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**The impact of the Covid-19 pandemic on the performance of the Italian and
British National Health services**

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References

Abstract

The goal of this research is to highlight how the pandemic affected the National Health systems of Italy and the United Kingdom. The two countries have been picked because their nationalized systems stem from different historical contexts that led also to the creation of different welfare systems, and of course. After all, both countries suffered heavily from the pandemic. This leads to different approaches and routes that national governments can take to tackle any kind of issue. Whether that will be by delegating to local communities or by simply trying to harmonize on a national level the general course of action, depends on the issue at hand.

Undoubtedly Covid-19 put most countries under serious stress. Italy's most recognizable characteristic during this health crisis has arguably been the role of its regions, and the disregard that some of them felt towards national decisions; this led to actions that hardly respected order from higher national and health authorities, but that, however, could have respected more the needs and possibilities of local governments. The UK has made itself famous for its policy of finding its own route and the lack of scrupulous tracing and the avoidance of lockdowns.

This work is structured into three main chapters, leading to the main conclusions and observations. The first chapter aims at explaining what performance means and how its definition can be bent to apply to different contexts. The second chapter focuses on the pandemic itself, considering data and statistics from the two case studies and then trying to find out whether such data could have been influenced by a different managerial approach of the nationalized healthcare systems. The third chapter pertains to the health systems themselves, considering their origins to give some context and highlighting their strengths and weaknesses, to begin with, to then apply the concepts from chapter one to this area and giving a possible forecast in the short, medium and long run. Lastly, the conclusion will summarize the findings and acknowledge possible new topics of research.

The sources consulted will mainly be previous work from different researchers, as well as international organizations providing the statistical data that I will need to conduct this analysis.

Chapter one

A theoretical analysis: performance

1.1 What does performance mean?

Performance is a term that has been widely used in recent years with regards to scholarly literature. It has garnered much attention due to a plethora of different events that have raised some controversy towards local, national, or international subjects. Its importance is significant when trying to assess the utility of a certain set of actions entailing policies or simply only decisions. As many of these actions have a direct impact on private citizens and companies, the need to understand and analyze the results of a certain task is extremely critical. In addition to this, when referring to national or local governments, performance is important, because, as a result, that can be generally defined as bad, will cost the citizens' money and trust, leading to discontent, and calling for malpractice and negligence. One of the most salient topics has been the Covid-19 pandemic, which, due to its high virulence, caught many governments off-guard. In the beginning, the amount of deaths and hospitalizations could have been excused by the surprise factor, not leaving hospitals enough time to adapt and turn national legislations into practice in order to tackle the issue itself. As time passed, however, governments had time to study not only the virus but also to discuss and reflect on the general course of action. This last point is especially by following other countries' approaches.

One crucial aspect to consider now is what kind of impact did the national governments leave on the national health systems of their respective countries, in this instance, I will focus on the Italian and the United Kingdom's cases. Performance then could be interpreted as how well something does an action or a set of actions. As we are dealing with institutions that lie directly under the governments' decisions it is easily seen how they could be restricted in what they can and will do. First, however, the definition begs another question. Reaching research, "Psychological Management of individual performance" by Sabine Sonnentag (2002) delves into the concept of performance, how it can be theorized, and much more. The book puts emphasis on the subjective aspect of performance, as it plays an important role for the individual. Accomplishing tasks and performing at a high level can be a source of satisfaction, pride, and feelings of mastery, low performance on the other hand, and not being able to achieve

goals might translate as dissatisfaction or personal failure even. Whenever performance is recognized by other people within the organization, it may lead to financial compensation or other benefits, including promotions. Therefore, performance can be interpreted as one of the prerequisites for future career development and success in the labour market. High performers generally get promoted more easily within an organization and generally have better career opportunities than low performers (VanScotter, Motowidlo & Cross, 2000). Authors generally agree on the fact that when conceptualizing performance, there needs to be a differentiation between an action aspect and an outcome aspect of performance (Campbell, 1990; Campbell, McCloy, Oppler & Sager, 1993). The behavioral aspect encompasses practical behaviours, such as assembling components, selling products, teaching or performing surgeries. Certainly, not every behaviour comes under the spectrum of performance, but all behaviours within the organization are inside of it, for that behaviour is remunerated and asked for specifically by the organization to the employee. Therefore, performance in this case is not defined by the action but by judgemental and evaluative processes (Ilgen & Schneider, 1991). And as one of the reasons to consider performance is to track and record it, only measurable behaviours can constitute performance (Campbell et al., 1993).

The outcome aspect refers to the consequences of the individual's behaviour. The examples put forth beforehand then will result in outcomes such as a number of full products assembled, children taught to, or a number of surgeries completed. Outcome aspects of performance depend on factors other than the individual's behaviour as well, these can be categorized as external factors. In the case of teaching then, one professor might express proper behavioural aptitude to provide a good performance with regards to explaining a certain subject, but some children might still find it challenging and therefore struggle with good enough marks. In this case, then, behavioural aspects of performance and outcome aspects do not overlap, as during the mediation of the two aspects something else came into play (Trevor C. Brown et al; 2019).

It would be difficult to describe the action aspect of performance without any references to the outcome aspect. As not every action but only actions relevant to the organization constitute performance, there need to be criteria for evaluating the degree to which an individual's performance meets the organizational goals. The criteria used to evaluate performance need to be conceptualized around both aspects of performance, this means that the emphasis on performance pertaining to an action only is simply not sufficient.

A perhaps more practical definition of performance is given by Borman and Motowidlo (1993), distinguishing between task and contextual performance. Task performance itself is a multi-dimensional concept. Among the eight performance components proposed by Campbell in 1990, there are five factors which refer to task performance, which are: job-specific task proficiency, non-job-specific task proficiency, written and oral communication proficiency, supervision (when mentioning a leadership or supervisory position), and management. Each

one of these factors may then comprise subdimensions such as planning, guiding and motivating subordinates, coaching and communication (Borman & Brush, 1993).

Contextual performance on a very general level is divided into two different performances: behaviours aiming at the smooth functioning of the organization as it is currently, and proactive behaviours aimed at changing and improving work procedures and organizational processes. Other contextual behaviours have to do with national culture, including organizational citizenship behaviour (Organ, 1998), as well as some aspects of organizational spontaneity (helping coworkers or protecting the organization – Georgie & Brief, 1992), and of prosocial organizational behaviour. This means that contextual performance is not a single set of uniform behaviours, but is, as much as task performance, another multi-dimensional concept.

What also needs to be addressed is the fact that individual performance is not stable over time, as variability reflects learning processes and other long-term changes, and temporary changes in performance. As per Avolio, Waldman & McDaniel (1990) it has been shown how individual performance changes as a result of learning, it initially increases with the increase of time spent in a specific job, due to the increase in proficiency and comfort with the tools, but then reaches a plateau. Other than this, in the beginning stages, performance recorder during the early stages of skill acquisition works in tune with the availability of declarative knowledge and the optimal allocation of limited attentional resources, whereas later what plays a more important role has to do with passive skills, such as automatic processing and procedural knowledge. This last phase has been named the “maintenance stage” by Murphy (1989), indicating a situation in which, compared to the transitional phase (when the worker is still at the beginning of their experience), cognitive abilities become less prominent as the amount to learn has diminished, and what plays an important factor are other dispositional factors, such as motivation and interests. Motivation, as I will show later, plays an important role when managing performance especially.

The short-term variability in performance is due to changes in the individual’s psycho-physiological state (Kahneman, 1973). These changes may be caused by different reasons pertaining to work-life balance, but they do not necessarily result in a performance decrease. Individuals are in fact able to compensate for fatigue by either switching to different strategies or tasks, or by increasing effort (Hockey, 1997).

1.2 What defines good and bad performance?

To first understand what makes any perceived performance good, or bad, we need to understand how performance can be measured.

Performance measurement has become a key component in any government: the United States published the Government Performance and Results Act (GPRA) in 1993, followed then by Canada, Australia and New Zealand, with then Western Europe joining (Halachmi, A. 2002). The sudden rise in interest for this matter has

many explanations, but the most notable ones are concerning accountancy, the desire for the government to be more transparent and hold itself more accountable, the increase of communication between governments and different policies enacted that led to a more thorough confrontation of results and ways to tackle certain issues, and simply the government's aim to provide better services.

Halachmi, A. (2002) explained more thoughtfully as follows:

- 1- A need to review more carefully the allocation of resources due to the inability of many governments to generate new and additional revenues to underwrite their various operations;
- 2- Demands by a better-educated public for information about the use of taxes in the aftermath of scandals concerning waste and corruption;
- 3- the world's evolution into a global village where a report about an alleged practice in one place generates media reports, editorials, and eventually public opinion in favour of imitating the practice;
- 4- the desire of legislatures to reestablish their relevance and credibility after having failed to provide either oversight or solutions to serious social issues.

It is also important to note the link between tracking performance and accountability. "When performance measurement is introduced to boost accountability, managers and their subordinates have disincentives to deviate from approved plans, even when such deviation is likely to be in the public interest" (Halachmi, A. 2002). This creates a plethora of new issues then that are pertaining to performance itself, as tracking it, is what is potentially not enabling it to be as functional as it could be. Deviating from the budget that was given initially leads to more paperwork needed to document and justify such practices, thus, removing the power and freedom of initiative that the employees themselves have. This then creates a very common situation which is simply, the rigidity of the bureaucratic system and the removal of strategic thinking. Other issues concern the deviation of plans throughout the year, that however need to still follow the original blueprint that was given to employees and employers, creating a dysfunctional environment that is prone to stagnancy.

Halachmi, A. (2002) shows how measures of performance at the individual level might affect performance at the organizational level, by creating three categories. Each one shows a corresponding management strategy. The first one is remediation, its popular view is that "best practices" exist, and that workers are generally benevolent. In this scenario tracking and reviewing performance is key to understanding first the best practices themselves, but also the best workers who are either implementing them or devising them. Alternatively, it is also needed to show its counterpart, the worst practices and the worst workers. As workers are generally acting in good faith, a session of tutoring and mentoring will be enough to keep them in check and generally increase overall performance. No additional incentives are needed as the workers only need information and training. The second way is Selection. In this case, individual performance is viewed as

immutable for the most part, with some people being outstanding to begin with, while some others perform badly. The good workers will be promoted, and the bad workers will be fired immediately. This view is very straightforward and points to efficiency as much as possible. The third view is Incentives. This view sees workers' performance as malleable, but workers need incentives to keep up with the demand for a higher performance rate. A high level of performance is generally accompanied by more effort and more time spent at work when compared to underperforming actors. Workers will obviously perform better when promised incentives for their additional work, creating a net profit for them. The incentives may be different depending on the management strategy and context, but they do take several forms. The easiest way to solicit to do more work is a salary increase, or simply put, additional pay if we're able to distinguish the output into units. Less direct incentives include faster promotions, which then lead to better pay, whereas negative direct incentives are slower promotion or dismissal.

Performance under this view can be distinguished into various levels: inputs, outputs, and social benefits and costs (tying itself with the public and their perception of the public actor taken into consideration). When talking about public actors however using such classifications proves to be difficult as for the most part they are dictated by political compromises, including different goals and actors to satisfy. This of course makes it hard to identify the best course of action, identifying where on the scale workers place themselves, and the incentives to put in place. Nonetheless having a clear path towards a set goal is crucial for implementing performance-based management systems, this topic will be taken into consideration again by Blackman et al., (2015).

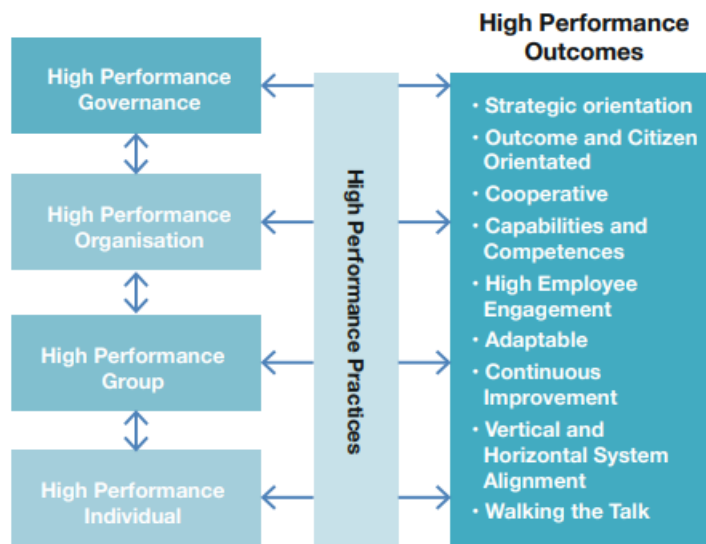
Being able to differentiate "good" from "bad" performance, also entails necessarily the need to define how a performance management system should work, and most importantly how ideally it should be categorized.

Blackman et al., (2015) aimed their work towards performance-based management systems, however, they reason around the belief that these kind of systems could be reoriented across individual, group, organization and system levels rather than following a more typical focus on underperformance. This is simply because the term performance management has received a pejorative connotation due to the effect it has on people, giving costs instead of opportunities; this leads to higher levels of anxiety in both employees and managers (Kahneman and Tversky; 1979, Alford and O'Flynn; 2012, de Vos et al.; 2003). However, it has also been found that the implementation of the system itself has proven itself to be critical. Most employees rate the importance of the link between performance and feedback, which would then make it obvious that a solid feedback system would prove beneficial and would need to be implemented. However, Blackman et al., (2015) also found that the majority of employees feel that any form of performance feedback over the annual performance management cycle simply will not improve their performance. Adding to that, most employers also express their confidence regarding their skills when evaluating their

employees' performance., while also not having enough time to assess it properly Blackman et al., (2015).

Blackman et al., (2015) found that most of the literature focused on the individual, with organizational performance being considered as a secondary concern. However, putting blame on the individual only might easily hide other issues inside the organization we deal with, as there could be multiple gaps above the individuals that make it difficult to reach certain goals. Therefore, they decided to reconceptualize performance management as a four-tier model, with Human resources assuming a key role to achieve high-performance outcomes at each tier. (Figure 1)

“Achieving High performance outcomes through four levels of performance.”



Source: Blackman et al. (2015).

Figure 1.

The first level is individuals, being the cornerstone of every organization, they have also been the focus of scholarly literature in evaluating performance, however, many factors can play concurrently, as already mentioned, hijacking the process.

The second level is based on the tight link between the importance of teams and the relationship between rewards and team outcomes. Groups also serve as mediators between the individual and the organization.

On the third level, the focus is on the organization. As posed by Blackman et al., (2015), in the literature there are key outcomes that can be identified with high-performing organisations (Blackman et al. 2012). The performance management system needs to be designed to enable the alignment of individuals with

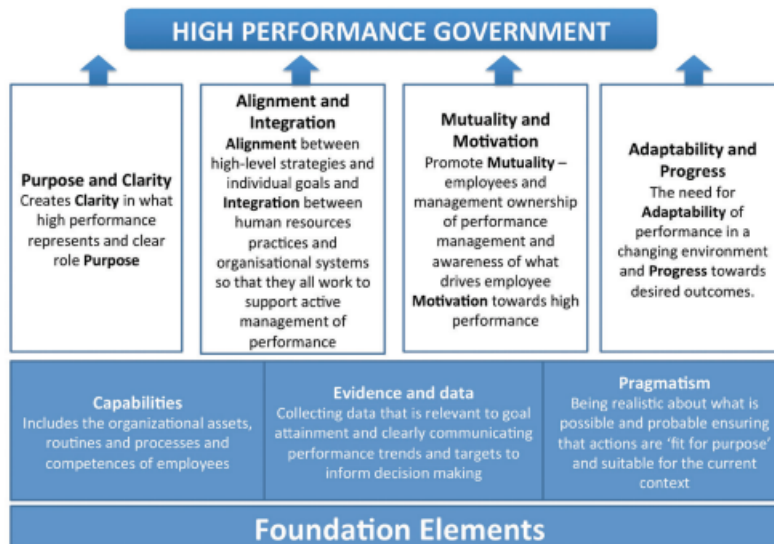
organizational goals to achieve these goals.

The fourth level, completely new to the literature, reflects on high-performance governance. Here the Dawkins Report played an impactful role in establishing how the change in governance structure had a huge impact on all the universities as it changed the system they operated on. The governance structure aims at creating a system-wide plan which roots itself around the whole system, if poor results are present at a base level, the systemic plan needs to be addressed. It is notable then how this easily applies to the public sector as well.

The definition of high performance has proven itself to be puzzling, as most employees and employers simply wouldn't be able to give one (Blackman et al., 2015). This is extremely important as a lack of clarity explains also the lack of proper performance measurement, which impedes setting proper expectations and the subsequent ratings. This of course then creates a scenario in which people do not know what to do to get a positive rating, nor do they not know why they have been evaluated a set result instead of another one. Blackman et al., (2015) found that this lack of clarity showed not only in individuals but in groups alike, where only generic performance agreements were put in place.

For this reason, Blackman et al., (2015) mention how more clarity is needed, and that can be given through a different organizational model, summarized in Figure 2:

“A framework for high performance.”



Source: Blackman et al. (2015).

Figure 2.

In this case, the focus is on the implementation and not on the process, of the system itself; the focus of both employees and employers can finally be set on

achieving the outcome of high performance. The framework is divided into four principles and three foundation elements. The four principles reflect what the framework needs to achieve, whereas the three foundation elements are critical factors that make it possible to implement the principles.

Clarity of purpose is self-explanatory: each organization, group, and employee need to have both role and goal clarity. Alignment and integration focus on giving a reason behind each action undertaken by every actor in the organization.

Underlining the reason as to why something is being done, the first sector is also being met. Mutuality and motivation are linked to the passive role perceived by employees towards the management policy; the general consensus is that performance management is something that is being done to them. This inhibits cohesion and exacerbates animosity towards the employers. Yet the ability to motivate performance requires a positive attitude from both employers and employees. Mutuality means that there is a shared view that the outcomes will be of benefit to both the individual and the organization, this link must show a shared understanding of the needs and wants of the organization and the employee.

Motivation, as listed by Klerman et al., (2005) can have different methods, with some being more effective than others.

Adaptability and progress fights against the stagnancy shown by Klerman et al., (2005). The fear of undertaking new bureaucratic tasks overcomes the possible gains from a more efficient and better-suited action.

As for the foundation elements, capabilities indicate the need for proper training and certifications, especially on the managerial side. By ensuring employees that managers and leaders have adequate competencies, organisations can facilitate self-efficacy and can reach their end goals. Leveraging resources, systems and processes is key to supporting high performance.

Evidence and data require enough goal clarity to identify specific targets.

Evidence also suggests that individuals will work to achieve whatever goal is set (Blackman 2006; Knight 1999; Norreklit et al. 2008).

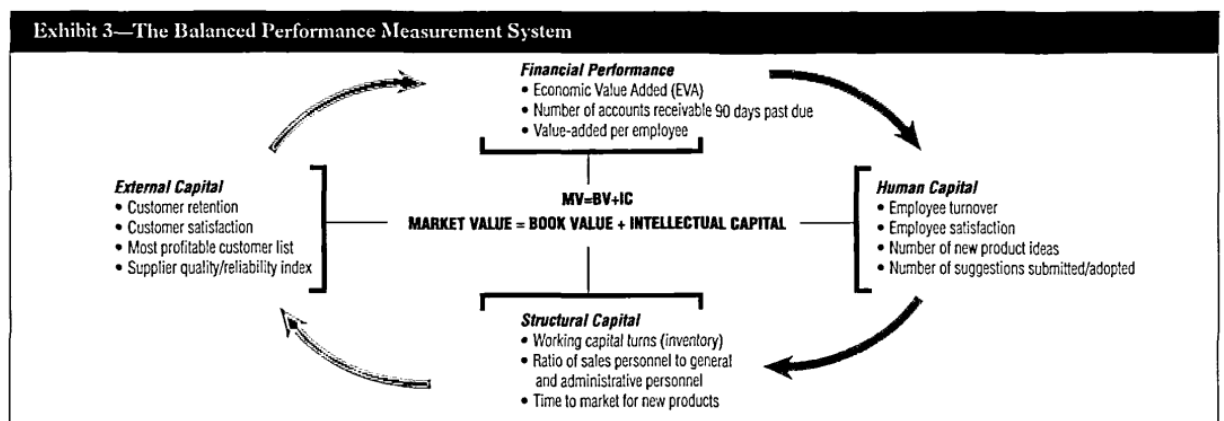
Knight in particular, in “Leveraging intellectual capital requires a company to become a knowledge-based organization and to revise its performance measures accordingly” (1999) mentions the conflict between traditional and newer perspectives on performance measurement. In most cases, managers analyze their company’s level of success through different metrics, such as cost, return on investment and book values. These values however can be used only in somewhat stable and therefore predictable environments. In the author’s own words “in a fast-moving environment, they equate to steering a car forward while looking into the rear-view mirror.” This indicates how these measures, however effective they may be, only show the past. In newer systems, the most treasured asset is intellectual capital, and leveraging it requires a company to become a knowledge-based organization and to revise performance measurements accordingly.

