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Lorenzo Pratici, Simone Fanelli and Antonello Zangrandi

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Not Only Funding: How Healthcare Organizations Can Contribute to National Health Service Sustainability

Lorenzo Pratici , Simone Fanelli , and Antonello Zangrandi 

Department of Economics and Management, University of Parma, Parma, Italy

ABSTRACT

Healthcare organizations struggle to provide adequate assistance because of the scarcity of resources affecting National Health Systems (NHS) worldwide. It is necessary to find strategies to make the NHS sustainable. Funding cannot always be leveraged, and new variables need to be found. It is asked: What can and should be done in single health organizations to improve the efficacy of the NHS? To answer, several CEOs of Italian hospitals were interviewed. Results suggest that there is a widespread need for improvement of organizational aspects of professionals' responsibilities, better coordination between health professionals, and in-service training. Several conclusions can be sketched by the analysis of interviews. Current possible NHS problems, as well as practical suggestions on how to improve it, are offered. Bureaucracy, slow decisional processes, and weak reward systems are seen as demons to fight. How? Reforming the regulation system, valorizing professional competencies, and placing stronger emphasis on organizations' commitment.

KEYWORDS

Hospital-CEO; NHS; health organizations; sustainability; management

Introduction

Whenever a community develops and progresses there is demand for a better quality of life (Andaleeb et al., 2007), and the level of healthcare in the community, whether a country or a region, determines the community's development in terms citizens' life quality (Goh & Marimuthu, 2016). Individuals realize the importance of health in their quality of life and the importance of healthcare services provided by healthcare organizations (Addington-Hall & Kalra, 2001). In fact, the demand for higher quality healthcare services among people in "developed countries" has risen significantly, and there has been an inevitable rise of the cost of care (Campbell et al., 2000). Healthcare organizations often struggle to provide adequate assistance because of the scarcity of resources affecting National Health Systems (NHS) worldwide. NHS thus increasingly face the new challenge of how to improve and maintain high quality standards across public healthcare organizations with limited resources.

There are several solutions, and for many researchers the answer entails sustainability (e.g., Buchanan et al., 2006; Jameton & McGuire, 2000; Lega et al., 2013). All healthcare systems worldwide, whether financed by taxation, the market or social insurance-based, struggle with sustainability (Lega et al., 2013) and reaching a sustainable equilibrium between funding and outcome

(Greener, 2020). Sustainability is however a wide-ranging concept, and its significance is not always clear. It tends to be associated with environmental practices, but this paper focuses in its core principle defined by the managerial literature: "*the ability to meet current needs without compromising the ability to meet future needs*" (De Preux & Rizmie, 2018).

Superficially, this seems simple enough, but it is not always clear how to put the principle into practice (Lega et al., 2013).

There are several other aspects of the concept of sustainability, as well as its managerial significance. The European Observatory on Health Systems and Policies (2009) defines it as maintaining quality and service coverage at an affordable cost.

These definitions underline the financial aspect, which is always a major source of concern for any healthcare organization (Naylor & Appleby, 2013). But for public services, which often suffer from a lack of funding, it has a wider scope and includes other factors. In managerial literature, in fact, various researchers find that sustainability is more than a financial matter (Davies et al., 2010; Higuchi et al., 2013; Maher et al., 2007).

Furthermore, an NHS is a complex system, formed by single organizations, each one with its own issues and difficulties. For an entire system to work efficiently and

effectively, it is necessary for each and every component to have the correct tools to work efficiently and effectively. In countries with an NHS aiming to be sustainable, every single organization needs to achieve a sustainable growth.

The aim of this paper is thus to identify the tools to be managed in each component of the NHS in order to make each part of the whole more efficient and effective.

The context of Italy

In 2018, Italy celebrated the fortieth anniversary of its NHS, which is one of the few NHS worldwide to provide universal coverage (Signorelli et al., 2017). The Italian NHS was built on the principles of “universality” and “solidarity”, and all Italian citizens are entitled to care with no discrimination on the basis of income, gender or any other determinant. The service is funded through national taxation, supplemented partially by co-payments for pharmaceutical and outpatient care (Signorelli et al., 2017).

The Italian NHS, like Italy as a whole, however, was badly hit by the financial crisis of 2008–2011. Funding was cut at precisely the time that the NHS was required to cope with new issues such as increasingly expensive technological innovation, the rising population and society’s rising expectations on quality of care (Thomson & Mossialos, 2004). Before the crisis in the 2000s, health expenditure accounted for around 6% of national GDP (Osservatorio & Università Cattolica del Sacro Cuore, 2019). After the crisis, the growth of health expenditure slowed consistently and reached a turnaround point in 2011, when there was a fall in the health expenditure-GDP ratio. Subsequent governments have made frequent cuts to public health services (Frisina-Doetter & Götze, Ferrario & Zanardi, 2011). The only exception was the year 2020, an outlier, when the ongoing Covid-19 pandemic caused an increase in health funding of around 5% (Italian Ministry of the Economy, 2020). However, this increase was based on an immediate need, rather than structural, (Glied & Levy, 2020) and, although it is hoped that many plans have been made by successive governments to limit the effect of this unexpected growth, it is likely that spending in Italy will be decreased after the pandemic (McCullough et al., 2020).

International comparisons highlight the structural difficulties that the Italian NHS is facing. In 2019, Italian health expenditure was 8.6% of the national gross domestic product (GDP), which is below the mean of EU states as a whole (8.8%) and far below other G8 economies, such as France (11.2%), Germany (11.2%), the UK (9.6%) and the US (17.8%) (WHO, 2019).

However, the Italian NHS is still ranked by WHO (2020) among the best in the world, and was ranked second in the world in 2000. So today, when its financial sustainability is threatened by cuts in public funding, overall spending reviews (Urbini et al., 2018) and the economic crisis predicted after the Covid-19 pandemic, it is more important than ever to enable the NHS to achieve its ambitious objectives. It needs to continue to follow the principle of universality enshrined in the Italian Constitution and, at the same time, meet demand for high quality of care (Roschnik et al., 2017).

