 years. There were less than 400,000 in 2019 (2.9%). The greatest increase was observed in the Centre, from 2.6% to 3.6%, while it remained substantially stable in

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the South and Islands (2.9% in 2022) and increased slightly in the North (from 2.7% to 3.0% in the North-West, from 3.5% to 3.8% in the North-East).

In the regional level, significant increases are observed in Lombardia, Toscana, Umbria, Lazio and Abruzzo. The latter, together with Molise (5.5%), has the highest share of elderly people assisted in HC (4.9%) (Figure 7).

Figure 7. Elderly people aged 65 and over assisted in integrated home care (IHC) by region. Years 2019, 2022.
Percentage values

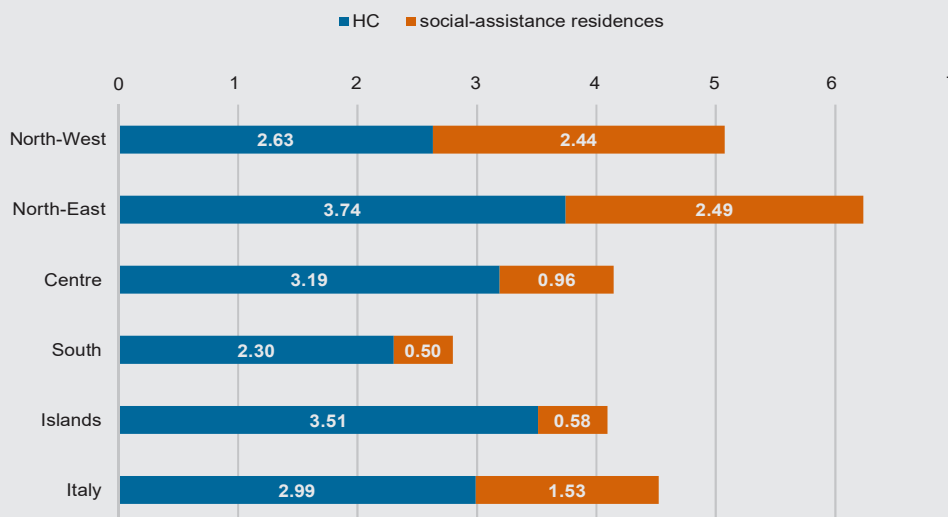


ASSISTANCE TO FRAIL ELDERLY PEOPLE

In 2021 (the last year available for data on non-self-sufficient elderly people cared for in residential facilities), 4.5% of the elderly population aged 65 and over received care in-home care or in social-assistance residences, with a strong variability from 6.2% in the North-East to 2.8% in the South and Islands (Figure A). The two settings have a similar share of vulnerable elderly people in the North-West (52% in HC, 48% in residences), while in the South and the Islands, care is provided for over 80% in HC. The South and Islands, a macro territorial area strongly affected by the process of population aging and precarious health conditions, has very low shares of frail elderly people cared for both in HC (2.3%) and in residences (0.5%).

These geographical differences are closely linked to the strong territorial variability of beds in residential facilities: in 2021, compared to a national average of 70.1 beds per 10,000 residents, this number in the North-East is equal to 100.3, three times higher than in the South (33.4); an intermediate situation appears in the Islands, with 51.3 residential beds, and the Centre, with 56.5. The North-West is more similar to the North-East with 97.2 beds per 10,000 residents.

Figure A. Elderly people aged 65 and over assisted in integrated home care (IHC) and percentage of non-self-sufficient elderly people aged 65 and over in residences by geographic area. Year 2021. Percentage values



