

The unsustainable immobility of public intervention (in healthcare and in other sectors)

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The 21st Health Report analyses the evolution of health policies over the last year, based on the structure that has been followed in recent years: the analysis begins by addressing several “cross-cutting” issues (socio-economic context, financing, expenditure, outcomes and networks) and then examines policies in individual areas of care in greater depth.

The executive summary uses the evidence contained in the monographs that make up the chapters of the Report (to which reference should be made for further details) in order to develop a coherent narrative of the evolution of healthcare in Italy, focusing on the elements of healthcare policy deemed most relevant. Using a strictly quantitative approach to analysis, as well as highlighting the most important problematic issues in the national health care system, we aim to provide some suggestions for their desirable solution, while maintaining the ultimate goal of reaffirming the importance of the principle of public health protection.

A “special feature” of the 21st Report, we deem important to highlight, is that many of its Chapters share the attempt to retrospectively extend the scope of the analysis, with the aim of assessing the impact that the establishment of the National Health Service (NHS) has had on the protection of population's health.

This approach has been adopted in light of the conclusions of the 20th Report, entitled “Maintenance or Transformation: Public Intervention in Healthcare at a Crossroads”, and the debate that has developed over the last year.

In fact, in the 20th Report, we argued that time

had come for a paradigm shift. In other words, that further “maintenance” (however “extraordinary”) of the Service was insufficient, and that it was therefore right to promote a “transformation” of the NHS in order to keep it sustainable and effective.

In practice, the 2025 health policies do not seem to have embraced this idea: they have rather continued with “maintenance” measures - some more incisive and effective than others (see, for example, the issue of waiting lists) - but without undertaking a significant revision of the Service paradigm.

In some ways, what the latest OASI Report from Bocconi University defines as “consolatory narratives” seems to have prevailed, for the reasons brilliantly explained in the Executive Summary of the Report “La sanità italiana: narrazioni consolatorie, criticità governabili e una doppia agenda manageriale” (Italy's Healthcare: Consolatory Narratives, Manageable Problematic Issues and a Dual Managerial Agenda), Longo F. e Ricci A., 2025 - narratives that tend to justify maintaining the status quo.

It is also clear that, in the absence of politicians' guidelines showing a desire for transformation, a paradigm shift cannot take place on the impulse of the institutions responsible for managing public healthcare.

However, no such guidelines have clearly been provided. Quite the reverse. The political debate has remained confined to “tactical skirmishes” which, once again, we believe are based on “consolatory narratives”.

As a partial justification for the failure of politicians to acknowledge the growing difficulties of the NHS

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in keeping its “promises”, we must first mention the apparent contradiction between health indicators and service Performance: the former are excellent in international comparisons and continuously improving; the latter are weakened by the inability to solve certain problematic issues within the system.

It is therefore not surprising that the debate on health policy has been marked by conflicting (and equally “political”) opinions on the real need for change: indeed, there seems to be a consensus that “change” is unnecessary or, worse, that it is a surreptitious way of “scuttling” the NHS.

In other words, two “factions” (in the broad sense) seem to have formed which, for the sake of simplicity and “immediacy”, we can call “transformers” and “maintainers”.

Essentially, the two “factions” agree that the principles of Law No. 833/1978 are still valid and need to be safeguarded. However, while the “transformers” believe that some of these principles need to be reinterpreted and adapted to changes in society (and others need to be added from scratch), the “maintainers” believe that this is not necessary and is in fact “dangerous” because it could lead to the privatisation of the system.

In some ways, the “maintainers” believe that the problems of the NHS are due to aspects linked to wrong and/or insufficient health policy choices (and not only health policy ones). This idea is often based on the view that the NHS is largely underfunded or a victim of policies that have undermined its efficiency and effectiveness (federalism being one of the most mentioned). Another frequently mentioned idea is that a creeping “privatisation” of the Service is responsible for the problems that the NHS is facing on a daily basis.

Although the debate has so far remained confined to conference rooms, as we were among the promoters of the idea that a “transformation” was necessary, we have felt it appropriate to take a closer look at those aspects that are most frequently opposed to the idea that a “transformation” is necessary.

There are essentially three assumptions from which we started to develop our analysis (in logical order of preparatory importance):

- 1) a fundamental reason for public intervention in healthcare is the pursuit of equity;
- 2) a further condition is the ability of the National Health Service to be truly efficient and, therefore, capable of maximising the “return” on public investment;
- 3) finally, the National Health Service must be actually capable of protecting health by meeting the population’s real needs.

The assumption listed as third is so for reasons related to the development of the narrative, but it remains the first from a logical viewpoint, insofar as it would not make sense to pursue effectiveness and efficiency in the face of services that are deemed ineffective by the population.

Ultimately, the (main) research questions asked in the 21st Health Report are the following:

- Has the NHS met the population’s needs?
- Has the NHS kept its promises and pursued equity?
- Has the NHS improved (or at least maintained) its levels of efficiency?

The three main research questions generate, in turn, a series of further questions:

- Is the system being privatised?
- Has federalism “undermined” the spirit of Law No. 833/1978?
- Can the system be adequately funded?
- How can the need for transformation be reconciled with the observation of good aggregate health outcomes?
- Is the NHS prepared to deal with emerging health risks (pandemics, demographic changes, new needs)?

Here below, we will attempt to provide a summary of the evidence that emerges from the analyses made in the Report, individually for each of the questions listed. For the sake of narrative consistency, we will leave the aspect of needs to the end.

Equity

The 21st Health Report has reconstructed the trends and dynamics of various indicators of the system's levels of equity, analysing the entire period from the establishment of the National Health Service (Law No. 833/78) to the present day. In particular, the proportion of households that bear healthcare costs directly; the incidence of private healthcare expenditure on consumption expenditure; the incidence of impoverishment due to healthcare costs; the proportion of households subject to catastrophic healthcare costs, and the proportion of households experiencing economic hardship caused by healthcare costs.

Long-term trends and dynamics have shown a dystopian trend compared to what would seem to be, based on "legitimate" expectations for the impact generated by the establishment of a universal public service based on principles of equitable access.

For example, the proportion of households that have paid healthcare costs privately has increased by 9.2% over the forty years considered: currently, over 70% of Italian households bear out-of-pocket (OOP) expenses.

What is most significant, however, is that the increase was concentrated in the 1990s (+16.1 percentage points (p.p.), namely 83.9% of the increase), coinciding with the implementation of the first reform of the National Health Service, and was greater in the most economically vulnerable sub-population. Households in the first consumption quintile (the lowest) incurring healthcare expenses increased by 25.9 p.p., while those in the fifth quintile increased by 8.1 p.p..

Similarly, the increase was greater among households in which the householder had a low education level (+28.7 p.p.).

The trend is also contrary to expectations from a geographical viewpoint. In 1985, households in the North-East (62.3%), with an average income above the national average, were the ones that resorted most to private healthcare expenditure. Over the 40 years considered, the situation has been reversed: currently, the share of households' expenditure in the Centre (75.9%) and South (70.8%) has become greater than that of the North (68.7%).

In terms of consumption breakdown, we see that

households in the South purchase medicines more frequently (81% of households) and specialist visits for prevention purposes (24.2%); in the Centre, specialist services and Long Term Care (LTC) services. In the North, on the other hand, dental care prevails (26.4%).

While for medicines, hospital care and LTC services, the proportion of households expenditure privately remains the same across the various segments, for dental care, specialist care and diagnostics, recourse increases with the households' financial means. For dental care, it rises from 8.8% of households in the first consumption quintile to 27.9% in the fifth quintile; for specialist services, from 33.5% (first quintile) to 56.1% (fifth quintile), and for healthcare items, from 10.9% to 24%.

One aspect worthy of note and of further in-depth analysis is the different trends and "dynamics" that coexist within the purchase of specialist services. Istat, in fact, separately records services that are part of a treatment and rehabilitation pathway and those that are classified as prevention and therefore presumably are a "first contact" with the healthcare system.

Consumption for the former is essentially homogeneous (and even limited) across various profiles (consumption quintile, education level, etc.); conversely, the use of prevention services paid directly by households is concentrated among less educated and less affluent patients. This phenomenon can be interpreted as a system to circumvent access barriers to services and ensure "early" access to treatment: the fact that they have greater impact on the most vulnerable households raises the risk of continued high levels of inequity and inequality in access.

Similar consideration can be made for expenditure trends.

The burden of private healthcare expenditure has also increased over the years: its impact on household consumption has increased by 2.6 p.p. over the last forty years, reaching 4.3%. In this case, again, the increase is borne more heavily by the most economically vulnerable: +5 p.p. for less educated households, that currently allocate 6.8% of their consumption to healthcare expenditure (compared to 4.6% for wealthier ones); +2.1 p.p. and +2.8 p.p. for the least well-off (1st and 2nd consumption quintiles),

that currently allocate 3% and 4% of their consumption expenditure, respectively, to healthcare-related consumption.

It is worth noting that, while in the North growth in healthcare expenditure has been in line with the increase in disposable income, in Central and Southern Italy, healthcare expenditure has grown significantly more than income: a phenomenon that seems to support the theory that households deem private healthcare expenditure as a “necessity/requirement.”

This finding is confirmed when considering that in the first years after the establishment of the National Health Service (NHS), 27.6% of private healthcare expenditure was concentrated in the top three quintiles of consumption; currently, the share has grown to 37.6% (7.2% in the first quintile; 13.% in the second, and 17.4% in the third quintile).

The above-described trends and dynamics are reflected in the indicators of impoverishment and of giving up treatment and care.

The impoverishment caused by private healthcare expenditure has increased by 1.3 p.p. since the establishment of the National Health Service (when it was almost zero). Currently 367,528 households are impoverished. The most affected are the poorest ones and those with a low education level, i.e. 6.3% of those in the first quintile (considering households that incur healthcare expenditure); 0.5% of those in the second, and 0.1% of those in the third quintile, as well as 5.5% of those in which the householder is a person with no education, and 2.7% of those in which the householder has a primary school diploma.

The most affected households are those made up of elderly people (single or in a couple) and those with children (2.3% and 2.1%, respectively).

Geographically, the South is the most affected area, with an incidence approximately three times that recorded in the North and more than double that recorded in Central Italy.

The purchase of medicines, specialist care and dental services are the main causes of impoverishment; for households with elderly members, long-term care (LTC) ranks second, while for those with children, dental care ranks second.

In particular, the problematic issue of access to LTC seems to affect mainly impoverished house-

holds in Central Italy, where there is a low rate of beds in residential facilities (3.9 per 1,000 inhabitants), as well as those with lower education levels (presumably older and therefore in need of this form of care).

The analysis of impoverishment is distorted by the phenomenon of giving up consumption: this generates households that do not become impoverished because they do not spend, but face the risks associated with giving up healthcare consumption.

Taking a cautious approach and considering only those households that reported having reduced their healthcare consumption for economic reasons to the point of even eliminating it altogether, and adding them to those that have become impoverished, it is estimated that 1.25 million households (2.3 million inhabitants) have suffered “economic hardship due to healthcare expenses”.

This “hardship” mostly affects households in the South (6%) and those with a low education level (9.3% of those with a householder without a school diploma and 5.8% of those in which the householder has a primary school diploma).

Over the last decade, the incidence has increased by 0.6 p.p. (mostly in the South and the North-East, +0.9 p.p.).

In relation to consumption quintiles, the increase has been greater in the first three quintiles: 1.0, 0.8 and 0.4 p.p., respectively.

Finally, there has also been an increase in “catastrophic” expenditure (exceeding 40% of monthly household expenditure power): specifically, 2.1 p.p. over the last decade, affecting 2.3 million households.

Once again, households in Southern Italy are most exposed to this phenomenon, followed by those in the North-East: in particular, elderly people, either alone or in a couple, and households in the middle consumption quintiles. The most frequent cause of “catastrophic” expenditure is dental care, although in Southern Italy it is medication, and among the elderly, LTC costs.

Overall, the picture that emerges is problematic, both in terms of persisting levels of inequality and in terms of trends and dynamics, which unfortunately show no sign of improvement.

Efficiency improvement

Efficiency is one of the issues deemed crucial, and therefore most frequently referred to, in health policies aimed at ensuring the sustainability of the system over time.

In particular, we can recall that the first reform of the National Health Service in the 1990s focused primarily on improving the efficiency of the system, so much so that, in those years, the slogan “rationalise so as not to ration” was coined. The aim was to increase the efficiency of the NHS in order to safeguard its sustainability and avoid reducing the forms of protection. As is well known, in the early 1990s, considering the continuous expenditure deficits, it was decided to introduce changes in the system (which, for the sake of simplification, can be summarised under the label of “corporatisation”) aimed at encouraging efficiency.

To place this into the right context, it should be noted that at the time of the first reform of the NHS (Legislative Decrees Nos. 502/1992 and 517/1993), public expenditure levels and growth rates were lower (-14.9 p.p.) than the average ones recorded in the pre-1995 EU countries.

Specifically, between 1992 and 2000, the average annual growth rate of public healthcare expenditure was 4.4% overall (0.8% in real terms).

At the same time, private expenditure grew by a 10.7% annual average (6.8% in real terms), i.e. +6.3 p.p. compared to the public sector.

The trends described above have shifted the burden of coverage: in the early 1990s, over 81% of healthcare expenditure was funded by the public service (a value higher than the average of the pre-1995 EU countries (73.1%). In 2000 coverage had fallen to 72.6%, which was lower than the average of the pre-1995 EU countries (76.5%).

Faced with the “unsustainability” of accounts, in 2001 the lawmaker intervened again, introducing devolution and Federalism, aimed at making the Regions economically and financially accountable.

Following the adoption of the reform of Title V of the Constitution (Constitutional Law No. 3/2001), public expenditure growth slowed further down to a

+2.7% annual average (+0.7% in real terms) in the period 2000-2024.

That trend was perfectly in line with that of private expenditure, so much so that the share of public coverage after 2000 began to grow again and in 2008 returned to the European average.

The 2008-2009 financial crisis ushered in a new phase of “withdrawal” of the public share, which has fallen down to the current 74.3%, with a 7.7% decrease compared to the pre-1995 EU countries.

The data referred to above can therefore be summarised as follows:

- despite “good intentions”, it seems that in the 1990s much of the “rationalisation” was in fact “rationing”;
- the 1990s saw a significant increase in the burden on households, while Federalism did not contribute to shifting the burden onto households and, on the contrary, had reduced it until the financial crisis;
- therefore, the idea of a current trend towards privatisation of the welfare and protection system is not corroborated;
- Federalism has brought expenditure “under control”, while maintaining and further reducing the real growth rates of the 1990s.

In other words, since 2001, the real driver of change in the healthcare ecosystem has appeared to be Italy’s stagnant growth, which has undermined both public and private expenditure. It should be recalled that until 2000, Italy’s GDP grew by a 2.1% yearly average in real terms; later, growth was almost zero (+0.3%).

The shortage of resources and, therefore, the growing competition for allocation among the various public functions, has affected the trajectory of public healthcare expenditure, but also that of private expenditure.

In the period 2001-2024 the average growth rate of the former was, on average, 1.9 p.p. per annum lower than that of the pre-1995 EU countries, resulting in a 44.6% deviation.

After 2000, there has no longer been any “offsetting” from households. This is not surprising considering that Italians already spend privately more than

expected on the basis of their economic resources: Italian private healthcare expenditure is, in fact, 13% lower than the average of the pre-1995 EU countries, but with a per capita GDP that is 20.6% lower.

An analysis of private expenditure suggests that Italian society is undergoing a process of “rationalisation” in this area. As evidence of this, within the €43.3 billion of private expenditure (24.2% of the total), the share of expenditure intermediated by supplementary private insurance and funds (the so-called “*spesa intermediata*”) is gradually growing: between 2019 and 2024, it increased by 14.2 p.p.. In 2024, 67.2% of the intermediated component was associated with collective insurance policies and 32.8% with individual insurance policies.

Reverting to public expenditure, despite the deviations (“shortfalls”) compared to European levels, and even if it can be estimated to be undersized (also considering compliance with macro-economic constraints), the refinancing margins seem modest, and in any case not sufficient to reach “decisive” levels.

It should be noted that Italy’s GDP (used here as a proxy for available resources) is more affected than in other European countries by the impact of interest on public debt and by the impact of the underground economy, which does not fiscally contribute to supporting public expenditure.

In fact, referring to the statistical relationship between GDP net of interest (since it has not been possible to refine the comparison in terms of incidence of the underground economy) and (total) healthcare expenditure, the conceivable refinancing target is 12.9% (overestimated for the reasons explained above). It is in practice less than €30 billion that, considering what already said with reference to the households’ unwillingness to spend more on healthcare, should clearly be found in the public budget.

This amount remains hard, if not impossible, to find, especially considering the “competition” from other underfunded welfare sectors (primarily education) and growing pressure for rearmament.

Moreover, even if the resources for refinancing were found, many problems would remain unresolved, including, but not limited to, the fact that:

- in the absence of growth, the differential would quickly materialize again;
- expenditure would still remain lower (just by way of example) by 27.8% compared to countries such as France and by 43.9% compared to Germany
- based on estimates published in previous Health Reports, this would not even be sufficient to realign the staffing levels and remuneration of healthcare professionals working in the National Health Service.

It should be added that, looking ahead, the main problematic issue appears to be the gap between Italian growth and expenditure growth rates due to healthcare technologies.

As proof of this, just recall that the average annual growth rate of total pharmaceutical expenditure over the last decade has been 3.6% and is accelerating significantly (4.1% over the last five years), so much so that the share of public healthcare expenditure absorbed by the sector has increased by 3.1 p.p. over the last 10 years. This happens despite attempts to curb it, which have now reached a breaking point: we estimate that the public pharmaceutical ceiling will be exceeded by €4.1 billion in 2025 and €6.5 billion in 2026.

On the other hand, it seems impossible to adopt an approach of “giving up technology”, especially considering that a large part of the efficiency gains is ultimately attributable to innovation (including organisational innovation). This is confirmed - albeit indirectly - by the reduction in average hospital stays in the surgical field (-3.9% on average over the last decade). This is even more significant considering how ageing is reflected in the increase in hospital stays for “medical” admissions (+15.5%), but also in the progressive increase in the age of onset of acute diseases, demonstrating the effectiveness of greater therapeutic opportunities (and primarily secondary prevention).

Overall, even in terms of efficiency, the results do not appear to be free of problematic issues: “rationalisation” does not seem to have avoided rationing, which is implicit and, for this very reason, potentially generates inequalities and inefficiencies.

Needs

Equity and efficiency are prerequisites for maximising social welfare, but they are not sufficient: clearly, they would be meaningless if the NHS did not actually meet the population's needs

From this viewpoint, it is important to recall that the NHS structure was designed in a world that was completely different from today's world:

- the elderly people (over 75), who in 1982 accounted for 4.7% of the population (2.7 million), now account for 12.6% (7.4 million);
- in 2014, 691,000 people died each year; in a decade, this figure has increased by 27,000;
- 509,000 children were born, while now this figure stands at less than 370,000 (37.3%);
- the number of disabled people, instead, has remained constant despite ageing;
- people with multiple chronic conditions, who in 1980 accounted for 40.7% of the population (23 million), now account for 41.6% (+1.5 million);
- the number of people who are not self-sufficient, which in 2016 was 3.3% of the population (2.0 million), is now estimated to be 3.7% (2.2 million), with an increase of approximately 10% in less than ten years. .

The picture described above suggests a significant increase in needs due to ageing, but also to the growth in diagnostic and therapeutic opportunities which, at least in some areas, even exceed the impact of demographic changes.

Nevertheless, technology innovation has made it possible to significantly counteract the growth in demand. Just recall the data mentioned above on disability, which has remained essentially constant over time, certainly also thanks to more effective therapies. The same holds true also for the increase in expected healthy life years (0.8 years), and we can also add to the list the momentous reduction in surgical admissions (18.8% over the last 10 years).

However effective it may be, technology has not been able to fully offset demographic effects, but the most significant change is not quantitative, but qualitative, linked to changes in the nature of needs, and therefore in the demand they generate.

From this viewpoint, other social change factors should be mentioned, without claiming to be exhaustive:

- single-person households that accounted for 31.1% in 2015, now account for 36.2% (9.5 million);
- single-person households of people over 65 that accounted for 14.8% in 2015, now account for 16.9%;
 - graduates, who accounted for 17.6% of the population (aged 25-64) in 2015, now account for 22.3%.

It is ultimately clear that we need to consider the combined effect of demographic and social factors, and this leads us to recognise two fundamental changes:

- the growth of "hybrid" needs, i.e. both health and social needs;
- the progressive divergence between needs (in clinical terms) and demand.