To do this it will be necessary to use other variables as well as financial leverage. The present research aims to identify such variables, and to outline what can be done at the level of single organizations.

NHS sustainability as the sustainability of single organizations: management matters

Several authors (e.g., Dillard et al., 2008; Rosset, 1991) argue that the basis for sustainability is the organizational level, so pursuing sustainability needs to start with every organization making its own contribution. Public health organizations, which are required to improve the quality of care in line with demand, need to take this into account (Ramirez et al., 1988).

Many factors affecting sustainability (e.g., rising costs, population ageing, demographic curve and of course, the effects of the pandemic) are exogenous to healthcare organizations and cannot be directly controlled (Pettigrew et al., 1988). Funding levels are decided top-down by policymakers, and managing available resources is often considered as the most effective way of achieving sustainability (Lega et al., 2013). Scarcity of resources is an escapable fact for most NHS worldwide, but there are many other factors which impact strongly on the efficacy and efficiency of healthcare organizations (Higuchi et al., 2013) and which the NHS can manage (Davies et al., 2010; Lega et al., 2013). For instance, the ability to adapt to change and make continuous improvement is one of the most important issues for a public organization. Attitude and adaptability to change are required to pursue sustainable strategies (Benn et al., 2014; Ford et al., 2011; Kiesnere & Baumgartner, 2019). It is however the case that in public organizations, where the bureaucratic model tends to prevail (Martela, 2019; Mintzberg, 1978; Mintzberg & Van der Heyden, 1999), change is often perceived as negative and hard to accomplish (Homberg et al., 2019). Each organization needs to implement good management so that each single component of the

NHS can work sustainably, efficiently and efficaciously in order to make the whole system efficient and effective. In short, *management matters*.

The research question addressed by this paper is thus: “What factors can be managed at the level of a single organization in order to maximize the outcome of the organization itself and contribute to improving NHS sustainability overall?”

Analyzing the literature, five main factors recur: (1) motivation of healthcare professionals, (2) coordination of co-workers covering different positions, (3) continuous improvement of health professionals’ competencies, (4) strengthening managerial roles, and (5) health professionals’ commitment to the organization they work for.

Motivation

Health professionals’ motivation to do their job in the organization they work for is nowadays a crucial issue across the healthcare sector (Altindis, 2011; Berberoglu, 2018). The importance of motivation is underlined by several studies (Kjellström et al., 2017; Lambrou et al., 2010), which find that organizations with motivated health professionals produce better outcomes and deliver a higher quality of care (Dieleman et al., 2003). In order to improve efficacy and efficiency, an organization should thus promote the motivation of its personnel (Zaccaro et al., 1995).

It is not easy to identify factors which motivate health professionals. Financial reward would appear to be a possibility, but it is not always achievable within an organization, and is not in any case proven to be the most effective variable (García-Goñi et al., 2007; Marques et al., 2019). Other factors include rewards in terms of job recognition, assignment of responsibilities, and recognition of the value of their work (Peters et al., 2010). Numerous variables can in fact be considered.

Coordination

Three different forms of coordination can be found in the literature (Borys & Jemison, 1989; Tello-Leal et al., 2012; Wadmann et al., 2009). The most frequent is operational coordination, which refers to all the organizational processes (Wadmann et al., 2009). Organizing and planning should involve determining what work is needed to reach an objective and assigning tasks to individuals correctly and effectively, and arranging these individuals in a decision-making framework. In healthcare organizations this is often hard because of the heterogeneity of professionals involved,

and it can be difficult for management to identify the right person for the right role (Runciman & Walton, 2007).

Operational coordination alone is not however sufficient; a second level of organizational coordination is also required (Stephenson, 2015). Organizational coordination in public entities, such as NHS organizations, has to be carried out by other entities which identify the mission, in other words, by upper management (Embertson, 2006).

The third type of coordination is professional coordination. Healthcare organizations are mixed organizations: they usually have a variety of objectives as well as differentiated forms of coordination (Borys & Jemison, 1989). Professionals are very much differentiated in terms of skills and competencies (Jennings et al., 2007). Evidence suggests that closer coordination leads to a general increase in effectiveness and also helps to improve the quality of care (Øvretveit, 2011; Van Loenen et al., 2016). It is not always easy to coordinate different professional roles, and too often NHS do not help in this direction (Webb, 1991).

Competencies

Promoting the development of new professional competencies is one of the main objectives of every NHS (Battel-Kirk et al., 2009). In many countries, policies and incentives to promote and enhance them are the responsibility of NHS, which are thus required to valorize professionals willing to learn and develop new skills (Mensah et al., 2005) which aid sustainability across the organizations. The NHS may act as a central policy maker, but individual healthcare organizations need to promote willingness to update and develop new competencies among healthcare professionals (Wilson & Carryer, 2008).

Individual healthcare organizations thus need to adopt a model of value creation where competitive advantage is based on professional competencies (Buchanan et al., 2006; Fanelli et al., 2018). This helps to define a path for any organization in improving its quality-of-care standards (Edvardsson et al., 1994; Øvretveit, 2003) as well as improving clinical governance (Fanelli et al., 2018; Freeman & Walshe, 2004).

Managerial role

In many countries, healthcare organizations have progressively abandoned the traditional organizational model based on professional bureaucracy, where professionals are considered outside the administrative hierarchy. It has been replaced it with a model in which clinicians are required to use managerial skills (Correia & Denis, 2016; Mintzberg & Van der Heyden, 1999).

The literature finds that skills in professional activities need to be combined with managerial skills in order to improve performance and make an organization more sustainable (Aini et al., 2019).

NHS sustainability depends on its ability to optimize the use of resources. There is thus the need for policy makers and health organizations to make health professionals more aware and better informed about their function as managers.