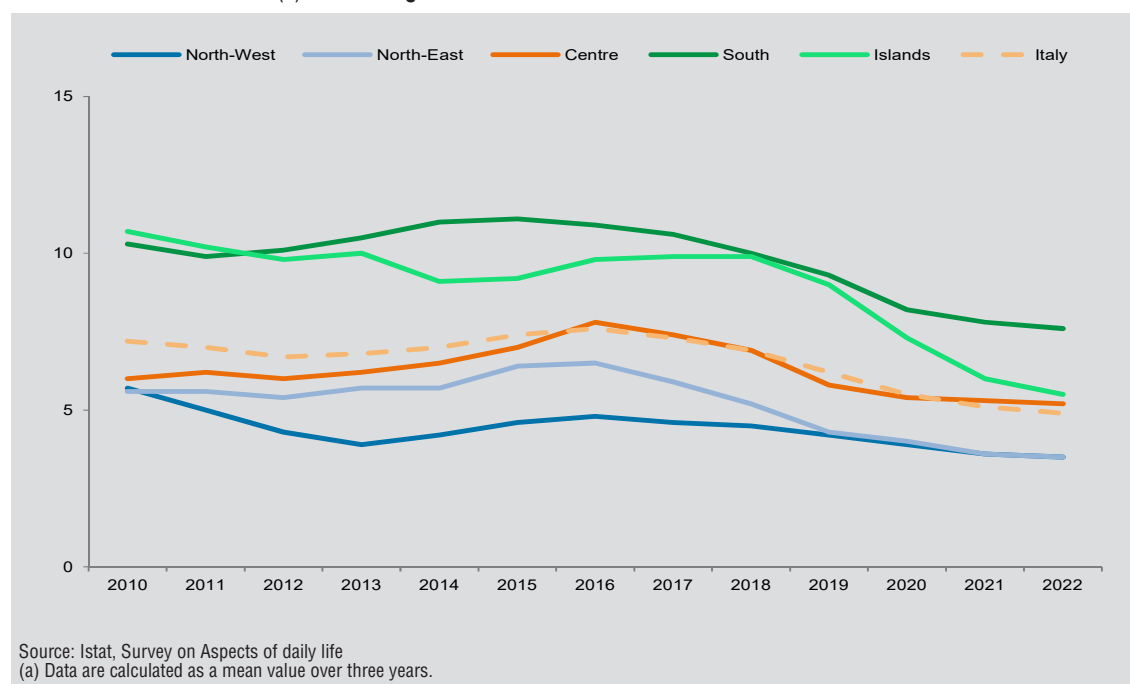
Source: Processing of data from the Ministry of Health, Home Care Information System (HCIS); Istat, survey on residential health and social care facilities

Much difficulty in accessing essential services in the South

A widespread diffusion throughout the country of facilities that provide essential services, such as pharmacies, emergency facilities, post offices or municipal offices, supermarkets, schools or police and carabinieri stations, is of fundamental importance for the well-being of citizens. In the three-year period 2021-2023, 4.9% of families reported having many difficulties in reaching three or more essential services (Figure 8). This situation occurs more frequently in the South (7.6%) and in particular in Campania (8.8%), Calabria (7.7%) and Puglia (7.1%) and to a lesser extent in the North (3.5%). The parameter improves slightly over time, but at the same rate across the entire territory, so that differences between North and South show no signs of decrease.

The most marked improvement is observed in the Islands, where the share of families with difficulty in reaching essential services dropped from 10.7% in the period 2009-11 to 5.5% in 2021-23.

Figure 8. Families declaring great difficulty in reaching three or more essential services, by geographic area. Years 2010-2022 (a). Percentage values



