Do Senior Management Cultures Affect Performance? Evidence From Italian Public Healthcare Organizations

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EXECUTIVE SUMMARY

Healthcare organizations are often characterized by diffuse power, ambiguous goals, and a plurality of actors. In this complex and pluralistic context, senior healthcare managers are expected to provide strategic direction and lead their organizations toward their goals and performance targets. The present work explores the relationship between senior management team culture and performance by investigating Italian public healthcare organizations in the Tuscany region. Our assessment of senior management culture was accomplished through the use of an established framework and a corresponding tool, the competing values framework, which supports the idea that specific aspects of performance are related to a dominant management culture. Organizational performance was assessed using a wide range of measures collected by a multidimensional performance evaluation system, which was developed in Tuscany to measure the performance of its 12 local health authorities (LHAs) and four teaching hospitals (THs). Usable responses were received from 80 senior managers of 11 different healthcare organizations (two THs and nine LHAs).

Our findings show that Tuscan healthcare organizations are characterized by various dominant cultures: developmental, clan, rational, and hierarchical. These variations in dominant culture were associated with performance measures. The implications for management theory, professional practice, and public policy are discussed.

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INTRODUCTION

Healthcare organizations are characterized by diffuse power, ambiguous goals, and a plurality of actors who have different values and interests but are authorized to participate in strategy and goal development (Denis, Langley, & Rouleau, 2007; Jarzabkowski & Fenton, 2006). The pluralism of healthcare organizations sometimes stems from public ownership, which exposes them to political control, particularly in the case of public organizations, such as those included in the present study. Pluralism complicates the prioritization of goals and expected performance, which is a necessary leadership task for managers, especially when public healthcare organizations face significant shortages of necessary resources (Tediosi, Gabriele, & Longo, 2009; Lega, Sargiacomo, & Ianni, 2010).

From this perspective, senior managers are expected to act as leaders and drive their healthcare organizations toward the definition and execution of shared performance targets. To avoid overly risky concentration on particular performance targets, in recent years many healthcare systems have developed multidimensional targets (Nuti, 2008; Agenas, 2008; DoH, 2001; Mannion, Davies, & Marshall, 2005c) and introduced balanced scorecards to establish and assess their expected performance targets (Inamdar, Kaplan, & Reynolds, 2002; Gurd & Tian, 2008; Rodgers, 2011). These actions have inspired some research questions that consider the relationship between management culture and performance (Gerowitz, Lemieux-Charles, Heginbothan, & Johnson, 1996; Shortell et al., 2000; Davies, Mannion, Jacobs, Powell, & Marshall, 2007). Is the culture of the senior management team linked to the performance of the healthcare organization? Are some senior management cultures more compatible with the achievement of specific performance results? Do certain cultures and management styles show consistently better results in terms of overall performance? In this study, we address the above questions in the context of the Italian national healthcare system and draw on evidence collected in previous international studies (Gerowitz, 1998; Davies et al., 2007).

LITERATURE REVIEW

Although the concept of organizational culture frequently appears in the organizational and management literature, it remains an ambiguous concept that lacks a unique definition and is subject to varied interpretations. However, it is generally agreed that organizational culture is related to the values, attitudes, and beliefs common to the members of an organization (Pettigrew, 1979; Schein, 1984, 1985a, 1985b; Scott, Mannion, Marshall, & Davies, 2003a; Davies, Nutley, & Mannion, 2000; Davies et al., 2007). Culture is commonly defined as "the way things are done around here" (Deal & Kennedy, 1982; Davies et al., 2000; Mannion, Davies, & Marshall, 2003, 2005b) and results from shared beliefs, values, and assumptions.

Over the past 30 years, an important part of the academic and managerial debate has focused on whether and how organizational culture affects an organization's performance and the achievement of its objectives. In the 1980s, some important studies conducted

within firms (Peters & Waterman, 1982; Deal & Kennedy, 1982; Ouchi & Wilkins, 1985) showed that organizational culture had a crucial influence on organizational performance. In the last 20 years, interest in organizational culture and its relationship to organizational performance has grown considerably among researchers, as reflected in the number of important empirical studies on the subject. Some of these studies have focused on public institutions and health organizations, and a significant portion of these investigations have shown clear evidence of a relationship between organizational culture and performance (Argote, 1989; Gerowitz et al., 1996; Jackson, 1997; Gerowitz, 1998; Mannion, Davies, & Marshall, 2005a; Davies et al., 2007; Zazzali, Alexander, Shortell, & Burns, 2007; Zhou, Bundorf, Chang, Huang, & Xue, 2011).