Commitment

In the last decade, there has been widespread debate in the literature on organizational commitment (Ahluwalia & Preet, 2017; Altindis, 2011; Pool & Pool, 2007). It is clear that commitment to an organization is an essential tool for encouraging professionals to work more effectively (Tella et al., 2007). Professionals need to feel the organization mission as their own, and work to achieve shared objectives (Ahluwalia & Preet, 2017). But it is far from clear how an organization can leverage professionals' commitment, and the debate is ongoing.

Some researchers find that emotional commitment needs to be in line with organizational objectives and to be continuous (Mowday, 1979). Others note that it is necessary to understand how organizations can manipulate this organizational commitment (Ramdhani et al., 2017). Others find that the main basis for commitment to an organization is actually job commitment (Millward & Hopkins, 1998). Organizations thus need to valorize and reward professionals in their roles as much as they can (Marques et al., 2019).

Method

The research question implies a qualitative approach. Data for the study pertaining to the main elements identified in the literature were collected throughout the year 2019, and a selected sample of hospital CEOs were interviewed. The methodology thus relies on privileged observers (Della Porta, 2014), selecting respondents particularly sensitive to the topic of managerial training. Respondents were also identified through being directly involved in the process of management training through a post-graduate diploma in healthcare service management offered by OMISSIS (the name of the university is omitted in order to preserve the anonymity of the research for reviewing purposes). Respondents were also required to meet the following criteria: (1) being the director of a public health organization, and (2) having been in the same position for at least two years (3) of

which at least one year on the same site (Price et al., 2020). We carried out 17 interviews, but only 10 respondents met all the necessary criteria (58.82% of the sample).

The low number of interviewees in the convenience sample meant that it was not possible to use complete structured interviews, and a semi-structured qualitative interview survey was used instead. In fact, according to Kvale (1994), the privileged observer methodology is appropriate for non-extensive samples, and usually implies the presence of a small universe.

The interviews consisted of five questions, one question for each factor identified in the previous section. Questions were as follows:

Q1 What are controllable factors which can contribute to motivating health professionals? (motivation)

Q2 How can coordination between different health professionals be enhanced and encouraged? (coordination)

Q3 What leverage can be used by health organizations to develop professionals' competencies and sustain improvement over time? (competencies)

Q4 What managerial roles should be strengthened in health organizations? (managerial role strengthening)

Q5 How can professionals' commitment to their organization be increased? (commitment)

Interviews were transcribed and analyzed using a qualitative data management software application (Dedoose). A process of pattern recognition is used where emerging themes become categories for the analysis (Aberbach & Rockman, 2002; Della Porta, 2014; Price et al., 2020). The coding framework was developed by three researchers with a joint process of blind coding (Price et al., 2020). The framework made it possible to identify the flows of information, characterizing key elements highlighted by the interviewees, in both positive and negative meanings.

As a further step, the research team frequently discussed their interpretations of the transcribed data and its relevance, using an interactive and reflexive approach (Della Porta, 2014; Millward & Hopkins, 1998).

In sum, the study was conducted in three stages as follows: (1) An analysis of the theoretical framework for the sustainability of the NHS, leaving aside the financial components. Five main areas to investigate were identified (motivation, coordination, competencies, managerial roles and commitment to the organization); (2) A coding process identified four recurrent items in the interviews related to healthcare sustainability (responsibility, integration, professionalism and training); (3)

Table 1. Frequencies of recurrent items in the coding process, for each question (Q1 to Q5).

ITEM GROUP	Motivation Q1	Coordination Q2	Competencies Q3	Management Q4	Commitment Q5	TOTAL
Responsibility	9	3	4	7	6	29
Integration	4	7	2	5	3	21
Professionalism	4	6	2	2	5	19
Training	5	0	7	1	0	13
Other	2	1	2	2	3	10
TOTAL	15	14	13	10	11	

Source: Authors' elaborations.

Analysis of respondents' answers, interpreting their views on the four items identified, and possible contributions to the five areas of investigation.

Results

Opinions of respondents are summarized in Table 1. The double entry table shows the areas identified by the literature review horizontally, and the items identified in the coding process vertically. Numbers in the table reflect the frequency of citations for each question during the interview.

In other words, Table 1 represents the coded most recurring tools from the analysis of interviews, classifying the four most frequently used by interviewees. Therefore, the table shall be read as: what tools (see first column) shall be leveraged to improve each area identified as crucial in the literature (first row).

Table 1 shows that almost 30% of the items come under the topic of responsibility, which is mentioned in the answers to all questions.

The topic of organization in its wider meaning covers the items responsibility and integration, and shows more importance than professionalism and training.

Results for Q1 – Q5 are reported as follows.

Q1 motivation

The coding process identified several items. Among the most frequent, interviewees found responsibility of professionals in their daily professional lives to be crucial. A typical observation was *"It is necessary to invest in health professionals across all dimensions, and especially in the technical and administrative department, increase responsibilities of employees"* in order to stimulate the interactions between health professionals and promote integration. Integration was the second element which interviews defined as a tool for efficiency. It is also closely related to the level of communication between different health professionals. Performed interviews confirmed findings in the literature (Delevidove de

Lima Verde Brito et al., 2019; Dieleman et al., 2003; Zaccaro et al., 1995), that the higher the level of internal communication, the better the performance.

Teamwork is another crucial factor in Italian NHS health organizations: *"It is important to motivate workers through the widespread use of teamwork, otherwise there is the risk of generating difficulties in communication between colleagues, which would impact on the efficacy of the treatment pathways and on management efficiency"*.

Finally, innovation is also found to be a factor to be promoted in health organizations. Three out of nine interviewees defined it as *"the key element to invest in. It is necessary to invest in and manage innovation, from both a medical and organizational point of view. Innovation has two different dimensions: professional and organizational, and both are a key element for general efficacy and quality improvement in service. Health professionals feel more motivated to work in a system which invests in innovation and gives them the opportunity to learn"*.