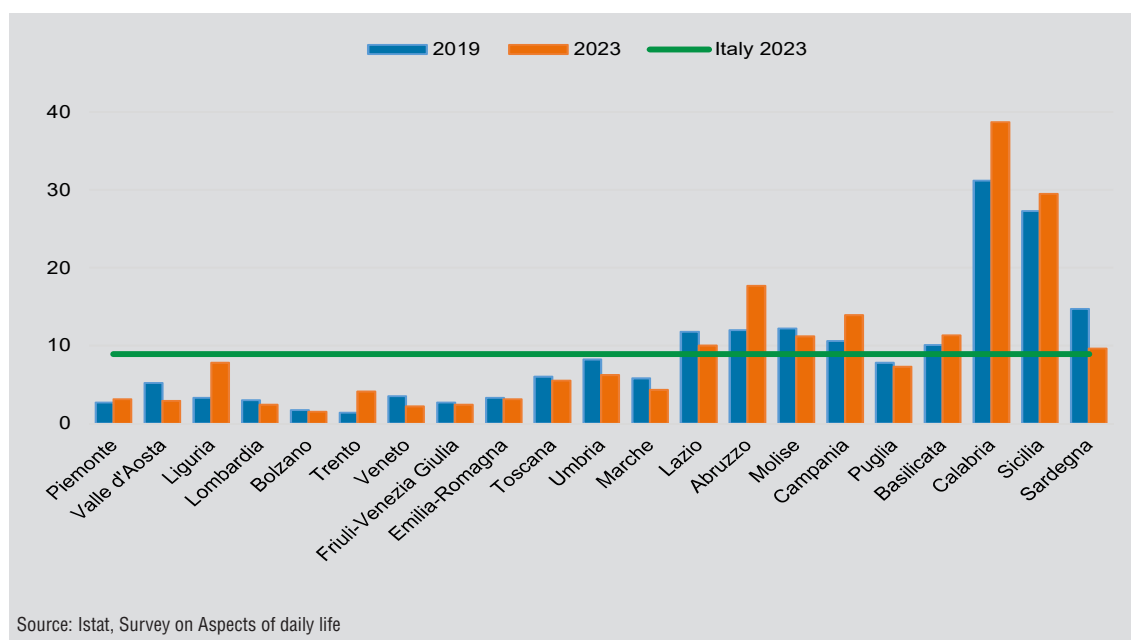
Increasing irregularities in the distribution of water and electricity in the South

Among the services that are absolutely essential for citizens, the quality of the water and electricity service depends on the effectiveness of the distribution network, which must be able to provide water and electricity continuously; interruptions in fact create inconvenience, both for domestic and for economic activities.

The water distribution network is quite good in all regions. In 2023, 8.9% of families reported irregularities in the water supply, but this average value is the synthesis of very different situations (Figure 9). In Calabria the percentage reaches 38.7% and in Sicilia 29.5%, while in all the regions of the North it is below 5%, with the exception of Liguria, with 7.8%.

This is a problem related to the presence of poor infrastructure, and the situation in Calabria and Sicilia shows no improvement.

Figure 9. Families declaring irregularities in water supply by region. Years 2019, 2023. Percentage values



Quality of the electricity service is assessed by the average number of interruptions without warning per user and lasting more than three minutes: in 2022, there were 2.2 long accidental interruptions per user.

The discontinuity of the electricity service shows differences across Italy, and follows the North-South differences already observed for the quality of the water service. Interruptions occur just over once a year in the North and more frequently in the South and Islands.

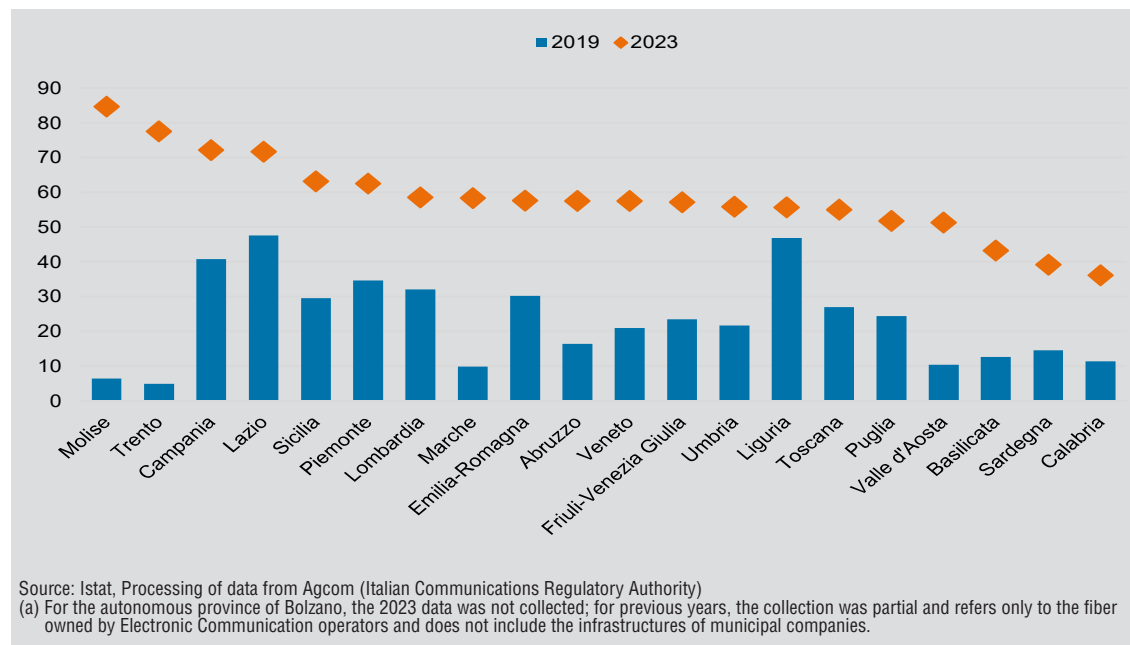
Compared to 2019, the electricity service improved slightly and homogeneously in all regions, but in 2022 the interruptions increased, albeit slightly, in all macro areas, with the exception of the Islands. In Sicilia, the mean value went from 4.9 to 3.9 interruptions per inhabitant; in Sardegna, the decrease was more limited, from 3.3 to 2.8 interruptions.