The starting point of these studies is that healthcare reforms have been overly focused on structural change (e.g., the introduction of general management principle and tools, quasi-market [Brenna, 2011], and mergers) rather than on cultural change (Mannion et al., 2003; Hyde & Davies, 2004). It is increasingly recognized that structural change alone cannot secure adequate and efficient improvements in healthcare performance (Scott, Mannion, Davies, & Marshall, 2003b; Mannion et al., 2005b). Because healthcare organizations are pluralistic settings, decision making in these contexts is an elaborate activity that includes the actions, interactions, and negotiations of multiple actors and the situated practices they draw on to arrive at decisions (Jarzabkowski, Balogun, & Seidl, 2007). Actions, interactions, and negotiations are profoundly affected by the cultural approach adopted by the senior management team. Performance is ultimately affected by the dominant culture, which influences the senior managers' decision-making processes. Consequently, changes or improvements to performance targets might require a change in the culture of the senior management team or the replacement of the team with members whose cultural affinity is more compatible with the expected performance targets.

In this work, we study the organizational culture using the competing values framework (CVF). The CVF subdivides organizational culture into two main dimensions. The first dimension describes how processes are conducted within the organization: Internal processes may be based on (1) personal relationships between the people within the organization, characterized by flexibility, individuality, and spontaneity, or (2) mechanistic processes that focus on control, order, and stability. The second dimension describes the orientation of the organization: The orientation can be (1) focused on the internal environment, with an emphasis on organizational integration and unity, or (2) focused on the external environment, with an emphasis on competition and differentiation. Using these two dimensions, the CVF defines four cultural archetypes: clan, developmental, hierarchical, and rational.

Clan culture is internally focused, and its processes are based on relationships. It is cohesive and participatory, casting the organization as a second

family. Leaders are viewed as mentors, and their actions support and facilitate teamwork and group interaction. Members bond with their organizations through loyalty and tradition.

Developmental culture focuses on satisfying external stakeholders and adapting its organization to push for innovation. Its leaders are risk takers and visionaries who require the same characteristics in their organization's members. The structure of the organization changes in relation to the objectives and activities developed to meet the dynamic external demand.

Hierarchical culture emphasizes an internal focus and the enforcement of rules and regulations that influence the way an organization works. Organizational effectiveness is defined in terms of predictability, control, and stability, and top managers tend to be conservative.

Rational culture is focused on achieving goals and facing external competition. As such, the leaders are viewed as goal oriented. This organizational culture emphasizes the achievement of a better market position and improved access to external resources.

The model assumes that culture is not absolute; organizations do not reflect one type of culture but have competing values. Consequently, organizations demonstrate a combination of each type of culture, with one dominant archetype.

SAMPLE AND METHOD

This study was conducted in Tuscany, a region in central Italy with a population of more than 3.7 million. The Tuscan regional healthcare system is composed of 12 local health authorities (LHAs)[1] and four teaching hospitals (THs).

The choice of the sample was based on the following factors:

1. *The opportunity to analyze the links between senior management culture and performance with a large spectrum of performance measures*. The Italian national healthcare service has been regionalized since the beginning of the 1990s and has yet to develop a multidimensional system to assess and benchmark the performance of healthcare organizations across the country. By contrast, the Tuscan region was the first to adopt a multidimensional performance evaluation system (PES), which was developed by Scuola Superiore Sant'Anna university of Pisa (SSSP) to assess and monitor its healthcare organizations (Nuti, Vainieri, & Bonini, 2010; Nuti, Seghieri, & Vainieri, 2013). The Tuscany PES is considered the leading system in the Italian National Health Service and is currently under adoption in other regions.
2. *The limitation of the sample to one region, Tuscany*. Here, (a) political directions (priorities and expected performance targets) have been the same for all healthcare organizations over the past 5 years, and (b) senior management teams have been stable during the same period.