The centrality of these two aspects in an evolutionary perspective of the NHS seems to be confirmed by the results of a survey promoted by C.R.E.A. Sanità to collect some PREMs (Patient Reported Experience Measures), by interviewing a representative sample of the Italian population.

The survey shows that citizens' satisfaction is significantly higher for services related to pharmaceutical care and general practice; instead, it is significantly lower for home care, residential care and care for non-self-sufficient people, while the other areas of care surveyed, such as hospital and specialist care, remain somewhere in between.

The data collected confirms the inadequacy of the NHS response to the most vulnerable and frail people, who are now those who, due to age (and therefore health problems), but also deprivation, lose all or part of their self-sufficiency. It is a growing proportion of the population that does not require so much hospital and specialist care, but rather "hybrid" health and social care, capable - first and foremost - of safeguarding their quality of life.

With marginal exceptions, citizens' disaffection with services of this type appears to be entirely generalised at a geographical level, thus confirming that

this is a widespread social emergency.

The NHS shortcomings in this area can be explained by considering that, in the 1980s, with a younger population, lower life expectancy and fewer treatment options, the main needs were linked to acute conditions. The NHS responded to those needs, to the extent that the population's satisfaction with hospital and specialist care, while not optimal, remained more or less sufficient.

Satisfaction remains "barely" sufficient, largely due to supply shortages, indirectly demonstrated by the long waiting lists and the resulting share of households' out-of-pocket (OOP) expenditure, which has now exceeded 25% of the total.

The existence of barriers to access also seems to be confirmed by the aforementioned use of private OOP expenditure to purchase "prevention" services, which can be interpreted (see Chapter 5f on Equity) as a ploy to speed up access to treatment.

Despite difficulties, however, Italian households seem to have learned to make up for shortcomings in supply by adopting a "do it yourself" approach.

To confirm this, by way of example, we mention the results of a survey with a sample of 585 women who had undergone breast surgery (C.R.E.A. Sanità survey for ANDOS). Based on the findings of this survey, almost 90% of patients manage to have their follow-up examinations within the scheduled timeframe. Less than half of them, however, had their examinations booked by the facility responsible for their care, while the others "did it themselves." It is therefore not surprising that two-thirds complained about difficulties in booking services due to long waiting lists (46.2% of respondents); 27% complained about having to resort to private healthcare due to the difficulty of booking tests and examinations in public facilities (27%). They even complained about the impossibility of booking tests and examinations in centres close to their place of residence (14%), the difficulty in communicating with the centres (9.9%) and, finally, the need to book tests and examinations well in advance (2.9%).

In summary, the treatment goal is achieved, but thanks to a significant amount of "self-management" by patients (the "do-it-yourself" approach mentioned

above).

The virtuous ability of Italian households to use a "do-it-yourself" approach to managing their health should be emphasised, not least because it is most likely one of the factors that most determines the maintenance of excellent aggregate health indicators in Italy, together with the observation that health services can only affect health by 10-20%. This is a significantly lower impact than the one exerted by lifestyles, individual behaviours, socio-economic and environmental factors (see also Chapter 4d on the need to develop the One Health approach at national level).

To confirm this, we would like to point out that in the aforementioned survey, C.R.E.A. Sanità has also collected data on the Health Related Quality of Life of regional populations (using EuroQol-5D-5L) and the replies highlighted that the perception of quality of life does not depend solely on the Performance of regional health systems. For example, Calabria and Veneto, despite showing extreme and opposite values in terms of Performance in health protection, record a perceived quality of life that is almost the same.

The "do-it-yourself" approach obviously has a cost, including an economic one, which is well represented by the fact that 38% of the women interviewed faced problems of "financial toxicity" (see Chapter 15b), despite living in a country with a universal public health service.

The "do-it-yourself" approach, however, is not enough where the shortage of supply exceeds the limit: this is the case with residential and home care.

With ageing and increased life expectancy, the need for chronic care has grown, but the NHS has failed to change its paradigm: proactive medicine and patient management and care remain patchy across the country.

The allocation of NRRP resources to the Regions is intended to be the decisive choice for changing the paradigm in terms of the Service's response to problems related to chronic conditions. However, while waiting for objective feedback on the impact of the investment made, it should be noted that it still mainly provides responses to the needs for special-

ist diagnosis (perhaps at the primary level) and intermediate care, without addressing in depth the issue of the “hybridisation” of needs. Indeed, health problems are increasingly shifting to older age and “mixing” with those related to non-self-sufficiency, the latter being “worsened” by social changes, primarily the reduction in opportunities for family support.

Under these conditions, it is clear that, in the lack of systematic and genuine integration of health and social services, the NHS will be increasingly unable to meet the real needs of the population, forcing households to provide for themselves. It is worth recalling that, even now, expenses for the elderly and those who are not self-sufficient are among the leading causes of impoverishment among citizens (long term care is the second largest expense, after medicines, for impoverished families with elderly members). This is left to the “do-it-yourself” approach of households that are forced to enlist an army of unprofessional caregivers (half of whom are not legally employed).

While the aspect of changing needs is certainly of great importance, no less important is the gap between needs and demand, which leads to the issue of its governance.

Demand is also made up of expectations, as well as objective health needs. The fact that the services that achieve the highest levels of satisfaction are those in which the methods of service have “spontaneously” changed is evocative of the change in the population’s expectations. General practice is the area in which remote contact is most commonly used, as is pharmaceuticals, thanks to the pandemic, which has led to the adoption of dematerialised prescriptions.

This satisfaction is consistent with the observation that the population is increasingly accustomed to using digital tools, even in old age, when there is a need to minimise travel.

It should also be noted that, in addition to the well-known problem of waiting lists, among the reasons for dissatisfaction with services, about half of respondents, especially younger ones, reported waiting times at doctors’ surgeries. Expectations are therefore not limited to the clinical response, but also

include the way the service is provided: a phenomenon that can in principle also be linked to rising levels of education and participation in the labour market.

As widely demonstrated in literature, higher education levels are also correlated with an increase in demand for specialist services: they currently account for the third largest expenditure item after hospital and pharmaceutical costs, and would be the second largest if we consider dental care outside the National Health Service (NHS). However, the growth in demand (now back to pre-pandemic levels even within the NHS) poses problems in terms of risk of inappropriateness. Over and above the scarce use of administrative data for its control and evaluation (worsened by the lack of integration of information flows with the significant share of services used outside the NHS), we need to rethink and redefine the boundaries of the concept of appropriateness.

In fact, the NHS has remained stuck in a definition that can be used in acute settings: but the definition of appropriateness in the case of chronic conditions is complex and much less “measurable”. For example, we can mention the issue of deciding on the frequency of follow-up checks, but also the decision on how to provide services (in person or remotely). It is even more complex to define the appropriateness of social services, for which we are still far from having a well-established definition of Essential Levels of Service, and therefore quantify the extent and intensity of care recognised to citizens.

The development of Preventive Diagnostic-Therapeutic Care Pathways (integrated care pathways extended to social care and services) and the widespread use of Personalised Care Plans could be a way to manage demand, but it requires investment to transparently align the resources of the system and the promises made to the population. In other words, the principles that define access to guaranteed rights need to be rethought and adapted to the changing needs of demand.

In conclusion, society is changing, demand is changing, and interpreting them is becoming increasingly complex: the NHS cannot afford to remain stuck in a definition of needs made over 40 years ago, in a world that no longer exists.

Final considerations

The evidence gathered in the 21st Health Report confirms the need for a substantial “rethinking” of public intervention in healthcare, as already anticipated in the final considerations of the 2024 Report.

We ultimately believe that the definition of the aforementioned “rethinking” is certainly not substantial, i.e. whether it is a “transformation” or “maintenance” (albeit certainly “extraordinary”).

On the other hand, it is certainly important that - probably thanks to the quantitative analyses provided by various research centres - consideration be given to the need to open a “constructive” debate on the future prospects of the public service.

If ever there was a need, the data processed reminds us that, when the National Health Service was established, the Italian society was profoundly different from today's, as was the epidemiological situation to be faced.

It is clear that the population has aged quickly, family support has weakened, average education levels have increased, but the deepest changes in the field of healthcare have been those linked to technology innovation. Over the last 50 years, we have shifted from an almost primitive healthcare system to a highly specialised and technological one; treatment options have grown exponentially, and with them the population's expectations.

As discussed in the previous pages, dedicated to the summary of the Report, we have moved from a context in which the goal was basically the (“simple”) response to a precisely identifiable clinical need, typically acute, to one in which the goal is a “complex” response to the population's expectations. These expectations are increasingly linked to a holistic concept of well-being, or rather to the pursuit of expectations related to quality of life (probably more than quantity of life).

Faced with such significant changes, it seems clear that we cannot avoid asking ourselves how the public response should be rethought.

The analysis seems to be hampered by a “friction point” identified in the risk, feared by some, that any revision of the principles adopted at the time when

the NHS was established could lead to a downgrading of public protection; or, to be more explicit, the risk that the issue of modernisation could be used to surreptitiously “scrap” public protection.

To avoid any misunderstanding, it should be preliminarily reaffirmed that the aim of the analyses made in the Report has been to provide useful information for maintaining effective, efficient and equitable public intervention in healthcare, in the belief that the protection (and promotion) of health, as well as the protection of citizens from the economic risks associated with illnesses - even beyond the provisions of the Constitution - are a decisive factor in terms of civilisation and social justice.

Nevertheless, given the quantitative evidence available, it seems logically untenable to cling to positions that refuse to consider changes to the system, except for marginal ones.

In order to try to overcome the stalemate, it has been deemed appropriate to reflect on the principles that should not be questioned, those that may need updating, and those that, due to the new characteristics of society, it would be reasonable to introduce from scratch.

Starting with the former, we reaffirm that the principles of universalism, comprehensive care and equitable access remain the indisputable foundations of public intervention, as do the criteria of appropriateness and efficiency. The analyses contained in the Report, however, seem to suggest that we need to update them, clarifying their content in some cases.

What we have defined as the “hybridisation” of needs requires an extension of the principle of comprehensive care: between prevention and end-of-life care, explicit recognition must be given to social needs and the right to maintain the possibility of social participation even in conditions of partial self-sufficiency. Therefore, there should be no retreat from public intervention, but rather an advance towards a system that is not “integrated” *ex post* in terms of protection, but rather originally both social and health-related: in other words, a comprehensive public response to those needs that can be met with benefits in kind.

Overcoming the logic of (*ex post*) integration seems appropriate, at least considering the disappointing results achieved so far (as discussed at length in the previous pages). But it is also appropriate considering the huge gap in both the resources allocated to the two sectors and professional skills (and therefore the ability to meet needs) that remains between healthcare (where local health authorities have developed an organisation and gained unquestionable experience and expertise) and social services (where local authorities have negligible resources and almost no specific expertise).

Overcoming the logic of “integration” requires a change of principle, because it is not a matter of “minor” interventions: just think of the difficulties that will be faced in reunifying the resources available in the system for non-self-sufficiency and establishing the scope of intervention of the National Health Service.

Even the principle of appropriateness, on which the definition of LEAs is based, seems to need updating. As anticipated, thinking of public intervention in terms of meeting needs (mostly interpreted as strictly clinical) is now unfeasible: in a society that pursues holistic well-being, it is necessary to shift from responding to needs to meeting demand, provided that it is socially meritorious. This implies the need for being able to govern demand, which, however, remains impossible without a deeper understanding of how appropriateness is defined in “non-acute” settings.

New rules must ultimately be identified to determine merit and eligibility, where the intensity of care and the methods of provision can be varied according to the characteristics of the patient, as well as the pathology.

It should be added that among the reasons for citizens’ dissatisfaction, there is growing concern about the methods of provision, an aspect of care that is largely neglected in the rules and regulations governing the NHS. The Service was in fact built on the assumption that equity of access could be achieved by ensuring an adequate supply, so much so that the NHS is defined as a “set of services”.

The size of supply, however, does not guarantee equity in outcomes, and the additional question is

whether the outcomes should also include aspects related to the satisfaction of citizens’ expectations, which are obviously subjective.

The debate on expectations has never developed, remaining confined to the problem of waiting lists, which are treated as a supply problem, while in fact they are mostly linked to the management of demand. Going further, however, besides the right to receive a service within reasonable time, Italian citizens may also have the right not to lose unnecessary hours of work (or free time) due to waiting times linked to inadequate organisation of services. They may also have the right to access a service even if they are unable to do so by their own means or independently, as well as the right to continuity and simultaneity between public prescription and booking of services (within a reasonable timeframe and at locations within a reasonable distance from their home).

From a collective well-being perspective, the system of public intervention principles therefore seems to lack a commitment to minimising the impact of the disease (in the broad sense) on the patient’s and his/her family’s life (also in the broad sense).

Attention to the impact of public intervention on economic development is equally lacking.

Today, albeit slowly, awareness of the importance of the “One Health” approach is growing (which, as argued in the Report, still lacks consolidated national governance). Even more so, awareness of the effects of health policies on economic development is lacking: it seems that the “lessons” of the pandemic have left no legacy in this regard.

In an economic situation in which the growth rates of technology costs outpace those of the economy as a whole, failing to address the issue of integrating “welfare/care” and “industrial” policies appears entirely short-sighted, so much so that it risks generating conditions of rationing in access to innovation.

The most “sensitive” issue to address, however, is still the implicit rationing of benefits and services: many of the proposed revisions/additions to the principles ultimately push towards an increase in costs, while resources remain insufficient (unless the country’s economic growth is revived): in other words, they pose a sustainability problem.

As repeatedly argued in previous Reports, sustainability is not an issue of the amount of resources, but rather of consistency between “promises” and resources.

The analyses made in the 21st Report highlight that, since its establishment, the NHS has not been able to effectively manage the aforementioned relationship between “promises” and resources. The latter have probably grown only as much as made possible by the sluggish growth rates of the Italian economy; at the same time, the “promises” have expanded without any apparent coherence with the financial resources actually available.

Despite a narrative that for decades has leant towards the idea that the balance between the two sides of the issue could be found by recovering efficiency (... billion euros in ...), the available data actually suggests that implicit rationing has mostly been used.

But what is most significant is that quantitative analyses show a picture in which rationing has been largely unfair and inequitable, affecting the most vulnerable citizens, whether economically, in terms of education levels, or socially (household structure).

The reconstruction of data on the Equity and Efficiency of the National Health Service, developed since its establishment, seems to leave no doubt that the original expectations in terms of Equity and Efficiency have been substantially disregarded.

The analyses also support a view that “debunks” some “false myths”, such as the “creeping privatization of the system” and the “organizational anarchy” due to Federalism. Quantitative analyses rather suggest that the decline in public coverage was concentrated in the 1990s, coinciding with the first reform of the NHS. Despite the slogan in vogue in those years (“rationalize so as not to ration”), there seems to have been significant recourse to (implicit) rationing.

Federalism, instead, has initially increased public coverage, although it later seems to have succumbed to the financial crisis and the stagnation of the Italian economy. Even geographical disparities, never bridged, seem to have origins far older than Federalism, having coexisted with all the interventions implemented in over 40 years of the NHS.

Ultimately, the system has certainly “survived” by continuing to perform its function of providing services, but thanks to implicit rationing: a strategy clearly contrary to the spirit of solidarity that should characterize public intervention.

Even the maintenance of high levels in aggregate outcomes, which often leads to an uncritical promotion of the NHS, is in fact linked to interesting elements of social trends and dynamics. A “do-it-yourself” approach is developing among households, evidenced by the growing recourse to paid services, especially among population groups facing greater barriers to access (just consider that the most vulnerable households make greater use of services classified as prevention, which we assume is a way to ensure quick access to public services). Along with this “do-it-yourself” approach, it is interesting to note that a rationalization of private expenditure seems to be developing, as demonstrated by the continued growth of its component intermediated by supplementary private insurance and funds (the so-called “spesa intermediata”).

Considering the above, it can be concluded that the principle of Equitable Access has not only failed to be achieved so far, but, given the limited opportunities for growth in resources, cannot even be expressed and interpreted in terms of “equality,” as envisaged by Law No. 833/1978.

We have discussed the reasons why, with current growth rates, there is no scope for a decisive increase in resources, either because of the disproportion between the growth in costs and that in resources, which are also depleted by high public debt and a significant share of the underground economy, or because of the growing competition from other underfunded public expenditure sectors (primarily education).

Therefore, clarification of the essential content to be given to Equitable Access cannot be further postponed, much less under the illusion that simply reducing waiting lists or further increasing the efficiency of the Service will put everything “in order.”

This cannot be done to avoid continuing implicit rationing, which is indeed carried out in an anarchic manner: just consider how co-payments and

exemptions are already structured and implemented differently at the regional level, with extremely variable results, as is also evident from the differentials in private expenditure.

Obviously, implementing explicit rationing is socially difficult, but is certainly fairer than choosing not to make any decisions.

Faced with the risk of leaving the needs of the most vulnerable and frail population unmet (just think of expensive therapies, such as those for cancer patients or those for rare diseases, but also care for non-self-sufficient people, etc.), it would be appropriate to have the courage to explicitly state the priorities of interventions. To be explicit, for example, by excluding treatments from the essential levels of care (LEA) if they have a limited impact on house-

holds' budgets. Despite the well-known difficulties associated with the lack of credibility of the Italian tax system in assessing households' financial means - and obviously equipping it with the necessary mechanisms to protect specific vulnerable population segments - we can use other criteria (with various combinations), such as excluding certain care settings - i.e., less severe conditions - from the Essential Levels of Care (LEA). Overall, the given definition of Equity seems preferable to us.

In any case, quantitative analyses can provide food for thought, but cannot replace political decisions. Therefore, we hope that the 21st Health Report will simply contribute to stimulating debate, and that this can lead public intervention out of the doldrums of an unsustainable immobility and stagnation.

CHAPTER 1

The socio-demographic context

Carrieri C.¹

With a view to contextualising the evolution of the National Health Service (NHS), which is discussed in detail in the following chapters, we have analysed the trends and dynamics of some contextual factors that have a significant impact on the population's needs and, therefore, on healthcare services.

In particular, we have analysed demographics and family structure, the labour market, education, production and income.

The picture that emerges is characterised by certain specific Italian features, such as the fast ageing of the population, as well as the fact that the Italian society generally lags behind the European (EU) average in terms of education, employment, economic development, etc.

The main data supporting this statement is summarised below, starting with the demographic picture.

Compared to when it was established, the NHS now serves a significantly older and larger population: in particular, with approximately 58 million inhabitants in 2024, the Italian population has grown by 4.2% over the last forty years, although a decline is expected in the coming years (-2.5% in 2050).

The main factor, however, is the increase in the share of "elderly" people: this is a "global" phenomenon, but it reaches its highest level in Italy, with 12.5% of the total population aged over 75, compared to the EU average of 10.2%. In 2050 Italy is expected to see a further 8.1% increase in the number of "very elderly" people, with the South recording the largest increase (10 per cent).

The Italian birth rate (6.3 per 1,000 inhabitants), which is the lowest in Europe, has led to a signifi-

cant reduction in the young population (0-24 years), who has fallen from 21 million in 1985 to 13 million in 2024 (-35.5%); in 2050, a further decline is expected, reaching 10 million young people (-19.9% compared to 2024).

The ageing of the population is evident when we consider that Italy has the highest old-age dependency ratio in Europe: currently standing at 38.4% (compared to the EU average of 34.0%), it is expected to double by 2050, reaching 61.3% (+22.9 per cent).

In particular, there has been a notable increase in single-person households, which in 2024 accounted for 36.2% of the total (higher than the EU average of 35.9%); a further 4.9% increase is expected by 2050. Specifically, single-person households composed of individuals over 65 years of age accounted for 16.3% in 2024 (again, higher than the EU average of 15.0%).

The distinction between the total number of single-person households and those composed of individuals over 65 years of age is important because the latter is the most vulnerable group from a social and economic viewpoint. Elderly people living alone are, in fact, more exposed to conditions of fragility, linked both to age (health problems, reduced autonomy, social isolation) and to economic factors (higher healthcare costs, etc.). For this reason, the separate analysis of this group allows for a better understanding of the demographic and social issues associated with the ageing of the population and the increase in the number of people living alone.

As confirmed by extensive literature, the levels of education have a significant impact on health: spe-

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cifically, a worse state of health is recorded among less educated segments of the population.

In Italy, the average level of education is below the EU average and that of the other Countries analysed: in 2024 the share of graduates stood at 22.3%, 14.7 percentage points (p.p.) below the EU average (37.0%). Italy is the only Country analysed where the population with only primary education exceeds that with a university degree.