Simplifying the article, Knight creates different levels to adequately review performance. The first level is named “market value”, mentioning the total value of any business in the stock market. The market value is given by the stock price

times the number of shares; as these shares are bought by investors, a subjective and psychological belief must come into play when assessing the price of a singular stock. This “invisible spreadsheet” takes into consideration the hope for the business to thrive in the future, and the main variable that can determine such a possibility is intellectual capital. This marks the basis for the understanding of the new performance management system. The second level mentions “virtuous cycles”, naming four factors that combine to create the cycle that leads to increased market value. As the stress is now put on intellectual capital, three of these are linked to the employees themselves, and not the financial success of the company. Human capital, being the first one, manifests itself as the expertise and skills of people, it increases when the company hires, trains and retains the best people. Stress is put on finding the right people from the beginning, to then having to spend as little as possible to teach them about their mistakes. The second factor, structural capital, consists of the strategies, internal networks, databases, files and legal rights that an organization may possess. This improves when organizations invest in technology and develop processes. The third factor is external capital, it defines an organization’s relationships with external subjects, such as with customers (customer capital), suppliers (supplier capital), partners (alliance capital) and so forth. As these relationships depend on other actors, they cannot be controlled, only managed. The fourth factor is financial performance, it involves the level of profitability and growth that an organization achieves. By investing in each factor and deliberately leveraging the factors’ virtuous relationship, managers improve their competitive position and most importantly, performance.

The third level entails performance measurement, and is explained in Figure 3:

“The Balanced Performance Measurement System.”



Source: Knight (1999).

Figure 3.

As seen, each level plays an important role and influences the other levels as well. Of course, such a program is not necessarily meant to be followed rigidly, in fact, Knight also mentions other strategic management tools that come into play when flexibility is needed (short-term and long-term goals, internal and external factors, leading and lagging indicators).

It is also important to note how the author proved himself to represent the future of performance management accurately. “Consulting, high-tech, and pharmaceutical firms have surfaced as the leader in knowledge-based organizations. But as the new economy evolves, every organization will realize the necessity of adopting knowledge management as a strategic initiative...”, highlighting the need to utilize intellectual capital in a way that lets companies gain as much advantage as possible, and not treating it as physical capital.

The choice of evidence is critical for achieving goals especially. This however poses a doubt still, as often what is measured is what is measurable, not necessarily what needs to be measured. This entails the need to have enough foresight to imagine what high performance will look like and what evidence will conduct the organization towards it.

Pragmatism puts stress on the importance of being realistic about what is happening and what is achievable with the resources available. Setting expectations too high will lead to employees not being able to reach any goal due to poor management, leading to performance anxiety and overly harsh criticism.

Expanding on the importance of goal setting and goal alignment, multiple sources (McCracken & Wallace, 2000) highlight the need to ensure optimal alignment between individual employee or workgroup goals and those of the organization to ensure long-term success. Performance management is a significant predictor of firm performance whenever effectively linked to strategic outcomes (Cravens, Oliver & Stewart, 2010; Lee, Lee & Wu, 2010; Nankervis & Compton, 2006). Once effective performance has been defined at the individual, team, and organizational levels, organizational members need to participate in the evaluation and review of their performance (Kinicki et al., 2013; (4)). In light of Brown et al., (2018)’s research, most papers examined this area across different main themes.

The first one is format. Performance management has a rich history of investigating how it should be designed and formatted. Past research examined the usage of behavioural, personality/trait, and outcome formats (Smith & Kendall, 1963; Wiersma & Latham, 1986). There is some interest among researchers concerning the merits of traditional format issues linked to behavioural measures of performance, the authors Brown et al., (2018) also observed research designed to understand some of the newer Performance Management formats such as competency-based evaluation (Catano, Darr & Campbell, 2007; Cheng, Dainty & Moore, 2005) and the balanced scorecard. Other formal issues discussed included comparative/noncomparative appraisal practices in four articles, forced distribution ratings and others examining the use of online or electronic forms of Performance assessment.

Giving frequent feedback is also a key element. Detailed, constructive, and explicit feedback on goal progress combined with guidance for improvement makes a great motivator (Latham & Locke, 2006). An effective Performance management system should always strive to give effective and clear feedback, thus also recalling Blackman et al., (2015).

Feedback sources, the third factor, are linked to those who provide performance feedback or ratings. (Brown et al., (2018) found that the norm has long been that supervisors assign work to individual employees, and manage it as well. Therefore it is the manager's responsibility to construct feedback and rate the employees, with the conjoined help of the human resources department's coaching. However, what has also been noted is that, due to the prevalence of more consistent group-based work, there has been an increased focus on non-supervisory ratings of performance. Part of the articles researched have found different origins of these feedbacks, exploring self, peer, manager and subordinate ratings.

Different other articles also discussed the topic of "rater training", the next aspect of this discussion. This is meant to prime Performance management raters to give less biased ratings. Rater training can and will improve rating accuracy (Roch et al, 2012).

One important aspect to consider is the reaction of employees towards Performance management systems. An aspect that has however often been overlooked by researchers (Krats & Brown, 2013).

Krats & Brown in 2013 explained the reaction of unionized employees to the introduction of a goal-based performance appraisal system. The main factors that were considered for such reactions were appraisal satisfaction, fairness, goal setting, the developmental purpose of the appraisal system, and job satisfaction. Appraisal satisfaction is important due to its positive relationship with productivity, motivation and commitment (Cawley et al., 1998), and it has been typically conceptualized in three ways: satisfaction with the appraisal interview, satisfaction with the appraisal system, and satisfaction with performance ratings. Satisfaction with the appraisal process in particular is significantly related to satisfaction with the appraisal interview (Landy et al., 1978; Dipboye and de Pontbriand, 1981). In addition to this, It has been found that employees who received information about the new performance appraisal system in advance were more satisfied with the quality of the performance appraisal sessions than those who had not been so informed (Steensma and Otto; 2000). Greller's research in 1978 assessed employee satisfaction with the appraisal interview. In particular, he examined different constructs (utility, satisfaction, anxiety and derogation) and found that a sense of ownership was strongly related to workers' reactions to and satisfaction with the appraisal.

The second aspect mentions perceived purpose. In this case, It Is crucial for the organization to be fully transparent, as whenever employees believe that the purpose of performance appraisal differs from the stated purpose, their attitudes towards the system may be negative.

Linked to transparency is Appraisal fairness. Research concerning employee

perception of fairness in performance appraisal has often examined the elements of procedural and distributive justice. The literature has found that both factors were related to performance appraisal satisfaction and that the relationship between procedural justice and appraisal satisfaction was significant when a developmental focus variable was included in the model. Therefore, employee satisfaction with appraisals is impacted by the perceived fairness of the system. Goal setting is also hypothesized as being positively correlated with performance appraisal satisfaction, with different sources confirming such a belief. The last aspect to consider is job satisfaction, which is thought in the aforementioned research to be positively correlated with performance appraisal satisfaction. Job satisfaction examines different variables such as pay, benefits, promotions, supervision, work itself, co-workers and working conditions. Also, some researchers have examined the relationship between performance appraisal satisfaction and job satisfaction. Studies involving medical technicians, municipal employees and retail workers have found a positive relationship between appraisal satisfaction and job satisfaction. As for the results of the study, they highlight the importance of a developmental focus in performance appraisal for positive employee reactions. The study also confirmed past findings concerning the relationship between performance appraisal satisfaction, and perceptions of appraisal fairness, goal setting and job satisfaction.

From Brown et al., (2018)'s work, it has been established that most studies suggest a clear link between positive employee reactions and performance management outcomes whenever the system is perceived as fair and employee-centred. It is fundamental to ensure that performance management systems are effective in terms of being perceived as leading to fair and equitable outcomes for employees.

Diving deeper into the same research, what also plays an important role is the context around each performance management system. This of course needs to be considered for the scope of this essay as a whole. Most of the research analysed pertained to themes relating to national culture, organizational culture, and environmental factors.

National culture plays often an important role, the main sources found show relationships between Chinese and US firms, the relationships between performance management of the employees working in higher education, and the role of leadership in the USA, France, and India.

In "Exploring the Impact of National Culture on Performance measurement" by Ihssan M. Jwijati and Umit S. Bititci (2014) the lens was put more into cross-cultural management, applied to the international context as different organizations often have to expand globally. In fact, due to advances in ICT technologies, it is easy to see how organizations have to develop in different cultural settings, as well as networks of smaller organisations collaborating in global networks (Bititci et al., 2011), in addition to this, with the increasing impact of the emergent markets, organizations' need to conduct and manage businesses in other countries is often needed. This then makes it necessary to

tailor the Performance management system to the individual culture at hand. Even though not directly applicable to this dissertation's main topic, it is still interesting to provide insights into the roles that different cultures play into the development of performance and its measurement and management.

In the paper, it is accepted that traditionally measuring performance in organizations used to be achieved by monitoring financial performance only, highlighting the same view that (4) presented already. However effective such a way of measuring performance may have been, it is now simply not applicable anymore (Johnson & Kaplan, 1987). The implementation of performance measurement systems had however high failure rate according to Neely and Bourne (2000), which lead the scholars to discover different factors that inhibit its effective use. Among other factors, the one that will be considered is culture. Culture is one of the important drivers of successful performance measurement systems implementation according to Bourne et al. (2000).

National culture has been defined as "the collective programming of the mind which distinguishes the members of one human group from another" (Hofstede & Hofstede, 2005). Kluckhohn and Strodtbeck (1961) also claimed that members of this group exhibit constant "orientations" towards the world and other people. Hofstede In 1980 introduced his five-dimensional model, explaining the main values of any culture and how then they can alter to differentiate a set culture from any other: power distance, uncertainty avoidance index, individualism vs collectivism, masculinity vs femininity, and long vs short-term orientation. The second main framework for the same context comes from Trompenaars and Hampden-Turner (1993), and it is based on the relationships of subordinates and rules (universalism vs particularism), their relationship to the group (collectivism vs individualism), their feelings and relationships (neutral and affective), the extent of their involvement with their tasks (specific vs diffuse), how status is awarded (ascription vs achievement), how time is managed (synchronic vs sequential) and how people relate to nature (internalist vs externalist). Successful implementation of performance measurement systems depends on many factors, such as management commitment (Henri, 2006), alignment of strategy (Kaplan & Norton, 1992), and as mentioned already, culture (Henri, 2006, Bititci et al., 2006).

Henri (2006) has found out that Performance measurement systems can be used for monitoring, attention focusing (recalling the clarity of goal in performance management systems), strategic decision-making, and legitimization. Monitoring when performance measurement systems provide feedback regarding performance to various stakeholders. If the results are used as a facilitator, then the use is strategic, while using the results to justify decisions or actions is legitimization. When the results are used to send signals throughout the firm, then the use is attention focusing or communications.

As for the findings, the researchers focused on eight different countries, for the sake of this project, I will focus only on Italian and UK culture.

In the Italian culture, we can see two organizations with two different organization

cultures. The first organization with an incubator culture, has deliberately designed its performance measurement system by middle management, with balanced measures where we witnessed a highly used system in managing strategy, monitoring, communication, and learning and behaviour. In the second organisation with a family culture, the performance measurement system was designed by the top management with an emphasis on financial measures. We observed evidence of resistance in its implementation where the performance measurement system is mainly used for monitoring and legitimization. In the UK however, we have two organizations with two different decentralized cultures. The first UK organization is an incubator with an emphasis on people. It has a well-developed set of measures which is used for all purposes except legitimisation. Its use for learning and improvement is highly emphasised. The Second UK organisation is a guided missile with a greater task emphasis. It has less developed measures that are informally used for monitoring, communication, and influencing behaviour purposes. Its use for learning and improvement is limited.

There is a defined impact of high power distance over performance measurement systems, as high power distance is associated with command and control use of performance measurement systems. This applies to the second Italian example, where the high influence of top management is attributed to the high power distance, which in turn leads to little middle management participation. The lack of participation from middle management has also probably led to it becoming non-compliant, resentful, or simply indifferent to the measurement process. It also seems that organizations that shift decision-making to middle management have better developed and used performance measurement systems. In the second case pertaining to the UK, the performance measures are designed by the middle manager, where the use of measures happens through daily meetings, with results shared and elaborated during the decision-making process entailing then actors that do not conform to the general top-down management system.

Overall, although national culture seems to have an influence on the design and use of performance measurement systems in organisations, some strategic characteristics of the organisation also influence the design and use of the system itself (Ihssan M. Jwijati et al., 2014), these being:

- Strategy, seen where innovation is a competitive requirement. A more decentralised behaviour within the organisation is seen, this accompanies with more empowered or delegated design and democratic use. This applies to the first Italian example;
- The organization's history and its governance structure may affect the design and use of the performance measurement systems.
- Personality and outlook of the leadership. In the first Italian example, the organization is led by a relatively young management, which has a focus on innovative leadership; in the second case, where leadership is more conservative, the system entails mainly monitoring.

The empirical researches provided show excellent points and data towards the definition and use of performance management and measurement, however, they fail often to recognize the possible challenges of such approaches.

Some of them are system-related or technical-related. When referring to the public sector especially, not all policy/programme goals and activities can be easily quantified and measured, as well as the difficulty to reduce the vagueness of many policy or programme goals. In most instances also, there are people issues associated with the application of performance management, as in practice the implementation of measuring performance attracts scepticism, fallacies and resistance (Bouckaert and Halligan, 2006). This becomes evident with performance targets (J. Taylor, 2021), where governance by targets starts on the assumption that targets can change organizational behaviour, and limit any potential negative behavioural effect to a minimum. Flaws in the performance management process however can occur, and these lead to altered behaviour, leading to different effects (Bevan and Hood, 2006).

The first effect is named the “ratchet effect”, occurring when next year’s targets are based on the current year’s performance. This practice encourages managers to hit but not exceed targets for the current year, even if completely possible. This might lead to setting undemanding targets or failure to perform above targets for fear they will be subsequently raised.

“Threshold effects” refer to the effects of targets on the distribution of performance among a range of entities. Target-setting can encourage those falling below the target level to do better, but can conversely create a context in which employees purposefully only put enough effort to allow their performance to fall to the target level. This leads to having most performance clustered around the target, impeding the organization to be able to discern good and bad performance. “Output distortion” refers to attempts to meet targets at the expense of unmeasured but important aspects of performance.

The major issue with performance management is therefore that it can shape employees’ behaviours in non-desirable ways, often leading to a blame-avoidance type of behaviour that results in a strong “negativity-bias” in the public sector. Other issues are the centralization of the performance managing process, and most importantly the uncertainty surrounding its impact on the performance of public organizations. The last issue however provides little conclusive empirical evidence, although it is widely believed that performance management has performance-enhancing effects.

Recalling the initial question and trying to define the meaning of “good” and “bad” performance proves itself to be puzzling, as different management and measuring systems provide a set of different flaws that cannot be ignored. This leads to beginning the classification on a basis that might not be proper already. Generally, we could define performance as “bad” when the specific targets have not been met, or at least, when compared to the past, the outputs have not been kept up to par with the previous year. With regards to the public sector, as I will

show later, the public eye's opinion on the way that the public sector operates, and the corresponding outcomes of their actions, matter just as much. In this case, a "good" level of performance can satisfy social and political expectations.

The financial aspect needs to be emphasised, therefore it could be considered a given that any actor should also act on the basis of efficiency and conscious spending, other than pure efficacy.

Likewise, "bad" performance comprises aspects that are the opposite of what has just been mentioned.

1.3 How performance applies to this context

The study of performance and performance management can be utilized in the public sector as well, albeit with a more keen eye on factors such as following the public interest and therefore not necessarily falling into pure economic efficiency. Here, the periodical evaluation of citizens' satisfaction and the economic performance achieved by the public services is compulsory to accomplish the proper administration of a local community.

The interest in good governance and the right to good governance have represented concerns for the national and the European governmental authorities, resulting from the theories and practices specific to the New Public Management. Interesting for the scope of this work is also to mention how national attitudes have not been totally uniform, but instead there has been explicit support from countries such as the United Kingdom, the Scandinavian countries and the Netherlands, and some more careful consideration from others, such as France, Germany, and Italy (Torma, 2010).

Public organizations are required to meet multiple and conflicting organizational goals (Rainey, 2010). These goals have to be applied through the principles of good governance, assuring then the desire for high-quality services on the citizens' part, and the conditions of efficiency and professionalism on the government's part.

The principles are as follows (Statskontoret, 2005):

- The principles of lawfulness, non-discrimination, and proportionality;
- The right to have affairs handled impartially and fairly;
- The right to have affairs handled in a reasonable time;
- The right to be heard before any individual measure is taken that would affect the citizen adversely;
- The right for the citizen to have access to their own files, regarding any individual measure that would affect them;
- The right of access to documents;
- The obligation to state reasons in writing for all decisions;
- The obligation to indicate remedies available to all persons concerned;
- The obligation to notify all persons concerned of a decision;
- The obligation to be service-minded.

With the undertaking of these principles, the need to measure performance in the public services becomes crucial (Behn, 2003; Bird, 2005). Behn (2003) in particular mentions different reasons as to why measuring performance is important. These mainly pertain to transparency and proper accountability, including also the use of performance measurement to motivate staff, managers, and for-profit collaborators, as well as stakeholders and citizens to do the things necessary to improve performance further, which can then be leveraged politically; to budget programs, people or projects for which the government should spend the public money.

The most widely used conception of public sector performance draws from the production process, where inputs are allocated to organizations and programmes, and are in turn processed in activities, resulting in outputs (J. Taylor, 2021). Inputs are the human, physical, and financial resources used to produce an output, whereas outputs are the goods and services produced by agencies for external users. Outputs often combine with other resources and activities to produce outcomes, valued by citizens (Jackson, 2011).

Outcomes can be differentiated into intermediate (short-term) and final (long-term) outcomes. Final outcomes are also affected by environmental factors over which the public actor has little to no power, and they can be government policies or socioeconomic influences (van Dooren, Bouckaert and Halligan, 2010).

As a result of the New Public Management movement, public sector performance is often assessed based on results, and this view enables other dimensions, of interest to the stakeholders, to be identified. This turns public sector performance into a multidimensional construct that covers the concerns of stakeholders, with the likes of efficiency, effectiveness, appropriateness, responsiveness and equity (Brewer and Walker, 2010). Effectiveness is often however viewed as predominant when related to efficiency, this because efficiency does not necessarily entail performance in line with the socially valued objectives (Williams, 2003).

Chapter two

2.1 A brief look into the virus: data and statistics

The global epidemic of the coronavirus disease 2019 (also known as COVID-19), put the world into a chokehold since its first spreading instances. Covid-19 is the result of infection with severe acute respiratory repercussions, and was first isolated and identified in patients who were exposed at a seafood market in Wuhan City, in the province of Hubei, China, in December 2019. Although the case fatality of Covid-19 (estimated at 2%-3%) is lower than those of its related illnesses SARS (approximately 10%) and MERS (approximately 40%), the pandemic associated with it has been far more severe. (Yu Shi, et al.; 2020). The virus' fast spread rate and high adaptability led it to become an unprecedented challenge for governments, individuals, and society.

The infectious sources of Covid are infected animal hosts and humans alike, with bats considered to be the most likely initial hosts, while pangolins may be the intermediate hosts. Both symptomatic and asymptomatic patients are known to be contagious. Bats are natural hosts of many of the known coronaviruses (de Wit et al., 2016), with other research indicating that Covid-19 may be derived from a predecessor coronavirus endemic in bats. What is however important to note is the necessary presence of intermediate hosts, as the major outbreak emerged during the winter, during bats' hibernation period.