Landline network coverage for high-speed Internet connection continues to increase

In 2023, Italy reached a share of 59.6% of families served by a high-speed Internet connection, a figure that is constantly growing, even if it is still lower than the European average. The target set by the European Commission for 2030 is to provide all families in the Union with high-speed connections and 5G coverage, even if, given the geographical conformation of some Italian areas, it will not be possible to achieve total coverage with a landline network.

Landline network coverage for ultra-fast Internet access is not homogeneous across the national territory. Some areas have a coverage greater than 70%. These are, for example, Molise (84.6%), Trento (77.6%), Campania (72.1%) and Lazio (71.7%). In other, critical, situations, the value is below 40%: this is the case, for example, in Calabria (36.1%) and Sardegna (39.2%) (Figure 10).

Figure 10. Households that are resident in municipalities with Overall Fixed Very High Capacity Network (VHCN) coverage by region. Years 2019, 2022. Percentage values



Also the improvement in the distribution of ultra-fast Internet connection was not uniform in all regions. Between 2019 and 2023, Liguria increased this coverage very little, while elsewhere, such as in Trento and in Molise, which were the most backward areas of Italy in 2019, significant steps forward were made, respectively from 5.0% to 77.6% and from 6.4 to 84.6%, resulting in being among the four regions with the highest coverage.

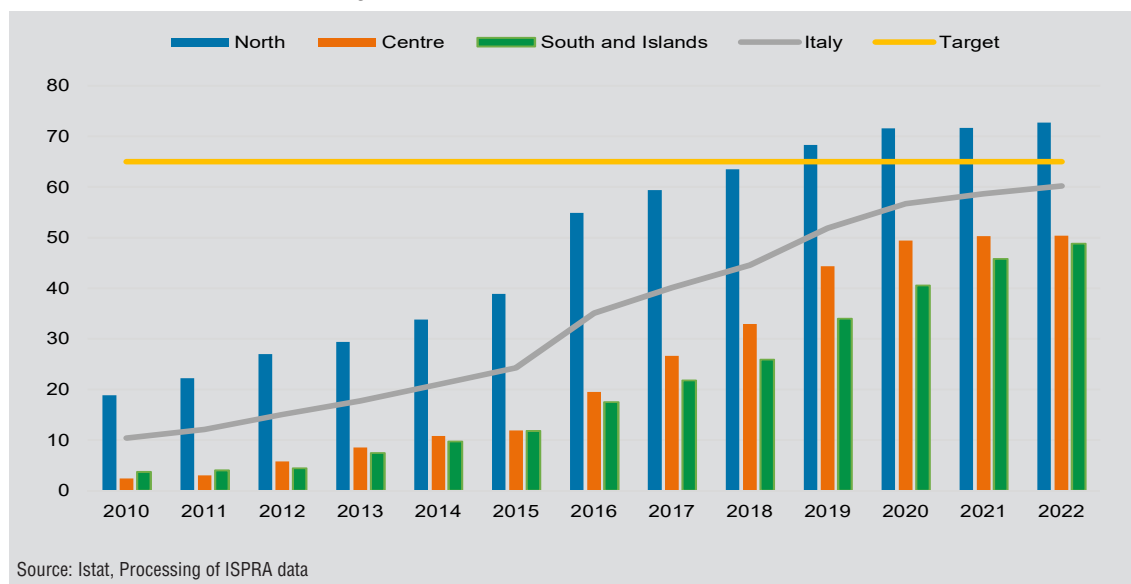
Separate waste collection is growing, half of the regions exceed the 65% target