The PES adopted in Tuscany is based on 50 measures that are composed of 130 indicators and organized into six dimensions (Nuti, 2008):

- Population health
- Regional policy targets
- Quality of care

- Patient satisfaction
- Staff satisfaction
- Efficiency and financial performance.

The majority of indicators are evaluated on the basis of available international, national, or regional standards. When no standard exists, the evaluation is based on the regional mean or median. The performance assessment is divided into five classes (Nuti et al., 2010)—very good, good, average, poor, and very poor—and every indicator receives a quantitative evaluation from 0 (very poor) to 5 (very good). The five classes are identified on the basis of the standard, the mean, or the median and the regional standard deviation for each indicator. The validity of the PES is supported by the fact that it is operated by an independent institution, the SSSP, and the measures were chosen on the basis of the scientific soundness in terms of validity, reliability, and the explicit nature of the evidence base (Nuti, Vainieri, Zett, & Seghieri, 2012).

In our analysis, we adapted the measures produced by PES for dimensions B to F,[2] and we normalized the total value for each dimension of assessment on a scale of 0 to 5.

A proxy for the best overall performance was constructed using the measures representing very good and good performance. We classified the best overall performers on the basis of the ratio between the number of performance indicators classified in the first and second classes (very good performance and good performance) and the total of indicators that assess performance for each organization.[3] A proxy for each culture's overall performance is the average of overall performance percentage of the organizations that presented the same senior management culture.[4]

Italian senior management culture was assessed using a survey method. This method was chosen for future repeatability, as a questionnaire allows for the replication of the analysis and the inclusion of results from additional organizations when a multidimensional performance evaluation system, such as PES, becomes available in other Italian regions. It may also help to delineate the trajectory of senior management culture in a longitudinal study (Mannion et al., 2009).

The questionnaire for the assessment of senior management culture was designed and structured according to the CVF. The CVF questionnaire was validated through a series of international studies in various fields (Quinn & Rohrbaugh, 1983; Cameron, 1985; Cameron & Freeman, 1991) and was subsequently applied to healthcare organizations (Gerowitz et al., 1996; Gerowitz, 1998; Jackson, 1997; Argote, 1989; Shortell et al., 2000; Davies et al., 2007). The questionnaire is based on solid theory (Scott et al., 2003a) and is used by studies that have effectively tested the relationship between performance and the cultural characteristics of an organization (Cameron & Freeman, 1991; Gerowitz et al., 1996; Gerowitz, 1998; Davies et al., 2007; Zhou et al., 2011).

The version of the CVF questionnaire used in this study, proposed by Davies et al. (2007), is among the most recent. The questionnaire was translated into Italian from English and was completely understandable to Italian

respondents. It was sent by e-mail to the chief executive officer (CEO) of all 16 public healthcare organizations in Tuscany between December 2009 and February 2010. A reminder e-mail was sent in March 2010. Drawing on Gerowitz et al. (1996), each CEO was asked to forward the questionnaire to the senior management team of the organization. The senior management team was identified as the members of the *collegio di direzione* (council of directors). The council of directors defines organizational priorities, strategies, and policies. Consequently, it is the most influential actor in shaping organizational culture. The council of directors is generally composed of the CEO, medical director, administrative director, social care coordinator, nursing manager (if present), directors of hospital clinical directorates or departments, and directors of the community health district.[5] In Tuscany, the council is composed of 20 members on average.

For each question, the CVF questionnaire offers respondents a set of four possible descriptions of an organization, corresponding to the different types of culture. The questions cover five organizational aspects:

- General characteristics
- Leadership
- Cohesion
- Emphasis
- Rewards

Within each group of four descriptions, the respondents were asked to allot 100 points to the descriptions that best fit their current organization. The largest score for each cultural type defines an individual's dominant cultural archetype. The dominant cultural type for an organization is calculated by aggregating the individual scores of the senior management team.

HYPOTHESES

The primary hypothesis of this research is that a relationship exists between senior management culture and performance.