Other elements were found to be counterproductive. Remuneration is widely used by health organizations nowadays as the main leverage to motivate health professionals, despite the general lack of funds. Respondents observed that it *"cannot be always considered as a positive element (...). However, two further substantial aspects need to be taken into consideration: persuading professionals to share the same objectives as the institution [goal sharing], and rewarding through the accountability of professionals. (...) Each individual needs to share the same mission as the institution and needs to be rewarded with responsibilities in order to be able to make his or her contribution to reaching shared goals"*.

Q2 Coordination

Opinions on coordination were less similar between the different organizations. There is no one particular point of view on this topic, but each interviewee highlighted several key elements.

445 The creation of networks between professionals
has been found to be one of the most successful
ways of improving coordination between health pro-
fessionals. The strengthening of procedures may also
help, in the sense that roles and duties are clarified.
450 However, several interviewees emphasized that pro-
cedures need to be well understood by all staff.
Otherwise they can become counterproductive and
make professional input less efficient, and also raise
levels of bureaucratic pressure in the organization.

455 Some interviewees believe that multi-disciplinarily
would increase integration between health professionals,
but no suggestions on how to pursue this objective are
made.

There are different views on hierarchy. Some think
that it entails a general dispersion of the shared goals,
460 given that *“the current system based on departments is
based on a vertical hierarchy, which may not be as
functional in terms of performance”* as other types of
hierarchical models. However, other interviewees
think that a defined hierarchy with defined job
465 descriptions is the key to a higher degree of coordi-
nation: everyone knows what to do and when to
do it.

Interviewees thus identify diverse factors, but there is
agreement that: *“assisting one other is not just a question
470 of different parties, but needs to be the lever which enables
health professionals to develop new competencies in order
to achieve better performance”*.

Q3 Competencies

475 The most frequently cited item in the interviews is
professional training and research. These need to be
increased, and require massive investment. Given that
every clinician also acts as a manager, professional train-
ing should include managerial skills. Universities should
work closely with health organizations in order to define
480 a training path for each professional category, and in all
cases need to improve their level of managerial training.

Closely related to this, the assessment process of *“job
profiles and tasks to be carried out”* is another important
factor needing improvement. Assessment processes can
485 in fact lead to *“a better definition of goals in terms of
performance”*.

490 Technology is again found to be a tool requiring
input, and overall a simple relation between the level
of technology and the willingness of health professionals
to increase their competencies is found. Health organi-
zations should acknowledge this and invest in technol-
ogy to promote the development of competencies in
their professionals. Today, says one interviewee, *“this is
still poor across Italian organizations”*.

Q4 Strengthening the managerial role

495

Overall, interviewees believe that managerial compe-
tencies are poor among health professionals. Health
organizations should thus strengthen the managerial
role of health professionals other than clinicians, and
confer a higher level of responsibility on those pro- 500
fessionals. Furthermore, *“clinicians should learn to be
managers as well. It is important to overturn the view
that the best professional is necessarily the best
manager”*.

It is also important to *“promote the brand reputation 505
associated with the organizations in all fields”*.
Professionals should share the vision of the organiza-
tion, and promote it through their professional
behavior.

Finally, *“a matrix organization should be implemented 510
in order to manage the different units which compose the
organizations”* promoting *“integration between one
another”*.

Q5 Commitment to organizations

Several interviewees remark that *“Health professions 515
are more like arts”*. And, as artists, some therefore
feel that it impossible for them to feel part of the
organization, but that they need to be committed to
a wider context and proud of working for the NHS.
In this way they feel useful to society and that their 520
job is valued.

The great majority of interviewees thus focus on
the topic of goal sharing: *“It is important for everyone
to feel involved in the decision-making process. This
does not mean that everyone can make the decisions, 525
but everyone needs to feel that their opinion is taken
into account and to feel part of the decision-making
process in some way”*.

The sense of commitment to the organization can be
compromised in various ways. Changes in the organiza- 530
tion can severely affect the participation of professionals
in the common goal, and to avoid such problems, each
organization needs to value its own history and histor-
ical mission.

Another potential problem is the distance 535
between workers and management. To reduce this
type of tension, *“Managers should go around and be
seen by other workers in order to reduce the distance
and increase the sense of commitment to the
organization”*. 540

Finally, *“it is important to transform the common
strategy into the shared ambition of professionals”*, so
they are more committed to achieve the organiza-
tion's goals.

545 Discussion

Analysis of interviews revealed several indications of what may be key elements and recurring factors for the improvement of NHS sustainability, using the single organization as a starting point. These indications are summarized in four main points, as follows.

- (1) There is a widespread need to improve the organizational aspect of professionals' responsibilities, as confirmed by a wide area of literature (Ginter et al., 2018; Shouksmith, 1994). Although legislation and contracts specify clear organizational responsibility for highly specialized health professionals in public hospitals, this aspect of Italian public hospitals is not as clear as it should be (Lega & Sartirana, 2016; Numerato et al., 2012) and there is a great deal of confusion about the responsibility of health professionals (Daidone & D'Amico, 2009). Several interviewees in fact highlighted that the responsibility for the quantity and quality of resources used is not generally the responsibility of the head of the unit, but is often a general benchmark for multiple roles. It is often necessary to define a specific responsibility for professional development, performance assessment as well as the use of resources. This leads CEO interviewees to demand a more specific definition of responsibilities for professionals employed. The issue of "who should inform who" becomes the key point and highlights a clear need for "strong chains of command able to generate internal policies and allow a continuous flow of information to hospital CEOs on any possible problem or issue occurring".
- (2) Coordination appears to be one of the main issues that hospitals are facing. CEOs consider coordination as a way of generating positive outcomes and, therefore, wish to incentivize the use of any tool which promotes it. Specific clinical paths appear to be an effective tool if they are well understood and shared by all the staff involved. In Italy, hospital organizations are characterized by a high level of specialization (Daidone & D'Amico, 2009), and are in a way "organizational silos", as described by an interviewee citing Mintzberg and Van Der Heyden (Mintzberg & Van der Heyden, 1999). The high degree of orientation to professional specialization limits integration between highly specialized professionals to some extent (Zoffmann & Kirkevold, 2005). Coordination is thus a particularly difficult aspect.