In 2022, 60.2% of Italian households live in a municipality that has reached the 65% separate waste collection target for urban waste. The municipalities that have exceeded this threshold are 5,420 out of 7,901 and result in 11 regions to achieving the target. Of almost 29 million tons of urban waste produced, 18.6 million are separately collected. Organic waste represents the majority of separated waste (39.3%), followed by paper and cardboard, which represent 19.2%; glass, with 12.2%, and plastic with 8.6%. This composition remained stable over time.

However, territorial differences in the performance of separate waste collection are significant.

The most efficient areas are Trento, Sardegna and Marche, where over 90% of families live in a municipality that has reached the 65% threshold. Bringing up the rear are Lazio and Campania, where the percentage drops to just over 30% of households. The separate waste collection service continuously improved throughout the country, albeit at different rates (Figure 11). In 2022, a great leap forward was made by Sicilia, where the indicator, although still far from the target, increased by 8.1 percentage points, going from 37.3% to 45.4%.

Figure 11. Percentage of population residing in municipalities with separate waste collection greater than or equal to 65%. Years 2010-2022. Percentage values



Rates increase also in those regions that already had high rates of separate waste collection, such as Emilia-Romagna (+6.8%), Marche (+5.6%) and Umbria (+4.8%). The only regions that have recorded a decline in the last year are Veneto, Toscana, Basilicata and Trento.

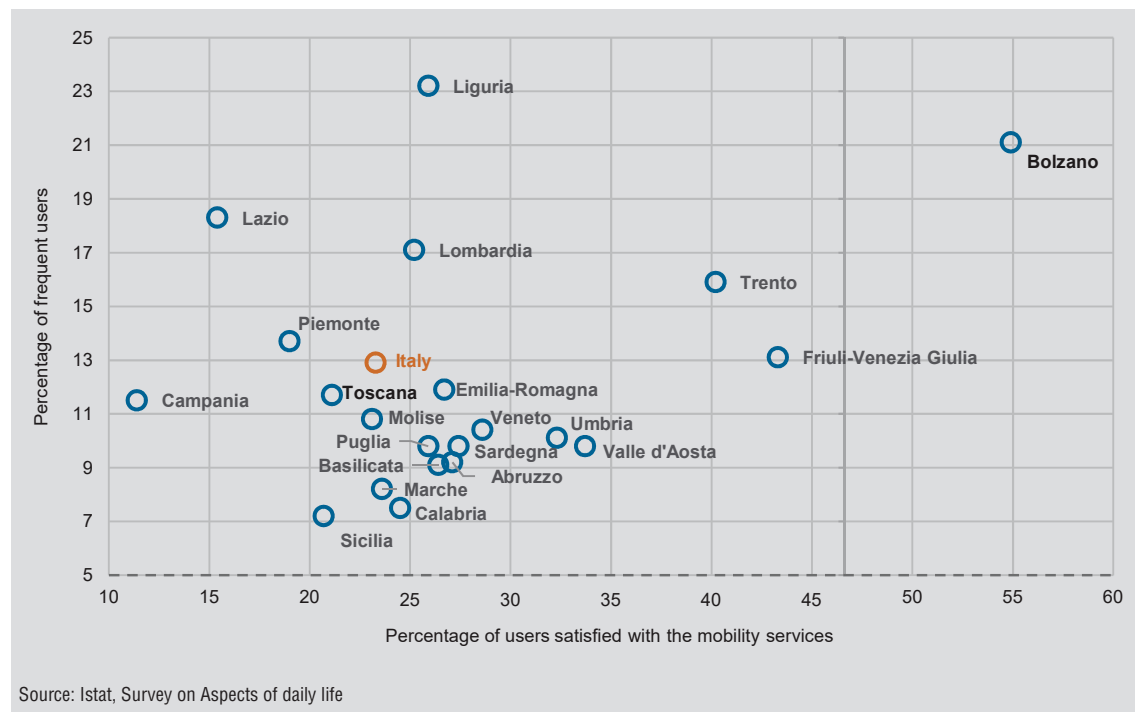
Use of public transport continues to grow, but did not return to pre-*COVID* levels