Labour market indicators also show that Italy is at a disadvantage compared to the EU average: in fact, the employment rate (15-64 years) in 2024 was the lowest in Europe (62.2% in Italy vs. 70.8% in Europe).

Finally, it should be noted that Italy's per capita GDP – here suggested as a proxy for a Country's economic well-being and average wealth – was €37,180 in 2024, i.e. 9.8% lower than the EU average (€41,213.9). In particular, it differs from the pre-1995² EU Countries by -€7,509.6, while it is €13,034.3 higher than that of the post-1995³ EU Countries.

In dynamic terms, it should be noted that the average growth rate of real GDP per capita in Italy – equal to a 1.2% yearly average over the last decade – is equal to that of Spain and the EU average (1.2% per year on average), and higher than that of France (a 0.7% yearly average) and Germany (a 0.4% yearly

average).

It should also be noted that the gap widens when GDP is adjusted for public debt servicing: the expenditure for interest on public debt accounts for 3.9% of Italy's GDP, compared with 2.4% in Spain, 1.7% in France and 1.1% in Germany. Therefore, in terms of “actually available” GDP, Italy's gap with respect to the other Countries mentioned widens, amounting to -2.8 p.p. compared to Germany, -1.8 p.p. compared to France and -1.5 compared to Spain.

In terms of income distribution, the disparity between the income earned by the richest 20% and the poorest 20% in Italy is 5.5 times, a result that, although similar to that of Spain, is the most unequal figure among the main European Countries.

In summary, over the 40 years since its establishment, the NHS has had to cope with worsening demographic factors, primarily the ageing of the population, but also the growth of single-person households, which are at greater risk of fragility. Other socio-economic indicators, such as education, employment and income – although improving – remain significantly below the EU average standards and those of the main EU Countries.

² This refers to the Countries that signed the Corfu Treaty in 1994, which came into force on 1 January 1995. Specifically, the Countries that signed that Treaty were the following: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain and Sweden

³ The European countries that joined the European Union after 1995 are the following: Estonia, Latvia, Lithuania, Poland, the Czech Republic, Slovakia, Slovenia and Hungary

CHAPTER 2a

The Funding of the National Health Service a Process based on a Precarious Balance

Lo Giudice C.¹, Spandonaro F.²

Chapter 2a analyses the funding process of the National Health Service (NHS), also comparing it with other European Countries.

In 2024, public coverage of healthcare expenditure in Italy stood at 74.3%, with a gap of -7.7 per cent compared to pre-1995 EU Countries³ and -4.5 per cent compared to post-1995 EU Countries⁴.

Italy therefore has lower public coverage than the European average, and the gap is widening due to the Country's poor economic growth.

Public funds to cover the National Healthcare Requirements (NHR) in Italy are allocated differently between Regions with Ordinary Status (RSO) and Special Administrative Regions (RSS).

The former showed an average annual variation rate in IRAP revenue (allocated to healthcare) of -0.7% in the period 2002-2024, and there was a 3.9% increase in VAT sharing and a 6.1% increase in the regional surtax on personal income tax (IRPEF).

Therefore, the RSO are 69.5% dependent on State "transfers".

With regard to the RSS, the IRAP average annual growth rate was 0.2%, while that of RSS revenues was 3.9%, and that of the regional IRPEF surtax was 6.2%.

This Chapter analyses the damage caused by tax evasion on the funding of the NHS in the period 2011-2024.

Based on official estimates of tax evasion, assuming the same tax rate, it can be estimated that the amount of resources lost to the NHS in 2011 was equal to 24.4% of the standard funding requirements in 2021 and to 7.1% in 2024.

During the period under consideration, funding grew at a 3.3% average annual rate.

The Region with the highest per capita funding was Liguria (€2,394.8), while the Region with the lowest one was the Autonomous Province of Bolzano (€2,101.0).

Considering mobility allowances and balances, the Regions at the extremes of the distribution were Emilia Romagna (€2,492.4 per capita) and Calabria (€2,164.5), with a gap of €327.9.

Ultimately, between 2005 and 2010, the "actual" per capita resources for healthcare grew by €262.9 in nominal terms, equivalent to €101.4 (+1.3% average annual growth) in real terms. In the period 2010-2015, they grew by a 0.4% annual average in nominal terms, which is equivalent to a -0.8% annual average in real terms. In the period 2015-2020, resources grew by a 2.5% annual average, equivalent to +2.0% per year in real terms. Finally, in the period 2020-2025, although "actual" resources grew by 2.7% on average per year, in real terms they decreased by 0.6% on average per year.

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³ Reference is made to the Countries that signed the Corfu Treaty (which came into force on January 1, 1995), namely Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, and Sweden

⁴ Reference is made to the Member States that joined the European Union after January 1, 1995, namely Estonia, Latvia, Lithuania, Poland, the Czech Republic, Slovakia, Slovenia, and Hungary

“Standard”, actual and post-mobility per capita funding. Year 2024

Region	NHR funding (€)	“Actual” funding (€)	“Actual” resources (€)
Italy	2,245.3	2,322.4	2,316.6
Piemonte	2,277.6	2,334.9	2,332.0
Valle d’Aosta	2,222.6	2,363.2	2,274.3
Lombardia	2,223.8	2,315.7	2,375.6
Autonomous Province of Bolzano	2,101.0	2,299.6	2,326.6
Autonomous Province of Trento	2,146.7	2,224.8	2,250.6
Veneto	2,245.0	2,313.7	2,356.5
Friuli Venezia Giulia	2,226.6	2,394.0	2,387.3
Liguria	2,394.8	2,493.2	2,445.5
Emilia Romagna	2,247.7	2,372.3	2,492.4
Toscana	2,283.6	2,367.0	2,381.2
Umbria	2,328.2	2,403.4	2,363.6
Marche	2,270.2	2,310.3	2,277.5
Lazio	2,228.5	2,281.7	2,243.5
Abruzzo	2,266.2	2,318.0	2,234.5
Molise	2,302.9	2,313.9	2,403.1
Campania	2,211.8	2,249.9	2,193.3
Puglia	2,253.6	2,290.3	2,231.4
Basilicata	2,281.6	2,330.3	2,177.2
Calabria	2,280.4	2,332.0	2,164.5
Sicilia	2,220.1	2,291.9	2,240.4
Sardegna	2,242.5	2,469.1	2,408.5

Source: based on CIPE, CE, Ragioneria Generale dello Stato and Istat data, 2025 - © C.R.E.A. Sanità

CHAPTER 2b

VAT in the Healthcare Sector: Exemption as a Problem and Taxation as a Factor Influencing Management¹Biondi E.², Bianchi G.³, Terranova L.⁴

The National Health Service (NHS) is undergoing a profound crisis, driven by the influence of a multitude of demographic, epidemiological, organizational, and managerial factors related to the human, logistical, and technological resources at its disposal. Especially at a time when the technological revolution is disruptive and, moreover, instrumental in providing citizens with better prospects for health and quality of life, Italy is falling behind. Substantial investments and significant adjustments are needed, at least to reach the average levels of other Countries. This is the rationale for this contribution: every opportunity to secure resources for the NHS is fundamental, including the possibility of VAT reform, and must be explored. The VAT treatment of goods and services provided to end consumers/users of the NHS is one of exemption from tax - a regime conceived in the 1970s as a benefit granted to activities of great public interest. However, the practical and economic effect of this preferential treatment has changed significantly over the decades and, indeed, has likely been reversed, particularly due to the considerable evolution witnessed in the healthcare sector. In fact, the exemption has become a cost factor for healthcare providers, since when purchasing goods or services necessary to deliver exempt care to users they must pay VAT to their suppliers but are unable to deduct it. This is the phenomenon known as "hidden VAT", which becomes significant

enough to create a genuine incentive for "escaping the exemption" when a provider's own activity is insufficient to produce the goods or services it must deliver to users and it needs to procure them externally to complete its operations. In this case, the 'balance' between VAT paid to suppliers that cannot be deducted becomes increasingly negative for the provider the greater the economic value of the external procurements required. This has been referred to as 'technological fiscal drag,' a term used to highlight the strong connection and repercussions of this tax phenomenon with the external procurement of high-technology goods and services by healthcare providers. Indeed, the expansion of technology in the healthcare sector has significantly contributed to the progressive erosion of the fiscal benefit and has led to a tax treatment that has become a budgetary burden for the provider and, often, a real obstacle to the evolution of the goods/services it delivers to users, if not even a major influence on overall management choices. The mechanism of hidden VAT in the healthcare sector is two-fold: on the one hand, hospital and healthcare entities are the final subjects in the purchasing chain, since they provide exempt services to users, and therefore the VAT they pay to their suppliers becomes a cost because it cannot be deducted; on the other hand, we have long witnessed a series of changes in the contractual and organizational forms of the key actors in the Health

¹ This contribution is the result of the elaboration of the contents discussed at the conferences organised by Co.Ne.Fi. in collaboration with the Luigi Sturzo Institute. We would also like to thank all the participants in the conferences, who will be specifically cited in the bibliography and who made a decisive contribution to the in-depth exploration of the subject under examination

² Committee for Tax Neutrality in the Healthcare, University and Research Sectors (Co.Ne.Fi.). The opinions expressed are personal and not attributable to any specific professional or institutional activities

³ President of Co.Ne.Fi.

⁴ Member of the Board of Directors of Co.Ne.Fi., who passed away prematurely. Through his work and passion, he made this in-depth study possible. From the outset he understood the importance of the issue of VAT in sectors that are crucial for the national system and devoted himself to raising awareness of it and contributing to the study of possible solutions

System, which have not been taken into account in their specificity by tax legislation. The purpose of this contribution is to assess whether it is possible to avoid treating hidden VAT as an “inevitable side effect” and thereby help to regard healthcare expenditure as an investment rather than a mere cost. In fact, with the amendments introduced in 2022 to the VAT Directive, there are some possibilities to overcome the current situation, such as granting the right to deduction even in cases of exemption or providing for a reduced rate. Such an intervention would not be “cost-free” for the State budget, but it would be less costly than it might seem if one considers that, through the system of regional sharing of VAT revenue, the regional sharing rate was set at 62.67% of total VAT revenue for 2021, compared with as high as

70.14% in 2020. The exercise of this option granted by Union law could prove to be a great opportunity for the Italian healthcare sector: if the same resources are allocated to healthcare but VAT is removed as a cost on certain investments, with the same resources healthcare can pursue more ambitious objectives. It is essential that a significant portion of the resources freed up through the VAT changes remain within the healthcare sector and are directed primarily towards research, innovation and training. Thus, the needs of the National Health Service would be better met, the Country’s overall position in the Life Sciences sector would be enhanced, and the risk of Italy losing further prominence relative to other European Countries would be reduced.

CHAPTER 3a

The Evolution of health Expenditure: International Comparisons and National Trends

Polistena B.¹, Lo Giudice C.²

The Chapter analyses healthcare expenditure trends in Italy (both public and private), making comparisons with both European Countries and at the regional level.

The analysis confirms that in 2024 total per capita healthcare expenditure in Italy remained significantly lower (-38.9%) than that of the remaining Countries that became EU members before 1995 (pre-1995 EU Countries).

The difference is the result of average growth rates that remain structurally lower than the EU average: Italian growth, even in the last year, was +3.4% versus +5.8% for pre-1995 EU Countries. Similarly, per capita GDP in Italy grew by 2.9% in the last year, compared to 3.8% in the pre-1995 EU Countries.

Analysing long-term trends, total Italian healthcare expenditure, compared to 1990, has recorded a (negative) differential compared to the pre-1995 EU Countries, widening by 15.4 per cent.

At the same time, the level of per capita Italian healthcare expenditure has approached that of the post-1995 EU Countries: while remaining 63.5% higher, the differential has narrowed by 681.1 percentage points (p.p.) compared to 1990, of which 19.0 pp in the last year.

The expenditure differentials above are largely influenced by trends in the public component.

For this item, the gap is -44.6% compared to the pre-1995 EU Countries (up 1.4% over the previous year and 15.4 % compared to 1990) while, compared to the post-1995 EU Countries, it has decreased by 759.9 p.p. compared to 1990, of which 16.9 p.p. in the last year.

The ratio of public expenditure to GDP is 6.3%, which rises to 6.5% when GDP is adjusted for interest costs on public debt; from a macro-economic perspective, Italian expenditure can be considered statistically “undersized” by 12.9% compared to expectations.

The private component of healthcare expenditure shows a -13% differential compared to pre-1995 EU Countries (up 33.9% compared to 1990, of which 5.5% in the last year); compared to post-1995 EU Countries, the differential has also increased by 436.4 p.p. compared to 1990, of which 24.4 p.p. in the last year.

The impact of private expenditure on GDP in 2023 amounted to 2.3%, a value which was 0.2% higher than that of pre-1995 EU Countries (+0.3% in 2023 and -0.5% compared to 1990) and 0.5% higher than that of post-1995 EU Countries (+0.6% in 2023 and +0.6% compared to 1990).

Since 2015 Italian households have shown a greater propensity, or probably a greater need, to spend privately on healthcare, both compared to the other pre-1995 EU and post-1995 EU Countries.

Ultimately, the goal of reducing the expenditure gap compared to other pre-1995 EU Countries seems hard to achieve from a macro-economic perspective, at least in the short term. In this scenario, on the one hand, it seems urgent to start a systematic analysis on the scope of the National Health Service's (NHS) “promises” (the Essentials Levels of Care - LEA), restoring the principle of subsidiarity through more efficient regulation of the relationship between public and private expenditure, particularly

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that relating to forms of collective intermediation.

Based on the findings of the System of Health Accounts (SHA) and Istat data on household consumption, in 2024 total healthcare expenditure in Italy was €178.9 billion (€3,032.2 per capita), up 3.2% compared to the previous year (2.2% in real terms).

Public healthcare expenditure amounted to €135.6 billion (€2,298.6 per capita), up 5.0% in nominal terms (4% in real terms) over the last year. Private healthcare expenditure amounted to €43.3 billion (€733.6 per capita), down 2.2% in nominal terms and 3.1% in real terms over the last year.

At the regional level, a significant gap in per capita expenditure levels persists: between the Regions with the highest and lowest expenditure, the differ-

ence is 1.4 times (€1,097.6), and 1.3 times (€812.2) excluding the Special Administrative Regions.

The difference is largely attributable to the private sector, for which the difference between the Regions with the highest and lowest expenditure levels exceeds 2.1 times (€555.1).

Considering the growing regional differences (including, but not limited to, regional differences in healthcare expenditure), in order to pursue the principle of national solidarity, we need to reconsider the allocation criteria - as one of the priorities of the NHS - which currently do not take into account differences in private expenditure, although they are the main source of differentiation in access.

CHAPTER 3b

Supplementary Health Funds: Research on Management Models, Use by Members, and Resulting KPIs

Micocci M.¹, Magnoni G.²

The Supplementary Health Funds (FSIs) established thanks to various National Collective Labour Agreements (CCNL) now cover approximately 16 million Italians.

However, their technical functioning and their value in terms of benefits provided are still scarcely known and give rise to superficial interpretations such as the assimilation of these Funds to insurance policies.

This simplification is profoundly wrong: there are self-managed Funds (i.e., those that do not take out any policies and generally have the longest tradition), mixed Funds (which partly self-manage their resources and partly take out policies), and, finally, Insurance Funds (i.e., those that perform their role by taking out collective policies with insurance companies).

In particular, the data analysed refer to 18 FSIs which, taken together, account for just under 6 million members (out of a total of approximately 16 million). Total contributions amount to approximately €941 million and benefits paid amount to €640 million.

The Funds analysed vary in size, as is traditional in the Italian supplementary healthcare system. Some Funds have a few thousand members, others have hundreds of thousands, and the largest Italian Funds have over 2 million members. The sample is therefore characterized by a very marked variability in size, which is also typical of the sector.

The purpose of the analysis made is to highlight

some key information such as the demographic distribution of members, their geography, the extent of consumption, the amount of contributions flowing into the Funds, the behaviour and consumption patterns of member workers, and their awareness.

The risk management model and the organizational structure model can take three different forms: outsourcing, insourcing, and mixed.

The healthcare services guaranteed by the Funds can be provided indirectly (i.e. reimbursed), directly (i.e. under agreement), or mixed.

The research highlights that, net of the different overall numbers of males and females in the sample of FSIs surveyed (3.2 million vs. 2.7 million, or 54.2% vs. 45.8%), there is a fairly homogeneous distribution by age group.

Coverage for family members and pensioners is still rare and residual in the world of FSIs. With regard to our sample, only seven of the 18 Funds analysed cover family members; five cover pensioners, and only four cover both categories. All four of the Funds mentioned are self-managed. For the few Funds that cover family members, coverage is always for dependent family members with the option (therefore on a voluntary basis) of enrolling non-dependent family members as paying members. In some cases, coverage for family members is more limited than that for policyholders.

The difficulty of including pensioners in Fund coverage is based on the issue of risk anti-selection³.

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³ The risk anti-selection (or adverse selection) in healthcare occurs when individuals with a higher risk than the average population tend to take out insurance more frequently or obtain more extensive coverage than low-risk individuals. This phenomenon can undermine the technical and financial balance of the Fund, as the contributions collected may not be sufficient to cover the increased demand for benefits.

This is because, even in Funds where pensioners are allowed to remain, this is linked to a voluntary choice by the individual, with all the anti-selection risks that this entails.

The utilization rates⁴ of members by age group and gender vary greatly, as shown in the Table. There is a clear and significant difference between self-managed Funds and mixed or insurance Funds.

The analysis highlights the distinction between

direct (contracted) and indirect (or reimbursed) services, as well as between services provided through self-management or insurance. The Tables provide insight into the average composition of the FSI health plans. Indeed, despite significant differences in terms of contributions and awareness/use, the FSIs of the sample show some partial common characteristics.

Distribution of members by age group and gender. % values

Age group	Self-managed Funds			Mixed Funds			Insurance Funds		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
0 - 20	53.8	55.8	54.7	0.7	0.4	0.6	39.4	41.8	40.5
21 - 30	39.2	56.3	47.0	4.5	8.4	6.5	17.3	23.1	19.4
31 - 40	38.3	59.6	47.3	9.5	17.8	13.9	22.9	29.1	25.3
41 - 50	46.7	62.7	53.5	14.3	30.4	23.5	25.8	30.5	27.7
51 - 60	55.0	68.7	60.5	23.0	54.7	41.4	25.5	32.2	28.1
61 - 70	71.8	79.2	74.8	38.2	88.2	66.9	24.1	30.8	26.5
over 71	94.3	83.5	88.9	6.1	21.1	12.2	9.9	14.8	11.8
Total	53.9	65.1	58.8	14.3	33.0	24.6	24.8	30.9	27.3

Source: based on own data - © Studio Micocci & Partners

Number of services by type of insurance

Services	Amount	Number	Amount (%)	Number (%)
Insurance	336,125,374	3,883,519	52.6	53.8
Self-managed	303,383,338	3,336,319	47.4	46.2
Total	639,508,711	7,219,838	100.0	100.0

Source: based on own data - © Studio Micocci & Partners

Amount and quantity by reimbursement method

Services	Amount	Number	Amount (%)	Number (%)
Direct	395,750,458	4,483,922	61.9	62.1
Indirect	243,758,253	2,735,916	38.1	37.9
Total	639,508,711	7,219,838	100.0	100.0

Source: based on own data - © Studio Micocci & Partners

⁴ The utilization rate shown below indicates the percentage of members who used at least one healthcare service during the financial year ("at least one" means between 1 and "n" services provided by the Fund to the member during the year).