The CVF supports the idea that specific aspects of performance are related to a dominant cultural type. Consequently, a series of second-level hypotheses can be developed to analyze the possible relationship between senior management culture and certain aspects of performance. The second-level hypotheses, shown in Table 1, were derived from the literature (Quinn & Rohrbaugh, 1983; Gerowitz et al., 1996; Davies et al., 2007; Wicks & St. Clair, 2007), and we determined the corresponding measures among the performance indicators available from PES. The second-level hypotheses aim to support the main hypothesis.

The hypotheses do not presuppose any causality of culture on performance or vice versa: The aim is to link the culture of a senior management team with organizational performance (Davies et al., 2007).

RESULTS

Usable responses were received from 80 senior managers in 11 healthcare organizations (two THs and nine LHAs).

In assessing organizational culture, we sought robust estimates of senior management's views. Previous studies have regarded three or four

TABLE 1
Second-Level Hypothesized Relationship

Dominant Culture Types	Valued Aspects	Expected Performance	PES Dimensions and Hypotheses
Clan	Cohesion, participation, tradition, loyalty, emphasis on staff morale and satisfaction Focus on internal integration and unity Relationship-based processes	Better staff satisfaction Higher degree of specialization Lower vacancy and turnover rates Emphasis on the development of professional competences and training initiatives	**Hypothesis 1**: Clan cultures show performance over the regional average[a] in dimension (DIM) E on staff satisfaction **DIM E "staff satisfaction" > regional average**
Development	Innovation, dynamism, entrepreneurship Focus on the external environment and relationship-based processes	Satisfaction of external stakeholders (especially patients) Better waiting times Greater investment in technologies and development of new products and services Better overall performance	**Hypothesis 2**: Development cultures show performance over the regional average in dimensions related to satisfaction of external stakeholders and better overall performance **DIM C, "quality of care," > regional average** **DIM D, "patient satisfaction," > regional average** **Greater number of measures in first and second classes**
Hierarchical	Emphasis on control, order, and stability Focus on internal integration and unity Mechanistic-type processes	Financial balance Better operating efficiency Better data quality	**Hypothesis 3**: Hierarchical cultures show performance higher than the regional average in DIM F, on efficiency and financial performance, and lower than the regional average in DIM D, related to patient satisfaction **DIM F, "efficiency and financial performance," > regional average** **DIM D, "patient satisfaction," < regional average**

TABLE 1 ***continued***

Rational	Competitiveness, goal-oriented Focus on external environment and mechanistic-type processes	Satisfaction of external stakeholders Enhanced market share and development of new services Greater access to financing Better recruiting of physicians Reputation improvement through excellence accreditation systems Lower staff satisfaction and loyalty Better overall performance (i.e., better star ratings)	**Hypothesis 4**: Rational cultures show performance higher than the regional average in DIM B, on regional policy targets, and DIM C, on quality of care, and lower than the regional average in DIM E, on staff satisfaction **DIM B, "regional policy targets," > regional average** **DIM C, "quality of care," > regional average** **DIM E, "staff satisfaction," < regional average** **Greater number of measures in first and second classes**

[a]"Regional average" refers to the regional average for all other cultures.

responses from senior management as sufficient to define the dominant organizational culture type (Gerowitz et al., 1996; Gerowitz, 1998; Davies et al., 2007). In this study, at least three senior managers responded from each organization of our sample. The senior management's response rate for the 11 healthcare organizations was 36%. The response rate for the strategic apex—CEO, medical director, administrative director, and social care coordinator—was 58%. Members of the council had served for approximately 5.5 years on average.

The results of the assessment of the dominant cultural types within the Tuscan healthcare organizations are shown in Table 2. Only one organization was identified as a dominant development culture; two were dominant clan cultures, three were rational cultures, and five were hierarchical cultures.

Table 3 shows the change in values (delta) between the average performance for all other cultures and the average performance of each senior management culture.