12.9% of people aged 14 and over used public transport services regularly in 2023, a figure that confirms the recovery trend (it was 11.8% the previous year), although it has not yet reached the levels of the pre-*COVID* years, when the share of users exceeded 15%.

Young people are especially those who regularly use public transport: more than half of people aged 14 to 19 (52.6%) used mobility services several times a week in 2023, with an increase of over two percentage points compared to last year (it was 50.4%). A more significant increase was recorded among people aged 20-24, with +3.3 percentage points compared to 27.2% in 2022, and in particular among girls, who are the main users of the service. In this age group, more than a third of girls (35.7% in 2023, compared to 31.1% in 2022) and around a quarter of boys (25.6% compared to 23.9% in 2022) regularly use public transport services.

From a regional point of view, the largest percentage of users reside in the northern regions (14.7%), and in particular in Liguria, which, with 23.2% of regular users, shows also the strongest recovery compared to last year (19.7%) together with Molise, where the percentage went from 6.5% to 10.8% (Figure 12).

Figure 12. Percentage of people aged 14 and over who use public transport several times a week, and degree of satisfaction for the service. Year 2023. Percentage values



The South and the Islands are confirmed as the areas with the lowest percentage of users and with a struggling recovery in mobility demand: Sicilia (7.2%) and Calabria (7.5%) are the regions with the lowest number of users, stationary or slightly decreasing compared to the past.

The share of those who declare themselves satisfied with mobility services remains stable, settling at just under a quarter of regular users of public transport (23.3%). The performance of the Centre (from 21.0% to 18.3%) and especially of the Islands (from 29.2% to 22.8%) is significantly worse than in 2022.

Indicators

1. **Beds in the residential social-healthcare and social-welfare facilities:** Beds in the public or private social-healthcare and social-welfare facilities that provide residential services (assisted hospitality with overnight stay) of a social welfare and/or social-healthcare type to people in need per 10,000 inhabitants.
Source: Istat, Residential health and social care facilities.
2. **Integrated home assistance service:** Percentage of people aged 65 and over who benefited from integrated home assistance service.
Source: Istat, Processing of data from the Ministry of Health, Health Information System (SIS).
3. **Composite index of service accessibility:** Percentage of households who find very difficult to reach some basic services (pharmacy, emergency room, post office, police, carabinieri, municipal offices, crèches, nursery, primary and secondary school, market and supermarket). The indicator is a three-year average.
Source: Istat, Survey on Aspects of daily life.
4. **Irregularities in water supply:** Percentage of households who report irregularities in water supply.
Source: Istat, Survey on Aspects of daily life.
5. **Irregularities in electric power distribution:** Frequency of accidental long lasting electric power cuts (cuts without notice longer than 3 minutes) (average number per consumer).
Source: Istat, Processing of data from the Authority for Electricity and Gas.
6. **Seat-Km of public transport networks:** Seat-Km of public transport networks per capita in provincial capital Municipalities.
Source: Istat, Urban environmental data Survey.
7. **Satisfaction with public transport services:** Percentage of people aged 14 years and over, regular users of public transport services, who rate their experience of these services as positive (grade of 8/10 or higher). Regular users are those reporting to use public transport (train or bus/trolleybus/tram, urban or suburban) more than once a week.
Source: Istat, Survey on Aspects of daily life.
8. **Frequent users of public transport:** Percentage of population aged 14 and over who use public transport several times a week (bus, trolley bus, tram within their own municipality; bus or coach connecting different municipalities; train).
Source: Istat, Survey on Aspects of daily life.
9. **Overall Fixed Very High Capacity Network (VHCN) coverage:** Percentage of households which are resident in an area served by a very high capacity network (FTTH).
Source: Istat, Processing of data from Agcom.
10. **Separate collection service for municipal waste:** Percentage of resident population in municipalities with separate collection greater than or equal to 65%.
Source: Istat, Processing of ISPRA data.
11. **Hospital beds in high-care wards:** Hospital beds in high care wards in ordinary inpatient care in public and private health care institutions per 10,000 inhabitants.
Source: Istat, Processing of Ministry of Health data.
12. **Hospital patient emigration to a different region:** Percentage of hospital discharges carried out in regions other than that of residence on the total discharges of residents in the region. Data refer only to inpatient discharges for “acute” care (excluding hospitalizations of “spinal unit”, “functional rehabilitation”, “neuro-rehabilitation”, “long-term care”).
Source: Istat, Processing of Ministry of Health data.
13. **Unmet need for medical examination:** Percentage of the population reporting unmet needs for medical care in the last 12 months (specialist visits – excluding dentist visits – or diagnostic examination) due to one of the following reasons: financial reasons; inconvenience (distant structure, lack of transportation, inconvenient hours); long waiting list; Covid (since 2020).
Source: Istat, Survey on Aspects of daily life.
14. **General practitioners with a number of patients above the maximum threshold:** Percentage of general practitioners with a number of patients above the maximum threshold of 1500 patients defined by the general practitioners’ contract.
Source: Istat, Processing of Ministry of Health data.
15. **Physicians:** Practising physicians per 1,000 inhabitants.
Source: IQVIA ITALIA One-Key Database.
16. **Nurses and midwives:** Practicing nurses and midwives per 1,000 inhabitants.
Source: Co.Ge.A.P.S. (Consorzio Gestione Anagrafica Professioni Sanitarie) - National database of ECM credits (Continuing Medical Education).