Services: amounts by category of service

Type	Services - Amounts (€)			Services - Amounts (%)		
	Insurance	Self-managed	Total	Insurance	Self-managed	Total
Dentistry	138,865,638	45,095,469	183,961,107	41.3	14.9	28.8
Tests and examinations	29,924,937	49,538,064	79,463,001	8.9	16.3	12.4
Hospitalisation with surgery	50,150,590	26,191,508	76,342,098	14.9	8.6	11.9
Hospitalisation without surgery	2,564,189	6,188,722	8,752,911	0.8	2.0	1.4
Prevention	23,821,035	3,131,336	26,952,371	7.1	1.0	4.2
Maternity	108,632	25,863,451	25,972,084	0.0	8.5	4.1
Advanced diagnostics	32,615,283	44,766,247	77,381,530	9.7	14.8	12.1
Co-payment	10,571,697	12,279,461	22,851,157	3.1	4.0	3.6
Other types (physiotherapy, lenses, etc.)	47,503,373	90,329,079	137,832,452	14.1	29.8	21.6
Total	336,125,374	303,383,338	639,508,711	100.0	100.0	100.0

Source: based on own data - © Studio Micocci & Partners

Services: quantity by category of service

Type	Services - Number (€)			Services - Number (%)		
	Insurance	Self-managed	Total	Insurance	Self-managed	Total
Dentistry	1,220,238	242,613	1,462,851	31.4	7.3	20.3
Tests and examinations	516,736	853,217	1,369,953	13.3	25.6	19.0
Hospitalisation with surgery	42,781	34,831	77,612	1.1	1.0	1.1
Hospitalisation without surgery	3,734	27,661	31,395	0.1	0.8	0.4
Prevention	287,863	28,180	316,043	7.4	0.8	4.4
Maternity	785	189,113	189,898	0.0	5.7	2.6
Advanced diagnostics	484,937	797,652	1,282,589	12.5	23.9	17.8
Co-payment	1,011,160	367,768	1,378,928	26.0	11.0	19.1
Other types (physiotherapy, lenses, etc.)	315,285	795,284	1,110,569	8.1	23.8	15.4
Total	3,883,519	3,336,319	7,219,838	100.0	100.0	100.0

Source: based on own data - © Studio Micocci & Partners

The following Tables show some data processing and calculations regarding the ratio between revenue and expenditure in the FSIs of the sample.

The Tables should be interpreted with due distinctions and great care.

Starting with the services managed through insurance contracts (next Table), the Loss-to-Premium ratio (SP) is approximately 75.0%, with significant regional differences that can be seen in the report.

Insurance Funds

Contributions	Premiums	Insured benefits	Insurance SP (%)
941.8	445.2	336.1	75.5

Source: based on own data - © Studio Micocci & Partners

The following Table shows the SP ratio or index (which would be better called Performance on Con-

tributions (PC)) for self-managed services (both from predominantly self-managed Funds and mixed Funds). The overall average is just over 61%. It obviously does not include the management costs that the Funds incur to manage their own services autonomously.

Self-managed Funds

Contributions	Services	Self-management SP (%)
496.5	303.4	61.1

Source: based on own data - © Studio Micocci & Partners

The following Table, instead, aims to unify the previous results; the Operating Balance (SdG) column is quantified as follows:

while the two SP ratios, i.e. overall SP (SPC) and Management SP (SPG) are quantified as follows:

Technical SP vs Management SP

Operating balance	Overall sp (%)	Management SP (%)
193.1	67.9	79.5

Source: based on own data - © Studio Micocci & Partners

Overall, therefore, the SPG value is approximately 12% higher than that of SPC. This index can be interpreted in various ways, the most intuitive of which is the following: with the same allocated resources, the FSIs could repay the amounts corresponding to the 12% mentioned above (over €110 million), increasing their Performance (provided that they directly bear the management risk).

CHAPTER 4a

Healthcare workforce management policies: The Veneto regional experience

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The paper illustrates the experience of the Veneto Region in addressing healthcare workforce shortages within a European context marked by structural imbalances: Italy counts 6.2 nurses per 1,000 inhabitants and a nurse-to-physician ratio of 1.5, below the OECD average.

Regional HR data for 2021–2023 showed a surge in nurse recruitment during the pandemic, followed by an unexpected rise in resignations in 2022, representing 65% of total exits. In 2023, resignation levels remained high (54% among nurses, 67% among physicians, up to 37% among healthcare assistants). Forecasts indicate a shortage of around 3,000 nurses per year from 2029 onwards, even under the most optimistic scenario.

To face this challenge, the Region adopted a multi-year plan structured around five main areas: strengthening governance, improving attraction and retention, mitigating the impact of workforce ageing, promoting organizational and technological innovation, and enhancing the attractiveness of health education.

Key actions have included the establishment of a regional taskforce on unexpected resignations; the launch of the “Compassionate Leadership” project in partnership with four universities, combining research and training to foster new leadership models; the mapping and recognition of advanced profes-

sional competencies; the creation of a regional platform to facilitate staff mobility; financial incentives for hard-to-staff areas; and initiatives to prevent burnout through psychological support services and minimum operational standards.

At the organizational level, new models have been developed to optimize staff and skill-mix, with practical applications in low-risk pregnancy care, community nursing and vaccination services. A cautious and structured introduction of digital and AI technologies has been promoted, supported by training and robust data-protection measures.

In the education domain, specific initiatives have been launched to make nursing degrees more attractive, including outreach campaigns and scholarships for students, alongside the modernization of healthcare assistant training programmes.

Complementary actions have been undertaken to monitor and improve organizational climate and staff well-being, through regular surveys carried out in collaboration with academic partners.

Overall, this integrated, data-driven and participatory approach defines a sustainable framework for the Veneto Region's health workforce policy, aligning with national and European strategies and providing the basis for long-term monitoring and continuous improvement.

¹ Veneto Region

CHAPTER 4b

Regional Oncology Networks (ROR): a multidimensional interpretation of Performance

Cepiku D.¹, Mastrodascio M.², Zappia G.¹

Cancer patient care is one of the most complex areas of modern healthcare systems, as the increasing prevalence and chronicity of many forms of cancer, and the highly fragmented nature of diagnostic and therapeutic processes require organizational structures capable of stably integrating hospital facilities, community services, and prevention, rehabilitation, and follow-up programs. Cancer patient care cannot be confined to a single location or a single player, but rather takes the form of a distributed process involving diverse professional skills, heterogeneous structures, and different institutional levels. In this context, traditional organizational models based on isolated structures or linear hierarchies have proven insufficient to support continuity, timeliness and equity of care, thus requiring the use of forms of inter-organizational coordination based on shared responsibilities, resources, and decision-making processes geared toward generating public value. In the Italian context, Regional Oncology Networks (ROR) are the main institutional tool for supporting this integration, with the aim of reducing fragmentation, promoting homogeneity in care pathways, and ensuring continuity of care. The formal establishment of these Networks, however, has not resulted in homogeneous configurations: the Regions differ significantly in governance structures, use of organizational tools, professional cooperation, and ability to ensure proximity and equity in access. To understand this heterogeneity, the Dynamic Multidimensional Model of Network Performance (MMNP) (Cepiku, 2013) has been applied as a key to understanding the Italian RORs, thus capturing the multilevel and interdependent na-

ture of the operation of Oncology Networks.

The adoption of the MMNP for ROR analysis enables theoretical dimensions such as professional relations, activity coordination, the role of governance, and the Networks' ability to generate public value to be turned into empirically observable elements. In this sense, the indicators provided by the ROR Monitoring Observatory, at the National Agency for Regional Health Services (Agenas), is the empirical basis through which the model can be made operational in different regional contexts. Information regarding the role of the coordination centre, the Network's operational tools, the functioning of multidisciplinary groups, and the adoption of Diagnostic and Therapeutic Care Pathways (PDTA) are incorporated into the Synthetic Index Questionnaire (ISQ), which documents the institutional and organizational conditions supporting coordination. The Synthetic Index for Hospital Discharge Records (SDO), the so-called ISSDO, based on administrative flows, assesses the Networks' ability to ensure consistent care, appropriate timing, and continuity of care. Finally, the Overall Synthetic Indicator (ISCO) summarizes proximity, accessibility, and quality of care, allowing for observation of the Network's territorial outcomes. The integration of these indicators enables to grasp the dimensions of the MMNP, thus showing how governance structures, organizational processes, and professional dynamics turn - in each context - into configurations of different Networks' characteristics. From this perspective, the Table summarises the indicators within a coherent framework that positions the Regions along the dimensions of the MMNP mod-

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el, allowing for a comparative analysis of the RORs' evolutionary trajectories. The emerging heterogeneity concerns not only the absolute levels of indicators, but above all the coherence with which governance, care, and territorial proximity combine to generate stable configurations or, conversely, configurations which are still-being strengthened.

The values of the indicators corresponding to the different dimensions of the model show that some Regions (such as Emilia Romagna, Toscana, Veneto, Piemonte, and Valle d'Aosta) have characteristics attributable to mature and integrated Networks: governance is institutionalized; organizational tools are used continuously, and professional cooperation appears strengthened, thus generating consistent pathways in line with patient needs. In these contexts, the Network operates as a relational infrastructure embedded in operational routine practices rather than as an external regulatory structure. A different profile emerges in Regions such as Friuli Venezia Giulia, Basilicata, and the Autonomous Province of Bolzano, where satisfactory results in terms of proximity and continuity of care appear to stem more from tried

and tested professional relations than from a fully structured governance system. Although producing positive outcomes, these configurations are more exposed to changes in the medium term, given the limited formalization of coordination mechanisms. Regions such as Campania, Lazio, Lombardia, Umbria, Puglia and the Autonomous Province of Trento are in an intermediate phase, characterised by the formal presence of the Network's tools, but their turning into operational routine practices is still incomplete. The Network is designed, but the full integration of its processes is proceeding gradually, thus showing an alignment between rules, practices, and relations that is still being strengthened. Finally, in Calabria, Molise, Sicilia, Marche, and Sardegna, the Network appears predominantly nominal: management and care are fragmented; cooperation between nodes is poorly established, and the proximity of services is limited. In these cases, the gap between institutional design and actual operation is more marked, thus requiring interventions aimed at creating the minimum enabling conditions for initiating lasting collaborative processes.

Profiles of Italian RORs

Network configuration	Observable structural and relational characteristics	Regions	Interpretation summary
Mature and integrated Network	Stable governance; PDTAs implemented; continuity of care; high proximity; low passive mobility; routinized cooperation	Emilia Romagna, Toscana, Veneto, Piemonte, Valle d'Aosta	Governance is institutionalized and turns into consolidated clinical coordination practices: the Network is alive and embedded in professional routines. .
Network functioning with informal / not fully structured governance	Medium or low ISQ, but good care and proximity; Network supported more by professional relations than by formal arrangements	Friuli Venezia Giulia, Basilicata, A. P. of Bolzano	Cooperation is supported by professional capital and territorial cohesion; the balance is effective, but less stable in the long term.
Governance formalized, but not yet fully effective	Existence of coordination and Network bodies, but uneven results; PDTAs not yet internalized; operational integration under development	Campania, Lazio, Lombardia, Umbria, Puglia, A. P. of Trento	The Network has been designed and institutionalized, but the alignment between rules, practices and relations is still being strengthened.
Weak / nominal Network	Poor governance; fragmented management and care; high passive mobility; nodes operating as autonomous structures	Calabria, Molise, Sicilia, Marche, Sardegna	The Network is formally present, but it does not act as a coordinated infrastructure: stable mechanisms for cooperation and continuity are lacking.

Source: based on one's own data

Overall, the analysis shows that RORs' Performance is the result of a structurally evolutionary process, in which governance, professional cooperation, and continuity of care do not operate as separate dimensions, but as interdependent components that influence each other over time. The emergence of the Network as an operational system, in fact, does not coincide with the mere presence of tools or the formal adoption of organizational architectures. What defines the maturity of Oncology Networks is the ability of governance structures to be turned into shared practices, to support stable professional interactions, and to produce care configurations capable of ensuring proximity and coherence in care pathways.

An integrated interpretation of the MMNP model through the empirical indicators provided by the ROR Monitoring Observatory at Agenas enables us to grasp these dynamics, providing a vision of Per-

formance that is not limited to the description of individual scores, but identifies the ways in which the different Network components align or, conversely, remain separate. This enables us to interpret regional differences as an expression of different consolidation trajectories, in which the balance between governance, clinical-organizational processes, and territorial structures requires different timescales, enabling conditions, and learning approaches.

This emerges from the progressive alignment of the institutional, organizational, and professional dimensions that make up the system. The challenge facing Regions is therefore to support this integration process, so that Networks can evolve from predominantly formal configurations to structures capable of consistently orienting and guiding daily care practices, thus continuously contributing to the generation of public value.

CHAPTER 4c

The digital transformation of healthcare in Italy: the scenario of the Digital Health Observatory

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Over the past year, Italy has witnessed significant developments in digital health, driven by investments from the National Recovery and Resilience Plan. In 2024, Digital Health expenditure reached €2.47 billion, representing a 12% increase from 2023 and approximately 1.9% of public health expenditure.

On the Telemedicine front, adoption by healthcare professionals remains stable yet sporadic: 36% of specialist physicians and 52% of General Practitioners (GPs) have conducted televisits, while tele-monitoring has been used by 30% of specialists and 46% of GPs.

Electronic Health Record usage is growing moderately, with 44% of specialists and 57% of GPs having used it, while 41% of citizens report accessing it. The Health Data Ecosystem, established in late

2024, represents a crucial step toward fully leveraging health data.

Artificial Intelligence (AI) is experiencing significant momentum. Generative AI tools are seeing rapid adoption: 26% of specialists, 19% of nurses, and 46% of GPs have used them. The Observatory estimates potential time savings of approximately one working week per specialist physician and two weeks per family doctor in administrative tasks, though concerns persist regarding transparency and medical-legal liability.

To ensure effective transformation, technological investments must be complemented by structural commitment to organizational and cultural change within the system, through long-term initiatives oriented toward economic and social sustainability.

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CHAPTER 4d

National governance for the One Health approach (and “more”)

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The analysis in this Chapter begins with the strengthening of the One Health approach, promoted internationally by the so-called “Quadripartite” (WHO, FAO, WOA, UNEP).

After describing the current governance of the process, built on the need to respond to the fact that health determinants are multiple, the Chapter questions the advisability of extending the approach adopted by the United Nations 2030 Agenda, in view of pursuing equitable and sustainable well-being. With specific reference to the Sustainable Development Goals (SDGs) promoted - including SDG 3 (Ensure Healthy Lives and Promote Well-Being for All at all Ages) - by broadening the scope of the relationship between health and society, it seems appropriate to also invest in clarifying the impact of health on economic and social development, with the aim of promoting awareness that healthcare is not only a cost, but also an investment in human capital that acts as a multiplier of productivity and a driver of economic growth. In other words, poor health should be understood, for example, as a determinant of deprivation, and not just as a consequence of it.

With a view to making the international strategy effective within the One Health approach, it therefore appears necessary to integrate it with national governance, which must go “beyond” the scope currently envisaged at the international level.

To this end, without prejudice to the fact that the national “terminal” of the approach coordinated by the “Quadripartite” is identified in the Ministry of Health, the Chapter suggests that a “Conference”

be established, which includes, in addition to the Ministry of Health itself, at least the Ministries of the Environment, Agriculture, Social Policies, Education, and Economic Development, with the dual objective of assessing the impact of the various public policies on health and also the impact of health policies on economic development and balance.

The Presidency of the “Conference” could be taken up, alternately, by different Ministries, and could independently define the rules for prioritizing assessments and development methodologies.

Drawing on the experience of the “One Health High Level Expert Panel” (OHHLEP), the Conference could make use of a network of experts (individuals and institutions) to whom it could commission assessments. It could also envisage procedures for consulting the main stakeholders, and be accompanied by a local governance model, also based on the territorial experiences of the National Complementary Plan (PNC) (Biodiversity-Climate-Health program).

The Italian local system has already developed skills, collaborative networks, and cross-sector governance tools that are fully consistent with the One Health paradigm. What is therefore necessary is to enhance, systematize, and organize these local experiences, linking them organically to the national governance proposed through the inter-Ministerial “Conference.” Through the WHO Healthy Cities Network and the existing thematic networks (such as the one represented by the signatories to the Manifesto), municipalities could, for example, take on the role of permanent laboratories for the testing and evaluation

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of integrated health-environment-economy policies, providing the national “Conference” with empirical evidence, replicable good practices, and territorial monitoring indicators.

From a methodological viewpoint, the “Conference” should equip itself with evidence-based tools. For example, it is suggested that certain tools already operational, such as the Health Impact Assessment (VIS) and the PNC, be used and implemented.

The goal of the proposed governance is ultimately to implement a profound modernization of the po-

litical vision, turning health from a simple cost item for healthcare into a real strategic investment for the entire Country, by aligning efforts with the pursuit of the sustainability goals of Agenda 2030, as well as overcoming the current institutional fragmentation by promoting a platform of shared policies, where different Ministries actively collaborate to harmonize decisions and treat health as a global concept, capable of acting as a driver for economic and social development.

CHAPTER 5a

Health outcomes

Carrieri C.¹

The Chapter examines the health outcomes achieved in Italy (at national and regional levels), in terms of level, trends and dynamics, by also drawing a comparison with those achieved in Europe (with a specific focus on France, Germany and Spain).

In particular, life expectancy and mortality, disability and chronicity rates are analysed.

Despite the marked ageing of the population, health outcomes in Italy are “excellent” when compared with other European Countries.

Life expectancy at birth (83.5 years in 2023) is the second highest in Europe, and healthy life expectancy is the highest (69.1 years), significantly higher than the European average of 63.4 years.

The figures mentioned are also continuously improving: over the last decade, life expectancy has increased by 6.7 years (in other words, life expectancy is increasing by 0.7 years every year).

Italy also ranks first in Europe for healthy life expectancy among the elderly population (10.8 years), recording the largest increase (+3.2 years over the last decade).

In terms of avoidable mortality, Italy ranks significantly below the European average (17.7 per 100,000 inhabitants) compared to the European average (24.0).

Healthy life expectancy is reflected in a significant reduction in the prevalence of severe disability, which in the population over 16 years of age fell from 9.4% in 2015 to 4.3% in 2024. The improvement in the elderly population is even more significant, as the prevalence in the over-65s fell from 24.6% in 2015 to 11.3% in 2024 (still recording the most marked improvement in Europe).

The prevalence of chronic conditions, instead, is increasing, rising from 15.2% in 2016 to 17.0% in 2024 among the population aged 16 and over, although remaining significantly below the European average (34.1%). In particular, for the over-65s, Italy has the lowest prevalence among the Countries analysed (41.0% in 2024), but with the greatest deterioration over the last decade (+6.6 percentage points (p.p.) compared to 2016).

Similarly, the people’s perception of their own health has worsened, but this, too, can be attributed to ageing.

Moreover, in the 30 years considered in the analyses, there have been no significant reductions in the gaps between different population groups: in particular, levels of education appear to be the main cause of disparities in terms of perceived health, disadvantaging the population with lower health literacy.

This data highlights problems of inequality, confirmed by the strong regional variability of many indicators.

Indeed, despite the fact that the national average levels of outcomes are among the highest in Europe, the South of Italy consistently records lower “Performance” in all the indicators analysed: lower healthy life expectancy at birth (-4.8 years compared to the North-East); a higher avoidable mortality rate (+4.4 points compared to the North-East); higher multi-morbidity in the over-75s (56.8% vs 44.0% in the North-East). Even health-related quality of life (HRQoL) shows significant regional differences, with average values ranging from 0.840 QALY in Umbria to 0.938 QALY (Trentino Alto Adige).

To summarise, although the system is effective in

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promoting health, it is unable to offset the effects of ageing, which leads to an increase in chronic conditions.

This data indicates the need to continue investing in primary and secondary prevention, with a view to

promoting true longevity.

Furthermore, significant disparities persist, albeit decreasing, which require targeted interventions to ensure real equity in terms of health outcomes.

CHAPTER 5b

Health Inequalities in Italy: From the Establishment of the National Health Service to date

Atella V.¹, De Luca C.¹, d'Angela D.², Maresch E.¹, Polistena B.², Spandonaro F.³

This Chapter summarizes the main findings of a recent study analysing the evolution of health inequalities in Italy from 1984 to 2023.

The analysis, based on the reconstruction of time series data from the Istat surveys “Aspetti della vita quotidiana” (1993-2023) (Aspects of Daily Life - 1993-2023) and “Bilanci delle Famiglie” (1985-2023) (Household Budgets – 1985-2023), provides a unique longitudinal perspective on Italian healthcare trends and dynamics, examining how disparities related to socio-economic status, gender, and geographic residence have shaped the healthcare system.

Specifically, six indicators have been considered by geographic area (Northwest, Northeast, Centre, South, Sicilia and Sardegna), gender, education level, and age. Their trends and dynamics since the establishment of the National Health Service (NHS) have been analysed: self-perceived health status; number of comorbidities; frequency of hospitalizations; satisfaction with hospital services; impact of out-of-pocket (OOP) healthcare expenditure on Gross Domestic Product (GDP) and household consumption; the share of households bearing private healthcare costs.

The analysis of the self-assessed health status of the Italian population over the period 1993-2022 shows complex trends and dynamics: a generalized worsening of the indicator is apparently recorded over time. This trend, however, is largely due to the progressive aging of population rather than to an actual deterioration in health conditions.

At the regional level, before 2007, the South par-

adoxically had a better health status than other macro-areas. Later, probably following a change in the survey methodology, this difference disappeared. Over the long term, territorial disparities have remained substantially stable.