Hypothesis 1 (see Table 1) was supported because clan cultures have good staff satisfaction, although this dimension did not show a large delta among the average of the other cultures (0.14). On the other hand, the ability to maintain a sound economic and financial balance, which is not typically

TABLE 2
Average Culture Scores for Healthcare Organizations and Dominant Cultural Types

Culture Type	Mean Score (*N* = 80)	SD (*N* = 80)	Number of Organizations With Such a Dominant Culture
Clan	21.95	2.85	2
Developmental	19.69	5.78	1
Hierarchical	30.33	3.38	5
Rational	28.04	5.18	3

Cultural Dimension	Mean Score (*N* = 80)	SD (*N* = 80)	Number of Organizations With a Prevalent Dimension
Internal focus	52.28	2.50	8
External focus	47.73	2.50	3
Mechanistic-type processes	58.36	2.30	9
Relationship-based processes	41.64	2.30	2

consistent with clan culture traits in the literature, far exceeded the average of the other cultures (0.63).

Hypothesis 2 was partially supported. Development cultures are oriented toward the satisfaction of external stakeholders, and the assessment of the patient satisfaction dimension is higher than the average of the other cultures by more than half a point (0.58). Furthermore, according to the literature, a developmental culture demonstrates better overall performance and quality of care, but the evaluations were slightly negative compared to the average of the other cultures (–0.05). The results refer to the culture of a single organization, and a larger sample is needed to verify the relationship between cultural characteristics and performance with less ambiguity.

Hierarchical cultures are the most common type of organizational culture in Tuscany. Hypothesis 3 was supported only partially: First, the difference between the results and the average of the other cultures for patient satisfaction was –0.26, indicating that hierarchical cultures have a strong internal focus and are less influenced by external stakeholders. Second, in contrast to the literature, the results of financial performance showed a negative delta compared to the average of other cultures (–0.36). Hierarchical cultures showed no particular superiority in any of the assessment dimensions.

TABLE 3
Change in Values (Delta) Between Regional Performance and the Performance Averages of Senior Management Cultures

PES Dimension of Assessment	Culture	Clan	Developmental	Hierarchical	Rational
DIM B, "Regional policy targets"	Average PES score	2.79	3.63	3.28	3.51
	Average PES score for all other cultures	3.38	3.23	3.25	3.21
	Delta	**–0.58***	**0.40**	**0.04***	**0.30**
DIM C, "Quality of care"	Average PES score	3.13	2.82	2.91	3.42
	Average PES score for all other cultures	2.80	2.87	3.05	2.78
	Delta	**0.33**	–0.05	–0.14	0.63*
DIM D, "Patient satisfaction"	Average PES score	3.36	3.93	3.30	3.49
	Average PES score for all other cultures	3.41	3.35	3.55	3.34
	Delta	**–0.06***	**0.58**	–0.26*	0.14*
DIM E, "Staff satisfaction"	Average PES score	3.11	3.25	2.93	3.21
	Average PES score for all other cultures	2.97	2.97	3.17	2.93
	Delta	**0.14**	**0.28**	**–0.24**	0.29*
DIM F, "Efficiency and financial performance"	Average PES score	3.50	2.67	2.78	3.19
	Average PES score for all other cultures	2.87	3.01	3.14	2.96
	Delta	**0.63**	**–0.34**	**–0.36**	**0.23**
Overall performance	Average PES score	56%	56%	47%	64%
	Average PES score for all other cultures	54%	54%	60%	50%
	Delta	**2%**	**2%**	**–4%**	**14%**

*Data were approximated up to two decimal points after each subtraction. Consequently, some delta values are different than the mere subtraction of the data reported in the table.

In terms of rational culture performance, Hypothesis 4 was supported for regional policy targets, quality of care, and overall performance (per hypothesis above the regional average for all other cultures) but not for staff satisfaction (per hypothesis lower than the regional average for all other cultures). Because rational culture is mechanistic—based on planning and control systems that are oriented toward the achievement of objectives and performance standards—the assumptions primarily tested the capacity of rational cultures to achieve the objectives set by the Tuscany region. For the regional policy targets dimension, the results showed higher values than the average of other cultures (0.30), supporting the hypothesis. Further, rational cultures focus on the response to external stakeholders rather than on internal members. Therefore, one of the hypotheses specified a low propensity to maintain high levels of organizational satisfaction. However, results show that rational cultures appear to produce greater levels of employee satisfaction than the average of the other cultures (0.29). Rational cultures are also linked to better performance in the quality of care dimension in terms of responding to patients' needs. The value of this dimension was positive compared to the average of other cultures (0.63). Finally, rational cultures were associated with better overall performance (+14%).