Indicators by region and geographic area

REGIONS GEOGRAPHIC AREAS	Beds in the re- sidential social- healthcare and social-welfare facilities (a) 2021	Integrated home assistance service (b) 2022	Composite index of service accessibility (c) 2022	Irregularities in water supply (c) 2023	Irregularities in electric power distribution (d) 2022	Seat-Km of public transport networks (e) 2022	Satisfaction with public transport services (f) 2023
Piemonte	117.7	2.2	3.6	3.1	1.6	3,650	19
Valle d'Aosta/Vallée d'Aoste	110.5	2.2	4.8	2.9	0.7	961	33.7
Liguria	112.2	3.4	5.1	7.8	1.1	4,270	25.9
Lombardia	86.0	3.3	3.2	2.4	1.4	11,244	25.2
Trentino-Alto Adige/Südtirol	134.3	2.9	3.3	2.8	0.9	4,180	48.5
Bolzano/Bozen	115.6	3.2	2.5	1.5	0.8	3,923	54.9
Trento	152.8	2.7	4.1	4.1	0.9	4,411	40.2
Veneto	93.5	4.3	3.7	2.2	1.5	5,289	28.6
Friuli-Venezia Giulia	116.2	2	3.5	2.4	1.2	4,416	43.3
Emilia-Romagna	95.2	4	3.5	3.1	1.3	2,841	26.7
Toscana	61.9	4.2	5.4	5.5	1.6	3,054	21.1
Umbria	67.2	4	4.9	6.2	1.8	1,853	32.3
Marche	83.5	3.8	4.2	4.3	1.6	2,092	23.6
Lazio	44.5	3.1	5.3	10	2.3	7,052	15.4
Abruzzo	42.1	4.9	4.8	17.7	2.5	2,638	27.1
Molise	62.8	5.5	5.2	11.2	1.8	402	23.1
Campania	19.5	2.5	8.8	13.9	4.7	1,691	11.4
Puglia	39.4	2.1	7.1	7.3	3.4	2,274	25.9
Basilicata	75.8	4.5	6.1	11.3	2.1	1,219	26.4
Calabria	40.1	0.9	7.7	38.7	3.2	1,794	24.5
Sicilia	52.3	4.2	6	29.5	3.9	1,639	20.7
Sardegna	48.3	1.7	3.9	9.6	2.8	3,726	27.4
North	98.5	3.1	3.5	2.9	1.4	6,078	26.8
North-West	97.2	3	3.5	3.1	1.5	7,694	23.9
North-East	100.3	3.2	3.5	2.6	1.3	3,886	32.3
Centre	56.5	3.6	5.2	7.6	1.9	5,403	18.3
South and Islands	39.2	2.9	6.9	18.6	3.6	1,976	20
South	33.4	2.6	7.6	15.8	3.6	1,940	19
Islands	51.3	3.5	5.5	24.3	3.6	2,036	22.8
Italy	70.1	3.3	4.9	8.9	2.2	4,696	23.3