Women constantly report worse self-perceived health status than males. This gender difference in perceived health status may reflect both actual differences in physical and mental health and a different subjective threshold for assessing one's own well-being. Although women, on average, have a longer life expectancy than males, they report worse self-perceived health, a higher prevalence of non-fatal chronic diseases, and greater use of healthcare services.

An analysis of the indicator by education level shows that education is the most powerful and stable determinant of health inequalities. Individuals with low education levels systematically report worse self-perceived health status throughout the entire period considered. The gap between high and low education levels remains large and constant, confirming that education inequalities in health are structural and hard to reduce without targeted interventions.

Considering gender and education level together, it emerges that the gender health gap is largely explained by differences in education levels. Women with low education levels report the worst levels of health, while women with high education levels have similar, or even better, levels than males with the same education background.

The average number of comorbidities in the Italian population shows a general increase over the period

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considered, again primarily due to population aging. Analyses by age group confirm that, for the same age, prevalence rates remain essentially stable.

Central Italy and especially the South record higher values than the North, reflecting traditional disparities in terms of socio-economic conditions and access to healthcare services.

Women systematically show a higher average number of comorbidities than males, consistent with the “female survival paradox.”

When analysing the phenomenon by education level, we see that individuals with low education levels show a significantly higher number of pathologies, with a gap that tends to widen over the period under consideration. Those over 65 show the highest levels of multi-morbidity, reflecting the accumulation of chronic conditions associated with aging.

An analysis of data on the prevalence of hospitalizations between 1997 and 2022 confirms the well-known reduction in hospitalization rates, but also shows the persistence of structural inequalities.

During the period analysed, there was a significant reduction in the use of hospital services across the Country, with a particularly marked decline during the Covid-19 pandemic, followed by a partial recovery in 2022. This trend may be due to a combination of expenditure containment policies, strengthening of community-based medicine, implementation of less invasive diagnostic technologies, and the spread of outpatient services.

Despite the overall reduction, structural inequalities persist: hospitalization rates are higher among the most disadvantaged socio-economic groups, reflecting a higher incidence of chronic illnesses and a lower availability of community-based healthcare options.

Individuals with low education levels experience significantly higher hospitalization rates (4-5%) than those with higher education levels (2-3%), with a gap that remains stable over time.

As expected, those over 65 have the highest hos-

pitalization rates - although on the wane in recent years – thus reflecting the accumulation of comorbidities associated with aging.

The analysis of satisfaction with access to hospital health services (both medical and nursing care) shows generally positive trends, but with significant differences:

Considering hospital medical care from a territorial perspective, significant differences are found in initial levels and trends. The Northeast and Northwest Regions have maintained high levels of satisfaction throughout the period, with a stable increase to values close to 95%. Central Italy has shown a more gradual improvement. The South, which in 1993 started from a significantly less favourable situation (approximately 82%), has shown a steady increase, although it remained the macro-region with the lowest satisfaction levels in 2022. This trend confirms the persistence of regional inequalities in access to and perceived quality of hospital medical care, although with signs of convergence in the long term.

Gender data shows that, until 2013, men and women recorded similar trends, which later diverged, with female satisfaction on the wane, suggesting the emergence of differentiated dynamics in the perceptions of services.

When analysing data by education level, we see that individuals with a high education level constantly recorded higher levels of satisfaction until 2018, followed by a slight decline. Conversely, individuals with a low education level, despite starting from lower levels, showed a gradual and continuous increase in satisfaction, reaching and aligning with the higher-educated group in 2022. This trend may reflect an improvement in the perceived equity of services or a levelling of expectations among education groups.

In summary, more than forty years after its establishment, it can be confirmed that the NHS has been able to ensure universalism and counter the effects of population aging but has not produced the desired effects in terms of reducing health inequalities.

CHAPTER 5c

Italians' Opinion on the National Health Service

d'Angela D.¹, Polistena B.¹, Spandonaro F.²

The Chapter summarizes the results of the survey promoted by C.R.E.A. Sanità and administered to a representative sample of the Italian population, with the aim of gathering feedback and collecting citizens' opinions on their experiences in their contacts with the National Health Service (NHS).

The idea for the survey arose from realizing that the debate on healthcare policies focuses both on the awareness that the public healthcare system is an essential asset and on the perception that it is increasingly struggling to keep up with citizens' needs. It therefore seemed appropriate to check this last point by going directly to the source, i.e. using the typical Patient Reported Experience Measures (PREMs) scheme, asking citizens for their opinions on the NHS's "ability to meet" their needs.

The analysis has shown that the vast majority of Italian citizens are satisfied with:

- the general practitioner/family doctor, who is still a key figure with an average satisfaction score of 7.3 (on a scale of 0-10);
- access to medicines, which scores as high as 8 out of 10.

Citizens' experiences with hospital, outpatient, and prevention services is rated as sufficient/adequate or slightly above sufficient/adequate; in other words, these are areas that work, but are clearly affected by organizational limits.

The experience with home care, residential care, and support for people who are not self-sufficient is rated worse, below satisfactory. However, these are fundamental sectors, considering the aging of population that characterizes the Country, and the con-

sequent increase in frailty, which requires continuity and proximity of care.

Satisfaction with healthcare services based on patient experience

Area	Average satisfaction
Unscheduled hospital care	6.3
Scheduled hospitalizations	6.9
Outpatient services for prevention purposes	6.8
Outpatient services	6.7
General practitioners	7.3
Admissions in nursing homes	5.7
Home care	5.8
Care for non-self-sufficient people	5.6
Ease of obtaining medicines	8.0

Source: based on data from the survey - © C.R.E.A. Sanità

When asked about the reasons for their dissatisfaction, Italian citizens state that the most problematic aspect of the NHS services is still "waiting lists."

Regardless of geographical location and age, citizens largely agree (62.0%) that waiting times for access to services are unacceptable.

Moreover, 45.0% of respondents are dissatisfied with the waiting times they experience in healthcare facilities when receiving services.

These two factors are presumably the reason why almost 7 out of 10 Italians now use private healthcare services.

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Reasons for dissatisfaction with healthcare services

Area	% of dissatisfied population
<i>Waiting times for booking services (waiting lists for appointments, tests, etc.)</i>	62.4
<i>Waiting times when receiving services (waiting in waiting rooms, failure to meet appointment times, etc.)</i>	44.6
<i>Difficulties in contacting the National Health Service (bookings, etc.)</i>	24.1
<i>Expenses incurred (co-payment)</i>	22.9
<i>Lack of attention from healthcare staff</i>	20.8
<i>Impossibility to choose the professional (i.e. the specialist doctor by whom they would actually like to be treated)</i>	19.3
<i>Distance from the place where services are provided</i>	18.8
<i>Inconvenient service hours</i>	15.8
<i>Lack of communication between general practitioners and specialist doctors</i>	14.9
<i>Difficulty in finding information on where to book tests, appointments, etc.</i>	14.2
<i>Expertise of the NHS doctors</i>	13.7
<i>Lack of communication between professionals</i>	11.0
<i>Complexity in obtaining health documentation</i>	7.5
<i>Lack of social support for those who are not self-sufficient (personal care staff, etc.)</i>	5.9

Source: based on data from the survey - © C.R.E.A. Sanità

The analysis of the survey results based on respondent characteristics shows some specific features.

Firstly, it appears that those over 75 (who are presumably the largest consumers of healthcare services) are on average more satisfied with the services.

Working adults and students are the segment of population that is most critical of the healthcare services they receive, thus demonstrating that they have higher expectations: in other words, they demand fast, easily accessible, digitized services capable of reconciling care with the pace of work or study life.

There is also a geographical gradient: Trentino Alto Adige and some northern Regions are consistently rated as performing better by citizens in almost all areas surveyed.

In conclusion, citizens' answers show that, while continuing to believe in the importance of the NHS, Italians are demanding services that better meet their expectations: in particular, in terms of support for those who are not self-sufficient, speed of access, reduction of waiting times for services, and proximity of care.

CHAPTER 5d

Avoidable mortality

Buzzi N.¹

The issue of avoidable mortality is an indicator of considerable interest for the analysis of health inequalities and healthcare system Performance, particularly in a Country such as Italy, which has traditionally been characterized by deep regional differences. In recent years, interpreting data has become even more complex due to the impact of the Covid-19 pandemic, which had both a direct impact, through the increase in deaths from the disease itself, and an indirect impact, through its effects on the functioning of Health Services and individual behaviours. Italy, however, continues to rank favourably in European comparisons, maintaining one of the lowest standardized rates of preventable mortality in 2022, ranking fourth among European Union's Countries.

Breaking down the indicator into its two main components, i.e. deaths avoidable through public health interventions and deaths treatable through timely diagnosis and therapy, different dynamics and trends emerge. Italy shows a favourable trend for both components, with values below the European average and those of the main Western Countries. In particular, the analysis adjusted for Covid-19 deaths, used for a more comparable interpretation of the time series, showed a progressive reduction in avoidable mortality in the decade 2013-2022, albeit with a slowdown during the pandemic period.

In 2022 avoidable deaths accounted for 58.2% of all deaths between 0 and 74 years of age, with a higher incidence among men (59.2%) than women (56.6%). The main causes include malignant tumours, which account for 40% of avoidable mortality among men and over 50% among women, followed by circulatory diseases, most of which are deemed preventable. The treatable component is more prev-

alent among women, while the preventable component, mainly linked to unhealthy lifestyles, is more prevalent among men, thus confirming a traditional gender imbalance.

The territorial analysis reveals a highly uneven picture. At the regional level, the standardized rate ranges from 139 avoidable deaths per 100,000 residents in Trentino Alto Adige to 200 in Campania, thus confirming the gap between the North and the South of the Country. Although all Regions have recorded a downward trend in rates over the long term, a comparison between 2022 and 2019 shows different trends: some Regions recorded significant improvements, while others showed a reversal of the trend.

The provincial breakdown shows further differences, sometimes more marked than those at the regional level. Data for the three-year period 2020-2022 also shows very large differences in avoidable mortality rates due to lifestyle-related causes or the effectiveness of care, thus confirming that inequalities are not limited to macro-areas, but also involve smaller local areas. In general, the Provinces of Central Italy and part of the North have the lowest rates, while many Provinces in the South continue to have significantly higher rates, even compared to the pre-pandemic three-year period.

Overall, the analysis confirms that, despite the good results achieved at the national level, there is still considerable room for improvement in terms of both the effectiveness of Health Services and the prevention of individual risk factors. Reducing regional and gender inequalities in avoidable mortality is a key challenge for health policies, especially during the post-pandemic phase of reconstruction and strengthening of the system.

¹ Nebo Ricerche PA

CHAPTER 5e

Health Protection Opportunities: Regional Performances

d'Angela D.¹, d'Angela C.², Carrieri C.², Polistena B.¹, Spandonaro F.³

Chapter 5e summarises the results of the survey “Health Protection Opportunities: Regional Performances” – 13th edition 2025, promoted by C.R.E.A. Sanità, aimed at assessing the actual opportunities for protecting health and social well-being in the Italian Regions.

The study adopts a multidimensional and multi-perspective approach, recognising that health protection depends not only on healthcare, but also on social, environmental and organisational factors.

The methodology adopted recognises the multi-dimensional nature of Performance, as well as the existence of different perspectives held by stakeholders in the social and healthcare system. The assessment is supported by a multi-stakeholder Expert Panel that currently includes 107 representatives from institutions, corporate management, healthcare professions, users and the Life Sciences industry.

The single Performance index is determined on the basis of the methodology developed by C.R.E.A. Sanità, described in the reports of the various editions. In particular, the Panel is called upon to:

- identify the Performance Dimensions
- identify a set of indicators representative of the aforementioned Performance Dimensions
- elicit the “value” attributed when determining the indicators
- elicit the “relative value” attributed to the various indicators
- process data based on the synthetic Performance index, according to the different perspectives and the relative contribution of the various Dimensions.

Compared to the previous edition, the 2025 survey:

- measures Performance dynamics and trends in the period 2019–2024
- checks the correlation between Performance and citizen satisfaction (PREMs) and between Performance and quality of life (HRQoL)
- assesses the resilience of the Regional Health Services (SSR) through medium-term sustainability indicators.

The 13th Survey on Regional Performances conducted by C.R.E.A. Sanità, in collaboration with a Panel of 107 National Health Service (NHS) stakeholders from various areas of interest (institutions, users/citizens, corporate management, healthcare professions, Life Sciences industry), confirms the existence of a significant gap between current Performances and potentially optimal ones. This gap has also widened over the years due to the growing expectations of the Panel members.

The gap between Regions is still very significant, with the best Performance standing at 55.0% and a third of Regions not exceeding 40.0% of the maximum achievable level. Nevertheless, over the last five years, there has been an average improvement in Performance levels, especially in the Regions that lagged further behind (many of them in the South of Italy), thus resulting in a reduction in disparities.

However, in the best-performing Regions, only marginal improvements have been recorded, thus showing the existence of structural limitations in the current healthcare system, largely linked to the resources available.

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Only two Regions (Veneto and the Autonomous Province of Trento) do exceed 50% of the maximum Performance level (55% and 50%, respectively).

Six Regions follow with fairly consistent Performance index levels, ranging from 48% to 42%: the Autonomous Province of Bolzano, Emilia Romagna, Liguria, Toscana, Piemonte and Lombardia.

The third group includes Friuli Venezia Giulia, Sardegna, Valle d'Aosta, Molise, Abruzzo, Lazio, Umbria and Marche, with Performance levels ranging from 33% to 41%.

Finally, five Regions, Puglia, Campania, Basilicata, Sicilia and Calabria, have Performance levels below 28% of the maximum achievable.

Although similar, Performance assessments show some differences when analysed for different stakeholder groups: for users, besides Veneto and the Autonomous Province of Trento, the Autonomous Province of Bolzano is worth mentioning. For institutions, besides Veneto and the Autonomous Province of Trento, Liguria is also among the Regions providing their citizens with greater opportunities for social and health protection. For healthcare professionals, besides Veneto, the Autonomous Province of Bolzano, as well as Piemonte and Liguria, are worth mentioning. For corporate managers, Emilia Romagna also rises in the ranking. Finally, for industry, Veneto, the Autonomous Provinces of Bolzano and Trento, and Toscana are the four most virtuous Regions.

In terms of Performance determinants, the three Dimensions of Appropriateness, Outcomes and Equity contribute by more than 60% to Performance: 24.3%, 24.3% and 15.2%, respectively, followed by the Social Dimension (12.8%), and the Innovation and Economic-Financial Dimensions, which contribute by 12.2% and 11.2%, respectively.

Performance is confirmed as a dynamic “category” that follows changes in political priorities: compared to the previous survey, there has been a reduction in the “weight” associated with the Social and Appropriateness Dimensions, while the contribution of Equity has increased, particularly for Users.

The reduction in the contribution of the Social Di-

mension to Performance, recorded for all stakeholder groups, could be attributed - at least in part - to the absence in the National Recovery and Resilience Plan (PNRR) of a framework for real integration between health and social care, as well as to the awareness that the resources available for this function are insufficient to enable the system to be extended to social care.

For corporate managers, the importance of Outcomes continued to increase, while that of the Economic Dimension decreased, a phenomenon attributable to management difficulties with limited resources (in the broad sense). This year, managers and healthcare professionals have once again expressed greater overall satisfaction with the results achieved in the “best-performing” Regions: this can be interpreted as awareness of having done the best possible with the resources available. Users continue to be the most critical, especially towards the “worst-performing” Regions.

With specific reference to resources and therefore sustainability, the Panel identified nine Regions (Piemonte, Lombardia, the Autonomous Province of Trento, Veneto, Liguria, Emilia Romagna, Toscana, Umbria and Abruzzo) as potentially “resilient”. Among these, Emilia Romagna, Toscana and Abruzzo also recorded a medium-term improvement in the indicators selected.

In conclusion, Performance levels are still far from optimal, although they are improving; the gap (and relative positions) between Regions is also confirmed, although there is a trend towards a reduction in the gap.

Resources seem to be a constraint that significantly affects the possibility of improving Performance, and less than half of the Regions are successful in the check carried out to measure their resilience in terms of medium-term sustainability.

In any case, the analyses conducted demonstrate that the Performance measured is significantly (and positively) correlated with citizen satisfaction; much less so with perceived quality of life, which is clearly influenced by factors beyond regional control.

CHAPTER 5f

Impoverishment, Catastrophic Burden and Economic Hardship: The Levels of Equity in Our National Health Service

d'Angela D.¹

The aim of this contribution is to assess the impact of care needs on families by analysing the healthcare consumption that they bear privately. The latest available update of consumption data relates to 2023, and, following on from the work started last year, allows the analysis of the different care areas, separately by area of intervention: prevention, treatment and rehabilitation, and Long-Term Care (LTC). The analysis has also been supplemented with the social-assistance component aimed at the elderly and/or people with disabilities.

The analysis of private health expenditure provides, indirectly, indications of the actual level of protection offered by the National Health Service (NHS) against the economic risks arising from illness. To this end, an analysis of inequalities in privately borne health expenditures was conducted in order to assess the equity of health systems on the financing side by adopting an ex post logic, that is, by measuring the fairness of the health system according to the burden space approach (Murray et al., 1999).

Specifically, the contribution reconstructed the trends of several indicators - the share of households incurring health expenditures, the incidence of health expenditure on total consumption, the incidence of impoverishment due to health expenditure, the share of households facing catastrophic health expenditures, and the share of households experiencing economic hardship caused by health expenditure - which are useful for assessing the level of protection against economic risks since the establishment of the National Health Service (Law No. 833/78).

Where possible, stratification was carried out by Region of residence, consumption quintile, educa-

tion level of the household reference person, and household composition.

The data source used for the analyses consists of the microdata from the surveys conducted by Istat on household consumption and expenditure. It should be noted that the surveys mentioned have undergone significant changes over the past 40 years, and for the years 2014–2021 the Institute has reconstructed the series to align them with the new international reference classification for household expenditure (Classification of Individual Consumption by Purpose (COICOP)).

In quantitative terms, in 2023 (the latest year available for disaggregated analysis) 70.9% of Italian households incurred health expenditures out of pocket; these expenses were particularly prevalent among young couples and individuals aged 75 and over without children.

Compared with 1985, the share of Italian households reporting out-of-pocket (OOP) health expenditures increased overall by 19.2 percentage points (p.p.), with a marked rise up to 1997 (+17.9 p.p.), followed by a decline until 2012 (-8.8 p.p.), a new peak in 2014 (+28.7 p.p.) and, finally, a further downward phase in subsequent periods (-18.6 p.p.).

The increase has mainly affected less affluent households and those with low or no educational attainment.

Preliminary Istat data for 2024 indicate that household consumption expenditure remained essentially unchanged (+0.6% in nominal terms) compared with the previous year, while health expenditure declined by -1.6%.

The incidence of private health expenditure for

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households in the lowest consumption quintiles reached 5.9%, compared with 4.6% for those in the highest quintile, against an average incidence of 4.3%, which rises to 7.6% if only households that actually spend on health are considered.

The share of private expenditure borne by the first three consumption quintiles represented 27.5% of total private health expenditure in 1985, while in 2023 it increased to 37.6% (7.2% in the first quintile, 13.0% in the second and 17.4% in the third).

When relating the dynamics of health expenditure to that of disposable income, it can be observed that compared with 1997 (the first year available), both items increased - disposable income by 66.0% and health expenditure by 36.0% - but with different patterns over the sub-periods. At the national level, up to 2012 the growth of health expenditure was lower than that of disposable income, then 'aligned' with it in subsequent years. At the geographic level the trends diverge: in the South both indicators increased more than the national average (+13.5 p.p. for income and +18.8 p.p. for expenditure), but health expenditure grew 5.3 p.p. more than disposable income; in the Centre the increase in disposable income was lower than the national one (-6.9 p.p.) and that of health expenditure was greater (+30.4 p.p.), with health expenditure growing 37.3 p.p. more than disposable income; in the North-East increases in both indicators were lower than the national figures (-10.5 p.p. for income and -23.4 p.p. for expenditure); similarly, for the North-West the differentials were -4.2 and -13.9 p.p. respectively. Thus, in the North the incidence of private health expenditure relative to disposable income tends to decline over the period considered, whereas in the South, and even more so in the Centre, the growth in disposable income has been 'absorbed' by the increase in health expenditure.

The primary expenditure item is pharmaceuticals, purchased by 72.6% of households; this is followed by out-of-pocket preventive specialist visits (30.5% of households), and then by the purchase of specialist services related to treatment and rehabilitation, incurred by 18.2% of households.