DISCUSSION

The results for clan culture are not fully consistent with what was hypothesized on the basis of theory and empirical evidence. Gerowitz et al. (1996) and Davies et al. (2007) found that hospitals with dominant clan cultures overperformed significantly on measures related to the human resource domain. In our analysis, despite clan cultures showing a good assessment of the internal dimension of organizational satisfaction, the results were not excellent and did not distinguish this type of organization from the others. Further, shifting the focus to the structural characteristics of organizations with clan cultures (comparison similarly conducted in Davies et al., 2007), we found that both organizations that reflected this culture were smaller than average.[6] Therefore, the dominance of clan culture could be related to a smaller organizational size and the opportunity to maintain informal personal relationships rather than the adherence to rigid rules and procedures; moreover, the staff express a strong sense of identity with and loyalty to the organization.

The hypothesis that development culture is positively related to the demands of external stakeholders was partially confirmed by the results. However, quality of care and overall performance were only slightly negative or positive compared to the average of the other cultures. Our results differed from previous studies (Gerowitz et al., 1996; Davies et al., 2007), where dominant developmental culture performed positively and significantly on measures related to responses to external stakeholders and overall performance compared to the other cultures. Nevertheless, in our sample the evaluation only refers to a single organization, so it is not possible to draw definitive conclusions.

Hierarchical cultures are characterized by the lowest relative performance

for all dimensions of assessment, even those that best fit their specific cultural traits. These results do not support our hypothesis. Similar to Gerowitz et al. (1996), we found that hierarchical cultures underperformed in the areas related to cost containment and efficiency. Therefore, it is plausible to suggest that a hierarchical culture is unsuitable for the management of professional bureaucracies, such as healthcare organizations. The attempt to define mandatory rules and formal procedures with the final goal of improving results could have the opposite effect of demotivating staff and obstructing the achievement of positive results, creating a vicious cycle of poor performance outcomes.

Rational management showed performance outcomes above the average of the other cultures in all dimensions of evaluation and overall performance. Although this finding was unexpected considering the hypothesis, rational culture encouraged a greater level of employee satisfaction. One explanation for this result may be found in planning and control system theories (Goold & Quinn, 1990). The definition of strategic and operational objectives and the prediction of performance-related incentives support efforts to achieve corporate strategic imperatives and to fulfill individual motivation. Lacking the constraints imposed by formal rules (or simply due to the perception of less constraint), the staff members are subject to continuous positive incentives for achieving challenging goals, and they react with greater satisfaction. From this perspective, rational culture seems to correspond with mission-driven or market-driven organizations, in which the clarity of goals and targets (which are rationally linked to mission or market opportunities) produces organizational motivation and wellness, which is reflected in staff satisfaction. However, we must specify that rational cultures, by their nature, aim to achieve objectives and targets. Mechanisms such as the PES, which establishes assessment indicators and targets, push the rational cultures to incorporate those measures into their objectives and, consequently, are better geared to achieve the results expected. This situation provides an advantage to rational cultures because they tend to conform to the performance requested by the evaluation systems and to achieve better results.

CONCLUSIONS AND MANAGERIAL IMPLICATIONS

Although our sample was not large enough to support universally valid arguments, we can make the following inferences from this study.

First, we observed that rational culture outperforms other organizational cultures. This finding supports the efforts of most countries and healthcare systems to promote this type of culture among organizations, managers, physicians, and other health professionals. Second, if the superiority of rational culture holds true, then policy makers, boards, and owners have clear indication of the benefits of providing better assessment and training of senior healthcare managers. The content and competencies related to rational management, such as performance management, planning and control, and budgeting systems, should be relevant for role appraisal and training schemes.

Further, middle managers should be assigned well-defined goals and clear mandates to develop and promote rational management styles.

Finally, if rational cultures are to be developed, then it follows that the mandates of CEOs and senior management teams must be defined and clarified. The more clearly defined and prioritized the target is, the more likely a rational culture will take root. Unfortunately, this situation does not occur easily in public health systems, where politicians are often afraid of clear-cut decisions and the CEO's objectives might be ambiguous (Calciolari, Cantù, & Fattore, 2011). Policy makers must be aware that they represent the first step in the development of a rational culture. If organizations with rational cultures are geared toward achieving the results desired by healthcare and political systems, policymakers and senior management teams must have sound decision-making systems in place to identify the right goals to be pursued before allowing organizations to pursue goals rationally and in the right way.