(a) Per 10,000 inhabitants;

(b) Per 100 people aged 65 and over;

(c) Per 100 families;

(d) Average number of interruptions per user;

(e) Seats-km per inhabitant. The data refers to all provincial capital municipalities;

(f) For 100 regular users of at least one type of vehicle;

12. Quality of services

Frequent users of public transport (g) 2023	Overall Fixed Very High Capacity Network (VHCN) coverage (c) 2023	Separate collection service for municipal waste (i) 2022	Hospital beds in high-care wards (a) 2021	Hospital patient emigration to a different region (h) 2022	Unmet need for medical examination (i) 2023 (*)	GPs with a number of patients above the maximum threshold (l) 2022	Physicians (m) 2022	Nurses and midwives (m) 2022
13.7	62.5	58.3	3.0	6.5	8.8	49	3.8	6.8
9.8	51.3	80.6	3.6	18.4	6.3	59.2	3.7	7.4
23.2	55.7	40.6	4	14.7	7.8	46.7	4.8	8.1
17.1	58.5	76.2	4.5	5	7.2	71	3.9	6
18.4	77.6	84.5	2.9	9	5.3	62.5	3.5	8.3
21.1	-	73.4	1.9	4.7	5.1	66.3	3.5	8.3
15.9	77.6	95.5	3.9	13.8	5.4	59.1	3.4	8.3
10.4	57.5	83.6	4.5	6.2	7.4	64.7	3.7	6.9
13.1	57.1	70.9	3	7.4	5.1	49.2	4.2	7.6
11.9	57.6	74.8	3.7	5.5	5.8	51.5	4.6	7.2
11.7	55	55.9	3.2	6.3	5.6	48.6	4.8	7.3
10.1	55.8	77.7	2.4	12.7	9.2	28.2	4.7	8
8.2	58.4	91.2	2.3	13.4	9.7	45.8	3.9	7.2
18.3	71.7	32.1	3	7.4	10.5	47.4	5.0	7.5
9.2	57.5	67.9	3.2	16	9.2	30.8	4.5	7.3
10.8	84.6	47	4.6	30.4	9	23.2	4.2	8.8
11.5	72.1	33.4	2.6	9.8	5.9	58.4	4.0	6.2
9.8	51.8	56.8	3.5	9.2	8.4	24.4	4.0	7.2
9.1	43.2	55.1	3	28.4	6.7	28.1	3.5	7.6
7.5	36.1	36.8	2.3	21.3	7.3	27.3	4	5.9
7.2	63.1	45.4	3.6	7	7	22.4	4.5	6
9.8	39.2	91.6	2.5	6.7	13.7	48.1	4.9	6.7
14.7	59.0	72.7	4	6.5	7.1	60	4.0	6.8
16.7	59.3	68.1	4	6.6	7.7	61.7	4.0	6.5
12	58.5	79	3.9	6.3	6.4	57.7	4.1	7.2
14.3	63.7	50.4	2.9	8.3	8.8	46.1	4.8	7.4
9.4	58.0	48.8	3.1	11.1	7.7	34.7	4.2	6.5
10.1	58.6	45.1	2.9	13	7.3	38.2	4.0	6.7
7.9	57.0	56.8	3.4	6.9	8.6	27.8	4.6	6.2
12.9	59.6	60.2	3.5	8.3	7.6	47.7	4.2	6.8

(g) Per 100 people aged 14 and over;
(h) Per 100 discharges of residents in the region;
(i) Per 100 people;
(l) Per 100 doctors;
(m) Per 1,000 inhabitants;
(*) The 2023 data are provisional.