With the closure of the Huanan Seafood Market and animal trading markets in most regions of China, wild animals became no longer the main sources of infection, transferring the blame onto infected humans (Huang et al., 2020). In particular, asymptomatic patients constitute an unpredictable transmission source that cannot be identified promptly. The unknown numbers of those with asymptomatic infection may explain why SARS-CoV-2 (the previously mentioned Covid-19), seems to be more contagious than Sars-CoV (its predecessor), the transmission of which is largely limited to symptomatic patient sources. Zou et al. in particular showed in 2020 the dynamics of virus shedding in a comparison between asymptomatic and symptomatic individuals, demonstrating an indistinguishable capability of transmission between asymptomatic and symptomatic patients. This study also proved that higher viral loads were a characteristic of the early stage of disease and were more readily detected from specimens on nasopharyngeal swabs than on oropharyngeal swabs (Yu Shi, et al.; 2020).

The main transmission routed for person-to-person spread of Covid-19 are respiratory droplets and physical contact. Transmission by respiratory droplets is believed to be the predominant route of transmission, and is similar to that observed in other respiratory virus infections. As for contact transmission, it has been found that the virus persists within the environment of infected individuals, such as household surfaces, door handles and mobile phones. It has been

discovered that Covid-19 can remain airborne for up to three hours, increasing the risk of contracting it further. When susceptible individuals come into contact with the virus containing body fluids-contaminated items, indirect transmission of Sars-Cov-2 can occur.

The population at large is generally susceptible with no predominance of a given sex or age. As of 2020, the Special Expert Group for Control of the Epidemic of Novel Coronavirus Pneumonia of the Chinese Preventive Medicine Association, the age bracket of 50 year olds and over accounted for 53.6% of the reported cases, while children under 10 years old account for only 0.9%; a small male predominance has been found at 51.4%. Patients with underlying co-morbidities (including hypertension, diabetes, pre-existing respiratory infection, cardiovascular disease, and cancer) are more likely to succumb and undergo progression to the more severe forms of Covid-19, as well as having a higher risk of developing complications (Guan et al., 2020). Analysing the previously-mentioned data follows how family member of Covid-19 patients and medical care providers are at high risk for infection due to more frequent contact with infected patients.

The most common complaints with regard to positivity to the virus are fever, cough, shortness of breath and less frequently gastrointestinal symptoms. Older age brackets are at a higher risk of developing severe Covid-19 infections because of higher proportion of established co-morbidities. Some other common symptoms include taste alterations and olfactory disturbances, especially during the earlier course of the disease. Rashes, headaches, dizziness have also been showed to be rather common (Rohan Kumar Ochani et al., 2021).

Prompt diagnosis of Covid-19 infection is essential to minimize the risk of large-scale outbreaks in hospitals and local communities. As previously noted the most widespread procedures have been nasal and throat swabs, additionally however antibody detection through blood samples have also been widely used, as well as other more complex methods which include CT scans and Electron microscopy and cell culture. Although these procedures aim to be as effective as possible different factors play a distinct role into determining whether such a system will be accurate or not. Quantity of detection material is important to achieve effective enough results as it will decrease the likelihood of having proper clear results. Timing is also key, as the concentration of detection material varies in the early and later stages of Covid-19 infection. Every patient's infection status should be interpreted with their history and diagnostic information, as comorbidities will also help assessing the severity of future symptoms. Negative test results also have to be checked carefully upon, as the results are dependent on sensitivity of assay and the chance of being infected prior to testing, rendering the virus unable to be detected yet. Logistics also plays an important role, storage, transportation and processing of the specimens have to be dealt with in the best conditions and celerity possible to avoid decay and late diagnosis (Rohan Kumar Ochani et al., 2021).

In December 2019, several patients with pneumonia of an unknown etiology were admitted to hospitals in Wuhan, and according to the World Health Organisation, the number had been reported to be 44. On March 11th, 2020, the World Health Organization declared Covid-19 as a pandemic, with confirmed cases in 114 countries. By mid-march, Europe had more cases than anywhere in the world, while Covid-19 spread to more than 160 countries. A consistent increase in new cases and deaths was seen over September 2020, in the Eastern Mediterranean region with the highest number of new cases reported in Iraq, Iran, and Morocco. However the Americas remained the most impacted by the pandemic overall, most notably the United States, Brazil, Argentina and Colombia, reporting repeatedly the highest increase of new cases during September especially (Rohan Kumar Ochani et al., 2021). Although dated to the beginning of 2021, the next table will showcase an accurate representation of the global pandemic outlook:

“Top 20 countries affected by Covid-19.”

#	Country	Total Cases	Total Deaths	Total recovered
1	United States of America	24,439,427	406,162	14,970,252
2	India	10,610,883	152,869	10,265,706
3	Brazil	8,638,249	212,831	7,618,080
4	Russia	3,616,680	66,810	3,021,861
5	United Kingdom	3,515,796	93,469	8,492
6	France	3,023,661	71,792	219,354
7	Italy	2,414,166	83,681	1,806,932
8	Spain	2,412,318	54,637	150,376
9	Turkey	2,406,216	24,487	2,283,919
10	Germany	2,100,618	50,079	1,778,319
11	Colombia	1,956,979	49,792	1,786,170
12	Argentina	1,831,681	46,216	1,613,773
13	Mexico	1,688,944	144,371	1,264,780
14	Poland	1,457,755	34,561	1,215,732
15	South Africa	1,369,426	38,854	1,160,412
16	Iran	1,354,520	57,150	1,144,549
17	Ukraine	1,216,780	22,521	947,087
18	Peru	1,073,214	39,044	993,509
19	Indonesia	951,651	27,203	772,790
20	Netherlands	940,106	13,350	12,102

*According to COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU) (<https://coronavirus.jhu.edu/map.html>), as of January 21, 2021.

Source: Rohan Kumar Ochani et al., 2021.

Figure 4.

In December 2020, the World health organization reported two new variants of Covid-19, proving how the virus can mutate further and thus pushing for more research fostering the development of effective vaccines. Initial analysis of these variants suggested that they may spread more rapidly. As of January 17th, 2020 Covid-19 has affected a total of more than 93 million people worldwide.

As for vaccines, the genetic sequence of Covid-19 was released on January 11th, 2020, and since then many pharmaceutical companies and academic institutions from various countries have emerged in collaborative efforts to develop the Covid-19 Vaccine. Eight vaccines have been approved for Emergency Use authorization (UEA), which belong to the types below.

Two of the mRNA-based vaccines developed as a joint effort by Pfizer and BioNtech, and Moderna, have gained popularity due to the approval in multiple countries (Rohan Kumar Ochani et al., 2021).

1.2 Could the damage caused by the pandemic have been foreshadowed?

In “Preventing and managing COVID-19 across long-term care services” (World Health Organization, 2020), eleven policy objectives are listed to make clear what to do in order to mitigate the impact of Covid-19 across long-term care. Of course, if one policy is listed, it means that most countries are lacking it in the first place. With this reasoning we can deduce whether or not the absence of such policies could have given a hint towards the explanation of the lack of full preparedness of governments towards the pandemic.

The policy objectives are:

- Include long-term care in all phases of the national response to the covid-19 pandemic;
- Mobilize adequate funding for long-term care to respond to and recover from the covid-19 pandemic
- Ensure effective monitoring and evaluation of the impact of covid-19 on long-term care and ensure efficient information channelling between health and long-term care systems to optimize responses.
- Secure staff and resources, including adequate health workforce and health products, to respond to the covid-19 pandemic and deliver quality long-term care services.
- Ensure the continuum and continuity of essential services for people receiving long-term care, including promotion, prevention, treatment, rehabilitation and palliation.
- Ensure that infection prevention and control standards are implemented and adhered to in all long-term care settings to prevent and safely manage covid-19 cases.
- Prioritize testing, contact tracing and monitoring of the spread of covid-19 among people receiving and providing long-term care services.
- Provide support for family and voluntary caregivers.

- Prioritize the psychosocial well-being of people receiving and providing long-term care services.
- Ensure a smooth transition to the recovery phase.
- Initiate steps for transformation of health and long-term care systems to appropriately integrate and ensure continuous, effective governance of long-term care services.

The world health organization already makes it clear how these objectives may be challenging for different reasons.

When talking about including long-term care in all phases of the national response to the pandemic, it is highlighted how long-term care tends to have low political priority. This, linked to the general outlook of governments with regards to the health sector, being only a sure way to lose money hence giving it less importance than other more profitable sectors, may showcase one of the reasons that created a low level of preparedness. Other than this, in most countries, long-term care falls between different ministries, typically healthcare and social affairs, development or social protection. This also creates a situation where this type of care is poorly coordinated, integrated, financed and regulated. This issue created shortage of back-up personnel, as well as not being able to give the personnel itself enough flexibility to meet the demands of the national health services. This can also be paired with the vertical division of responsibility typical of Italy, where national, regional, and local actors may intervene to solve the same issue.

The second point refers to the mobilization of adequate funding for long-term care, but the average public expenditure on long-term care is low as it is, being less than 1% of GDP globally. This results in not only a harder time to take care of the people in need due to lack of equipment, but also a shortage of personnel due to the low wages. Providers are also experiencing decreases in revenues due to lower occupancy in long-term care facilities, resulting from a decrease in admissions and the higher than the usual amount of deaths.

As for the third point, relatively few countries have information and monitoring systems that include individual-level data about the characteristics, needs and outcomes of people who use formal long-term care services, and about the type and quality of care that they are receiving. This reflects the overall situation of limited data sources about older people (who are often long-term care users) and lack of age- and gender-disaggregated data. Where individual-level data are available, quite often they only cover people who use publicly funded long-term care or provide services. Furthermore, health and social care data are usually collected under separate systems, leading to difficulties linking data for the same individual.

The ensuring staff and resources to respond to the pandemic is plausibly one of the more difficult topics to address and solve. Prior to the pandemic most countries were already facing workforce shortages, poor pay and working conditions, the low proportion of professionally qualified staff were already a major concern in long-term care systems. These issues have only been rendered more acute by the pandemic, when personnel had to isolate due to suspected or confirmed infection with covid-19.

The last points listed dive much deeper into the topic of long-term care, hence their explanation and problem-solving process can hardly be generalized to the health sector as a whole, unlike the aforementioned aspects.

2.3 What did the governments do?

Analysing the context of the Italian situation, the OECD and World Health organization published in 2021 a “Country Health profile” showing interesting insights regarding to the health sector. These could explain the failures and successes of the way the covid-19 pandemic has been handled by all actors. Italy has always shown itself to be among the countries with the highest life expectancy in all of the European union, being still close to the top even during the pandemic. Before the pandemic, gains in life expectancy slowed considerably between 2010 and 2019, particularly among women (passing from an increase in two years in the previous decade to only one). Between 2019 and 2020 life expectancy fell by 1.2 years, being higher in northern Italy due to the higher impact of the virus in the northern regions.

In 2018, circulatory diseases signified 35% of all deaths in Italy, followed by cancer (27%) and heart diseases (about 9%). In 2020 however, Covid-19 accounted for about 75 000 deaths in Italy (10% of all deaths), with most of them being among older people. In fact, the average age of people who died from covid-19 in 2020 was 81, and 86% of deaths were among people aged 70 and over. By the end of August 2021, the cumulative mortality rate from Covid-19 in Italy was about 35% higher than the EU average.

What are also particularly interesting are the figures regarding the amount of Italians that perceive themselves as being in good health, amounting to 73% in 2019, that paired with the 16% of adults reported having at least one chronic condition (raised to 37% for people aged 65 and over) might indicate an initial lack of care from the national health system. The covid-19 pandemic gave birth to the “Long Covid” phenomenon, where patients experienced persistent ill health for long periods even after contracting the virus. In the Gemelli University Hospital in Rome, 87% of patients previously hospitalized for Covid-19 reported the persistence of at least one symptom in follow up assessments taken 60 days after the emergence of the first symptoms (Carfi et al., 2020).

Even though not directly pertinent to the topic at hand, behavioural and environmental risk factors can help explaining the prevalence and impact of the covid-19 virus. Around one third of all deaths in Italy registered in 2019 can be attributed to behavioural risk factors, such as tobacco smoking, dietary risks, alcohol consumption and low physical activity; air pollution also contributes to a sizeable number of deaths each year. 15% of all deaths in 2019 can be attributed to tobacco smoking, whether direct or second-hand smoking. Dietary risks account for about 14% of all deaths, and 5% are related to alcohol consumption. Low physical activity accounts for 3% of total deaths and air pollution for 4%, in the form of cardiovascular diseases, respiratory diseases and some forms of cancer. Smoking among adults has decreased since 2000, but in 2019 18% of Italian adults still smoked regularly; during the pandemic the number rose to 20%. These figures are especially important as they increase the total number of people who were potentially at risk of contracting any additional serious respiratory disease, being more in danger than the average non-smoker. Alcohol consumption is not as much of a concern, as consumption among adults in Italy as per 2019 was over than 20% lower than the EU average. More pressing is the issue of

overweight and obesity rates as a whole. This issue however relates mainly to children and teenagers, the demographic that was the least impacted by the pandemic.

As for the health system, Italy's National Health system is decentralized and regionally based, the national government defines the benefits package and exercises overall stewardship, but each region is responsible for organization and delivery of health services through local health units and via accredited private hospitals. This model was largely maintained during the Covid-19 pandemic, but leadership and administrative authority were partly centralized. In 2019 Italy spent 8.7% of GDP on health care, proving right the historical trend of spending less than the EU average. There have however been slow increases over the last five years, mainly driven by a growth in private spending, in fact, public spending as a proportion of total health expenditure was 74% in 2019. Most of the remaining expenses came from direct out of pocket payments by households and, as a minor factor, voluntary health insurance. The Covid-19 emergency prompted additional funding injections in 2020 to support the health sector, amounting to an additional 7.5 billion euros. The largest category of health spending in 2019 was outpatient care, accounting for one third of total health expenditure. Pharmaceuticals and medical devices accounted for one fifth of health expenditure in 2019. Long-term care, despite increasing in importance due to the rise in the ageing Italian population, accounts for only 11% of spending. On the other hand however, spending on prevention accounted for a total of 4.7%, compared to the 2.9% of the EU average.

Italy also shows a relatively low number of hospital beds, being a 3.2 beds per 1000 people prior to the pandemic (being considerably lower than the 5.3 of the EU average). Southern regions have a harder time at hitting the average mark, having a capacity of 2.4 beds, compared to the 3.4 of the northern regions. In 2019 the average length of stay in the hospital was 8 days, still higher than the EU average (7.4 days), this could possibly be explained by a substitution of low-intensity inpatient care with ambulatory care and home care; therefore the remaining inpatient cases are more complex and require longer professional care and stays.

When mentioning personnel, the total number of doctors in Italy is slightly higher than the EU average at 4.1 every 1000 inhabitants, compared to the 3.9. The shortage of staff during the pandemic is however explained by the decrease of practitioners working in public hospitals and working as doctors of general medicine. The shortage is projected to increase as the average age of doctors increases. Nurses fall even shorter, as Italy employs 6.2 nurses every 1000 people, lower than 8.4 EU average

Although the Italian population is rather prone to heart and lung diseases, up until 2018 Italy registered among the most successful countries in treating such kinds of diseases. Prior to the pandemic Italy had the lowest preventable mortality rate in the EU, which reflected, among other things, cases of active prevention policies. These policies may be exemplified by active health promotion programmes in schools and increasing food literacy among citizens. The number of deaths deemed potentially avoidable through healthcare interventions was also one of the lowest in the EU in 2018, indicating that the Italian health system is effective in treating patients with life-threatening conditions.

One of Italy's strong points is the presence of an effective primary care, which helps keeping people out of hospitals. Translated into the context of chronic diseases, such as asthma, chronic obstructive pulmonary diseases and diabetes, have to pass through general practitioners, and in some regions through multidisciplinary teams providing acute and chronic care. As expected, there are important regional differences in the rate of hospitalizations for chronic obstructive pulmonary diseases especially, which show a lower threshold for admissions in several southern regions when compared to the northernmost counterparts.

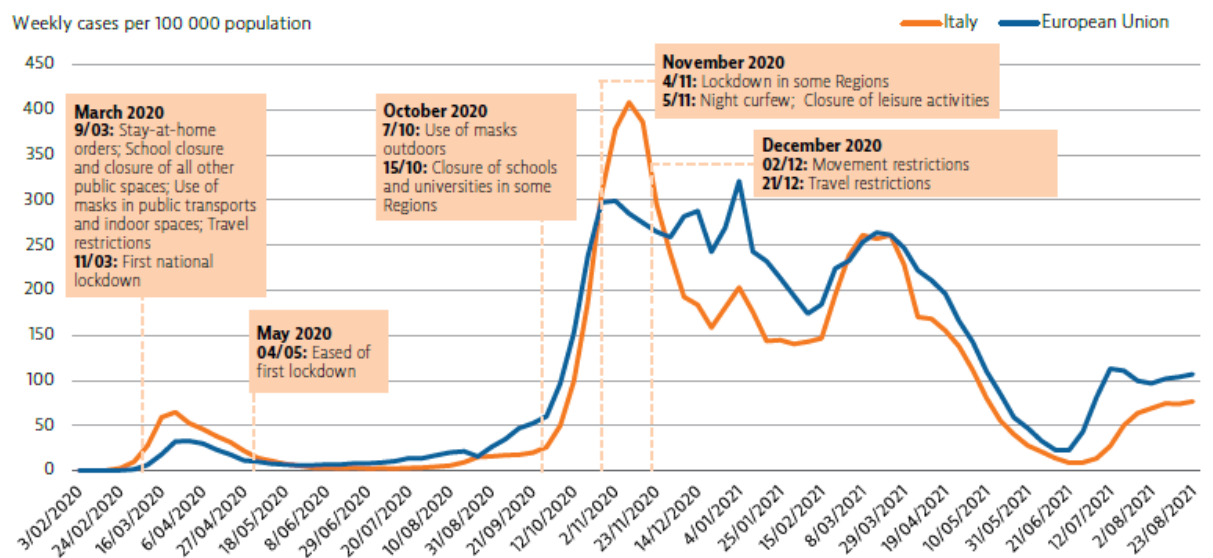
As for accessibility, prior to the pandemic, only 1.8% of the Italian population reported unmet needs for medical care in 2019, mostly for financial reasons. There are sizeable disparities when comparing people in the lowest income quintile and those in the highest, as well as people from poorer regions in the south, who are twice as likely to report unmet medical needs due to financial reasons, waiting times, or travel distances. The Covid-19 crisis and the lockdown measures limited access to health services in 2020, with figures rising up to 23% as of March 2021. Financial issues go hand in hand with the out of pocket expenditure rates as a share of health spending in Italy, which prior to the pandemic was rated well above the EU average (23.2% versus the 15.4% average). A large proportion of these payments are spent on outpatient medical care, making up 45% of the total, and on outpatient pharmaceuticals, constituting 30% of the total. Consultancies by general practitioners are free, but co-payments are levied on specialist visits with a referral and a diagnostic procedure. To aid citizens financially, Italy has implemented a series of measures to promote greater use of generics to improve affordability and value for money in pharmaceutical spending. Unless clearly states by the doctor, pharmacists must let customers know whether there are cheaper alternatives to the drugs prescribed. If the doctor however indicates that the medicine is not substitutable or if the customer insists on purchasing the specific brand name, the customer must pay the difference between the price of the acquired medicine and the cheapest alternative. It is important to note how between 2015 and 2019 customer spending to make up for the difference in price increased annually by 3% (Italian Medicines Agency, 2020). This increase could be explained by the fact that pharmacies are remunerated according to a fixed percentage of the consumer price of each product, which creates a disincentive to dispense cheaper generic medicines.

The COVID-19 pandemic had a major impact on population health and mortality in Italy in 2020 and 2021. Italy had registered about 129 000 deaths from COVID-19 as of the end of August 2021, with most concentrated among older people. Measures taken to contain the pandemic also had a substantial impact on the economy. GDP decreased by 8.9 % in 2020 – more than the EU average of 6.2 % – and is not projected to return to 2019 levels before 2022. The unemployment rate increased, particularly among young people, rising from 28 % in March 2020 to 33 % in March 2021 among people aged 15-24.