Although this study provides some valuable elements for future research, it has several limitations. First, our sample consists of only 11 organizations, so future studies should extend the sample to additional healthcare organizations.

Second, we assessed culture by exploring the views of senior managers. This approach raises other questions: Can we explain the results of this study by referring only to senior management culture, or must we also explore the dominant culture of other members of the organization? In other words, is the superiority of rational culture determined by its diffusion throughout an entire organization, or is it sufficient to be the dominant culture of the senior management team? Can CEOs appointed for a short term (3.81 years in Tuscany)[7] consolidate cultural change, and do organizational cultures really change with managers and the practices of senior management teams? It is clear that specific organizational assessments might help managers to understand whether they must reevaluate and change their cultural approach in connection with performance expectations and other prominent cultures within the organization.

Third, the survey was self-reported, so further studies might try to use different methods to assess the organizational culture.

NOTES

1. LHAs are vertically integrated organizations that are intended to build the most complete and cost-effective continuum of care for their catchment area. LHAs combine facilities that provide care at different levels: prevention and environmental health services, primary care (general practitioners), secondary care (outpatient services), tertiary care (general or community hospitals), quaternary care (academic medical centers, specialty hospitals), rehabilitation (nursing homes, rehabilitation centers), and long-term care (long-stay inpatient centers, home care units).
2. We did not hypothesize the link between organizational culture and the first dimension, which is related to the assessment of population health, because mortality rates and specific health measurements are primarily associated with the lifestyle and endemic characteristics of a population and are only secondarily related to the effectiveness of senior management's choices and interventions.

3. For example, Organization A has 26 performance indicators classified in the first and second classes on a total of 48 indicators evaluated, or 54% of the measures.
4. For example, Organization A and Organization B are dominant clan cultures. The former has an overall performance equal to 54% and the latter equal to 58%, so the clan culture's overall performance is 56%.
5. LHAs are organized into health centers or districts. Districts and health centers have a dual nature: (a) From a structural perspective, they are a single facility or a network of facilities in which services are delivered to patients. (b) From a managerial perspective, they have an organizational responsibility to meet the health needs of a population or territory.
6. The two organizations with dominant clan culture are the smallest LHA and smallest TH in terms of population for the former and in terms of beds and number of staff for both organizations: (a) The clan LHA has a population of 168,823, whereas the average of the LHAs is 270,693. (b) The clan LHA has 450 beds and the clan TH has 179 beds, whereas the average of the respondent organizations is 750 beds. (c) The clan LHA employs 1,798 staff members and the clan TH employs 765 staff members, whereas the average of the respondent organizations is 2,860 staff members.
7. The figure is based on data from Italy's Ministry of Health and reported on the annual observatory on the Italian National Health Service (Osservatorio Aziende Sanitarie Italiane, or OASI) produced by Bocconi University, Milan (Cantù, 2009). Although evidence is lacking on the relationship between cultural change and CEO turnover, some authors (Anessi Pessina, 2002; Borgonovi, 2005) appointed several critical issues for the CEO to achieve organizational and cultural changes in public administration in a short time, specifically the following: (a) Public administration operations are significantly affected by political cycles; the CEO of a healthcare organization is appointed through the spoils (patronage) system by politicians, so before the elections the organization interrupts its activities to await the new appointment, reducing the change management time for the CEO. Moreover, politicians seek to gain consensus in an electoral period, and they could try to influence the CEO's agenda to achieve their specific consensus purposes. (b) Organizational changes in public administration could need a long time to first negotiate the actions with stakeholders (both internal and external) and second formalize the decisions, so 3.81 years on average could be too short a period to start the actions for change.

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PRACTITIONER APPLICATION

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Culture is difficult to measure or manage primarily because of its intangible qualities. Organizational culture, however, can be qualified as either an asset or a liability. Most leaders in healthcare organizations lack the skills to strategically manage culture. The article by Prenestini and Lega does an excellent job of analyzing a