The share of households incurring expenses for pharmaceuticals, hospital care and LTC services

does not vary significantly across consumption quintiles; in contrast, the share of households expenditure on dental care, specialist care and diagnostics increases with economic resources: for dental care it rises from 8.8% in the first quintile to 27.9% in the fifth; for specialist services from 33.5% (first quintile) to 56.1% (fifth quintile); and for health articles from 10.9% to 24.0 %.

Analysis by education level shows that less educated households allocate almost 90% of their health expenditure to pharmaceuticals, specialist services, dental care and LTC; the share of LTC expenditure tends to decrease with higher levels of education (and, presumably, lower age), giving way to dental care.

In addition to purely health-related expenditures, there are also expenses incurred for socio-assistance services. According to the 'Household Expenditure' survey conducted by Istat, these services are paid for by approximately 260 thousand households and amount to €2.2 billion.

In terms of the distribution of expenditure by type, it is noteworthy that the incidence of expenditure on preventive/extra-care specialist visits does not vary with households' expenditure capacity, standing at around 20%. This pattern suggests that households resort to fee-for-service care in order to accelerate access to treatment pathways.

Healthcare expenditures can lead to impoverishment: in 2023, this phenomenon affected 367,528 households (1.2% overall and 2.0% when considering only those that incur health expenditures). The impact in the South is about three times that registered in the North and more than double that recorded in the Centre.

Impoverishment is concentrated mainly among households in the lowest consumption quintiles: specifically, 6.3% of those in the first quintile (considering only households with health expenditure), 0.5% in the second and 0.1% in the third, as well as 5.5% of households with no formal education and 2.7% of those with at least an elementary school qualification. At the geographic level, the South is the most affected area.

In terms of family type, those most affected by

the phenomenon are couples of elderly people over 75 (2.3% of those with private expenditure), elderly people living alone (2.1%) and families with three or more children (2.1%).

Over the period 1985–2023 there was an increase in the incidence of impoverishment (from 0.1% to 1.4%), which has mainly involved less affluent households and those with low levels of education.

Households experiencing impoverishment spend mainly on pharmaceuticals, specialist care, dental care and LTC; those with elderly members spend primarily on pharmaceuticals and LTC, while households with children spend mainly on pharmaceuticals and dental care. The burden of LTC increases for households with low levels of education (presumably older).

To complete the picture, the phenomenon of ‘forgone’² healthcare expenditures must also be considered: in 2023 this affected approximately 2.3 million residents (3.3% of households), particularly among the less affluent.

Combining impoverishment and forgone expenditures, 4.7% of all households (1.25 million households, corresponding to 2.3 million people) experienced economic hardship related to health expenditures.

The incidence of this phenomenon is significantly higher in the South of the Country (6.0%), followed by the North-West (4.8%), the North-East (4.0%) and the Centre (3.2%).

Economic hardship affects all consumption quintiles, although it is more prevalent (11.9%) among households in the first quintile; it is 3.9% in the second quintile, 3.2% in the third, 2.5% in the fourth and 2.1% in the highest quintile.

Households experiencing economic hardship tend to be those associated with lower levels of education: 9.3% of households with a head of household

with no formal education, 5.8% of those with only an elementary school qualification, 4.9% with a middle school diploma, 4.8% with a high school diploma and 2.8% with at least a university degree.

Over the past decade³, the incidence of economic hardship has increased by 0.6 p.p.; this increase has been observed in all geographic areas, but particularly in the South and the North-East, where it rose by 0.9 p.p., followed by the North-West and the Centre with +0.2 and +0.1 p.p. respectively.

The incidence of the phenomenon is significantly higher in the South of the Country (6.0%) and lower in the Centre (3.2%).

“The phenomenon of ‘catastrophic’ health expenditure affects 8.6% of resident households (11.8% of those incurring health expenditures), equivalent to 2.3 million households. It disproportionately impacts the South and the North-East, as well as elderly people, whether living alone or as a couple, and affects all consumption quintiles, particularly the middle ones. Dental care is the most frequent cause of catastrophic expenditure, except in the South, where pharmaceuticals predominate.

In summary, the dynamics of the indicators reconstructed for the period 1985–2023 show a trend misaligned with the expectations associated with the establishment of the NHS: there has been an increase in the share of households resorting to out-of-pocket health expenditure, in the incidence of health expenditure on household consumption, and in impoverishment. Most critically, however, the trend has been more unfavorable for the least affluent, those with low levels of education, and residents in the South and Centre of the Country.

The results point to a substantial failure of the NHS’s equity policies, both in terms of protecting economically weaker groups and in terms of empowering less educated segments of the population.

² Households that reported having reduced their healthcare expenditure and have zero out-of-pocket expenditure for those items

³ The trend was determined by considering the incidence of impoverishment obtained from the reconstructed version of the household expenditure survey and, for forgone expenditures, by applying the incidence observed in analyses conducted with the original historical series of the survey prior to the reconstruction

CHAPTER 6

International comparisons, national and regional resource allocation policies for prevention*Carrieri C.¹, d'Angela C.¹, Lo Giudice C.¹, Spandonaro F.²*

Healthcare systems are under financial pressure around the world: in 2019, before the Covid-19 pandemic, healthcare expenditure in the Countries of the Organisation for Economic Co-operation and Development (OECD) stood at 8.8% of Gross Domestic Product (GDP), a level that has remained roughly stable since 2013. Average expenditure reached 9.7% in 2021, but it decreased to 9.2% in 2022, with a slight recovery to 9.3% in 2024. Evidence of the financial pressure that healthcare systems put on the public sector in OECD Countries is the fact that healthcare expenditure already averages around 15% of public expenditure, making it difficult to achieve consistency between different budget priorities (OECD, 2025).

Considering this forecasting context, there is a risk that prevention may be “sacrificed” in the face of other priorities, despite its widespread recognition as essential for promoting health protection and, in the long term, as a functional investment in maintaining the sustainability of systems.

The Chapter analyses Italy's current state of investment in prevention, both by comparing it with other European Countries and by analysing the allocation of resources among the various functions at the national level and the resulting outcomes. The analysis ends with a first attempt to analyse regional prevention policies.

Based on international comparisons, while applying the necessary caution in interpreting data, it emerges that Italy allocates a significant share of the public resources it makes available for healthcare to

prevention: the incidence is 5.6% of total healthcare expenditure, i.e. 2.4% higher than the average for pre-1995 EU Countries³.

In absolute terms, however, investment remains significantly lower than the average for pre-1995 EU Countries: in terms of per capita expenditure, Italy ranks eighth (€-PPP 126.4), 9.4% below the average for pre-1995 EU Countries, although 224.9% above that of post-1995 EU Countries.

Citizens “supplement” public investment in prevention by allocating a portion of their directly borne healthcare expenditure, ranging from 13.4% in the Netherlands (a figure that also appears to be influenced by the particular institutional structure of healthcare in that Country) to rates below 1%. In Italy the share is 2%, or 1.7 percentage points (p.p.) below the average for pre-1995 EU Countries (3.7%) and 0.9 p.p. below the average for post-1995 EU Countries (2.9%)⁴.

It can be noted that in pre-1995 EU Countries, citizens' propensity to allocate resources to prevention is lower than the State's propensity (-0.4 per cent), while in post-1995 EU Countries, where public allocation is lower, private supplementation is higher (+0.7 per cent).

The trend analysis highlights the “exceptional” investment in prevention in 2020 and 2021, coinciding with the Covid-19 pandemic, but also the subsequent realignment to pre-pandemic levels.

In particular, Italy, which ranks at an intermediate level in European comparisons, increased public

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³ Reference is made to the Countries that signed the Corfu Treaty (which came into force on 1 January 1995), namely Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, and Sweden

⁴ Reference is made to the Member States that joined the European Union after 1 January 1995, namely Estonia, Latvia, Lithuania, Poland, the Czech Republic, Slovakia, Slovenia, and Hungary

expenditure during the pandemic, but to a lesser extent than the other Countries considered (excluding Spain).

After the pandemic, expenditure on prevention has regressed to pre-pandemic levels: this trend leads us to conclude that, although being considered a priority public investment, prevention does not actually appear to be so in practice.

At the national level, the cost of prevention borne by the National Health Service (NHS) is €6.2 billion, equal to €104.8 per capita, with a 3.1% average annual increase compared to 2019. The highest rate is recorded in the Molise Region (€160.8 per capita, with a 2.1% annual average increase) and the lowest one in Liguria (€85.9 per capita, with a 2.8% increase).

In terms of incidence, the cost borne by the NHS for prevention averages 4.3% of the NHS healthcare expenditure, with a 0.1% decrease compared to 2019. The highest incidence is recorded in the Molise Region (5.7%, up 0.3% per cent compared to 2019) and the lowest in Liguria (3.2%, down 0.04 per cent).

In terms of breakdown, the majority of resources (47.6%) goes to “Surveillance and Prevention of Infectious and Parasitic Diseases (including Vaccination Programs)”, with a 6.1% increase compared to 2019.

Expenditure related to vaccinations account for 75.2% (-9.2 per cent compared to 2019).

This is followed by “Veterinary Medicine” (18.5%), with a 0.9% decrease compared to 2019.

“Chronic Disease Surveillance and Prevention” ranks third (15.4%, down 0.9 per cent). 51.9% of this expenditure relates to cancer screening, up 4.5 per cent as against 2019.

The other items, which we summarize as “Public Health”, account for 38.9%, down 6.1 per cent compared to 2019. Within this aggregate, the items “Health and Safety Protection in Open and Confined Spaces” and “Survival, Prevention, and Protection of Health and Safety in the Workplace” prevail, accounting for 23.2% (-2.2 per cent).

Considering the national investment in (primary) prevention, an attempt has been made to evaluate

its outcomes using the data published by the OECD to compare it with other European Countries, in terms of levels of the main indicators representing health risk factors (and their variations over time), as well as adherence to the main primary prevention programs.

Despite the limited availability of internationally comparable indicators, Italy can be considered to be at an intermediate level in terms of addressing risk factors and adhering to public prevention programs. Unfortunately, however, the trend is often less favourable (if not worsening) than that recorded in other Countries, thus implying a relative decline in national Performance.

Moreover, improving the Performance of investment in prevention is linked to the available resources, but also to their use, and this falls within the Regions’ responsibility.

Unfortunately, to our knowledge, there is no routine and systematic survey of regional prevention policies. For this reason, we have attempted an initial assessment, starting with a desk analysis and supplemented by a request for information sent directly to the regional departments.

It should be recalled that prevention funding made available to the Regions for 2024 amounted to €6.3 billion, with a 4.4% increase over the previous year (a 1.9% average annual increase compared to 2014).

Looking ahead, the 2026-2028 Draft Budgetary Plan allocates additional resources for prevention, “obtained” by mandatorily allocating part of the expected increase in the National Health Requirements (FSN) (€486 million) to support cancer screening, vaccinations, and communication campaigns.

Considering that this amount accounts for nearly 7% of the resources ordinarily allocated to prevention, this should increase funding for the Essential Levels of Care (LEA) by approximately 0.3 per cent compared to the current level: it is worth recalling that the latter has been stagnant at 5% of the FSN for decades.

Its distribution is based on the unweighted population criterion, i.e. proportionally to the regional population.

In practice, the national healthcare expenditure

allocated to prevention is still more than 0.5% lower than the theoretical allocations, and also shows strong regional variability.

The lack of cogency in the constraint theoretically assigned to the Regions on the use of resources is related to the evidence that - although the main objectives of Prevention in Italy are set by the “National Prevention Plan 2020-2025” and are binding on all Regions - their turning into regional actions is filtered by the Regional Plans, which use different criteria. The analysis conducted and described in the Chapter highlights the complexity of criteria and the different quantitative constraints used at the regional level for the internal distribution of the resources targeted to prevention.

To avoid “wasting” funds, it would therefore be appropriate to revise the distribution criteria and their binding nature, moving beyond the current per capita quota criterion. This criterion, in fact, neglects the fact that nearly 40% of the prevention LEA refers to public health programmes (that we reasonably doubt can be directly proportional to the population). It also neglects the fact that the second largest component is veterinary medicine, with a share approaching 20%, and its specific characteristics are not fully reflected in the current national distribution criteria.

Ultimately, in the absence of a revision of resource governance, there is a risk that the alleged priority of prevention will remain confined to a fully “theoretical” level.

CHAPTER 7

The Evolution of Hospital Care

Carrieri C.¹, d'Angela D.²

In 2023 Italy was still the Country with the lowest rate of acute hospital admissions in Europe, with 93.3 hospitalisations per 1,000 inhabitants, significantly lower than the European Union's average. Despite this reduced propensity for hospitalization, the average length of stay is still relatively high (7.1 days), higher than in Countries such as Sweden, France, and Romania, where it is around 5.5–5.6 days. This phenomenon can be explained by the older demographic structure and greater selectivity in access to hospital care.

A ten-year analysis of the sector's dynamics and trends shows a structural decline in hospital demand: ordinary acute hospitalizations have fallen by 15.7%, while day hospitalizations have fallen by 27.9%. A similar trend can also be seen in rehabilitation and Long-Term Care settings, thus confirming an overall shift in the system towards fewer hospitalizations.

At the same time, there has been a reduction in the national bed capacity, with a 2.8% decrease over the last decade, reaching the current ratio of 3.3 beds per 1,000 inhabitants. The trends described above have led to an increase in the bed utilization rate, which in public facilities has reached 79.9% (+2.3 per cent)). However, there are still significant regional differences: some Regions have significantly reduced the number of beds (by up to 17.8%), while others have recorded slight increases (up to 2.2%). Utilization rates also show divergent trends, with an increase in the North and a decline in the South, suggesting different organizational approaches and management strategies between geograph-

ical areas.

On a national basis, there has been a general decline in hospitalization rates, equal to -21.8 admissions per 1,000 inhabitants, with a more marked contraction in the South (-28.4 per 1,000 inhabitants) and a more moderate one in the Northeast (-10.4 per 1,000 inhabitants). The acute hospitalization rate also decreased (-22.0 per 1,000 inhabitants), with regional variations ranging from -34.1 to -2.3 per 1,000 inhabitants.

With specific reference to the average length of stay, the trends diverge between medical and surgical Diagnosis Related Groups (DRGs): there has been an increase in medical DRGs and, conversely, a significant reduction in surgical DRGs. The decreases in the surgical sector probably reflect technological innovations, improved clinical practices, and more efficient organizational processes, while the lengthening of hospital stays in medical DRGs may be related to the increase in the average age of patients at admission.

From an economic viewpoint, the five-year period shows substantial stability in the weight of hospital admissions and specialist outpatient activities carried out in hospitals: the latter is probably affected by the residual post-pandemic effects, which continue to have an impact on the volumes of services provided.

Finally, we need to consider the gap between the costs attributed to hospitalisation in public facilities and the tariff remuneration recognised for them, which covers only 45.7% on average.

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CHAPTER 8

Residential care: regulatory developments for the care of the elderly people

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In light of demographic aging and the growing complexity of the social and healthcare needs of the elderly population, residential care for non-self-sufficient seniors is a fundamental component of welfare policies.

Nursing homes (RSA) are the main structured response of the system to ensure continuous care, safety, support in daily life, and protection of the quality of life for people who cannot be adequately cared for at home. They are part of the broader model of social and healthcare integration, established by Legislative Decree No. 502/1992 and Law No. 328/2000, which recognizes the complementarity between health and social interventions and entrusts the Regions with a decisive role in defining the structural, organizational, and qualitative standards of the facilities.

National regulatory developments have gradually outlined an increasingly complex system, geared towards personalizing care and improving the quality of services. Starting with the Prime Minister's Decree of 1989, which was the first to define the functions and requirements of RSAs, the legislation has expressly moved beyond the custodial model of care, promoting an approach based on multidimensional assessment and continuity of care. The 1994 guidelines introduced an innovative vision, focused on the recovery and maintenance of residual autonomy, and proposed the analysis of care needs as a tool for determining the adequacy of staffing levels based on the complexity of the residents' needs. The 1997 Presidential Decree introduced the requirement for an Individualized Care Plan (PAI), drawn up by a multidisciplinary team, which became the main

operational tool for managing and monitoring care pathways.

Law No. 328/2000 placed RSAs within the integrated social services system, and the Prime Minister's Decree of 2001 placed their activities within the scope of the Essential Levels of Care (LEA), as a highly integrated social and health service.

The State/Regions Agreements of 2012 and 2015 initiated an attempt to standardize accreditation requirements and criteria throughout the Country, while leaving ample autonomy to the Regions, with the aim of ensuring greater quality, safety, and transparency of services.

Finally, the most recent reforms - introduced by Ministerial Decree No. 77/2022, Law No. 33/2023, and Legislative Decree No. 29/2024 - have further strengthened the territorial vision of care, placing RSAs as intermediate structures in the service network, closely connected to the so-called Case della Comunità (CdC) (Community Homes) and home care services, introducing the Unified Multidimensional Assessment (VMU), and promoting flexible models such as Multiservice Residential Centres (CRM). At the same time, the Ministerial Decree of December 19, 2022, defined a national quality and safety assessment system based on uniform indicators for authorization and accreditation.

Despite regulatory developments, however, comparative analysis shows that significant differences remain between territories.

On a structural level, almost all Regions adopt uniform criteria: absence of architectural barriers; organization into units of 20-30 places; single or double rooms equipped with bathrooms and call sys-

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tems; common areas for socializing, rehabilitation, and entertainment activities; gardens and protected outdoor paths; facilities and installations that comply with safety standards; minimum technological equipment such as data networks and nurse call systems.

Within this shared framework, however, there are differences. Some Regions deviate from the minimum room size. The level of comfort required, the presence of rooms for specific activities (gym, cognitive stimulation, areas for relatives and family members), the requirement for private bathrooms, and the tolerance for pre-existing structures, also vary.

In terms of management, accreditation always has a limited duration (3-5 years) and requires continuous checks by the local health authorities (ASL/ATS) or regional technical bodies. Inspections can be routine or extraordinary, and failure to comply with requirements results in the suspension or revocation of accreditation.

The aspects related to internal organization appear to be more uniform: requirement for a multidisciplinary team (doctor, nurse, healthcare assistant (OSS), physiotherapist, educator, psychologist); presence of a healthcare manager and care coordinator; implementation of PAI and staff training and retraining with refresher courses, internal quality systems, periodic audits, and user satisfaction surveys.

The most problematic issue is staffing standards, which vary greatly between Regions: some use min-

utes of care per guest; others hours per module, and still others staff-to-bed ratios. These choices lead to very clear differences: daily nursing care, for example, ranges from a minimum of 6 minutes to a maximum of 72, while OSS care ranges from 27 to 147 minutes.

Such heterogeneity leads to radically different models of care and runs the risk of undermining territorial homogeneity in the care of non-self-sufficient elderly people.

In this regard, the overall picture that emerges is a plurality of regional models which, rather than outlining a coherent and consistent system, give shape to different ways of understanding and organizing residential care. This heterogeneity can lead to significant disparities among the elderly people admitted to nursing homes, as the quality of care provided still depends significantly on the Region in which they live. For this reason, it would be desirable to have a national intervention capable of establishing uniform minimum standards and homogeneous evaluation criteria, so as to enable the Regions to maintain their autonomy without undermining the overall fairness and equity of the system. Only through greater data transparency and a shared path of standardization will it be possible to ensure that all non-self-sufficient elderly people receive adequate levels of care that truly meet their needs, regardless of where they live.

CHAPTER 9

Outpatient specialist care

d'Angela C.¹

This Chapter analyses available evidence regarding activity and expenditure related to outpatient specialist care.

Available statistics is still lacking, both in terms of timely updating of activity data and the relationship between supply and population needs. The same holds true for the overall cost incurred for this segment of care, which is the second largest cost item for the NHS after hospital care.

The Chapter analyses supply, focusing on the level of aggregation within the various branches. It then analyses the demand for services met by the National Health Service (NHS); it also provides some insights into the progress of the process for realigning activity volumes following the reduction experienced with the Covid-19 pandemic.

Subsequently, in line with previous Reports, an estimate of the costs related to specialist care for the period 2013-2023 has been developed, both within the NHS and outside it, by also distinguishing between activities carried out by public and private facilities.

It finally focuses on the dynamics of costs incurred by public health agencies, by type of activity and type of facilities providing services (hospital, district, and accredited private facilities).

With specific reference to supply, in 2023 (the latest year for which data is available), the NHS had 9,121 outpatient facilities (including testing laboratories) nationwide, with a 1% decrease over the 2013-2023 decade.

59.7% of facilities were private, up 1.0% compared to 2013, and 82.8% were non-hospital-based (-0.6 per cent).