Italy was the first European country affected by the pandemic: the first cases of COVID-19 were identified in early February 2020. The spread accelerated at an

exponential rate; the threshold of 1 000 cases was crossed on 29 February, and on 10 March more than 10 000 people were infected by the virus. The spread of the virus across the Italian territory was uneven. The north of the country – Lombardy in particular, and to a lesser degree the Veneto, Emilia-Romagna and Piedmont regions – saw the largest concentration of cases, while southern regions were relatively spared, in particular during the first wave of the pandemic. During the first wave, the decision to shift COVID-19 non-acute patients from hospitals to care homes to free up hospital capacity and the reluctance to impose “red zones” to avoid hindering local economic activity caused a dramatic rise in cases and deaths in Lombardy. At the same time, regions such as Veneto did their best to keep people out of hospitals by bolstering primary and home-based care and increasing their testing, tracking and tracing capacity. Despite a well-developed health care system in the regions most affected by the pandemic, Italy was unable to flatten the curve of infections early enough. This led to rapid saturation of hospital capacity and a dramatic acceleration in deaths, which reached a peak of 800 per day at the end of March 2020. During the first wave from early March to the end of May 2020, Italy recorded more than 34 000 deaths, which was one of the highest death rates in Europe at that time. The number of COVID-19 deaths during the second wave – which started at the end of September 2020 – exceeded those in the first wave, with nearly 40 000 deaths registered between October and December 2020 (ISTAT & National Health Institute, 2021). An additional 54 000 people died from COVID-19 between January and August 2021 (OECD, European Observatory on Health Systems and Policies; 2021). The next figure helps explaining the measures that have taken place in Italy, as well as deaths and comparisons with the EU’s average:

“Italy’s implementation of national or regional policies.”



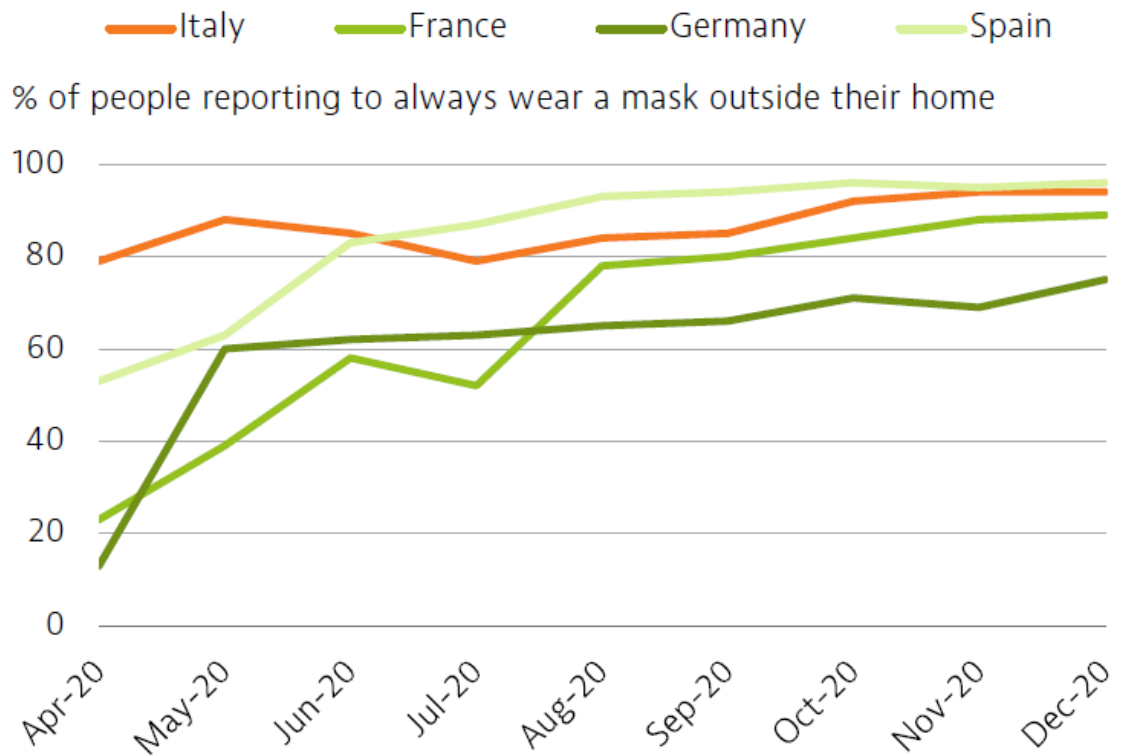
Note: The EU average is unweighted (the number of countries used for the average varies depending on the week).
Source: ECDC for COVID-19 data and authors for containment measures.

Source: Italy: Country Health Profile 2021

Figure 5.

The state of emergency was declared in February 2020, joined with the decision to implement radical measures. The actual measures took place on the 9th of March 2020, and they consisted mainly in deciding to quarantine the main outbreak spots and dividing the peninsula based on the impact of the pandemic, as well as restricting travel from different regions and cities, especially if they were on different levels of seriousness. The containment measures included wearing a mask inside all public spaces, social distancing, a national curfew and stay-at-home requirements for anyone who displayed symptoms that could have been related to Covid. As the second wave of the pandemic began, the government extended the obligation to wear masks outdoors from the 7th of October 2020, even though most Italians were doing it already:

“Compared overview of mask use among Italy, France, Germany and Spain in 2020.”



Source: YouGov data (<http://www.coviddatahub.com/>).

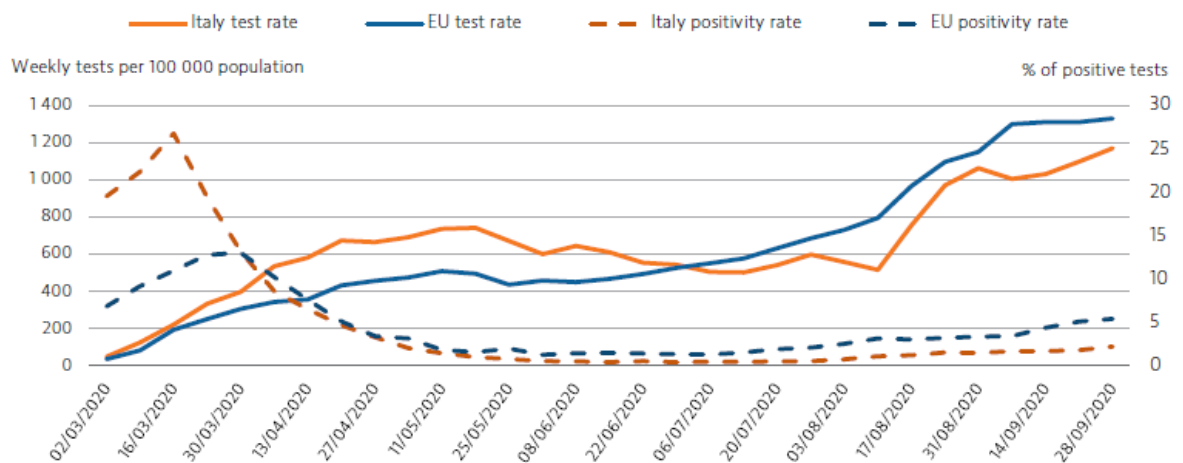
Figure 6.

Among the actions taken to contain the spread of the virus, Italy also adopted a broad testing strategy, enabling it to estimate more accurately the spread of the virus. During the initial weeks of the pandemic, positivity test rates were rather high, due to the tests being taken only from certain groups of the population, mainly hospitalized patients or people with serious symptoms. The total number

of tests steadily increased from mid-march to end of April 2020, which resulted in the detection of more positive cases, but with lower levels of test positivity rates. By mid-april 2020 50 000 tests were performed every day, almost doubling to 90 000 by the end of August 2020. The ability to study such an amount of tests in such a restricted amount of time was due to the conversion to covid-19 testing of diagnostic laboratories previously focused on performing other types of tests, and an increase in the availability of reagents and the additional offer of testing at home and at drive-through facilities. This task was also widely advertised and supported by the National Health Institute, that in November 2020 released a set of guidelines regarding testing, recognizing the strategic role of antigenic rapid tests for close contacts of a confirmed case even if without any symptoms, and, among others, for community screening.

The next figure showcases the progression of weekly testing in Italy, compared to the EU’s average:

“Italy’s increase in test capacity during the pandemic.”



Note: The EU average is weighted (the number of countries included in the average varies depending on the week).
Source: ECDC.

Source: Italy Country Health profile 2021.

Figure 7.

As for Intensive care units, before the covid crisis, the number of beds stood at 8.6 per 100 000 people, which was half below the level of most other EU countries. In April 2020, the Ministry of Health set a safety target of 14 ICU beds per 100 000 people. By mid-october 2020, right before the beginning of the second wave, only four out of twenty regions managed to comply, increasing the average number to 11.8 per 100 000 people. This showcases then how, despite the national desire to create a homogenous plan to dispel to virus, most regions were either unable to follow guidelines (showing then how the national government is out of touch with regions), or the lack of desire in doing so, for a belief that following the principle of sussidiarity, only regions could be able to solve such issues (as is for the case mainly of the Veneto region, that in multiple cases decided to follow its own

plan).

During the second wave, several regions reported ICU bed occupancy rates by covid-19 patients higher than the alert threshold of 30% set by the Ministry of Health. In the second half of November 2020, around two thirds of the available ICU beds in the Lombardy region were occupied by Covid-19 patients. Sicily on the other hand, never reported reaching the alert threshold. The situation improved drastically soon after, by March 2021 only four regions had not reached the set target of 14 ICU beds per 100 000 people (OECD, European Observatory on Health Systems and Policies; 2021).

The next figure showcases ICU bed occupancy rates, in orange the dates that market the emergency threshold:

“Bed occupancy rates on the Italian territory, with exceeding capacity highlighted.”

	4-Nov	11-Nov	17-Nov	24-Nov	1-Dec	8-Dec	15-Dec	22-Dec	29-Dec	4-Jan
North										
Bolzano	26	54	57	52	44	39	31	29	26	32
Emilia Romagna	20	34	35	34	33	31	28	27	29	31
Friuli Venezia Giulia	19	26	25	31	35	37	32	32	32	36
Liguria	25	47	53	53	47	41	33	32	28	35
Lombardy	32	58	64	64	61	56	51	44	41	39
Piedmont	25	59	61	64	60	53	42	37	33	29
Trento	15	47	39	47	49	53	59	54	50	48
Valle d'Aosta	29	57	46	38	39	27	18	12	12	5
Veneto	12	21	27	30	30	32	35	34	36	37
Centre										
Lazio	20	26	32	37	37	36	34	33	33	34
Marche	23	45	45	46	44	45	40	33	28	30
Tuscany	29	48	47	48	44	42	37	32	29	25
Umbria	40	58	55	55	49	44	35	32	26	34
South and Islands										
Abruzzo	18	29	37	39	40	37	31	23	20	21
Basilicata	12	n.a.	33	21	23	17	12	9	7	5
Calabria	6	13	34	28	26	16	14	14	9	12
Campania	23	31	34	34	29	23	20	19	16	15
Molise	15	24	26	29	38	24	24	26	24	29
Puglia	20	33	41	45	48	43	41	36	30	30
Sardegna	22	31	37	40	38	34	32	27	24	24
Sicily	19	28	30	29	27	25	23	23	22	23

Note: Cells highlighted in orange indicate a value higher than the alert threshold of 30 % set by the Ministry of Health. n.a.: not available. Sources: Ministry of Health (Monitoraggio COVID-19 Fase 2, Report settimanale, various editions).

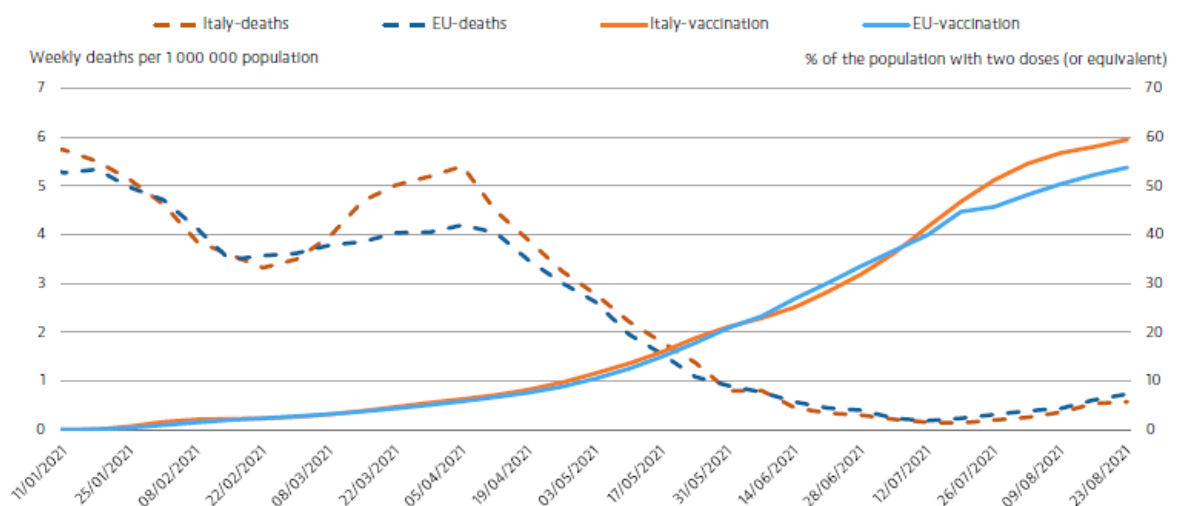
Source: Italy Country Health Profile 2021.

Figure 8.

To boost the supply of emergency health workers during the first wave of Covid-19, in March 2020, the Italian government allowed the NHS temporarily to hire retired doctors, nurses and final-year medical students for six months. In addition to this, to alleviate pressure from general practitioners' offices and hospital emergency departments, the government began supporting through special units for continuity of care (Unità speciali di continuità assistenziale), that had the task of supporting ill citizens at home, 12 hours a week 7 days per week. To strengthen and broaden their effectiveness, these special units started being staffed also by psychologists and social care assistants. From May 2020, the government also allocated a total of 480 million euros to hire an estimated of 9600 nurses over the course of 2021, with the task of supporting the special units through home-based care (OECD, European Observatory on Health Systems and Policies; 2021).

Italy started administering the first vaccines at the end of December 2020, with a budget of 2.8 billion euros for the purchase of covid-19 vaccines and the supply of medicines to treat patients. Multiple private accredited organisations, and the NHS, arranged vaccination centres under the coordination and supervision of regional authorities and the Extraordinary Commissioner. Regions could also engage with general practitioners and medical specialists of any sort, with a fund of 345 million euros allocated to help administer vaccines through these providers. The government also authorized pharmacists that proved to successfully complete online training courses on covid-19 vaccination. By the end of August 2021, 70% of the population had received at least one dose and 60% were considered to be fully vaccinated with at least two doses.

“Close look comparison of deaths and vaccinations during the pandemic period in Italy versus the EU.”



Note: The EU average is unweighted (the number of countries used for the average varies depending on the week).
Sources: ECDC for COVID-19 cases and Our World in Data for vaccination rates.

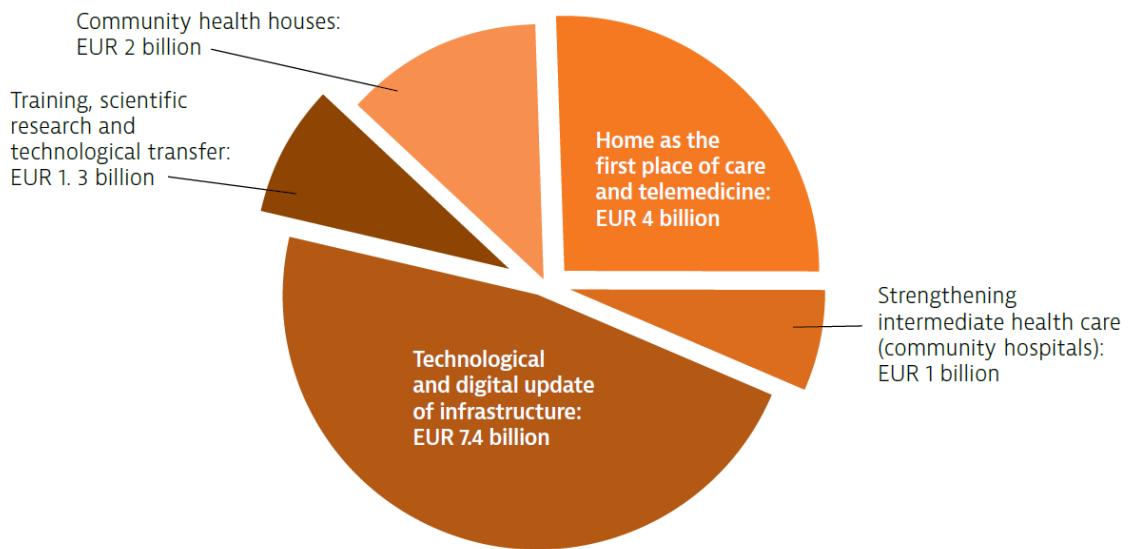
Source: Country Health Profile Italy 2021.

Figure 9.

To tackle the pandemic, the Italian government allocated an additional 3.7 billion euros in 2020 and 1.7 billion euros in 2021 to the health system. The ministry of health allocated in May 2020 additional funding tailored to regions to take into account additional hospital costs related to the care of covid-19 patients. Such costs covered mainly additional intensive care units beds, additional high-care beds, additional emergency room activity and financial incentives for personnel and new hires. The total amount of this additional funding was of 1.83 billion euros. Additionally, the ministry of health also allocated an additional 1.2 billion euros to strengthen primary care in 2020. Funds were mainly allocated to improve tracing and monitoring of covid-19 cases.

Italy also received support from the European Union through the Recovery and Resilience Plan from June 2021 onwards. The funding for the health components of the plan, totaling 15.6 billion euros over five years, was designed to invest in using new technologies for the updating of hospital and home-care equipment. (OECD, European Observatory on Health Systems and Policies; 2021)

“The Recovery and Resilience Plan in Italy.”



Source: Government of Italy (2021)

Figure 10.

The next paragraph will mention health statistics from England, Wales, and Scotland. Wherever clearly available I will also insert data from Wales and Scotland in the same categories, bearing in mind that for most topics there is already an overlapping in percentages, showing very similar figures due to the

shared National Health System. When necessary, with regards to population data, I will also provide specific information.

As for England, the first two cases of Covid-19 were detected on the 30th of January 2020, and the first death on the 2nd of March 2020. At the end of June 2021, more than 4 million confirmed cases were reported in England alone.

The first covid-19 wave took place in spring 2020 and the second from autumn 2020 to spring 2021, impacting regions in different manners. Cases in the north of England were relatively high in October and November 2020, while in regions in the south, case rates increased later in December 2020 and January 2021.

According to the Office for National Statistics (ONS), by the end of June 2021, 132,053 deaths mentioning COVID-19 on the death certificate had been registered among England residents. This is more than the number of deaths occurring within 28 days of a positive test (112,694) as not all of those who died with COVID-19 will have received a positive test, particularly in the first wave of the pandemic where testing was limited, and a small proportion of deaths due to COVID-19 occurred more than 28 days after a positive test. Inequalities in mortality involving COVID-19 have been widely reported. There have been higher COVID-19 mortality rates in older age groups, among men, and in more deprived areas. The patterns of COVID-19 death rates by ethnic group and regions of England have varied throughout the pandemic. The regional pattern has been influenced by the geographic patterns in cases, as described above, and the timing of measures to control the spread of the virus. At the end of May 2021, London had the highest overall cumulative COVID-19 mortality rate among English regions and the South West the lowest. London also had the highest monthly mortality rate at the peak of the first wave (April 2020) and the peak of the second wave (January 2021). However, in October and November 2020, the monthly mortality rates were highest in the North West, North East and Yorkshire and the Humber due to an increase in cases in these regions.

There is evidence that the COVID-19 pandemic has disproportionately impacted inclusion health groups. Inclusion health is a 'catch-all' term used to describe any population group that is socially excluded. This can include people who experience homelessness and rough sleeping, drug and alcohol dependence, vulnerable migrants, Gypsy, Roma and Traveller communities, sex workers, people in contact with the justice system and victims of modern slavery, but can also include other socially excluded groups. There were high rates of COVID-19 infection and mortality among vulnerable migrants in high-income countries and prison populations in England and Wales. Measures introduced early in 2020 in England to protect people experiencing homelessness from COVID-19 infection, such as the use of hotel accommodation, are estimated to have prevented hundreds of deaths among homeless people.