- (3) A third element is in-service training. Generally speaking, training not only increases professionals' technical knowledge, but also develops an organizational culture oriented to coordination between different professionals. It is necessary to "directly intervene on the ability of health professionals to operate with synergy" in order to improve outcomes.
- (4) The last element identified from the interviews is "professionalism". Interviewees highlight the importance of professionalism and commitment to the job. But rather than a critical element, it is considered to be a positive element to retain, and thus bears less weight.

Clearly, the topic of commitment to the organization, or "feeling part of a professional group", mentioned by every interviewee, is one of the most important elements in improving the sustainability of the NHS.

Commitment appears to be closely related to motivation, as commitment generates motivation among health professionals. And *vice versa*, the more motivated health professionals are, the more committed they feel to their organization. However, this virtuous relationship can easily become a vicious circle; the weaker motivation, the lower commitment. So it is important and necessary to implement policies to increase health professionals' motivation, as this will affect also their commitment to the organization itself.

Several CEOs highlight the need for physical presence of management, or "management by walking around" (Mohan et al., 2013; Serrat, 2017; Tucker & Singer, 2015), which implies the participation of all health professionals in defining strategic goals. It is therefore necessary to work to align personal ambitions of professionals with the aims of their organization.

In short, the interviews identify three different managerial styles which can improve health professionals' involvement in organization policies:

- Based on organizational responsibility, with a strong and rigid definition of organizational roles.
- Based on coordination and close interaction between different types of professionals. This type of management focuses on strong synergy between different professionals from different backgrounds.
- Based on specific elements, such as responsibility, coordination, professional training and professionalism. This implies a weaker characterization of the managerial style, and is modelled on professionals' profiles.

Conclusions

It appears that any general increase in financial resources would not be sufficient to support the Italian NHS. Hospitals and other healthcare organizations require more than additional financial resources, and effective and efficient results can only be achieved by taking account of organizational conditions. Hospital CEOs interviewed indicated several possible causes of current NHS problems:

- (a) The bureaucratic structure of public health care, and the resulting strict regulations governing operating conditions. This is widely considered the cause of stagnation in the process of change. Regulations are emanated by higher levels of government, from local and regional authorities up to central government, and this generally entails a formal and impersonal managerial approach.
- (b) Processes of change in public organizations are likely slower than in other organizations. This reflects the heavily bureaucratic approach, which prevents review of the operational mode, even when it is clearly obsolete and outdated, and also slows down change itself. This can lead to a general resistance to change, which is related to a lack of clear responsibilities and sometimes laziness. It prevents any type of innovation.
- (c) Reward systems are weak and organizational responsibilities are not sufficiently considered or rewarded. This is also an effect of heavy bureaucracy, which allows management little discretion in rewarding responsibility.
- (d) Reward systems are managed by CEOs, but they never involve direct financial reward.

In order to promote the sustainability of public health organizations, many hospital CEOs have thus embarked on the path of strengthening health professionalism as the most important lever affecting performance. Conducted interviews identify several key elements which may contribute towards the ambitious objective of improving NHS sustainability from an organizational point of view. The first is reform of the bureaucracy and long-term modification of the entire system of regulation. The second is the valorisation of professional competencies within the current rules. Strong emphasis should be put on commitment to the organization, and new reward systems giving recognition to those who follow the organization's lines of strategic development. Lastly, the interviews show that organizational innovation should be promoted for continuous improvement of the quality of care, making services more

organizationally effective. Examples of such innovation are the reorganization of care services, and a clearer description of coordination responsibilities.

All this implies that hospital CEOs should be the biggest promoters of change, in the context of a transformation from a bureaucratic to a modern stream-lined organization, strongly goal-oriented and pursuing a continuous path to improvement. Evidence also suggests that hospital CEOs are well aware of this issue and in many cases are already taking steps to pursue this objective.

The paper is not without limitations. The small sample is in line with the privileged observer approach, but does not make it possible to define different management models. However, the CEOs interviewed are all linked to a School of Management, and their beliefs, ideas and suggestions offer a clear starting point and shared ideas on what is needed to improve the Italian NHS.

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ORCID

Lorenzo Pratici  <http://orcid.org/0000-0003-2557-8231>
 Simone Fanelli  <http://orcid.org/0000-0003-1094-3291>
 Antonello Zangrandi  <http://orcid.org/0000-0002-5664-9269>

References

- Aberbach, J. D., & Rockman, B. A. (2002). Conducting and coding elite interviews. *PS, Political Science & Politics*, 35(4), 673–676.
- Addington-Hall, J., & Kalra, L. (2001). Who should measure quality of life? *BmjMJ*, 322(7299), 1417–1420. <https://doi.org/10.1136/bmj.322.7299.1417>
- Ahluwalia, A. K., & Preet, K. (2017). The influence of organizational commitment on work motivation: A comparative study of state and private university teachers. *IUP Journal of Organizational Behavior*, 16(2), 55.
- Aini, Q., Alwiyah, A., & Putri, D. M. (2019). Effectiveness of installment payment management using recurring scheduling to cashier performance. *Aptisi Transactions on Management (ATM)*, 3(1), 13–21. <https://doi.org/10.33050/atm.v3i1.706>
- Altindis, S. (2011). Job motivation and organizational commitment among the health professionals: A questionnaire survey. *African Journal of Business Management*, 5(21), 8601. <https://doi.org/10.5897/AJBM11.1086>