With a view to providing an assessment of the size of facilities, considering that a facility can provide services in different branches, the average number of services supplied per individual facility was determined - with regional detail - by branch: lab testing, diagnostics, and clinical services.

At the national level, laboratories provided an average of 311,693 services, thus remaining within the minimum values required by national legislation, despite the 14.2% growth recorded over the last decade.

With regard to diagnostics, again at the national level, in 2023 an average of 18,715 services were provided per outpatient facility, with a 7.5% decrease over the decade under consideration. A South-North gradient was confirmed: in the latter area, the average number of services per facility (25,487) was 50% higher than in the South and in Sicilia and Sardegna (12,441).

Clinical services (medical examinations) nationwide averaged 29,941 per facility, down 13.5% in the period between 2013 and 2023. In the Northwest, the average number of services per facility was 47,151, while in Sicilia and Sardegna it was 15,120 (about one third).

In 2023, nationwide, laboratory tests exceeded those provided in 2019 by 16.2%, before the reduction due to the Covid-19 pandemic.

All the other branches remained below 2019 levels: diagnostics by 3.2%, medical examinations by 8.9%, therapeutic services by 5.9%, and rehabilitation services by 10.4%. As to diagnostics, the gap compared to 2019 was largest in the South (-6.2%), followed by Central Italy (-4.9%) and the North

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(-0.9%), although the differences have narrowed over the past year.

Similarly, for medical examinations, the gap – albeit narrowing – remained at -7.3% in the North and -14.8% in the South: it decreased most in Central Italy (-5.0%).

For therapeutic services, the gaps compared to 2019 were -2.1% in the North, -4.7% in Central Italy, and -12.7% in the South.

The gap compared to 2019 appeared more homogeneous geographically: -7.3% in the South, -12.7% in the North, and -10.4% in Central Italy.

It should be noted, however, that the service packages (PAC², PACC³, MAC⁴, PRAC⁵), promoted in an ever-increasing number of Regions, are increasing (+8%) and can at least partially compensate for the aforementioned differentials.

In line with previous Reports, we have attempted to estimate the overall cost of outpatient specialist care, by also analysing its dynamics and trends over the 2013-2023 period.

In 2023 the cost of outpatient specialist care was estimated at €33.2 billion nationwide, e.g. the third-largest healthcare expenditure item after hospital care and pharmaceuticals (the second-largest if we also include dental services paid directly by households).

71.1% (€23.6 billion) of the cost was related to services included in the Essential Levels of Care (LEA) covered by the National Health Service (SSN); the remaining 28.9% (€9.6 billion) was related to services outside the National Health Service (SSN).

The financial costs borne by the National Health Service (SSN) amounted to €22.2 billion (67%); the remaining €11.0 billion (33%) remained the citizen's responsibility, of which 11.8% (€1.3 billion) was for co-payments for services provided within the NHS. The remaining 88.2% (€9.7 billion) regarded services provided "outside the National Health Service" (to which, as mentioned, another €9.4 billion could be

added for dentistry).

In terms of dynamics and trends, according to the Ministry of Health's LA models, the cost of specialist care borne by healthcare agencies increased overall by 34% compared to 2013 (a 3% average annual increase), with growth in the post-pandemic period (2021-2023) three times greater than that of the 2013-2019 period (a 4.2% average annual increase vs. 1.4%).

Looking at the phenomenon by type of service provider, 60.8% of the cost of outpatient specialist care referred to services provided by public facilities (€20.2 billion) and the remaining 39.2% (€13.0 billion) to services provided by private facilities.

During the decade under consideration, both NHS and non-NHS expenditure increased: the former by 2.3% and the latter by a 5% annual average.

In financial terms, expenditure on services covered by the NHS increased by a 2.6% annual average and that paid by citizens by 3.6%.

It is worth noting that in the 2013-2019 period (before the pandemic), there was an increase in both expenditure borne by the NHS and directly by citizens (a 1.5% and a 1.1% average annual increase, respectively). In the post-Covid-19 period (2021-2023), the latter (citizens' expenditure) grew much more: a 6.0% average annual increase versus 3.4% for the National Health Service.

On the production side, during the decade under consideration, both expenditure on services provided by public facilities and expenditure on services provided by private ones increased: a 2.5% and a 3.7% average annual increase, respectively. After the Covid-19 pandemic, expenditure increased more quickly for both categories, by 4.6% and 3.7%, respectively.

At the regional level, with an average per capita cost of €395.5 (+29.3% over the decade under consideration), the highest value, €434.0 per capita, was recorded in the Northwest, and the lowest,

² Pacchetto Ambulatoriale Complesso (Complex Outpatient Package)

³ Percorso Ambulatoriale Coordinato e Complesso (Complex Coordinated Outpatient Pathway)

⁴ Macro-attività Ambulatoriali Complesse (Complex Outpatient Care Activities)

⁵ Pacchetto Riabilitativo Ambulatoriale Complesso (Complex Outpatient Rehabilitation Package)

€343.5, in the South and in Sicilia and Sardegna. Over the decade under review, the increase affected all geographical areas, particularly the South, Sicilia and Sardegna (+61.3%), followed by Central Italy (+30.1%) and the Northeast (+22.0%).

The Northeast and Central Italy were the areas with the largest share of costs attributable to services provided in hospitals (78.4% and 75.5%, respectively), followed by the Northwest (69.0%) and the South, Sicilia and Sardegna (53.7%).

Analysing the cost borne by the NHS by type of activity, clinical activity accounted for 57.5%, followed by laboratory tests (23.4%) and imaging diagnostics (19.1%).

This breakdown has remained essentially unchanged over the last decade.

Regarding geographical distribution, there was relative homogeneity in the incidence of expenditure related to imaging diagnostics (from 15.6% in the Northeast to 22.9% in Central Italy). Conversely, there was significant geographic variation in laboratory tests and clinical activity: from 14.1% in the Northeast to 34.4% in the South, Sicilia and Sardegna for laboratory tests, and from 70.4% in the Northeast to 46.6% in the South, Sicilia and Sardegna for clinical activity.

Considering the type of facilities supplying services (hospitals and other types of facilities), we see that the increase in costs was equal in both cases during the period under review. Considering the type of activity, the cost for laboratory services increased above the national average, especially in

the non-hospital setting (+96% vs. a +18.3% annual average). For clinical and imaging services, the increase was the same for both settings.

While the increase in costs for imaging diagnostics and clinical services was the same in both settings, the breakdown of costs across the various activities in the hospital setting was comparable to the overall cost. In the non-hospital setting, the share of costs for imaging diagnostic services decreased, while that for laboratory tests increased.

Over the last five years, the breakdown of costs for the services provided in hospital and non-hospital settings has not changed. Considering the individual types of services, however, the cost of services in the non-hospital setting has increased for laboratory tests and decreased for imaging diagnostics.

In summary, specialist services are the third (or second) cost item for healthcare. Supply is still highly fragmented while, on the demand side, the recovery of specialist service levels - after the decline during the pandemic - is almost completed. The resulting increase in expenditure has been greater than that recorded in the pre-pandemic period and has seen a particular increase in the cost borne by citizens (double that borne by the National Health Service).

In terms of the breakdown of cost across the various types of activity, no significant changes were recorded between 2019 and 2023, except for a significant increase in the cost for laboratory tests performed in a non-hospital setting, presumably attributable to diagnostic activity related to Covid-19.

CHAPTER 10a

Pharmaceutical Care: Expenditure and Governance

Polistena B.¹, Spandonaro F.²

The Chapter is aimed to analyse both public and private expenditure on pharmaceuticals, as well as the evolution of its components, with the ultimate goal of supporting governance in the sector.

Total expenditure on pharmaceuticals reached €36.7 billion in 2024. The public share, which accounts for 72.3%, has increased by a 4.2% average per year over the last decade, with an acceleration (+4.6%) over the last five years. Expenditure by citizens (including co-payments, privately purchased “Class A” medicines, and “Class C” ones), amounting to €10.2 billion, has increased by a 2.2% average per year over the decade and by 2.8% over the last five years.

80.9% of pharmaceutical expenditure is potentially included in the Essential Levels of Care (LEA), for a value of €29.7 billion. The direct purchases by households of “Class A” drugs reimbursable by the National Health Service (NHS), as well as co-payment of expenses, reduce the public burden for the provision of LEAs by a total of -10.6%.

The actual cost for pharmaceuticals is further reduced (-6.8%) by the payback system.

Public pharmaceutical expenditure is growing faster than funding, resulting in an increase in its impact on the NHS budget, which is not even offset by the continuous increase in payback.

The recourse to private expenditure by households tends to vary at the regional level and is not always correlated with income levels, as we might expect. For example, although it tends to be higher in the North of the Country, private expenditure in the Autonomous Provinces of Trento and Bolzano is low-

er than in the South. Statistically, there is no correlation between per capita GDP and per capita private healthcare expenditure ($R^2=0.1$); however, there is a significant correlation between per capita GDP and expenditure on “Class A” drugs privately purchased ($R^2=0.6$) and between per capita GDP and co-payments ($R^2= 0.2$).

It therefore seems to be confirmed that, on the one hand, the availability of economic and financial means is significant in terms of households’ decision not to use the National Health Service (thereby reducing the pharmaceutical burden borne by the Regions) and, albeit to a lesser extent, in terms of regional “revenue” from citizens’ co-payments: the latter phenomenon can be explained by the exemption system.

Overall, pharmaceutical expenditure has grown more than total healthcare expenditure throughout the decade and more quickly over the last five-year period than in the previous one.

Consequently, it is clear that the current regulatory framework is no longer able to keep expenditure under control, thus requiring new governance of the sector. The latter, however, has so far been “static”, except for the increase in ceilings.

The 2024 Budget Law once again redetermined the ceilings at 8.5% for direct purchases (including medical gases) and 6.8% for contracted pharmaceutical expenditure.

Further changes to the pharmaceutical ceilings are planned for 2026 (+0.20% of the ceiling for direct purchases and 0.05 % of the ceiling for contracted expenditure).

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Under these conditions, in 2025, assuming a 2.0% increase in the National Healthcare Requirements (FSN) and an increase equal to that recorded between 2023 and 2024 (3.3%), contracted expenditure would continue to show a surplus of €664 million. If the same trend recorded between January and May 2025 were to continue, the ceiling would remain high and sufficient, with a surplus of approximately €308 million. We can reasonably assume that this will be even more so in 2026, considering the expected increase in the FSN (+6.8%) and the ceiling (+0.05%)

As regards expenditure on direct purchases by public entities, however, if we consider the same increase recorded between 2023 and 2024 (12.0%), the overexpenditure would reach €5.6 billion. If the same trend recorded in the first four months of 2025

were to continue, the overexpenditure would reach €4.1 billion. For 2026, considering the further increase expected in the FSN, the same increase in expenditure recorded between 2023 and 2024, and a 0.2% increase in the ceiling, the overexpenditure would be over €6.5 billion.

Considering the possibility of revising the pay-back system, the simulations carried out suggest that, in principle, a change would actually be possible while safeguarding the principle of cost containment: The restructuring of the ceilings for the various distribution channels would rebalance the system, making it more "equitable". In any case, there are many options and the choice ultimately depends on the pharmaceutical policy objectives that the regulatory authorities decide to set for themselves.

CHAPTER 10b

Expenditure on Medical Devices

d'Angela D.¹, Caforio G.²

The Chapter attempts to reconstruct the actual costs borne by the National Health Service (NHS) for medical devices (MDs), using available information sources.

Although MDs are a significant and growing cost for the NHS, and despite the availability of information flows dedicated to their monitoring, knowledge of the burden incurred for MDs still has significant limits, so much so that it is not possible to determine with certainty the total expenditure incurred.

The complexity arises, first and foremost, from the fact that MDs include a wide variety of goods, differentiated by intended use, technology, risk factors, and even by nature, as they can be single-use (prostheses, etc.) or multi-use (equipment, software, digital medicine tools, etc.).

Bearing these caveats in mind, the Chapter also analyses the overrun of the expenditure ceiling set by the legislation.

The Chapter ends with a proposed new governance for MDs, in light of the possibility of introducing a new Fund for Innovative MDs, as proposed in a recent legislative amendment relating to Draft Law No. 912/2025: the proposal aims to define the innovative nature of MDs and allow early access to them.

Starting with a expenditure analysis, the cost borne by the National Health Service for MDs in 2024, considering only the item officially monitored (CE-BA0210) for the purpose of checking compliance with the ceiling, stood at €8.3 billion, equal to €140.4 per capita (+5.7% compared to the previous year, with a 5.5% average annual increase over the last five years).

At the regional level, with a median value of €157.0, the minimum per capita value was €104.3 in Lazio, while the maximum one was €209.2 in Friuli Venezia Giulia.

72.6% of expenditure on medical devices consists of “medical devices”, 6.1% of “implantable medical devices”, and 21.3% of “in vitro diagnostic medical devices (IVD).”

The public facilities' expenditure on MDs accounts for 6.2% of the National Healthcare Requirements (FSN), with a 0,5% increase compared to 2019: with a 4.4% projected expenditure ceiling, this therefore leads to a 1.8% overexpenditure.

At the regional level, Friuli Venezia Giulia has the highest overexpenditure, with a 9.4% incidence on its Regional Healthcare Requirements (FSR); at the opposite extreme there is Lazio, which records a expenditure level equal to 4.7% of its FSR.

It should be noted that in 2022 - following the definition of the overexpenditure on MDs at the national level, estimated by the Health Ministry for the period 2015-2018 at €4.5 billion - the government allocated funds aimed at reducing the overexpenditure (and hence the payback), thus making the burden on facilities in the sector more sustainable. In practice, it was reduced to €522.0 million.

The payback reduction measures are therefore tantamount to an ex post rethinking of the current ceiling, estimating an increase ranging between 1.0 and 1.6 per cent. In other words, the ceiling has been repositioned ex post at a level ranging between 5.4% and 6.0% of the FSN: this level could therefore also be considered a benchmark for subsequent years,

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as it currently is the level considered “sustainable” for facilities.

Nevertheless, the actual cost of medical devices borne by the National Health Service is higher than the one subject to monitoring.

By supplementing the data presented with the cost borne by public facilities for prosthetic care and the rental of medical equipment, as well as with an estimate of the costs for the amortization of medical devices for repeated use, the estimated cost for medical devices increases by 37.3%, amounting to €11.1 billion (€188.1 per capita).

At the regional level, with a median value of €201.9, the minimum expenditure is €152.3 per capita in Lazio, while the maximum one is €249.2 in Friuli Venezia Giulia.

Even after supplementing the aforementioned data, there continues to be significant regional variability, which is largely attributable to the failure to record the costs of medical devices purchased by private facilities for activities and services provided on behalf of the National Health Service. This fact is corroborated by analysing the positive correlation between expenditure on medical devices and the share of admissions in public facilities out of total hospitalizations. For example, Friuli Venezia Giulia (recording the highest incidence of MD costs) had a share of ordinary admissions for surgeries performed in public facilities equal to 84.4% (year 2022), while in Lazio (having the lowest incidence) that share was less than half (42.0%).

When the cost borne by public facilities is added to the estimated cost incurred by private facilities, the cost borne by the NHS for MDs increases further, reaching per capita values in the range of €244.8–€275.5 (depending on the assumptions made in estimating the cost of services provided by accredited private facilities).

The figure, however, is still 13.6-23.3% lower than the European average (€319.0 according to Medtech Europe 2025).

Innovative Medical Devices: Proposed Governance

Recently, with amendment 7.06 to Decree Law No. 95/2025, the establishment of a National Fund for the purchase of innovative medical devices has been proposed. Specifically, the amendment provides for an assessment of innovativeness through a Health Technology Assessment (HTA) carried out by the National Agency for Regional Health Services (Agenas). Innovativeness would be valid for three years, after which the device could be re-examined; the expenditure for the purchase of innovative medical devices, within the limits of the Fund, would not add to the expenditure considered for the purpose of ascertaining any overrunning the ceiling.

The amendment also clarifies that the Fund's resources would be established on an annual basis according to the needs identified by the HTA assessments carried out by Agenas, with a 0.2% maximum limit of the FSN.

Although the amendment provides some guidance for defining innovation, to date - as far as we know - the criteria have not been defined operationally at the national level. There are some experiences at the regional level: for example, since 2022, Toscana has adopted three criteria for defining innovation, clearly inspired by those used by Agenzia italiana del farmaco (AIFA) for drugs.

However, defining criteria at the regional level has risks in terms of potential disparities in access, possible reimbursements (where applicable), and funding (access to the Fund).

The definition of national criteria for defining the innovative nature of a MD (although extremely difficult due to the heterogeneity of the devices themselves) is therefore an essential step in defining a new governance for MDs.

In order to face this complexity, in 2023 a group of researchers coordinated by C.R.E.A. Sanità developed a proposal to define the innovative nature of a MD (d'Angela et al., 2024). The proposal was supported by a consensus study conducted using the Delphi method, in which 93 Italian experts from different stakeholder groups participated and identi-

fied the criteria for defining an innovative MD. Those criteria were divided and differentiated by clinical, organizational, and economic impact.

With a view to making the tool operational, it should also be considered that the HTA, while being a fundamental tool for governing the system, has significant limits. First and foremost, it is very time-consuming, whereas the “useful life” of medical devices is often very short; furthermore, medical devices often lack “robust” evidence at the time of their market entry. Finally, clinical outcomes are often difficult to standardize and depend on the facilities’ organization and users’ experience.

For the reasons outlined above, in view of facilitating the introduction of innovative MDs into clinical practice, an early access process is proposed, matched by risk-sharing or cost-sharing mechanisms, inspired by those already used in the pharmaceutical sector, providing for discounts or reimbursements if the expected results are not achieved.

In practice, in case of MDs with potentially innovative characteristics, negotiations could be envisaged between Agenas and the manufacturing companies, aimed at preliminarily agreeing on endpoints that can be detected in clinical practice and defining a monitoring registry.

The use of registries, possibly supplemented with those that manufacturers are required to introduce for post-marketing surveillance, would allow for the practical implementation of risk-sharing agreements

based on evidence gathered in clinical practice.

In other words, the registries would allow information to be collected on the Population/Problem, Intervention, Comparison, Outcome (PICO) endpoints of efficacy, safety, and “Performance” defined by Agenas in the initial phase of the HTA, which are necessary for its complete development.

The proposed solution would allow immediate access to the Innovative MD Fund (early access), with the condition of a possible subsequent payback in the event of a “negative” outcome (non-achievement or partial achievement of the agreed endpoints).

In this context, the Joint Scientific Consultation (at the European and national levels) - provided for by EU Regulation No. 2021/2282, as from 2026, for class IIb and III MDs - could also be a tool for facilitating early access to MDs, thus being a “guide” for manufacturers for the “validation” of endpoints relating to innovativeness, which can also be used at national level.

Ultimately, there is an urgent need to define a governance framework for innovative medical devices, in light of the recent proposal to set up a fund dedicated to their purchase. This governance framework should define what innovation means for medical devices but, given their short life cycle, should shift the assessment *ex post*, providing for mechanisms to protect the National Health Service from financial risk and early access to innovation.

CHAPTER 11

Primary Care: Evolution of the Sector and CostsCappelli C.¹, Gentili G.², Ploner ME.³

In the current context of the National Health Service (NHS), primary care is undergoing a radical transformation that is redefining its role, structure, and future prospects. Traditionally identified with the activities of general practitioners (GPs) or paediatricians practicing under the National Health Service (PLS) in their own clinics, today it is called upon to become an integrated, multidisciplinary, and territorial system capable of ensuring continuity of care, proximity, and proactive ability in managing citizens' health. This change is supported by important regulatory initiatives, including the Prime Ministerial Decree of 2017, Ministerial Decree No. 77/2022, and investment by the National Recovery and Resilience Plan (PNRR), which are pushing towards a more proactive approach to medicine rather than a wait-and-see attitude, and towards a more decisive shift of care from hospitals to territorial facilities.

This vision of renewal, however, is countered by a number of structural problematic issues. The most obvious one regards the significant decline in local medical staff: between 2016 and 2024, the number of general practitioners (MMG) fell by 16%, with an almost similar decline among PLS. This decrease is not only due to retirements, but also to the lack of attractiveness of the specific training pathways and courses, which do not have the status of specialization and envisage lower salaries than university courses. The most immediate consequence of this staff shortage is an increase in the workload for each doctor: for GPs, the potential number of patients has risen from around 1,190 to over 1,400, with peaks in some Regions (such as Lombardia) exceeding the

contractual ceilings.

A similar trend can be observed for PLS, with workloads that in areas such as the Autonomous Province of Bolzano far exceed the 1,400 children aged under 14 who could theoretically be treated.