The first COVID-19 vaccinations, outside the clinical trial setting, in England, Scotland and Wales took place on 8 December 2020, 6 days after the first vaccine was approved for use. The COVID-19 vaccination policy in England initially required a second dose to be administered within 12 weeks of the first dose. The

gap required between doses was revised to 8 weeks in May 2021. As of 30 June 2021, 37.6 million adults had received a first vaccine dose (82.3% of the adult population), and 27.8 million adults had received a second dose (60.8%). While 92.0% of those aged 50 and over had received both doses of the vaccine by 30 June, this varied from 94.9% in the least deprived areas to 86.8% in the most deprived areas. Among different ethnic groups, uptake was lower than 70% in the Black African and Black Caribbean groups, and over 90% in the White British and Indian groups. Those born outside the UK had lower uptake than those born in the UK (81.8% compared with 93.4%). The rate of vaccination uptake was lower in London (84.7%) than in other regions (all over 90%). Due to vaccine prioritisation being mainly determined by age in England, differences between age groups are the most difficult to interpret. However, by June 2021 uptake of both doses was slightly lower among those in their 50s and 60s (87.6% and 92.5%) than among those aged 70 or over (upwards of 95.5%). While this comparison may be distorted because some people towards the younger end of this range may be awaiting their second vaccination, data shows that higher proportions in their 50s and 60s have yet to receive any vaccination, with little change between April and June 2021.

Many inclusion health groups in England have experienced barriers to accessing COVID-19 vaccination. However, strategies like co-produced communication campaigns and alternative access points for vaccination (for example walk-in centres or foodbanks) have also been found to improve access and uptake of COVID-19 vaccination in inclusion health groups like vulnerable migrants in England.

When talking about life expectancy, up to 2018, England had been experiencing a slowdown in improvement of life expectancy year on year. However, 2019 saw an increase of 0.4 years for both males and females, to 80.0 years for males and 83.6 years for females. The very high level of excess deaths due to the pandemic caused life expectancy to fall in 2020. It fell to 78.7 years for males and 82.7 years for females. The fall from 2019 was bigger for males (1.3 years) than females (0.9 years), confirming that the impact of the pandemic on mortality has been greater in men than women. These falls exceed previous year-on-year changes seen since 1981.

In 2020, COVID-19 was the leading underlying cause of death among males, replacing heart disease, and the second largest cause of death among females, after dementia and Alzheimer's disease. As mentioned previously, many of those who died from COVID-19 also had dementia or heart disease mentioned on their death certificate. Between March and June 2020, dementia was the most common main pre-existing condition, for 25.6% of all deaths involving COVID-19 in England and Wales. Heart disease was the second most common at 9.9%.

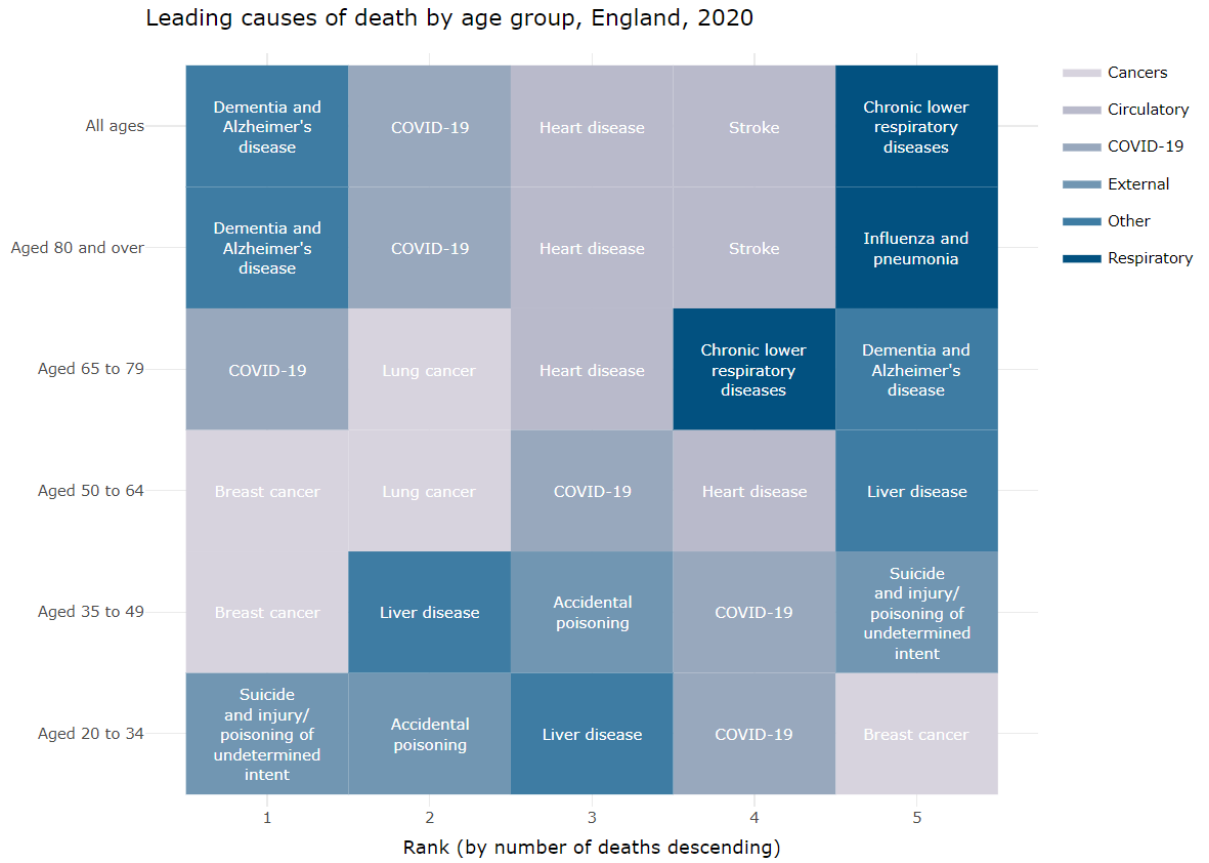
Prior to the COVID-19 pandemic the age-standardised death rates from dementia and Alzheimer's disease had been increasing. A number of factors have contributed to the long term increase in the death rates from dementia and Alzheimer's disease including an increase in awareness of dementia and historical

NHS policies encouraging GPs to diagnose, leading to increased recording on death certificates. This means that, in recent years, deaths may have been classified as dementia that would not have been in the past. The dementia mortality rate increased further in 2020 for females, but was similar to 2019 for males.

COVID-19 featured particularly prominently in the leading causes in older age groups, alongside the causes mentioned above. In younger age groups, COVID-19 was among the top five leading causes, but there were more deaths registered from external causes such as suicide or accidental poisoning, as well as cirrhosis and liver disease, heart disease (in males) and breast cancer (in females). Alcohol-specific mortality increased by around 20% between 2019 and 2020, driven chiefly by increases in mortality from alcoholic liver disease. Alcohol-specific mortality rates had been increasing prior to the pandemic, but this represented a significant acceleration in the upward trend. The increase in alcoholic liver disease mortality during 2020 has been linked to increased alcohol consumption among heavy drinkers who were already at risk of liver failure. Drug misuse deaths have been on a general increasing trend since 2012, and in 2020 they were the highest they have ever been. One possible explanation for this general increase is an increasing number of long-term heroin users with failing health that are at greater risk. This is supported by the fact that the average age at death from drug misuse has increased since the 1980s. There is also evidence of considerable inequalities in relation to drug misuse death rates. In 2020 the rate was almost 10 times higher in the most deprived areas compared with the least deprived areas (as measured by the relative index of inequality (RII)). This inequality in drug-related mortality is related to prevalence of drug use, particularly use of opioids, which is also associated with deprivation.

The next figure showcases causes of death divided by age group:

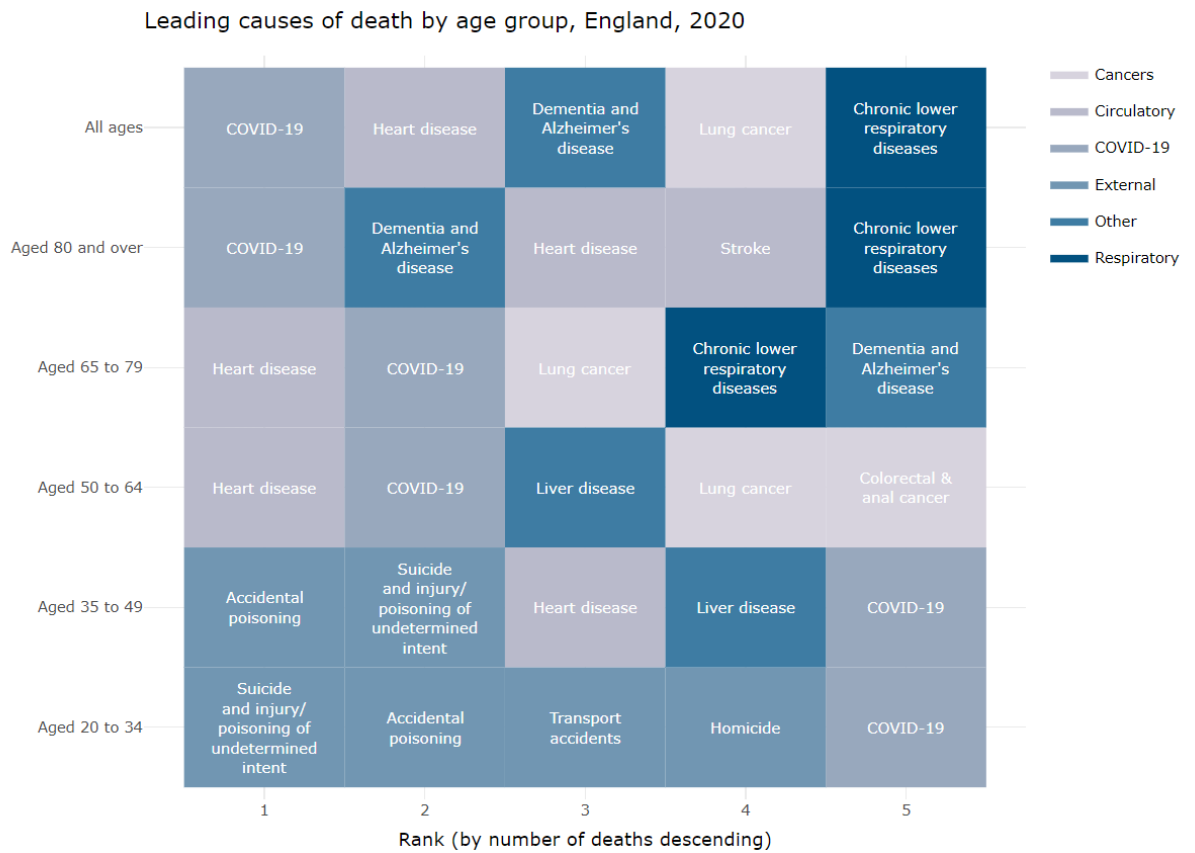
“Leading causes of death by age group, England 2020; females.”



Source: Office for National Statistics Nomis

Figure 11.

“Leading causes of death by age group, England 2020; males.”



Source: Office for National Statistics Nomis

Figure 12.

As for life expectancy, data differentiates common life expectancy from healthy life expectancy, or the years that one person is expected to live in good health. Prior to the pandemic, from 2017 to 2019 healthy life expectancy was 63.2 years for males and 63.5 years for females, showing very little improvement over the years. Females could expect an additional 20 years in poor health, whereas males an additional 17 years. Estimates of life expectancy are surely expected to change due to the ill effects of “long covid” and the delays in accessing treatments for health problems during the pandemic; however this will require further analysis in the future.

The latest population estimates from the Office of National Statistics indicated that as of 2020 people in the 65 year old bracket or older represent 18.5% of the population, an increase from 16.3% from 2010.

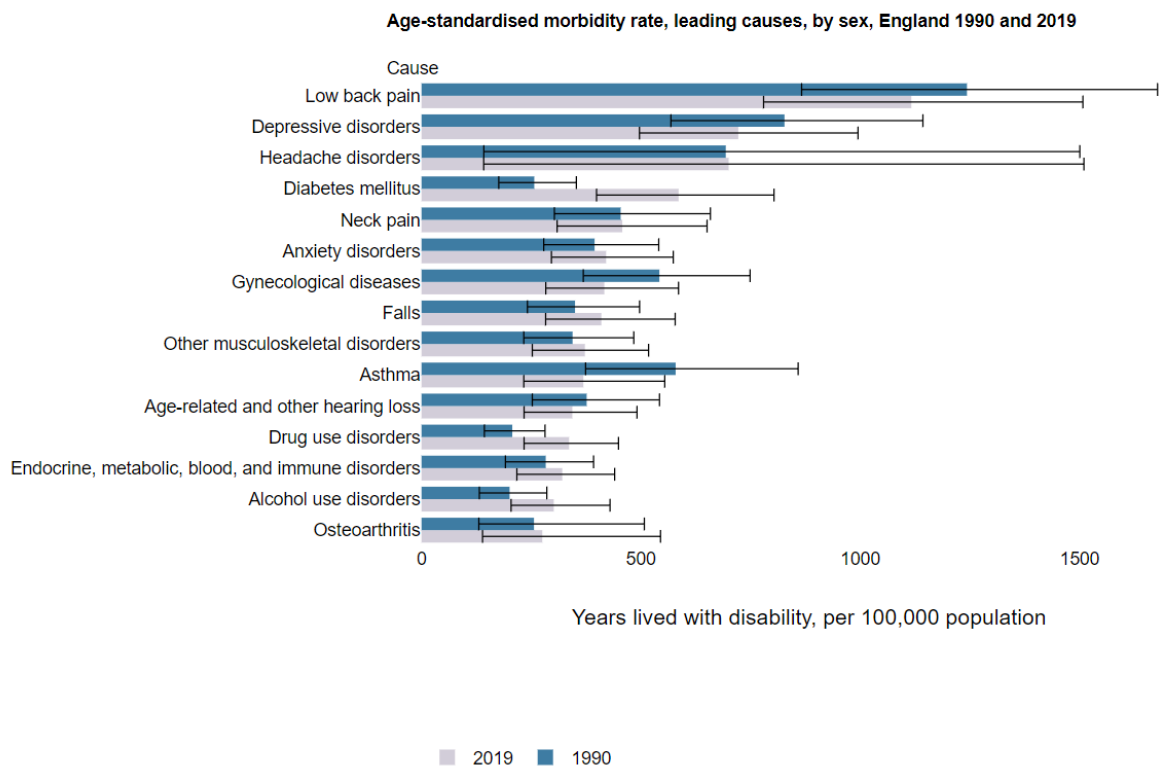
The leading causes of morbidity in 2019 for males were lower back pain, diabetes and depressive disorders, whereas females are impacted more by lower back pain, headache disorders and gynecological diseases. Compared to Italy, a low percentage of people is actually affected by ailments such as alcohol abuse, substance misuse (including tobacco), and various respiratory or cardiovascular

diseases.

Dementia and cancer, although not listed in the leading causes of deaths or ill health, still play a significant role. Prior to the pandemic, around 4.3% of people aged 65 were recorded to suffer from dementia; the figures decreased during the pandemic. This partly reflects reduced access to services where diagnosis takes place, however, as described earlier many people who died from Covid-19 also had a dementia diagnosis.

As for cancer, prior to the Covid-19 pandemic, in 2018, more than 320,000 malignant tumours were diagnosed, an increase of around 40% from just under 230,000 in 2002. The most common cancer sites for males were prostate, lung and bowel; for females it was breast, lung and bowel. Akin to dementia diagnoses, the measures to control the spread of covid-19 in England have had a significant impact on the number of new cancer diagnoses. This may result in more people being diagnosed at later stages, when treatments are less likely to be effective. Figure 13 shows a more comprehensive list of disorders:

“Age-standardised morbidity rates, leading causes, by sex, comparison between 1990 and 2019, England.”



Source: Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2019 (GBD 2019) Results. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2020.

Figure 13.

According to the Global Burden of Disease, in 2019, mental health conditions such as depression and anxiety, accounted for 16.9% of total morbidity in the

population. Between 1993 and 2014 the prevalence of common mental health disorders (phobias, OCD and panic disorders) in adults has increased. Mental disorders impact females more than men (20.7% compared with 13.2%), with prevalence especially in 16-24 age bracket. Unlike most physical health problems, prevalence was lowest among the oldest age groups. Severe mental illness, capable then of impairing people's lives to the point of also experiencing poor physical health, account for a minority of the general population, affecting 551.000 people in England.

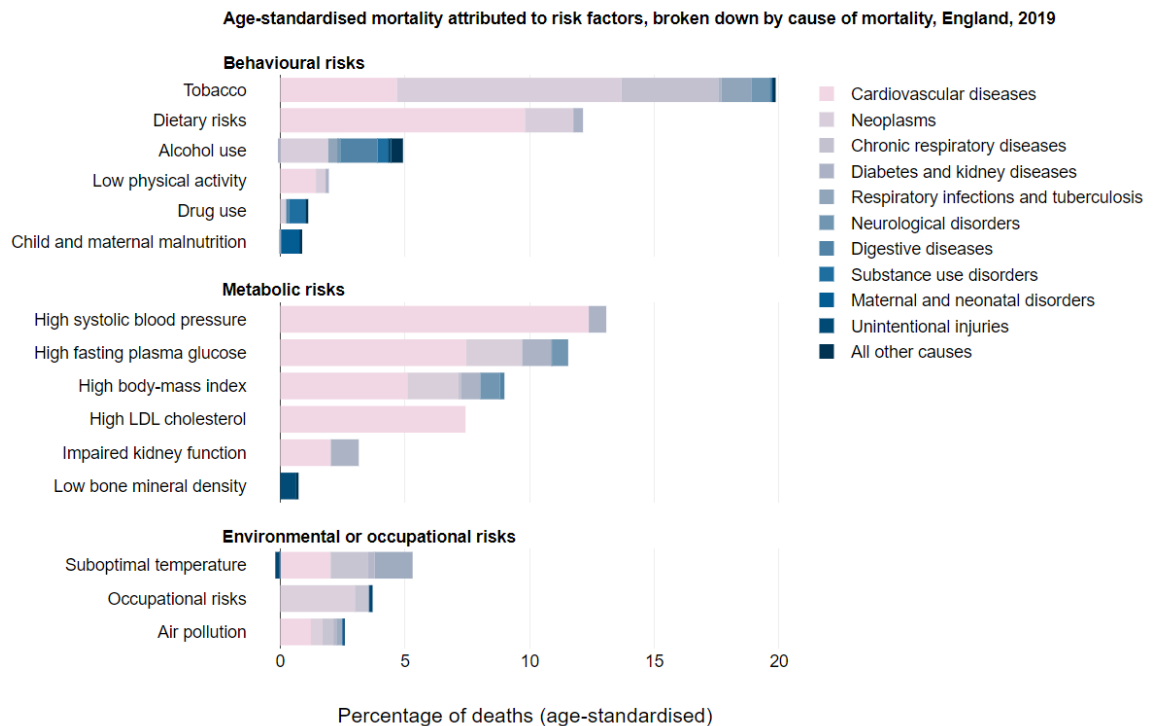
Self-reported mental health and wellbeing worsened during the pandemic. Adults experienced relatively high anxiety levels and low happiness levels in the week immediately preceding the first national lockdown and the following weeks. Prevalence for both indicators was more than double the average of 2019.

When considering risk factors regarding ill health, prior to the pandemic, there was an upward trend in obesity in adults to 28.0% in 2019, while the prevalence of smoking in adults declined to 13.9%. The prevalence of 'increasing or higher risk' drinking in adults was 22.7% in 2019, a slight reduction on previous years, while there was evidence of an increase in drug use. The proportion of adults meeting recommended level of physical activity and fruit and vegetable consumption had remained fairly constant. The risk factors making the biggest contribution to mortality were tobacco, high blood pressure, diet and high blood glucose. These also make a significant contribution to morbidity along with high body mass index (or obesity), alcohol, drug use and occupational risks.

The prevalence of 'increasing and higher risk' drinkers increased in April 2020 and remained above pre-pandemic levels until June 2021. There has also been a reduction in physical activity levels particularly in Black and Asian groups and lower socioeconomic groups. There has been an increase in the number of people trying to quit smoking during the pandemic with over a third of smokers attempting to quit in the 3 months up to June 2021. Data on the impact of the pandemic on obesity is not yet available.