- Andaleeb, S. S., Siddiqui, N., & Khandakar, S. (2007). Patient satisfaction with health services in Bangladesh. *Health Policy and Planning*, 22(4), 263–273. <https://doi.org/10.1093/heapol/czm017>
- 750 Ashburner, L., Ferlie, E., & FitzGerald, L. (1996). Organizational transformation and top-down change: The case of the NHS. *British Journal of Management*, 7(1), 1–16. <https://doi.org/10.1111/j.1467-8551.1996.tb00102.x>
- Q19 755 Battel-Kirk, B., Barry, M. M., Taub, A., & Lysoby, L. (2009). A review of the international literature on health promotion competencies: Identifying frameworks and core competencies. *Global Health Promotion*, 16(2), 12–20. <https://doi.org/10.1177/1757975909104100>
- 760 Benn, S., Edwards, M., & Williams, T. (2014). *Organizational change for corporate sustainability*. Routledge.
- Berberoglu, A. (2018). Impact of organizational climate on organizational commitment and perceived organizational performance: Empirical evidence from public hospitals. *BMC Health Services Research*, 18(1), 399. <https://doi.org/10.1186/s12913-018-3149-z>
- 765 Borys, B., & Jemison, D. B. (1989). Hybrid arrangements as strategic alliances: Theoretical issues in organizational combinations. *Academy of Management Review*, 14(2), 234–249. <https://doi.org/10.2307/258418>
- 770 Buchanan, D. A., Fitzgerald, L., & Ketley, D. (2006). *The sustainability and spread of organizational change: Modernizing healthcare*. Routledge.
- Campbell, S. M., Roland, M. O., & Buetow, S. A. (2000). Defining quality of care. *Social Science & Medicine*, 51(11), 1611–1625. [https://doi.org/10.1016/S0277-9536\(00\)00057-5](https://doi.org/10.1016/S0277-9536(00)00057-5)
- 775 Correia, T., & Denis, J. L. (2016). Hybrid management, organizational configuration, and medical professionalism: Evidence from the establishment of a clinical directorate in Portugal. *BMC Health Services Research*, 16(2), 73–83. <https://doi.org/10.1186/s12913-016-1398-2>
- 780 Daidone, S., & D'Amico, F. (2009). Technical efficiency, specialization and ownership form: Evidences from a pooling of Italian hospitals. *Journal of Productivity Analysis*, 32(3), 203. <https://doi.org/10.1007/s11123-009-0137-7>
- 785 Davies, B., Tremblay, D., & Edwards, N. (2010). Sustaining evidence-based practice systems and measuring the impacts. *Evaluating the Impact of Implementing Evidence-based Practice*, 166–183.
- Q20 790 De Preux, L., & Rizmie, D. (2018). Beyond financial efficiency to support environmental sustainability in economic evaluations. *Future Healthcare Journal*, 5(2), 103. <https://doi.org/10.7861/futurehosp.5-2-103>
- Q21 795 Delevidove de Lima Verde Brito, T., Baptista, R. S., de Lima Lopes, P. R., Taylor, A., Haddad, A. E., Messina, L. A., & Pisa, I. T. (2019). Collaboration between medical professionals: Special interest groups in the Brazilian Telemedicine University Network (RUTE). *Telemedicine and e-Health*, 25(10), 902–910. <https://doi.org/10.1089/tmj.2018.0075>
- 800 Della Porta, D. (2014). *L'intervista qualitativa*. Gius. Laterza & Figli Spa.
- Dieleman, M., Cuong, P. V., Martineau, T., & Martineau, T. (2003). Identifying factors for job motivation of rural health workers in North Viet Nam. *Human Resources for Health*, 1(1), 10. <https://doi.org/10.1186/1478-4491-1-10>
- 805 Dillard, J., Dujon, V., & King, M. C. (2008). *Understanding the social dimension of sustainability*. Routledge.
- Edvardsson, B., Thomasson, B., & Ovretveit, J. (1994). *Quality of service-Making it really work*. McGraw-Hill.
- Embertson, M. K. (2006). The importance of middle managers in healthcare organizations. *Journal of Healthcare Management*, 51(4), 223–232. <https://doi.org/10.1097/00115514-200607000-00005>
- 810 Fanelli, S., Lanza, G., & Zangrandi, A. (2018). Competences management for improving performance in health organizations. *International Journal of Health Care Quality Assurance*, 31(4), 337–349. <https://doi.org/10.1108/IJHCQA-02-2017-0035>
- 815 Ferrario, C., & Zanardi, A. (2011). Fiscal decentralization in the Italian NHS: What happens to interregional redistribution? *Health Policy*, 100(1), 71–80. <https://doi.org/10.1016/j.healthpol.2010.08.016>
- 820 Ford, J. H., Ii, D. K., Wise, M., & Oliver, K. A. (2011). Measuring sustainability within the veterans administration mental health system redesign initiative. *Quality Management in Health Care*, 20(4), 263. <https://doi.org/10.1097/QMH.0b013e3182314b20>
- 825 Freeman, T., & Walshe, K. (2004). Achieving progress through clinical governance? A national study of health care managers' perceptions in the NHS in England. *BMJ Quality & Safety*, 13(5), 335–343. <https://doi.org/10.1136/qshc.2002.005108>
- Frisina Doetter, L., & Götze, R. (2011). Health care policy for better or for worse? Examining NHS reforms during times of economic crisis versus relative stability. *Social Policy & Administration*, 45(4), 488–505. <https://doi.org/10.1111/j.1467-9515.2011.00786.x>
- 830 Garcia-Goñi, M., Maroto, A., & Rubalcaba, L. (2007). Innovation and motivation in public health professionals. *Health Policy*, 84(2–3), 344–358. <https://doi.org/10.1016/j.healthpol.2007.05.006>
- 835 Ginter, P. M., Duncan, W. J., & Swayne, L. E. (2018). *The strategic management of health care organizations*. John Wiley & Sons.
- 840 Glied, S., & Levy, H. (2020). The potential effects of coronavirus on national health expenditures. *Jama*, 323(20), 2001–2002. <https://doi.org/10.1001/jama.2020.6644>
- 845 Goh, C. Y., & Marimuthu, M. (2016). The path towards healthcare sustainability: The role of organisational commitment. *Procedia-Social and Behavioral Sciences*, 224, 587–592. <https://doi.org/10.1016/j.sbspro.2016.05.445>
- 850 Greener, I. (2020). Healthcare funding and its relationship to equity and outcomes: A QCA analysis of commonwealth fund and OECD data. *Journal of European Social Policy*, 30(4), 480–494. <https://doi.org/10.1177/0958928720905290>
- 855 Higuchi, K. S., Downey, A., Davies, B., Bajnok, I., & Waggott, M. (2013). Using the NHS sustainability framework to understand the activities and resource implications of Canadian nursing guideline early adopters. *Journal of Clinical Nursing*, 22(11–12), 1707–1716. <https://doi.org/10.1111/j.1365-2702.2012.04193.x>
- 860 Homberg, F., Vogel, R., & Weiherl, J. (2019). Public service motivation and continuous organizational change: Taking charge behaviour at police services. *Public Administration*, 97(1), 28–47. <https://doi.org/10.1111/padm.12354>
- 865 Jameton, A., & McGuire, C. (2000). Toward sustainable health-care services: Principles, challenges, and a process. *International Journal of Sustainability in Higher Education*, 12(2), S49–S54.
- Q22
- Q23
- Q24