This increase in workloads, however, is not uniform across the Country. Italy has a marked North-South gradient: the Northern Regions, where the population is aging more quickly, have significantly higher workloads for both GPs and PLSs than the Centre and South. For GPs, for example, the potential workload in the North exceeds 1,520 patients, compared to around 1,300 in the South. A similar difference can also be seen in the care of the over-64 population, a population segment that is particularly relevant for primary care: Regions such as Friuli Venezia Giulia have average caseloads well above those of Sicilia and Calabria.

Besides staff shortages and geographical differences, the evolution of healthcare demand is also contributing to an increasingly complex picture. The number of contacts between patients and GPs increased steadily from the 2000s until the pandemic, which temporarily reversed the trend due to restrictions and the widespread adoption of remote medical consultations. This data shows that not only has the number of patients per GP increased, but also the intensity of care. Retrospective comparisons in fact show that, in order to maintain the same operating conditions as in 2003, in 2021 the NHS would have needed almost 50,000 GPs, approximately 10,000 more than the actual number of GPs. If contacts were considered as a proxy for the care burden, the esti-

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mated shortage would exceed 14,000.

In addition to demographic and organizational dynamics and trends, the situation is also influenced by expenditure levels dedicated to primary care. Although overall expenditure slightly increased between 2016 and 2024, it remains relatively stable, accounting for 5% of public healthcare expenditure. Furthermore, significant regional disparities exist: some Southern Regions have higher per capita expenditure, while Northern Regions such as Lombardia show lower expenditure levels despite having higher burdens. This asymmetry highlights the risk of a lack of consistency between available resources and actual territorial needs.

Overall, the emerging picture is the one of a system caught between two opposing forces. On the one hand, ambitious reforms aimed at creating a modern community-based healthcare system capable of addressing the complex needs of an increasingly aging population; on the other, a structural staffing crisis, regional disparities, and potential allocation inefficiencies that run the risk of slowing or undermining the implementation of these reforms. The real challenge for the NHS, therefore, is to invest not only in new facilities and technologies, but above all in healthcare professionals and their training, thus restoring the centrality of primary care and making it attractive to the new generations of doctors.

CHAPTER 12

Home Care Services: The Evolution of Beneficiaries and Costs

Ploner ME.¹

This Chapter analyses home care services, which essentially act as a “bridge” between the healthcare and social sectors. The study is based on the consideration that this form of care is fundamental for the treatment of chronic conditions associated with disabilities and becomes essential when rehabilitation or support services can be provided directly in patients’ homes.

The study examines the evolution of two types of services: Integrated Home Care (ADI), provided by the National Health Service (SSN), which aims to coordinate healthcare and social care interventions under the management of the Multidimensional Evaluation Units of the Local Health Unit (ASL), and Home Care Services (SAD), under the Municipalities’ jurisdiction. The latter can be provided in various ways, such as social aid and assistance (social home care), services integrated with healthcare (ADI with healthcare services), or through financial instruments such as vouchers and care allowances.

Estimates for 2024 indicate that approximately 1.7 million people benefited from ADI. Between 2019 and 2024, the number of users grew steadily at a 12.5% average annual rate, but a regional analysis shows significant differences: the Autonomous Province of Bolzano recorded a 83.0% average annual increase in cases - a trend in stark contrast to that of the Veneto Region, which saw an average annual decrease of nearly 1.0% over the same period.

Data confirms that ADI is a service primarily used by the elderly population, although its original mission was to support all people with disabilities, regardless of age. This is confirmed by the fact that 79.2% of users are aged 65 and over.

With a specific focus on the over-64 age group, the analysis shows that 9.4% of elderly people received ADI services in 2024, up 3.2 percent compared to 2019. Moreover, this share is gradually coming closer to the 10% benchmark set by the National Recovery and Resilience Plan (PNRR), which reads as follows: <<...to increase home care services so that at least 10% of the population over 65 is provided home care by mid-2026 (in line with European best practices)...>>

At the same time, however, a problematic trend emerges: despite a general increase in the number of people to whom care is provided, there has been a reduction in the average annual number of hours dedicated to each person over 64 years of age. Specifically, between 2019 and 2024, the hours of care per patient decreased by a 2.4% yearly average, decreasing from 15 to approximately 13.3 hours.

This evidence suggests that the PNRR may have facilitated an expansion of service coverage, thus managing to include more users, but at the cost of a reduction in the intensity of care provided.

Therefore, considering users over 64 years of age and care intensity, we can identify four groups of Regions that can be classified based on the intervention model followed: 1) providing less intensive care to more elderly people (Autonomous Province of Bolzano, Veneto, Friuli Venezia Giulia, Toscana, Marche, and Molise); 2) providing more intensive care to more elderly people (Valle d’Aosta, Emilia Romagna, Lazio, and Basilicata); 3) providing more intensive care to fewer elderly people (Umbria, Abruzzo, Campania, Puglia, Calabria, Sicilia, and Sardegna); 4) providing less intensive care to fewer elderly

¹ C.R.E.A. Sanità

people (Piemonte, Lombardia, and Liguria).

Even with specific reference to expenditure, the analyses made have shown the existence of profoundly different regional systems in terms of remuneration of providers involved in providing services: the difference in cost per hour of care between the Regions with the highest and those with the lowest expenditure is 21 times higher.

With specific reference to Home Care Services (SAD), estimates for 2023 indicated a beneficiary base of approximately 381,000 people, with a significant increase compared to 2018 (+17.7%).

When analysing service coverage for those over 64 years of age, estimates for the same year showed that 1.0% of elderly people had access to social home care (a rate that remained stable between 2018 and 2023); 0.6% benefited from Integrated Home Care (ADI) with healthcare services (+0.2% compared to 2018), and 0.4% received financial support in the form of vouchers, care allowances, or social-healthcare vouchers.

The combined activation of ADI for healthcare and SAD for social support should - in theory - "fully" address the needs of care-dependent elderly people. The 2023 data, however, showed that - nationwide - out of a total of 7,267,605 people over 75

years of age and 2,922,000 people with disabilities, only 266,090 elderly people actually received both ADI and some form of SAD, thus highlighting a severe lack of integration between the two services.

In summary, the study has highlighted a severe lack of integration between the healthcare and social service systems. The lack of actual connection between ADI and SAD leads to an "artificial" fragmentation of the needs of care-dependent elderly people that are divided between different institutional authorities.

This situation is confirmed by expenditure analysis: the ratio of funds allocated to SAD to those allocated to ADI indicates a tendency to view social services as marginal compared to healthcare. With a view to promoting a more substantial development of SAD and its full integration with ADI, we should probably identify a single entity responsible for coordination: efficiency reasons related to economies of scale would suggest identifying this entity within the ASL.

A clear conceptual distinction ultimately emerges: ADI cannot be considered a Long-Term Care (LTC) instrument for structural care-dependent conditions. It rather address primarily the needs of temporarily care-dependent people, such as patients recovering from hospitalization.

CHAPTER 13

Cash Benefits: The Evolution of Beneficiaries and Costs

Ploner ME.¹

This chapter examines the development of cash benefits: although they play a secondary role in the National Health Service (NHS), they are the primary intervention in the Long-Term Care (LTC) sector.

These interventions mostly consist of cash benefits with no restrictions on their use and no stringent eligibility requirements. Furthermore, they do not require provider accreditation.

Most of these cash benefits are managed by the National Social Security Institute (INPS): those analysed in this chapter are the attendance allowance, civil disability pensions, disability pensions, and paid leave pursuant to Law No. 104/1992.

The last decade (2015-2025) has seen a steady increase, averaging 1.7% annually, in the number of recipients of both attendance allowances and civil disability pensions: a phenomenon, however, largely attributable to the progressive aging of the population.

In contrast, recipients of disability pensions (disability benefits and allowances, disability pensions, and incapacity pensions prior to 1984) have declined by a 0.5% average annually.

Attendance allowances are currently granted to 16.2% of the over 64 nationwide. The distribution of this benefit, however, is highly uneven: while 11.9% of the over 64 in the North of Italy receive it, the percentage rises to 17.4% in Central Italy and reaches 21.8% in the South. Even for civil disability pensions, the national rate of which is 3.0% among those aged 18 to 64, the regional differences are marked, ranging from 1.7% in the North to 4.8% in the South. Disability pensions show a lower national incidence (0.9%), but follow the same North-South gradient

(from 0.7% in the North to 1.2% in the South and 1% in Central Italy).

The gender distribution of benefits shows a female predominance for attendance allowances and civil disability allowances (60.1% and 53.2%, respectively), due to the greater share of elderly women. In contrast, disability pensions have a clear male predominance (65.5%), thus reflecting the link of this benefit to the traditionally male-dominated labour world.

Law No. 104/1992, which grants people with disabilities and their families the opportunity to take paid leave from work, in addition to regular leaves, provides 6.1 million leaves to public sector employees (59% of whom are women).

In the private sector (2023 data) there are 628,794 leave recipients and 87.9% of them take leaves for assisting a family member. It is worth noting that those who take leaves for a family member are more frequently male, while women prevail among those who take leaves for themselves.

A total of €27.3 billion (57.9% of which for attendance allowances) is estimated to have been spent on the financial allowances under consideration, accounting for 21.1% of public health expenditure.

This chapter also analyses the expected cost. Our estimates ultimately show that the reform of the attendance allowance, pursuant to Enabling Act 33/2023 that provided for the introduction of the Single Benefit (PU), would cost between €4 and €5 billion, depending on the assumptions and solutions adopted, or over €10 billion if the amounts were revalued.

Since these are significant but not unattainable

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amounts, the decision not to implement this reform, actually abandoned in the implementing decrees, seems to suggest that the Country prioritizes other public expenditure items to the detriment of social

protection for care-dependent elderly people. This ultimately demonstrates a lack of political will to correct and solving the glaring inequalities currently characterizing the attendance allowance.

CHAPTER 14

The Life Sciences Industry in the Italian Economy

Caforio G.¹

The Life Sciences industry encompasses various segments: besides the well-known pharmaceuticals and medical devices (MD), which are the largest in terms of size, there are also continuously growing sectors such as Information and Communications Technology (ICT) products and logistics solutions. These sectors have the potential to play a leading role (directly and indirectly through their related activities) in the national economy.

It should be emphasized that the contribution provided by the industrial sector to the Country's economic growth is also significant in terms of indirect support to the sustainability of our National Health Service (NHS). The spin-off industries of health-care-related activities in Italy account for more than 10% of the National Gross Domestic Product (GDP), second only to the food and construction sectors (Confindustria, Position Paper "La prosperità dell'Italia passa dal settore salute" (The Health Sector is Crucial for Italy's Prosperity), 2020), and therefore, indirectly, is a significant source of funding for the NHS.

Given the lack of data to quantify the share of ICT and logistics attributable to healthcare, this Chapter focuses on the pharmaceutical and medical device sectors, analysing their trends and dynamics over the last decade.

Italy is one of the world's leading pharmaceutical production countries, accounting for 10.7% of European production (€52.0 billion in 2023, with a 6.6% average annual increase over the 2013-2023 period).

Overall, the Italian market in the two sectors mentioned is significant: the pharmaceutical market was worth €25.4 billion in 2023, with a 2.0% average an-

nual growth over the 2013-2023 period; the medical device market stood at €19.9 billion, with a 7.1% average annual increase over the 2014-2024 period.

With specific reference to foreign trade, the pharmaceutical sector's trade balance has changed direction over the last 10 years: in 2023, it stood at +€10.5 billion, compared to -€15.0 million in 2013. Conversely, the MD sector's balance is negative, at -€2.6 billion (with a 2.7% average annual decline over the 2014-2024 period).

Italy stands out in some segments, in particular, such as vaccines, which, over the last decade, have significantly contributed to the positive trade balance of pharmaceuticals due to the significant value of exports, and in vitro diagnostics, where it holds a 10% share of the European market.

Italy is the third-largest Country in Europe in terms of pharmaceutical industry workers (70,000, with a 1.2% average annual increase over the 2013-2023 period). In the medical device sector, it ranks second with 117,607 workers (a 9.7% average annual increase over the 2014-2024 period).

The following describes the results of an initial attempt to reconstruct production, value added, and employment for the Life Sciences sector, based on the findings of the Italian National Institute of Statistics (Istat) related to the Companies' Profit and Loss Accounts.

The Life Sciences sector includes companies and organizations involved in the production of health-care goods (drugs, medical devices, and their maintenance), their commercial distribution (wholesale, retail, and intermediation), and the provision of treatment, diagnosis, and healthcare services (hospital

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services, general practitioners, specialists, dentists, and healthcare professionals), as well as social services (residential and non-residential care).

In 2023 the medical industry (production side) employed 152,683 people² (3.9% of the total manufacturing sector): 64,799 in the pharmaceutical sector and 87,884 in the medical device sector. Production³ in the pharmaceutical industry amounts to €29.2 billion, while that in the medical device industry is €15.6 billion, for a total of €44.8 billion in the medical industry. Value added per hour worked in the pharmaceutical segment is €102.6, significantly higher than the manufacturing average (€55.4); in the medical device sector, it is €52.4, slightly below the average, compared to an overall value for the medical industry of €77.2.

The commercial sector employs 252,078 people; total production is €34.9 billion, with a value added per hour worked of €74.7.

Healthcare employs 638,899 people, for a production value of €56.1 billion and a value added per hour worked of €74.4.

In 2023 social assistance employed 311,872 people, generating total production of €14.1 billion and value added per hour worked of €20.0.

Aggregating the results of the segments con-

sidered, total employees of companies in the Life Sciences sector (as defined above) would amount to 1,355,522 (6.8% of all companies), with a production value of €149.9 billion and total value added of €75.1 billion (7.0%), equal to €58.1 per hour worked (+11.2% compared to the average value of €52.2 for all companies).

Over the 2008-2023 period, the Life Sciences sector recorded a 1.8% average annual increase in employment, higher than the average increase for companies (+0.3% annual average); also in terms of production and value added, increases were higher in the Life Sciences sector, averaging 2.8% per year versus 1.6% and 3.5% per year versus 2.8%, respectively.

Over the period considered, the Life Sciences sector's incidence on total companies increased by 1.5% in terms of employment, by 0.8% in terms of production, and by 0.7% in terms of value added.

The description of the sector's value, albeit based on a few essential indicators, ultimately demonstrates its strategic importance for the Italian economy and, more generally, for developed Countries, thus calling for greater attention to be paid to coordination between healthcare and industrial policies.

² Employment data not comparable with those previously reported

³ Production data not comparable with those previously reported

CHAPTER 15a

Mental Healthcare in Italy

d'Angela C.¹

Mental disorders are currently the leading cause of disability worldwide. It is estimated that one in 100 people dies by suicide, and 58% of these deaths occur before 50 years of age. People with serious mental illness (SMI) experience an average life expectancy reduction of 10 to 20 years compared to the general population, primarily due to often preventable physical conditions.

According to the Global Burden Disease Report 2025, out of 2.8 billion Disability Adjusted Life Years (DALYs), 0.2 billion (7.1%) are associated with mental health, ranking ninth among diseases by impact.

Looking ahead, the World Health Organization (WHO) estimates that by 2030, depression and other mental health disorders will be the most widespread illnesses globally.

This Chapter aims to assess the “state” of health-care for individuals with mental health disorders in Italy. The analysis focused on the trends and dynamics of organizational indicators from 2019 to 2023. Particular attention was paid to the post-Covid-19 pandemic trends, in order to assess the alignment of Italian healthcare supply with the growing needs highlighted in the latest WHO Report.

Furthermore, an analysis was conducted to assess regional Performance by relating an outcome measure to guaranteed care.

In quantitative terms, the number of patients treated by public and accredited private mental health services (local, residential, and semi-residential ones) is 169.5 per 100,000 inhabitants and increased by 0.8% between 2019 and 2023. Only Central and Southern Italy saw a reduction, averaging 2.4% and 0.4% annually, respectively. In the post-pandemic

period, the increase in patients was greater and affected all areas except Central Italy.

The number of young people (18-34 years of age), in particular, is increasing, currently accounting for 20% of the patients in treatment.

Depression and schizophrenia are the two most common disorders diagnosed (with rates of 31.9 cases per 10,000 inhabitants and 29.6 cases per 10,000 inhabitants, respectively), although they have seen a slight decline, compared to an increase in cases of personality and behavioural disorders.

In contrast to the increase in the take-on rate, there has been a 0.6% average annual reduction in staffing levels in the Mental Health Departments (DSM) of Local Health Units (ASL) and in accredited facilities, a decline that has slowed down in the post-pandemic period (with a 0.1% average annual reduction).

Considering only the staff working in the Mental Health Departments of the Local Health Units (49.3 workers per 100,000 inhabitants), there was a 0.3% increase in the period under consideration (2019-2023), but after 2021 a 1.1% annual average reduction was recorded in all Regions except the North-west (with a 1.5% annual average). Southern Italy recorded the greatest reduction (with a 4% annual average).

Relating the staff working in territorial public services to the users served, we obtain a national average of 2.6 workers per 100 users, with a significant difference between Regions, ranging from 2.9 in the Northeast to 1.9 in Southern Italy. The correlation between the users served by regional services and the staff working there is modest.

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Recourse to hospitalization (42.1 per 10,000 inhabitants) decreased by a 3% average annually in all Regions between 2019 and 2023, particularly in the Northwest and Southern Italy (with a 3.6% average). At the same time, there was a reduction in emergency room (ER) visits (a 2.9% average) and compulsory medical treatments (TSO) (a 7.6% average).

The average cost per patient treated in mental health departments is €1,795.8, up 5.7% annually compared to 2019. The average cost per patient treated in residential facilities is €48,134.0, up 3.8% annually, while the one relating to semi-residential structures is €19,860.2, also growing by a 12.7% annual average.

Overall, Mental Health accounts for 2.6% of the total costs incurred by the National Health Service (NHS) and 4.6% of expenditure on local healthcare,

as well as 2.8% of the National Health Requirements.

Relating the Mental Health index contained in Istat's BES Report (Report on Equitable and Sustainable Well-being), taken as a proxy for health outcomes, a positive correlation emerges with the take-on rate and the staffing rate.

In summary, the take-on rate by services is increasing (except in Central Italy), with a simultaneous increase in terms of staff, although this has been decreasing since the pandemic.

It should be noted, however, that the recent 2025 budget package, which allocates an €80 million fund for Mental Health, while having a limited impact on overall expenditure in the sector, should allow for an increase in care for an additional 20,000 users, thanks to a realignment of the staff/user ratio in the various Regions.

CHAPTER 15b

First Survey ANDOS-C.R.E.A. Sanità **Effetti collaterali* del cancro alla mammella** ***umani, organizzativi, economici e sociali**

Polistena B.¹, d'Angela C.¹, d'Angela C.², Spandonaro F.³

The survey “Effetti collaterali del cancro alla mammella *umani, organizzativi, economici e sociali” (“Side Effects* of Breast Cancer: *Human, Organizational, Economic, and Social” (has been jointly developed by Associazione Nazionale Donne Operate al Seno (ANDOS) and C.R.E.A. Sanità with the aim of highlighting the experience and expectations of women who have had to face breast cancer.*

The analysis stems from ANDOS’s awareness that the journey of a woman undergoing breast cancer surgery is long and complex, and also has a significant impact on her daily life.

Surgery is a limited phase: it may be preceded or followed by complex and invasive neoadjuvant or adjuvant therapies, radiotherapy, and, in many cases, even years of hormone treatment, until the patient’s conditions improve.

During the entire process, clinical and social “side effects” of varying impact occur, which risk significantly undermining the quality of life of patients, most of whom are still of working age.

C.R.E.A. Sanità has joined ANDOS’s proposal to collaborate to develop a survey for women members, because we have always believed in the importance

of placing the patient at the centre of the treatment process. This can only be achieved by understanding the “person” behind the “patient” - her reasons, wishes, feelings, and needs - and involving her as an active partner in the treatment.

Understanding the expectations and challenges women face ultimately enables us to improve healthcare services, promoting a social and healthcare system capable of integrating interventions and holistically treating both the disease and the person, regardless of her place of residence, age, or education level.

While referring to the ANDOS-C.R.E.A. Healthcare Report and the monograph for the main findings, the survey has ultimately confirmed and quantified the psychological, social, and economic impact of breast cancer. Breast cancer is still a highly impactful experience, and the National Health Service’s response to it can be significantly improved.

Having identified the characteristics, expectations, and difficulties of people affected by breast cancer provides essential knowledge to effectively support healthcare policies that truly put women at the centre of their treatment pathway.

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