Figure 14 shows an accurate representation of the risk factors in relation to mortality rates:

“Age-standardised mortality attributed to risk factors, broken down by cause of mortality, England, 2019.”



Source: Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2019 (GBD 2019) Results. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2020.

Figure 14.

As for smoking, in 2019 13.9% of adults were classified as smokers, being mostly prevalent among people in manual occupations (23.2% of blue collar workers were smokers, almost double than other occupations) and in those with a long-term mental health condition (25.8%, still almost double than in the rest of the population). Data is similar for both Wales and Scotland, being 11% and 14% respectively.

There is early evidence that the pandemic may have had a positive impact on enabling some people to quit or reduce smoking. Data from the UCL smoking tool kit, reported in the WICH tool, shows that over a third of smokers attempted to quit in the 3 months up to June 2021. Over-the-counter nicotine replacement therapy (NRT) and e-cigarettes are still the most commonly used aids for quitting. However, during the pandemic there has been a reduction in their use, which suggests an increase in people trying to quit unaided.

Regarding alcohol consumption, the prevalence of ‘increasing or higher risk’ drinking is estimated to have reduced slightly over the past decade, from 25.7% of people aged 16 or over in 2011 to 22.7% in 2019. This reduction was seen for both males and females. In 2019, ‘increasing or higher risk’ drinking was highest

in the 55 to 64 age group (29.5%), with the lowest rates among those aged under 25 or aged 75 or over. The North East had the highest prevalence (28.7%) followed by the North West (26.9%) and the East Midlands the lowest (18.7%). Analogously in Wales, 23% of adults as of 2021 consumed a weekly hazardous amount of alcohol, which declined drastically from the earlier numbers of 2003 (34%), whereas in Scotland the numbers were around 17%.

Although pubs, bars and restaurants were often closed during the pandemic, other factors such as isolation and lack of employment may have influenced drinking patterns. Initial data shows there was an increase in the proportion of ‘increasing and higher risk’ drinkers in April 2020. Since then, up until June 2021, the proportion has declined but remains above the level seen in 2019, and this increase was observed for both males and females, and regardless of social class. This increase coincided with increased hospital admissions and mortality during the pandemic as described earlier in this report.

Regarding healthy living, in 2019 to 2020, 66.4% of adults reported undertaking at least the recommended level of 150 minutes of moderate intensity physical activity or equivalent per week. The numbers rise up to a 69% average for Wales and a 51% for Scotland. With regards to dieting, the proportion of the population meeting the recommended ‘5-a-day’ on a ‘usual day’ was 55.4% in 2019 to 2020 and this has declined slightly from 56.8% in 2015 to 2016. Scotland shows how only 7% of adults in 2021 reported following fewer than 2 healthy lifestyle behaviours; 31% of adults ate the recommended portions of five fruit or vegetables per day.

The impact of the pandemic on adult obesity levels is not known yet, but given the changes in other risk factors such as diet, physical activity and alcohol consumption, it is possible to foreshadow an increase in the percentage of people affected by it.

The parentheses regarding both Italy and the United Kingdom, when mentioning underlying issues in the respective populations were aimed at describing how these countries would have fared in the event of a pandemic such as Covid-19. People could have very well been predisposed to be impacted by pulmonary illnesses especially just on the basis of common underlying morbidities and lack of a proper lifestyle, but putting the blame on the citizens when most of the issues are directable to a lack of proper management of the national health system should come second.

2.3 What did the governments do?

Certain dates have been mentioned already, specifically when talking about the Italian government’s approach to the pandemic. For clarity’s sake this next subchapter will provide a more straightforward path to explain the measures taken by both countries.

Upon defining the seriousness of the Covid-19 virus, on the 31st of January 2020, the Italian Council of Ministers appointed the head of Civil protection (Angelo

Borrelli) as Special Commissioner for the Covid-19 emergency. On the 22nd of February, the government announced a quarantine in 11 different municipalities in the most affected areas, mainly northern Italy. With the support of the military and law enforcement agencies; travel from different zones, divided into different colours based on the rate of ill people per population, has been secured and allowed only behind special permits. Schools, sporting events, and trains were soon after stopped as well, and people showing concerning symptoms were advised to stay home and call emergency phone numbers to avoid the further spread of the virus.

These measures were further reinforced from the 1st of March, when the division by colours was applied nationwide. On the 4th of March a national shutdown of all schools and universities was imposed for two weeks. Schools will then be closed until September as a future decision of the then Ministry of Education. On the 16th of March 2020, the Italian government introduced the “Cura Italia” emergency package, valued at 25 billion euros to alleviate the Italian health care system, citizens and businesses who were unable to work.

As more people were infected and deaths increased, on the 21st of March further restrictions were announced. These resulted in halting all non-essential production, industries and businesses in Italy. This decision was then followed by an additional economic stimulus plan, consisting of 200 billion euros of state-guaranteed loans to companies and an additional 200 billion euros of guarantees to support exports.

Regarding vaccination campaigns, Italy begin administering the first doses on the 27th of December 2020, with the Lazio region beginning first with the Pfizer-BioNTech vaccine. On the 6th of January 2021, the European Medicines Agency approved the Modern vaccine aswell, leading to a wider spread of vaccinations that led Italy to have a total of 20 million people jabbed once on the 1st of May 2021 and 6 million with double jabs. On the 3rd of September 2021 65.1% (retrieved from Reuters) of the country’s population was given two jabs and received thus full efficiency.

It is also worth noting that people were heavily pressured to receive vaccines through coercion dictated by the EU digital Covid Certificate, also called “Green Pass”, rather than being vaccinated for social reasons, implying a high rate of vaccine hesitancy. Without this tool people were severely limited in what they could do on a daily basis and could face fines.

On the 15th of November 2022, Italy was announced to officially be on the endemic phase of Covid, enabling quarantine guidelines to not be as strict as in the past.

Regarding the United Kingdom, the government published the Health Protection Regulations 2020 on the 10th of February 2020, as a statutory instrument covering the legal framework behind the government’s initial containment and isolation strategies and its organization of the national reaction to the virus. On the 19th of March the government introduced the Coronavirus Act 2020, granting the government discretionary emergency powers in the areas of NHS, social care,

schools, police, the Border Force, local councils, funerals and courts. Initially, Prime Minister Boris Johnson opted for keeping Britain open, sustaining a completely different approach to the ones seen in Europe. This decision, was widely criticized by experts, as it was also not following common guidelines such as imposing lockdowns, reinforcing the use of masks, and restricting travel harshly.

The first national lockdown was imposed on the 23rd of March 2020, ordering the public against undergoing non-essential travel and ordering many public amenities to close. On the same day, a military task force named the COVID Support force was launched to provide support to public services and civilian authorities. From the 24th of March all major mobile phone providers began sending out messages to their customers, urging them to stay at home. This, when considering the initial "Catch it, Bin it, Kill it" wave of propaganda, greatly helped in creating a nationwide sense of solidarity.

In April, the Scottish government published plans to pursue a zero-COVID "elimination" strategy, in contrast with the rest of the UK, and expanded a "test, trace, isolate support" system.

On the 8th of May the Welsh government relaxed restrictions on exercise and allowed some garden centres and recycling facilities would reopen. Nicola Sturgeon stated that she wanted all nations to make changes together as it would give the public a clear and consistent message Boris Johnson acknowledged different areas move at slightly different speeds with actions based on the science for each area. Scotland announced a similar measure in terms on physical exercise as Wales, to go live on the same day. The Scottish government generally pursued a slower lifting of lockdown measures than the rest of the UK over the following months.

While nationwide lockdown measures were gradually relaxed throughout the summer, including a shift towards regional measures such as those instituted in Northern England in July, lockdown easing plans were delayed at the end of July due to rises in case numbers, and measures were increased once more following the resurgence of the virus nationwide starting in early September.

Johnson announced in a press conference on 31 October that England would enter a second national lockdown which would go on for four weeks. He said that to prevent a "medical and moral disaster" for the NHS, the lockdown would begin on 5 November when non-essential shops and hospitality will close, but, unlike the first lockdown, schools, colleges and universities will stay open.

On the 23rd of November, the government published a new enhanced tier system which applied in England following the end of the second lockdown period on 2 December. On the 16th of December Johnson said that restrictions would be relaxed for five days over the Christmas period. This decision coincided with the discovery, announced by the Health Secretary, of a new COVID-19 strain, prompting for new future measures. Restrictions on incoming international travellers were introduced in January 2021, including a negative test prior to departure and all travel corridors were closed on Monday the 18th of January, requiring all international travellers to self-isolate for 10 days.

As the vaccination programme expanded, the government lifted most remaining restrictions in England on the 19th of July 2021, as the SARS-CoV-2 Delta variant was driving a third wave of infections. In England, face masks became recommended rather than mandatory in certain settings, limits on gatherings were removed, and certain rules on nightclubs, restaurants and bars were lifted. However, Transport for London maintained face mask mandates. The governments of Scotland and Wales lifted most remaining rules in early August, but both maintained existing face mask rules.

Vaccinations began on the 8th of December 2020. As of the 13th of September 2021, there were four other COVID-19 vaccines on order for the programme, at varying stages of development.

Phase 1 of vaccine administration plan prioritised the most vulnerable, in a schedule primarily based on age. The delivery plan was adjusted on the end of December, delaying second doses so that more people could receive their first dose. A target to give all 15 million people in the top four priority groups their first dose by the middle of February 2021 was announced at the beginning of January 2021, and achieved on the 14th February 2021.

In June 2021, all adults aged 18+ were able to get their first dose of a vaccine. In response to the SARS-CoV-2 Omicron variant, third vaccine doses were made available to all adults in December 2021.

It may be of significance to note how polling suggests the UK's level of COVID-19 vaccine hesitancy is among the world's lowest, showing the results of a different approach when put at a comparison with Italy (Elisabeth M.; 2021).

Chapter three

An institutional analysis: the NHS

3.1 Origins of the NHS

The Italian and the British national health systems differ significantly in their social, operational, and historical context. To accurately analyse both it is appropriate to first understand their origins and how they began. More importantly, recognizing their history proves itself to be important when understanding the pattern of innovation and initiatives in both subjects, leading to their own unique problems dictated by different sets of priorities.

It is important to give a historical background to better explain the situation that was at hand prior and during the construction of the forefather of the National health system.

The unification of Italy was finalized in 1861, after more than fifty years of constant social upheavals, nationalist fervours and revolutions. Even though most of the current territories were at the time under the crown of the king of Italy, their borders were still largely fleeting up until the end of World War 2. After the War, the defeat of the fascist and national socialist threats, the Italian population voted to become a republic. This, in turn, removed power from the hands of the royal family and led to a more modern Italy; however it is crucial to note that the Italian peninsula showed a large cultural divide, most notably between the northern and southern parts. The southern areas were afflicted by economic and social difficulties, which were not aided by a Piedmont-based model of government being born from the unification in 1861. This model was first of all distant and inattentive to the needs of the population living in the South, but was also limiting local say in decision making, further exacerbating any possibilities for the citizens to be heard directly. This cultural and geographical divide will last for years to come, and will shape the future of the National Health system as well.

The start of the Kingdom of Italy was marked by poor planning and an inadequate fiscal base, this, paired with the enormous costs required to modernize the country made for a difficult start of the newly born kingdom.

In 1886 law 3818 was passed, establishing the right of mutual aid societies to provide subsidies to members in case of illness, inability to work, or old age, as well as giving death benefits to the families of the deceased. By the late 1880s, the health of the Italian population reached a critical point, where pandemic and illness outburst were frequent and rampant. Life expectancy was at 35 years, malnutrition was prominent and child mortality was as high as 45% at 5 years old (Ricciardi & Tarricone; 2021).

(Check and compare aforementioned statistics but for these times)

The desire to create a nationalized health system has been strong since the end of the war. In particular, the Veneto Health Council drew up an initial Project to reform the Italian health system, which was then signed in 1945. The project contained the first formulation of a radical reform of the health and welfare system (Giorgi and Pavan; 2021). With the birth of the Italian republic, came a new Constitution, which created the right to health in its 32nd article, making Italy the forefather regarding the consideration of health as a “complete discipline” (Mortati; 1961). This principle was also aided by the 3rd article, naming the cardinal national principles, which, among others, listed then equity. Even though Italy made clear how the right to healthcare was crucial, only the 1970s showed the big step moving from the mutual-assistance system inherited from Fascism, characterized by a contributory and occupational system, to the current system.

At the dawn of the republic, the Italian healthcare system was characterized by large pension and mutual-assistance institutions designed to manage insurance against illness for various professional categories belonging to the public or private sector. Among these institutions, the most important one was the National Institute for Health Insurance (INAM), adopted in 1947. By the end of the 1950s, the INAM assisted more than half the Italian population (Giorgi C.; 2023). Following the trend of other European nations, Italy’s first social health insurance system was born in the 19th century, and concretised itself in the form of mutual aid societies. These societies, even though amounting to a total of six thousand units as of 1906, only covered 3% of the population. Between the 1920s and 1930s most of these funds were taken over by several public entities setting the stage for compulsory insurance. By 1974, 93% of the population was covered by health-care funds, even though the benefit levels varied based on income and profession.

The rise in numbers is marked by a decision in 1919 to make social insurance compulsory with the establishment of the National Institute for Social insurance (Istituto Nazionale di Previdenza Sociale, or INPS), covering 12 million workers. In 1933 the National Institute for Insurance against Accidents at Work (Istituto Nazionale per l’Assicurazione contro gli Infortuni sul Lavoro, or INAIL) is founded, unifying all the smaller funds that were not yet taken over by the INPS. These establishments were followed then by the creation of an institute of Public health, in 1934 under the Ministry of the Interior, and by the creation of the Italian National sickness insurance (Istituto Nazionale per l’Assicurazione contro le Malattie) in 1943, merging furthermore all compulsory sickness insurance funds. In 1958, the Ministry of Health was created, devolving some competencies from the Ministry of the Interior to itself, aiding the birth of a more efficient and specialised system.

In the area of health-care provision, the hospital system evolved from religious institutions to community hospitals, marking the first step towards State responsibility and accountability.

A reform in 1968 established hospitals as public entities for hospital care and set minimum structural requisites and provided funds from the central government, attempting to create a more levelled National health system and reducing regional inequality. This however was still not devoid of issues, as these changes resulted in a rise of hospital beds, equipment and personnel, increasing the costs that every hospital had to face for their upkeep (Brown LD; 1984). Additionally, whenever insurance funds were unable to settle their debts with hospitals, the central government assumed the hospitals' debt instead of centrally managing both the debt and the hospitals.

In 1978, law number 833/78 was passed establishing the SSN. The law suspended mandatory insurance funds and incorporated all related assets and most personnel directly into the newly formed public health care system. It extended coverage regardless of employment status or financial capabilities, considering healthcare as a fundamental human right, by basing itself on the principles of coverage, solidarity and equity. This new system also covered provisions, including primary and hospital care, rehabilitation, prevention, public hygiene, maternal and childcare, mental health and veterinary services. Public hospital physicians were employed by the State, whereas specialists and General Practitioners remained private establishing contracts with the SSN whenever needed. Healthcare planning and financing was done at a national level, but healthcare service administration was performed at the regional and local levels through a series of local health-care units (Unità Sanitaria Locale), which contracted services from private and public providers. Throughout this period costs associated with providing social services to the population rapidly escalated, and the financial crisis only put more stress on the system as a whole (Ricciardi & Tarricone; 2021).

The financial turmoil the SSN was going through begged for a reform that could contain costs and improve managements. This reform arrived in 1992 and 1993, through the laws 502/92 and 517/93, granting broad powers to the regions for planning, organizing, financing health-care services, transferring power from the central government and eliminating the influence of municipal governments on the local health authorities. This transformed the system from a political model to a managerial model, providing for separation of political, administrative and operational functions. These reforms transformed the local healthcare units to local health authorities (Aziende Sanitarie Locali) while also reducing their number. Larger district or university public hospitals were given more powers, being transformed into hospital trusts (Aziende Ospedaliere), receiving full responsibility for budgeting, financing and operations management. Smaller general hospitals remained under the control of the Local health authorities. Each Hospital trust and each Local health authority was governed by a general manager, with the judicial authority needed for an autonomous leadership structure.

Such a massive reform paired with the economic recession of the 1970s, exposed the need for a more transparent financing system. In fact, the 1992 reform also added a prospective payment system, replacing the global budgets used thus far. This system introduced national and regional tariffs for hospital care, taking

inspiration from the American Medicare and Medicaid. The new system promised the added benefits of contributing to decentralisation of responsibilities and rewarding virtuous provider behaviours, introducing internal and external control systems, financial risk sharing, and the ability to assess performance (Ricciardi & Tarricone; 2021).

The resulting system introduced competition. The northern regions prospered, using legislation and programming to strengthen their positions and improve overall quality. Southern regions began to fall behind instead, due to their inefficiencies and less technologically advanced equipment per inhabitant than northern hospitals. In 1999 the law 229/1999 was passed, trying to reduce inequalities among regions and balance the power of the general managers by increasing the role of physicians and encouraging intra-regional collaboration. This reform confirmed the central government's role in national agenda-setting while trying to return to a context similar to the 1978 reform. This resulted in general animosity between the central government, the regions, and the regions among each other. The regions that thrived the most from the new system (e.g. Emilia-Romagna, Lombardy and Tuscany) were advocating for a federalist system with efficiency indicators, while the southern regions argued for the introduction of deprivation criteria, accounting for gaps in education, employment and housing, to allocate more of the national health-care budget into their hospitals (Ricciardi & Tarricone; 2021).

The system was finally amended further in 2001 by changing the title V of the Italian Constitution. The new law reinstated a high level of autonomy to the regions and responsibility to their residents. Most notably it introduced essential levels of care (*Livelli essenziali di assistenza*), marking a standard health benefits package that will change the financing system through central level monitoring and assessment of regional performance. The regions gained fiscal spending autonomy and were required to aim for a budget balance, but tax collection was still mostly centralized. Only one tax was administered on a regional level but was sternly checked by the central government regarding its rates. The financing system allowed the central government to provide discretionary, extraordinary funding to specific areas for development, growth, cohesion, social solidarity, and to correct economic and social imbalances, but it also allowed some regions to overspend without direct consequences for irresponsible management, given that the central government continued to cover those regions' deficits for several more years. This overlapping of state and regional legislative, policy, and administrative power was to prove problematic (Ricciardi & Tarricone; 2021).

As seen in the next tables, health-care expenditure rose steadily over the 2000-2005 period, highlighting gaps among regions in their financial situations and quality and quantity of services. Italians' freedom to seek care at any healthcare facility increased patient mobility, which was already an issue in the 1990s. As citizens sought more efficient and effective treatment, the northern-most regions thrived, while the southern regions were unable to cover their costs. This led to financial stability laws in 2004 and 2006, entailing spending reviews for all

regions and recovery plans for those regions in deficit requesting government bailouts. Spending reviews ensued by trying to reduce government spending and making health-care expenditure a major target to balance the regional budgets. It proved however to not be enough and eight regions (seven of which were in the south) were ultimately forced to request bailouts and submit recovery plans between 2007 and 2009, two more (Piedmont in the north and Puglia, in the south) did the same in 2010. Only two regions (Liguria in 2010 and Piedmont in 2017) left the plans. The regions with balance budgets returned to quality improvement to attract patients more the regions still under recovery plan stipulations. Gaps in the attainment of the essential levels of care between recovery plan and non-recovery plan regions were substantial before the 2008 crisis. The gap is still of concern now.