- Jennings, B. M., Scalzi, C. C., Rodgers, I. I. J. D., & Keane, A. (2007). Differentiating nursing leadership and management competencies. *Nursing Outlook*, 55(4), 169–175. <https://doi.org/10.1016/j.outlook.2006.10.002>
- Kiesner, A. L., & Baumgartner, R. J. (2019). Sustainability management in practice: Organizational change for sustainability in smaller large-sized companies in Austria. *Sustainability*, 11(3), 572. <https://doi.org/10.3390/su11030572>
- Kjellström, S., Avby, G., Areskoug-Josefsson, K., Gäre, B. A., & Bäck, M. A. (2017). Work motivation among healthcare professionals. *Journal of Health Organization and Management*, 31(4), 487–502. <https://doi.org/10.1108/JHOM-04-2017-0074>
- Kvale, S. (1994). Ten standard objections to qualitative research interviews. *Journal of Phenomenological Psychology*, 25(2), 147–173. <https://doi.org/10.1163/156916294X00016>
- Lambrou, P., Kontodimopoulos, N., & Niakas, D. (2010). Motivation and job satisfaction among medical and nursing staff in a Cyprus public general hospital. *Human Resources for Health*, 8(1), 26. <https://doi.org/10.1186/1478-4491-8-26>
- Lega, F., Prenestini, A., & Spurgeon, P. (2013). Is management essential to improving the performance and sustainability of health care systems and organizations? A systematic review and a roadmap for future studies. *Value in Health*, 16(1), S46–S51. <https://doi.org/10.1016/j.jval.2012.10.004>
- Lega, F., & Sartirana, M. (2016). Making doctors manage ... but how? Recent developments in the Italian NHS. *BMC Health Services Research*, 16(2), 170. <https://doi.org/10.1186/s12913-016-1394-6>
- Maher, L., Gustafson, D., & Evans, A. (2007). *Sustainability Model and Guide*. NHS institute for innovation and improvement.
- Marques, C. S., Marques, C. P., Ferreira, J. J., & Ferreira, F. A. (2019). Effects of traits, self-motivation and managerial skills on nursing intrapreneurship. *International Entrepreneurship and Management Journal*, 15(3), 733–748. <https://doi.org/10.1007/s11365-018-0520-9>
- Martela, F. (2019). What makes self-managing organizations novel? Comparing how Weberian bureaucracy, Mintzberg's adhocracy, and self-organizing solve six fundamental problems of organizing. *Journal of Organization Design*, 8(1), 23. <https://doi.org/10.1186/s41469-019-0062-9>
- McCullough, J. M., Speer, M., Magnan, S., Fielding, J. E., Kindig, D., & Teutsch, S. M. (2020). Reduction in US health care spending required to meet the institute of medicine's 2030 Target. *American Journal of Public Health*, 110(12), 1735–1740. <https://doi.org/10.2105/AJPH.2020.305793>
- Mensah, K., Mackintosh, M., & Henry, L. (2005). The 'skills drain' of health professionals from the developing world: A framework for policy formulation.
- Millward, L. J., & Hopkins, L. J. (1998). Psychological contracts, organizational and job commitment. *Journal of Applied Social Psychology*, 28(16), 1530–1556. <https://doi.org/10.1111/j.1559-1816.1998.tb01689.x>
- Mintzberg, H. (1978). Patterns in strategy formation. *Management Science*, 24(9), 934–948. <https://doi.org/10.1287/mnsc.24.9.934>
- Mintzberg, H., & Van der Heyden, L. (1999). Organigraphs: Drawing how companies really work. *Harvard Business Review*, 77(5), 87–95.
- Mohan, D. R., Kumar, S. S., & Subrahmanyam, G. (2013). Management by Walking Around: An effective tool for day-to-day operations of hospital. *IUP Journal of Operations Management*, 12(1), 58.
- Mowday, R. T. (1979). Leader characteristics, self-confidence, and methods of upward influence in organizational decision situations. *Academy of Management Journal*, 22(4), 709–725.
- Naylor, C., & Appleby, J. (2013). Environmentally sustainable health and social care: Scoping review and implications for the English NHS. *Journal of Health Services Research & Policy*, 18(2), 114–121. <https://doi.org/10.1177/1355819613485672>
- Numerato, D., Salvatore, D., & Fattore, G. (2012). The impact of management on medical professionalism: A review. *Sociology of Health & Illness*, 34(4), 626–644. <https://doi.org/10.1111/j.1467-9566.2011.01393.x>
- Osservatorio, C. P. I., Università Cattolica del Sacro Cuore. (2019). *Osservatorio sui conti pubblici italiani*.
- Øvretveit, J. (2003). What are the best strategies for ensuring quality in hospitals?
- Øvretveit, J. (2011). *Evidence: Does clinical coordination improve quality and save money?; Volume 1* (Vol. 1). The Health Foundation.
- Peters, D. H., Chakraborty, S., Mahapatra, P., & Steinhardt, L. (2010). Job satisfaction and motivation of health workers in public and private sectors: Cross-sectional analysis from two Indian states. *Human Resources for Health*, 8(1), 27. <https://doi.org/10.1186/1478-4491-8-27>
- Pettigrew, A., McKee, L., & Ferlie, E. (1988). Understanding change in the NHS. *Public Administration*, 66(3), 297–317. <https://doi.org/10.1111/j.1467-9299.1988.tb00696.x>
- Pool, S., & Pool, B. (2007). A management development model. *Journal of Management Development*, 26(4), 353–369. <https://doi.org/10.1108/02621710710740101>
- Price, T., Tredinnick-Rowe, J., Walshe, K., Tazzyman, A., Ferguson, J., Boyd, A., & Bryce, M. (2020). Reviving clinical governance? A qualitative study of the impact of professional regulatory reform on clinical governance in health-care organisations in England. *Health Policy*, 124(4), 446–453. <https://doi.org/10.1016/j.healthpol.2020.01.004>
- Ramdhani, A., Ramdhani, M. A., & Ainissyifa, H. (2017). Conceptual framework of corporate culture influenced on employees commitment to organization. *International Business Management*, 11(3), 826–830.
- Ramirez, B., West, D. J., & Costell, M. M. (1988). Development of a culture of sustainability in health care organizations. *Journal of Health Organization and Management*.
- Roschnik, S., Martinez, G. S., Yglesias-Gonzalez, M., Pencheon, D., & Tennison, I., World Health Organization. (2017). Transitioning to environmentally sustainable health systems: The example of the NHS in England. *Public Health Panorama*, 3(2), 229–236.