“Health-care expenditure in Italy, 1990-2012”

	1990	1995	2000	2001	2005	2010	2011	2012
Public health expenditure, in millions of euros	41466	48752	70173	77686	96797	111331	112810	113964
Variation from previous year	..	-0.6%	11.1%	10.7%	6.1%	1.0%	1.3%	1.0%
Percentage of total health expenditure	82.6%	73.8%	73.2%	75.2%	77.5%	78.2%	77.2%	77.7%
Percentage of GDP	5.7%	4.9%	5.7%	6.0%	6.5%	6.9%	6.9%	7.1%
Deficit or surplus, in millions of euros	-6729	-979	-3228	-3778	-5735	-2196	-1262	583
Variation from previous year	..	-74.5%	-13.9%	17.0%	-10.7%	-34.7%	-42.5%	-146.2%
Private health expenditure,* in millions of euros	8707	17299	25704	25609	28040	30954	33254	32765
Variation from previous year	..	13.0%	8.3%	-0.4%	-0.5%	1.1%	7.4%	-1.5%
Percentage of total health expenditure	17.4%	26.2%	26.8%	24.8%	22.5%	21.8%	22.8%	22.3%
Total health expenditure, in millions of euros	50173	66051	95877	103295	124837	142285	146065	146730
Variation from previous year	..	2.7%	10.4%	7.7%	4.6%	1.0%	2.7%	0.5%
Percentage of GDP	6.9%	6.7%	7.7%	8.0%	8.4%	8.9%	8.9%	9.1%
GDP, in millions of euros	723249	984984	1239267	1298890	1489725	1604515	1637461	1613265
Variation from previous year's GDP	..	8.7%	5.7%	4.8%	2.9%	2.0%	2.1%	-1.5%

GDP=gross domestic product. *Private health expenditure included out-of-pocket family spending as well as private insurance and health fund payments and other third-party payments. Euros are presented in the source documents exactly as the Italian Ministry of Health publishes them, without adjustment. Adapted from Armeni et al.³⁹

Table 1: Health-care expenditure in Italy, 1990-2012

Source: Ricciardi & Tarricone; 2021

Figure 15.

“Health-care expenditure in Italy, 2013-2019”

	2013	2014	2015	2016	2017	2018	2019
Public health expenditure, in millions of euros	112 900	114 260	114 578	115 904	117 678	119 074	120 272
Variation from previous year	-0.9%	1.2%	0.3%	1.2%	1.5%	1.2%	1.0%
Percentage of total health expenditure	77.4%	77.1%	76.2%	76.3%	75.9%	75.9%	76.1%
Percentage of GDP	7.0%	7.0%	6.9%	6.9%	6.8%	6.8%	6.8%
Deficit or surplus, in millions of euros	333	224	-669	-276	-154	-110	-62
Variation from previous year	-42.8%	-32.8%	-398.4%	-66.2%	24.8%	24.8%	24.8%
Private health expenditure,* in millions of euros	32 899	33 918	35 807	35 911	37 341	37 748	37 697
Variation from previous year	0.4%	3.1%	5.6%	0.3%	4.0%	1.1%	-0.1%
Percentage of total health expenditure	22.6%	22.9%	23.8%	23.7%	24.1%	24.1%	23.9%
Total health expenditure, in millions of euros	145 798	148 178	150 385	151 814	155 019	156 822	157 969
Variation from previous year	-0.6%	1.6%	1.5%	1.0%	2.1%	1.2%	0.7%
Percentage of GDP	9.1%	9.1%	9.1%	9.0%	9.0%	8.9%	8.9%
GDP, in millions of euros	1 604 600	1 621 827	1 652 086	1 689 823	1 727 383	1 756 981	1 770 689
Variation from previous year's GDP	-0.5%	1.1%	1.9%	2.3%	2.2%	1.7%	0.8%

GDP=gross domestic product. *Private health expenditure included out-of-pocket family spending as well as private insurance and health fund payments and other third-party payments. Euros are presented in the source documents exactly as the Italian Ministry of Health publishes them, without adjustment. Adapted from Armeni et al.³⁰

Table 2: Health-care expenditure in Italy, 2013-2019

Source: Ricciardi & Tarricone; 2021.

Figure 16.

The UK’s example, in contrast, shows itself to be much different than the Italian model. Historically, the poor, infirm and elderly received care from religious orders. However, the birth of the Church of England in 1543 by King Henry VIII led England to be excommunicated from the Catholic Church. This moment prompted the King to dissolve the monasteries nationwide, which meant that the locations that used to provide for the people in need were then removed. Various measures were introduced to ensure the presence of some sort of support. In 1601, Queen Elizabeth I introduced the Poor Law, establishing almshouses to care for the poor and sick, and a system of “outdoor relief”, providing benefits in kind to support the poor at home.

The Poor Law system required the “necessary relief of the lame, old, blind and such other among them being poor and not able to work.” Soon after a first rudimentary financial aid system arose, where those who were unable to pay were supplied with checkups by a parish doctor. Even though this system was not intended to spread beyond the ranks of the poor, pauperism made it unsustainable. Deterrents were put to curb stress on the Poor Law system, namely being the “workhouse test” before receiving proper treatment in 1834 and the Anatomy Act, being set in 1832. Although the sick were exempted from the “workhouse test”

and could then still be treated at home, no one started seeking treatment through the Poor Law if avoidable (Honigsbaum F. ;1990)

This context remained the main source of care until the 19th Century, although with some differences. Attitudes towards the poor had changed and almshouses were thought to be too benevolent, outdoor relief was abolished and workhouses were established, providing accommodation for the poor, orphans, and the elderly. Towards the end of the century, annexes were added to house the sick. Care was rudimentary, often provided by untrained volunteers (P. Greengross et al.; 1999). As time progressed, local and municipal authorities established hospitals for infectious diseases, as well as separate institutions for people with mental illnesses and handicaps. Additionally, many voluntary hospitals were established, run by Governors. Medical care was provided by visiting specialists. For economic reasons though, the hospitals that would host these practitioners would tend to focus on people with relatively acute problems and who did not require long-term care.

In the meantime, primary and community care services evolved separately. Community care, including domiciliary services, plus environmental and public health services, had always been the responsibility of local authorities. In contrast, at the start of the 20th Century, the developing family doctor service was funded through insurance schemes. In 1911, the Government extended the scheme to all working men whereby they could choose a General Practitioner from a "panel" of local doctors. This "panel system", although not providing cover to family members or their dependents, made considerable differences to a large proportion of the poor entitling them to free, government funded health care (P. Greengross et al.; 1999).

The goal of unifying the public health services was realized through the Local Government Act of 1929, abolishing the boards of guardians who administered the Poor Law, and giving the chance to local authorities to convert Poor Law institutions into municipal hospitals, making indoor and outdoor relief more readily available; means testing was added to avoid an excessive loss of patients. Considering these changes, the Poor Law system was still avoided when possible and care by local municipalities was believed to not be enough to create a universal service. Club practices were born, and people began administering themselves through the use of General Practitioners who could attest to the sickness in the people requesting aid from them. In 1911 State intervention was inserted in these clubs through the National Insurance Bill, after years of struggle between different clubs and demands from doctors.

As the Second World War more of a threat to the United Kingdom, the Government established in 1938 an Emergency medical Service. All the hospitals were then registered and run centrally to anticipate a large number of casualties (P. Greengross et al; 1999).

The acts of 1946 and 1947 established the NHS as universal, comprehensive and free at the point of use, funded by general taxation and with voluntary hospitals nationalized and managed by unelected Regional Hospital Boards, while General Practitioners were administered separately and local authorities were left with

residual public health and social care functions (Gorsky M., 2008).

By the end of World War II, the concept of an integrated and state-funded hospital became established, and in 1948 the newly elected Labour government created a National Health Service. The fundamental principles underlying the NHS were following the ones from 1946 and 1947. Privately-funded health care systems were still present, but for the most part British people received almost all of their care through the nationalized route.

The three main strands of the NHS hinted at the previously divided structure that characterized the previous health system, albeit with now different ways of managing them: state owned hospitals, a national network of General Practitioners, and as an auxiliary service community and domiciliary health services.

Hospitals that had previously been run by voluntary charitable organisations and local governments became the responsibility of Regional Hospital Boards, with local responsibility appointed to Hospitals Management Committees. A network of General practitioners replaced the old panel system; they were responsible for personal primary health care and received fees which were set and paid nationally. They would also refer patients to different kinds of services and hospitals whenever deemed appropriate. Executive councils, publicly funded as well, administered the family practitioner services. Home nurses and public and environmental health continued to be run by separate and elected local authorities. These three levels were financed centrally but managed separately.

The prevailing management style was “command and control”, with central instructions being passed down a chain of authority from central government to local hospital boards. This applied to community services as well, albeit with the central note being local authorities and not the central government. General practitioners were of course more independent as they relied on contracts, but they could be influenced through centrally agreed national contracts for services (P. Greengross et al; 1999).

The 1960s were famous as a decade of fast expansion in terms of buildings and technology. A “Hospital plan for England and Wales” specified the base line that every hospital had to follow regarding the number of beds for every 1,000 people served, through the aid of the 14 Regional Health authorities as a basis for planning and building new hospitals. This plan also accounted for those services that were required to be provided in District General Hospitals, including services for the elderly and mentally ill. This population-based approach led to services being organized more thoughtfully and in a more comprehensive way for the average citizen. For more acute care, people were expected to travel to further Regional Hospitals. In addition to this, the figure of hospital consultant career structures, and of medical advice to management were added. They were encouraged to involve themselves in the planning of services, being the forerunner for the trend of clinical management in the 1980s. Lastly was the development of personal care services, in particular the creation of a negotiated charter that would qualify General Practitioners as specialised personnel and would give them

contracts that wouldn't feed into the overworking and underpaying cycle that was prominent then.

In 1974 the NHS underwent a critical reorganization attempt to improve clarity of delegation and accountability, showcasing an important need to reform the services as well. These issues will then be tackled in the 1980s.

General management was introduced in 1984, encouraging the presence of only one individual at every level of the organization, improving authority and accountability for planning and implementing decisions, This in turn also allowed for more explicit decision-making and greater emphasis on clear leadership.

Clinical and professional staff, consultants aside, were responsible to managers now. The Ministry of health was removed from day-to-day management in the NHS, which was delegated to a new NHS Management executive. This managed to keep the policy-making aspect in the hands of the Ministry of Health, but also to separate its involvement in certain practices to allow better goal clarity (P. Greengross et al; 1999).

The most groundbreaking set of reforms was added in 1989 through the white paper "Working for patients". Within it was showcased a list of seven reforms which were aimed at radically changing the way the NHS operated. The most far-reaching change was the introduction of an internal market for health care. Health authorities became then responsible for assessing the health status of their resident population and for purchasing accurately the services needed to cover the identified projected needs from the public, or the private sector. NHS providers were established as "self governing" organisations, and they could focus on delivering services efficiently. Budgets were not calculated on a capitation basis related to population size, age, structure and financial capabilities with which they could or could not purchase health care services. The government also introduced a voluntary scheme where certain General practitioners could have a limited budget to purchase a restricted range of services; this was aimed at establishing alternative purchasers that also had a more in depth knowledge of the population and to improve the quality of secondary care.

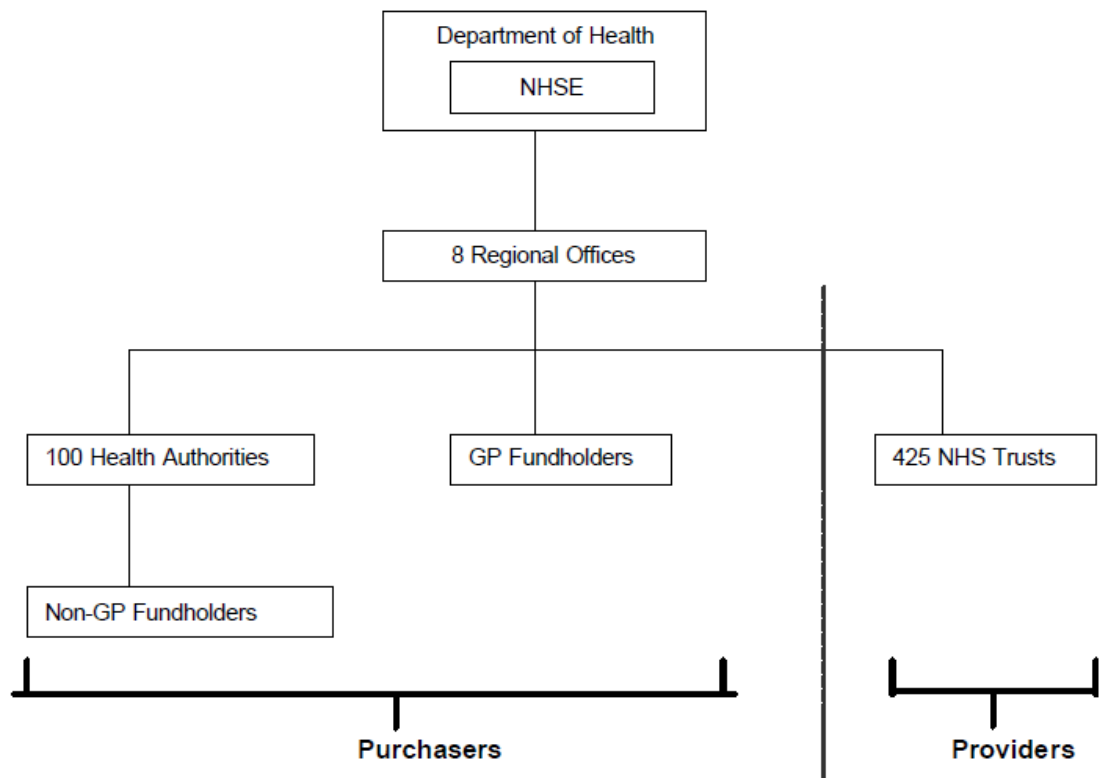
The reforms also enabled individual providers to apply to become NHS trusts, intended to be semi-autonomous organisations run in a business-like manner in order to promote greater efficiency and quality. Community services providers were encouraged to establish themselves as separate trusts from acute providers, this allowed to prevent the more powerful acute hospitals taking money away from community providers (P. Greengross et al; 1999).

All these reforms were aimed at changing the philosophy of the NHS, switching from a passive and bureaucratic scheme largely driven by historical budgeting to a responsive organization where money was channelled to meet the patient's needs. Reflecting this change, the structures and functions of the Department of Health changed as the decision-making was devolved locally.

Regional health authorities became financially responsible for the NHS trusts and the General Practitioners. They also initially purchased a range of specialised services (for rare or highly technical conditions such as plastic surgery, bone

marrow transplantation or kidney dialysis). However, in 1996, this function was devolved to District Health Authorities and Regional Health Authorities were abolished as Statutory Health Authorities. In practise, driven by the difficulties of assessing needs for such specific services for their own relatively small populations, Health Authorities within each region grouped together to commission specialist services, nominating a lead authorities on their behalf. Regional Health Authorities were then replaced by newly created Regional Offices of the NHS Executive, part of the civil service and with newly clarified functions such as performance management of trusts, Health Authorities and General Practitioners fundholders, strategic resource allocation, workforce planning and research and development. The next figure illustrates the general NHS scheme as of 1996 (P. Greengross et al; 1999).

“Structure of NHS in England, 1996.”



Source: P. Greengross et al; 1999.

Figure 17.

The introduction of an internal market proved itself to be difficult. Purchasers could hardly ever initiate radical changes as the central government frequently

intervened to protect hospitals for practical or political reasons. Additionally, needs-based assessments were not always perfectly indicative of a local population as each purchaser only tended to look at the most obvious problems, inhibiting the likelihood of discovering new health problems. Furthermore, contracts were not being carried out as how they ideally should have, as trusts often claimed they had fulfilled or exceeded contracts early and needed more money; this was due to either under-recording of patients to inflate activity, or due to an initial overworking of the trusts to achieve more financial assets faster. All these issues were faced in 1997 with the “New” NHS. This new and evolved system kept the purchaser-provider course of action, to separate planning of healthcare from delivery, but also created new actors and ways to enhance management as a whole.

Firstly came the abolition of the internal market, aimed at increasing cooperation between Trusts, primary care, health authorities and social services. Primary groups were introduced, forcing all general practices to be part of one. Each group included about 50 General practitioners and their staff, serving a population of 100,000 people, they covered defined geographical areas and each is run by a board with a majority of general practitioners, the Health Authority, representatives of practice nurses and community groups. Health authorities were now expected to develop three-yearly Health improvement programmes with the aid of local NHS, Primary care groups and Local authorities. In order to ensure an improvement in the quality of the clinical practices, the concept of Clinical Governance was introduced, imposing a statutory upon Trust Chief executives for the quality of care delivered. A new Performance management framework was also established, assessing six factors regarding healthcare: its outcome, its accessibility, the perspectives of patients and carers regarding it, its effectiveness and efficiency, and the general health and quality of life improvements thanks to it. A National Institute for Clinical Excellence was created to develop National Service Frameworks for care delivery, this was paired with the new Commission for Health improvement aimed at evaluating clinical care against the standards set by the National Institute (P. Greengross et al; 1999).

The NHS as a whole remained largely unchained for the past thirty years, but some important events have still happened. One of those is the “Francis Report” from 2013. It provided a critique to the actions that led to the failings and unacceptable treatments of the patients in Stafford. This report made it necessary for the NHS to be reformed further, especially in the fields of inspection regimes, more communication among staff members and new safe staffing guidelines. Additionally in 2012 the Health and Social Care Acts were meant to increase competition to improve the overall quality of the system. The act is designed to make the NHS more responsive, efficient and accountable. It put clinicians in charge of shaping services to avoid over or underspending, whereas their role previously was to negotiate with primary care trusts. Patients were given more importance in their treatment as now they explicitly have been given the freedom to choose services that best meet their needs, including from charity or independent sector providers as long as they meet NHS costs. The Act also

introduced Healthwatch patient organisations locally and nationally to further this goal. Among other changes however it is important to note how the Act sets the Ministers' ultimate responsibility for the NHS, this, paired with the streamlining of management by removing unnecessary tiers, increases accountability both locally and nationally.

More recently, the Health and Care Act of 2022 turned the informal roles of Integrated Care systems formal, by establishing them as statutory bodies. The Act also introduced a new spending cap on the amount anyone in England will need to spend on their personal care over their lifetime, being a total of 86,000 pounds, increasing transparency and furthering the importance given to patients and communication with them. This amount only recognizes personal contributions that are not means tested.

3.2 Differences between Italy and the UK: strengths and weaknesses

The strengths of the UK's NHS are regarding its staff and the fact that it is publicly funded. The staff has proved itself during the pandemic to be resilient and fully committed to tackling the virus as much as they could even considering lack of equipment when applicable. The staff is also diverse, thanks to its international recruitment; NHS Wales recruited over 400 nurses from overseas in 2022 and the Medical Workforce Race Equality Standard has reported an increase of 9,000 doctors from black and Asian minorities in the NHS, increasing to 53,000 in 2017 and equalling to 42% of the total medical staff. The NHS being publicly funded entails the need to have a strong leadership, which in this case happens to also be central due to the reforms discussed in the earlier sub-chapters. The presence of one figure fully liable and responsible for the efficacy and efficiency of the NHS, as well as being crucial for the decision-making process, can be a negative aspect under the wrong conditions, but in this case it increases public support (Khan Z.; 2023).

The challenges faced by the NHS are similar to the Italian ones and have been briefly outlined earlier. They range from staff shortages, retention, financial issues, healthcare inequalities, social care issues and evolving healthcare needs. Covid-19 affected ethnic minority communities and people from poorer areas harder than the other demographics. The hospital bed crisis during the pandemic was mainly due to excessive underfunding and it led to unnecessary failings for patients and deaths. Additionally, due to years of poor workforce planning, weak policies and fragmented responsibilities, health and social care show understaffing. The poor work conditions, pay erosion for staff and unfriendly pension policies lead to the employees moving to different countries or retiring in search of a better work-life balance or better pay. Leading roles also are shown to be highly discriminatory in regards of women and ethnic minorities. One issue that is becoming an ever-growing trend in most other countries is the aging population. An increase in NHS spending on social care is required to overcome such an issue (Khan Z.; 2023).

As for Italy, even though the Italian expenditure is lower than the average of other European countries, the performance levels of its National Health Service ranks still among the best in the world, especially when comparing it to other countries also ranked by the OECD and the WHO (Bloomberg et al.). The Italian NHS ensures a number of benefits included among the basic levels of care (the previously mentioned Livelli Essenziali di Assistenza), with the aim of guaranteeing equity in terms of accessibility to the national health service and quality of the services regardless of the Region of origin.

Although the basic levels of care have shown consistent results, they may not be sustainable enough in the long-run due to other issues at hand. The supply network has many aspects of obsolescence, so the services that should be offered at a sustainable cost are made available at higher costs, making the relationship between resources used and results achieved less favourable (Moramarco R. et al.; 2016).