- Rosset, P. M. (1991). Sustainability, economies of scale, and social instability: Achilles heel of non-traditional export agriculture? *Agriculture and Human Values*, 8(4), 30–37. <https://doi.org/10.1007/BF01530652>
- Runciman, B., & Walton, M. (2007). *Safety and ethics in healthcare: A guide to getting it right*. Ashgate Publishing, Ltd.
- Serrat, O. (2017). Managing by walking around. In *Knowledge solutions* (pp. 321–324). Springer.
- Shouksmith, G. (1994). Variables related to organizational commitment in health professionals. *Psychological Reports*;74(3), 74(3), 707–711. <https://doi.org/10.2466/pr0.1994.74.3.707>
- Signorelli, C., Odone, A., Gozzini, A., Petrelli, F., Tirani, M., Zangrandi, A., & Florindo, N. (2017). La riforma costituzionale mancata ei possibili riflessi sulla sostenibilità del Servizio Sanitario Nazionale. *Acta Bio Medica: Atenei Parmensis*, 88 (1), 91. <https://doi.org/10.23750/abm.v88i1.6408>
- Sørensen, K., Pelikan, J. M., Röthlin, F., Ganahl, K., Slonska, Z., Doyle, G., Falcon, M., Agraftotis, D., Uiters, E., Falcon, M., Mensing, M., Tchamov, K., Broucke, S. V. D., Brand, H., & Fullam, J. (2015). Health literacy in Europe: Comparative results of the European health literacy survey (HLS-EU). *European Journal of Public Health*, 25(6), 1053–1058. <https://doi.org/10.1093/eurpub/ckv043>
- Stephenson, J. M. (2015). Making humanitarian relief networks more effective: Operational coordination, trust and sense making. *Disasters*, 29(4), 337–350. <https://doi.org/10.1111/j.0361-3666.2005.00296.x>
- Tella, A., Ayeni, C. O., & Popoola, S. O. (2007). Work motivation, job satisfaction, and organisational commitment of library personnel in academic and research libraries in Oyo State, Nigeria. *Library Philosophy and Practice*, 9(2).
- Tello-Leal, E., Chiotti, O., & Villarreal, P. D. (2012). Process-oriented integration and coordination of healthcare services across organizational boundaries. *Journal of Medical Systems*, 36(6), 3713–3724. <https://doi.org/10.1007/s10916-012-9844-0>
- Thomson, S., & Mossialos, E. (2004). Funding health care from private sources: What are the implications for equity, efficiency, cost containment and choice in Western European health systems?
- Tucker, A. L., & Singer, S. J. (2015). The effectiveness of management-by-walking-around: A randomized field study. *Production and Operations Management*, 24(2), 253–271. <https://doi.org/10.1111/poms.12226>
- Urbini, F., Callea, A., Chirumbolo, A., Talamo, A., Ingusci, E., & Ciavolino, E. (2018). Team performance in the Italian NHS: The role of reflexivity. *Journal of Health Organization and Management*, 32(2), 190–205. <https://doi.org/10.1108/JHOM-07-2017-0180>
- Van Loenen, T., Van den Berg, M. J., Heinemann, S., Baker, R., Faber, M. J., & Westert, G. P. (2016). Trends towards stronger primary care in three Western European countries; 2006-2012. *BMC Family Practice*, 17(1), 59. <https://doi.org/10.1186/s12875-016-0458-3>
- Wadmann, S., Strandberg-Larsen, M., & Vrangbæk, K. (2009). Coordination between primary and secondary healthcare in Denmark and Sweden. *International Journal of Integrated Care*, 9(1). <https://doi.org/10.5334/ijic.302>
- Webb, A. (1991). Coordination: A problem in public sector management. *Policy and Politics*, 19(4), 229–242. <https://doi.org/10.1332/030557391782454188>
- Wilson, S. C., & Carryer, J. (2008). Emotional competence and nursing education: A New Zealand study. *Nursing Praxis in New Zealand*;24(1), 36–48.
- Zaccaro, S. J., Blair, V., Peterson, C., & Zazanis, M. (1995). Collective efficacy. In *Self-efficacy, adaptation, and adjustment* (pp. 305–328). Springer.
- Zoffmann, V., & Kirkevold, M. (2005). Life versus disease in difficult diabetes care: Conflicting perspectives disempower patients and professionals in problem solving. *Qualitative Health Research*;15(6), 15(6), 750–765. <https://doi.org/10.1177/1049732304273888>