Another critical factors of the Italian national health system has to do with its architecture and organization of care's supply. The network of hospitals on the national territory is not organized to a "hub and spoke" perspective, such that small health facilities might handle basic services and primary care while larger hospitals may be able to face more complex demands. The Strongly hierarchical "State-Regions-Local Health structures" system, added with the absence of a market, a reasonable price for health services and the customization of the health service, make it difficult to control costs that the whole system entails. This needs to be added to the reluctance of general practitioners to treat patients without recurring to more complex architectural environments first and the expansion of defensive medicine's behaviour determining thus irresponsibility and a general higher resource consumption (Borgonovi and Casati; 2000). The lack of interdependence among production processed and of coordination among the services offered also can cause structural inefficiencies, especially when considering the use of certain equipment and procedures which may be delocalized to other venues as shown by Ruggeri (2012).

Another weakness has to do with the failure of the federalism's implementation (Moramarco R. et al.; 2016). Prior to its introduction, the National Health system was funded by calculating the national demand corresponding to the provision of the essential levels of care, and then by weighing the capital among regions based on different values. Past the legislative decree 56/2000 the funding is fully entrusted to the Regions, leaving it to the complex and changing finance of the regions. As the protection of health is a constitutionally guaranteed right, all the services included in the basic levels of care have to be provided for free.

Additionally the public health financing should also be directed at the redistribution of citizens' income. This leads to an environment where Regions may have less chances of spending than the amount of resources paid in terms of taxes, as shown in the negative numbers in the next figure.

"Public Administrations' Fiscal Residual Year in Italy, sorted by regions – Year 2012."

	millions of €			€ per capita			
	INCOMES	EXPENDITURES	FISCAL RESIDUAL	INCOMES	EXPENDITURES	FISCAL RESIDUAL	
Lombardy	170.176	116.198	+ 53.978	Lombardy	17.375	11.864	+ 5.511
Veneto	70.220	51.995	+ 18.225	Emilia Romagna	16.320	12.244	+ 4.076
Emilia Romagna	71.441	53.599	+ 17.842	Veneto	14.384	10.651	+ 3.733
Piedmont	63.576	52.998	+ 10.578	Piedmont	14.535	12.117	+ 2.418
Tuscany	52.666	44.324	+ 8.342	Tuscany	14.262	12.003	+ 2.259
Lazio	92.360	84.973	+ 7.387	Marche	12.860	11.242	+ 1.618
Marche	19.871	17.371	+ 2.500	Lazio	16.620	15.290	+ 1.329
Umbria	12.174	11.004	+ 1.170	Umbria	13.736	12.416	+ 1.320
Liguria	23.768	22.671	+ 1.096	Liguria	15.186	14.485	+ 701
Trentino Alto Adige	17.078	16.466	+ 612	Trentino Alto Adige	16.422	15.834	+ 588
Friuli Venezia Giulia	17.898	17.961	- 63	Friuli Venezia Giulia	14.648	14.700	- 52
Valle d'Aosta	2.310	2.432	- 122	Basilicata	10.015	10.681	- 666
Molise	3.207	3.499	- 292	Abruzzo	11.444	12.111	- 667
Basilicata	5.771	6.154	- 384	Campania	8.952	9.665	- 714
Abruzzo	15.020	15.896	- 875	Puglia	9.319	10.180	- 861
Puglia	37.748	41.235	- 3.488	Molise	10.234	11.167	- 933
Campania	51.650	55.766	- 4.117	Valle d'Aosta	18.071	19.024	- 953
Sardinia	16.093	20.303	- 4.210	Sicily	8.701	10.483	- 1.782
Calabria	16.924	21.640	- 4.716	Calabria	8.643	11.051	- 2.408
Sicily	43.507	52.414	- 8.908	Sardinia	9.811	12.377	- 2.566
<i>Regions with ordinary statute</i>	706.571	599.324	107.247		13.949	11.831	2.117
<i>Regions with special statute</i>	96.886	109.577	- 12.691		10.729	12.135	- 1.405

Source: Ufficio Studi CGIA

Source: M. Ruggeri, V. Moramarco; 2012 and Ufficio Studi CGIA.

Figure 18.

Additionally, a study by the Italian Federation of General Practitioners shows that 53% of Italians would like the expertise of matters concerning healthcare to return to the direct responsibility of the State, identifying in bad politics and corruption (76%), the organization of the system (57%) and citizens who take advantage of the system (29%) the main culprits for the weaknesses of the healthcare system. The Coronavirus disease highlighted some of the issues of the healthcare system, mainly being marked local differences in providing the services, the lack of integration between hospital, territorial and social services, high waiting times to provide certain services and the need for investments to update equipment and accelerate the digital transition (Tanese A.; 2023). Most of these topics will be faced in the next subchapter, when mentioning chronic underfunding issues (Moramarco R. et al.; 2016).

3.3 The different ways that Italy and the UK responded to the pandemic: why did the two systems struggle?

The years of public underfunding in the NHS affected Italy's ability to form a coherent plan towards the tackling of the pandemic in 2020. Whereas on paper, annual public spending has increased in the last 20 years, going from a total of 71.3 billion euros in 2001 to 114.5 billion euros in 2019, when considering inflation and thus adjusting the figures they change drastically. Between 2010 and 2019, public fund invested in the NHS increased by 0.9% per year on average, whereas inflation increased by 1.7% per year. The inflation rate led thus to indirect cuts to the NHS amounting to 37 billion euros in the same timespan. This difference between inputs and inflation led to the percentage of gross domestic product related to the health sector to decrease between 2010 and 2016. For comparison's sake, in the same period the average expenditure in the European Union pertaining the health sector was of 9.9% of the gross domestic product, Italy stood at 8.8%. This underfunding was reflected on the number of general practitioners as well, dropping by 6.7% between 2010 and 2017. Primary health care sectors have also been affected on a regional level, as the cuts to fundings towards regional systems resulted in public health services to be unable to carry out the necessary functions needed to achieve adequate preparedness for disease outbreaks and health emergencies (Buzelli ML, Boyce T.; 2021).

As Italy transferred responsibilities and competencies in the health sector from the national to the regional level, regions organized the delivery of healthcare in their territories with little input from the national government, with a more limited financial support compared to the past. Decentralization in of itself is not a sign of weakness of any sector or country, nor a clear sign of strength. Decentralization makes it easier for the local population to be heard by working in conjunction with subsidiarity, and it also helps greatly in providing services that can be tailored to the individual case or individual area. It is the lack of guidance and support from the major level of government that can easily prove itself to be a recipe for disaster. This decentralization was seen during the Pandemic, when each region organized their responses independently, based partly on guidance issued by the national government and also by local demands. This led to different approaches being taken locally in every case analysed; Veneto in northern Italy as an example maintained a strict division between hospitals to limit the spread of the virus, and prioritized the procurement of personal protective equipment. The adjacent Lombardy region decided instead to keep all public hospital emergency departments open, regardless of the Covid-19 status of their patients, leading to patients both negative and positive to the virus being hosted in the same departments (Buzelli ML, Boyce T.; 2021).

The underfunding process between 2010 and 2017 led to several cost-saving measures being implemented, including reducing personnel and equipment. The number of permanent staff in public hospitals decreased by 7%, non permanent staff decreased by 37.8%. Non permanent staff numbers increased from 2012, although it was a partial filling of previous losses, amounting to an additional

1.8%. The number of public hospitals fell from 634 to 518, hitting different regions in different manners. The Marche region closed 75% of all hospitals, being a total of 24 hospitals, leading also to a reduction of total beds of 16% or 773 beds (OECD; 2019). The Lazio region closed 25% of its hospitals, a total of 19, while decreasing the number of beds by 9%, or 1.465 units. Veneto closed 13% of its hospitals, or 15 in total, leading to a decrease of beds by 10%, or 1.656 beds. In the South, Calabria closed 39% of its hospitals, 14 in total, amounting to a reduction of beds of 21%, or 858. These examples also show how differently placed equipment is in hospitals and regions, and help making the divide between different regions clearer (Ministero della Salute; 2019).

To restructure its capacities due to underfunding the NHS had to further its cooperation schemes with private practitioners and facilities. Staff employed by private hospitals increased by 15.1% between 2010 and 2017. It is crucial to note how Italy still placed lower than other European countries in terms of employees in the public health sector; Germany as a comparison had 4.3 medical doctors and 13.2 nurses for every 1,000 inhabitants, Italy placed at 4.0 and 6.7 respectively. The cuts to health expenditure and inflation also led to the conversion of giving non-accredited private hospitals the credited status, balanced by a decrease in the number of public hospitals as previously noted. In 2017, public hospitals provided 107,435 more beds than the private health sector, despite being 36 more public hospitals than private facilities. Between 2010 and 2017, emergency services in public hospitals significantly decreased: emergency departments decreased by 10.7%, ICUs decreased by 5.8% and urgent care units by 7.5%. This led to significant downsizing of multiple departments in different regions; Calabria decreased the number of its departments from 31 to 20, in Campania the number of urgent care units fell from 30 to 15, in the Marche region it went from 25 to 11. The support from private hospitals was not enough, as in 2017 2.3% of accredited private facilities were equipped with urgent care units, 9.3% with ICUs and 5.8% with emergency departments (Ministero della Salute; 2019).

The decrease in overall equipment, personnel and department quantity resulted in fewer emergency services in those regions with more accredited private hospitals compared to those with a proportional higher number of public facilities.

Piedmont, Lombardy, Emilia-Romagna, Lazio, Campania and Calabria, heavily reliant on private hospitals suffered more from the lack of equipment. As of 2017 Lombardy had 58 public hospitals and 66 accredited private hospitals. Out of the 58 hospitals, 38 offered urgent care services, 40 provided emergency departments and 42 provided ICUs. Out of the 66 private hospitals, 6 offered urgent care services, 17 had emergency departments and only 13 offered ICUs. Emilia-Romagna in the same time frame had 23 public hospitals and 44 accredited private hospitals. None of those private hospitals provided urgent care services, 1 had an emergency department and 5 had ICUs. To show the regional disparity and the impact of underfunding, the Campania region had 48 public hospitals and 63 accredited private hospitals. Out of the 63 hospitals, 1 provided urgent care services, 2 had emergency departments and 8 had ICUs (Ministero della Salute; 2019).

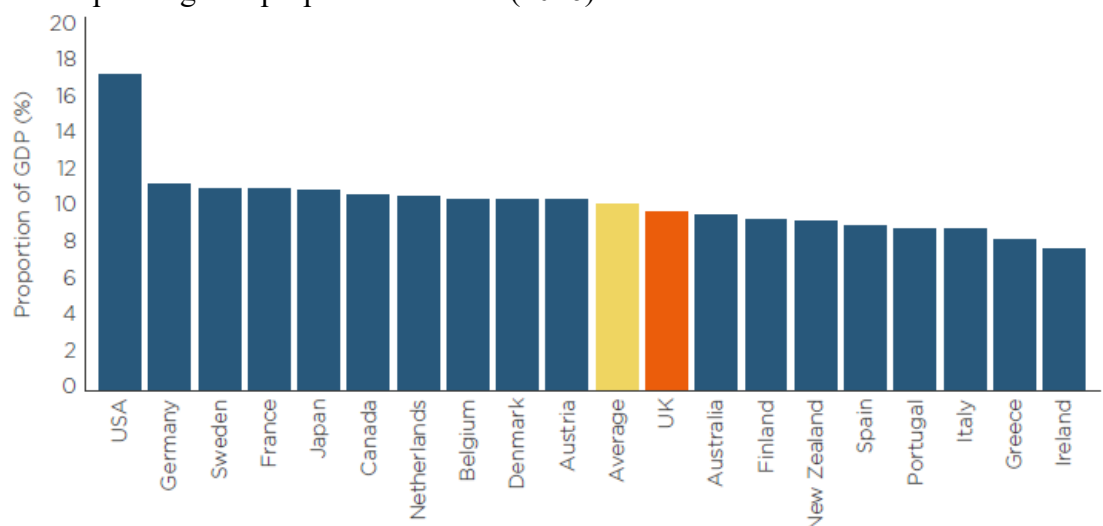
These critical numbers were not left unseen by the government, that responded by issuing an extraordinary decree-law to increase the NHS' resources in March 2020. This measure resulted in a substantial increase of beds in Emilia-Romagna, Lombardy and Veneto (513, 360 and 331 respectively), a increase of employees by 20,000 people (or 3.5% of the then total workforce in the NHS), and the creation of dedicated spaces available for patients who were in a noncritical state and were affected by Covid-19 (Buzelli ML, Boyce T.; 2021).

As for the United Kingdom, having a National Health system may provide the same weaknesses at face value as it is publicly funded. The weaknesses will however need to be addressed more deeply to further understand the quality of the results during the pandemic.

The annual spending on NHS increased by 4% every year; however, this number has dropped to 1.5% since the 2008 financial crisis, which is well below the average annual spending.

Although the government planned an increase in this spending to 3.4% for the next few years from 2019-20, the rising inflation and pandemic mean that this spending is still far below the average annual spending of NHS (Khan Z.; 2023). Compared to other OECD countries, the NHS is relatively poorly resourced when considering personnel, equipment and spending on the singular patient, the share of the gross domestic product spent on healthcare however is on par with other countries. The UK spent around 9.7% of its total gross domestic product in 2016, being slightly below the average of 10.2% for the comparison group. Healthcare spending from taxation and compulsory insurance is slightly above average in the UK, at 7.7% of the GDP, compared with an average of 7.5%. Spending from charging patients and from private insurance is below average, at 2% versus a total of 2.7%. The next figure will show more accurately the comparison with other countries.

“Health-care spending as a proportion of GDP (2016).”

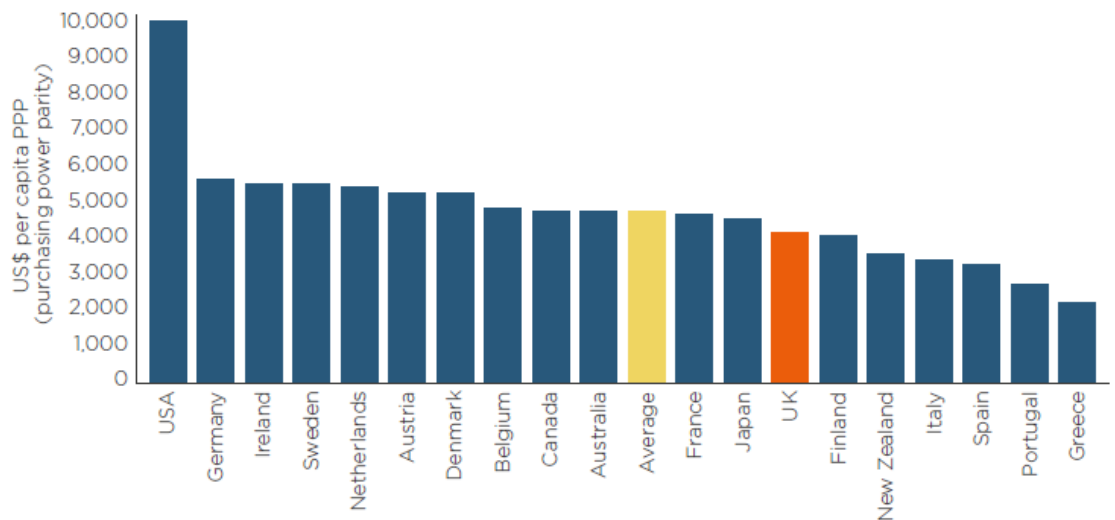


Source: Dayan M. et al; 2018.

Figure 19.

When considering then health care spending per person, adjusted for living costs as of 2016, the UK places still below average:

“Health-care spending per person, adjusted for living costs (2016).



Source: Dayan M. et al; 2018.

Figure 20.

Although the UK places below average on staff aswell, spending related to personnel is the single biggest cost for the NHS. The UK has 2.8 doctors per 1,000 population compared with an average of 3.6. 3 in 4 doctors are categorized as specialist, with 1 in 4 being general practitioners. The difference in spending and understaffing with other countries could then be explained by this “specialist” approach in healthcare, which would require a higher salary for most of the figures considered. Although a dubious explanation, as UK data for specialist doctors includes additional pay elements that other countries fail to insert, such as bonuses and overtime it may prove to be sufficient when also considering the possibility of employing more healthcare workers who are not captured in data. Many people employed by the NHS would not be counted in these professional groups as they do not have specific qualifications. Figures for the European Union show in fact that the UK employs more health care assistants and home-based personal care workers than average.

Compared with the group, the UK also has a very low number of hospital beds, amounting at 2.6 per 1,000 people, compared with an unweighted average of 4.5 for other countries. This is partly a conscious policy decision across many countries, as the aim is to make healthcare more efficient by prioritizing short lengths of stay and more care outside hospitals. This decision led to a halving of hospital beds in England over the last 30 years. The proportion of beds occupied

has risen across the UK as the demand has still been present, but it made it more difficult to admit patients in a timely fashion (Dayan M. et al; 2018).

3.4 Consequences: short and medium-long term

For the short term, the impact of the pandemic has only showcased the prevalent issues that were present in both countries' National Health Systems, making it necessary for immediate action from national governments towards the removal of such faults. These interventions, if done with accurate planning and care for the long-term wellbeing of the country as a whole, is bound to provide immediate investments in the short term, that will only show their results once such decisions have been fully incorporated into the system. The forms these investments will manifest themselves with can differ vastly, being e.g. grants towards Research&Development, or grants with the objective of increasing equipment wherever management is not at fault.

As already mentioned, only the medium, but especially the long term, will provide for an accurate blooming of these actions.

Chapter four

Conclusion

4.1 Concluding remarks and questions for the future

The leading questions of this dissertation was regarding the impact of the pandemic on the national health systems of both Italy and the United Kingdom. The results have been acquired through case studies in the aforementioned countries, with data retrieved from multiple scholarly articles written by past experts, governmental institutions, international organisations, and surveys to the public.

A historical background has been provided for better understanding of the birth of the national health systems, to further grasp the reasons behind some policy decisions, and most importantly, the strengths and weaknesses that either of them have shown through time. This was concretised in an explanation ranging, time-wise, from the earliest depictions of anything akin to health systems up until the pandemic period, as pertaining to the research topic. The pandemic, being inherently important for the scope of this dissertation, received ample space and time to properly be described. This in turn allowed to make sure that this paper had enough base knowledge from which to begin explaining from. In particular, what was shown was regarding the origins of the virus, how it can be spread, how it manifests, and towards what kind of demographics it may be more dangerous. The last part proved itself to be especially important as a country with a population more prone to a set disease or illness is more fragile against this specific virus. In the case analysed, poor diet, poor exercise, and a high ratio of young to old people set up the health systems to combat the pandemic in a disadvantageous position when compared to other possible more positive scenarios.

The main hypothesis was the one that underfunding and understaffing were the main issues with the fallbacks of the national health systems, with issues already present in the target demographics exacerbating them.

The pandemic made it clear which parts of the NHS in both countries were more at risk. Without the pandemic, and the toll it took on the respective national health sectors, the health sectors would have probably been kept the same as they've always been. Understaffing, lack of funding, lack of equipment, outdated technology are all issues that were commonly talked about, but as nobody ever suffered from such a health crisis, none of these issues were an economical, nor a political priority. Where understaffing was present, the pandemic made it impossible for hospitals to work properly. Where lack of proper equipment was present, the pandemic made it impossible to treat patients with more common ailments, let alone such a virus. Lack of funding was the nail in the coffin for most publicly-owned hospitals, that had then to face the aforementioned issues with a limited financial supply as well.

The research is in no way comprehensive of this topic, and is therefore in need to be integrated with future additional works. For such future avenues of research, It is advised to retrieve first-hand surveys regarding the impact of the pandemic on the general populace with more recent data. One interesting note would be the one regarding mental health, as often mental illnesses are treated through national health systems just as much as physical issues. It is no surprise that frequent and long-lasting lockdowns and social distancing were fertile grounds for the birth of mental issues among the people living in the most impacted area, and were already present, made them only worse. This is without considering economical issues such as an improper work-life balance, consisting in the extremes of overworking and burnout from staff associated with the health sector, and complete unemployment or lack of work in the case of self-employed professionals. As already mentioned in previous chapters, the pandemic made it more difficult for people to receive treatment, often then being left either untreated, or with improper counselling. Lastly, the effects of the pandemic on the health sectors are still being seen today, but to provide a proper comparison and thus analysis future researchers would require more time to be waited in an attempt to understand this context better. This applies to policies aswell, providing effects on short, medium, and long terms.

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