

## THE CULTURE AND ORGANIZATIONAL PERFORMANCE: THE CASE OF FAMILY HEALTH UNITS IN THE ALGARVE REGION

**Vera BASILIO**

Professor Assistant, University of Algarve, Portugal  
[veraluciaba82@gmail.com](mailto:veraluciaba82@gmail.com)

**Susana Soares Pinheiro Vieira PESCADA**

Professor Assistant, Faculty of Economy,  
Cin Turs - Research Center for Tourism, Sustainability and Well-being  
University of Algarve, Portugal. E-mail: [spescada@ualg.pt](mailto:spescada@ualg.pt)

**João VIDAL**

Professor Assistant, University of Algarve, Portugal  
Cin Turs - Research Center for Tourism, Sustainability and Well-being  
E-mail: [jvidal@ualg.pt](mailto:jvidal@ualg.pt)

**Fernando TEIXEIRA,**

Professor Asistant, Instituto Politécnico de Beja, Portugal  
Smart Cities Research Center  
[fernando.teixeira@ipbeja.pt](mailto:fernando.teixeira@ipbeja.pt)

### Abstract

**Background and Aim:** Considering the changes within organizations and their constant needs for internal and external adaptation, the study of organizational culture has been seen as a determining factor for the management of organizational behavior and, at the same time, a foundation in the process of decision making. This study aimed to analyze and compare the profile of the organizational culture of Family Health Units of two different models of organizational management. Based on the Competing Values Framework Model (CVF), the Organizational Culture Profile of the Family Health Units of models A and B was analyzed, in order to identify the type of organizational culture predominant in the units with different performance indices, analyze the discrepancies between the current and ideal culture and the cultural profiles generated by two professional groups. **Methodology:** A quantitative, cross-sectional study of the type described was chosen. For this purpose, two data sources were used, the Organizational Culture Assessment Instrument, translated and adapted to the portuguese language, applied to a total of 99 professionals, doctors and nurses, from various Primary Health Care Units, and the Primary Health Care Identity Card database, where data on performance indices were extracted. **Conclusion:** Certain cultural characteristics such as: dominant characteristics, organizational leadership, employee management, internal cohesion, organizational principle and success criteria must be readjusted in order to meet the challenges and objectives associated with management models organizational structure and, consequently, promote change and the success of the USF.

**Keywords:** Organizational Culture; Performance; Organizational Change; Organizational Culture Assessment Instrument.

**JEL Classification Codes:** I10, 130

## **1. Introduction**

With the constant changes in health services, it is essential to maintain the competitiveness, sustainability, effectiveness, market positioning, and positive organizational climate of health organizations. It is crucial to adopt various management models, as there is no single appropriate management model, but rather multiple complementary models that adapt to the needs of organizations (Mateus, 2021). The management of organizational culture has become increasingly pivotal in organizations and can play a fundamental role in the performance of health organizations due to the complexity of challenges posed by health sector reforms. These reforms entail increased responsibilities for managers, the adoption of new competencies by professionals, the achievement of positive and measurable results through contracting practices, client satisfaction, and quality of care (Leone et al., 2014). The reform in Primary Health Care (PHC) has led to organizational changes and the adaptation of professionals to constant changes, with organizational culture being intrinsic to the practices of the organization. In this context, it is important to study the role that organizational culture plays in health organizations. Understanding the significance of organizational culture within an organization is only possible by identifying the predominant and desired types of culture (Lourenço et al., 2017).

In this context, the present study aims to identify the prevailing organizational culture and the ideal one according to the perceptions of respondents, doctors and nurses of Family Health Units (USFs), with two distinct organizational models – Model A and Model B, using the CVF of Cameron and Quinn (2006) as a theoretical reference. To achieve this aim, the following specific objectives were outlined: 1) Identify the type of organizational culture that predominates in Family Health Units with different organizational models; 2) Analyse the discrepancies between the current and preferred culture; 3) Analyse the cultural profiles generated by the different professional groups in the USFs under study – Nurses and Doctors; 4) Identify the cultural characteristics represented by the CVF that best address the challenges and objectives associated with the organizational models of the USFs; 5) Based on the comparative analysis of the cultural profiles identified in the different USFs, formulate the necessary actions to achieve the changes needed to improve management practices. Based on the study's results, it is expected to contribute positively to the development of this field of knowledge, particularly in terms of recognising the values that guide professionals and identifying the need for cultural change in the different organizational models of the USFs.

## **2. Literature Review**

### **2.1. Culture and Organizational Change**

The constant concern for people within their work environment led to the development and interest in the study of organizational culture in the 1980s. The organizational and management models of American companies were showing signs of fatigue and were being surpassed by the highly competitive and efficient Japanese companies (Gomes, 2000; Robbins, 2005). It became crucial to identify what was underlying this threat, with studies revealing that the advantage lay in the existing culture (Gomes, 2000).

Organizational culture serves as a guiding principle for how the organization conducts its business, defining its reason for existence. Thus, when cultural values are established, the means to achieve the organization's mission are also defined. Organizations reflect a combination of cultures; however, in some organizations, a particular cultural typology is dominant. The great challenge for managers is to balance these cultural types so that the organization can achieve its objectives. Therefore, managers should have a broad vision and multidisciplinary knowledge to help employees reach their goals in a participative and personally satisfying organizational climate. Managers must lead in a proactive environment, adopting appropriate management principles and tools, and keeping employees informed about the company's objectives (Mateus, 2021).

Whenever there is a change in the organization, all individuals are confronted with the impact it may have on their attitudes. For change to be meaningful, the organization must be able to achieve the proposed results without negatively affecting individuals. Organizations must consider the commitment of individuals to the culture and proper change management. According to Grant et al. (2005), organizational change is the transformation to which an organization is subjected and can impact its culture. It is a flexible process that shapes and influences attitudes and behaviours.

Organizational change produces a significant socio-cultural impact, promoting appropriate outcomes that increase individual and group satisfaction and, consequently, performance (Rodriguez et al., 2020). According to Kotter (2012), organizational change is a process that can add value to the organization but can also be seen as a threat, potentially generating conflicts and thus becoming a barrier to change itself. Therefore, the greatest challenge of change focuses on the people within the organization and the change in behaviours. Changing behaviours requires a corporate effort, making it a difficult task to achieve (Junior, 2003). Junior (2003) also notes that organizational culture is dynamic and mutable. Its understanding and analysis are essential for better management of organizations, allowing the development of strategies to achieve better results in implementing changes in organizational structures.

In the context of healthcare, Leone et al. (2014) state that managing organizational culture is seen as necessary in the context of healthcare reforms, with evidence suggesting that organizational culture can be a significant factor in the performance of healthcare organizations.

## **2.2. Performance of Organizations and Culture**

Health organizations face constant changes in their environment. In a highly competitive and ever-evolving climate, developing, implementing, and utilizing appropriate performance evaluation and management systems are fundamental challenges for their success. The contribution of human capital to creating competitive advantages within health organizations has sparked interest in practices that motivate, measure, and improve performance. Performance management aims to develop an environment of opportunities and motivation so that employees can grow and contribute to achieving organizational objectives (Zhang & Zhu, 2012). In this context, the performance of organizations, particularly health organizations, has been considered a significant topic in the literature, indicating the extent to which organizational objectives are achieved through indicators that measure efficiency and effectiveness (Zhang & Zhu, 2012). Lebas (1995) states that performance is the potential for the successful implementation of future actions to achieve objectives. Performance evaluation allows the identification of the level at which the organization stands and should be assessed in terms of productivity and flexibility, being adapted to each situation and individual. The success of an organization's culture can result from various factors: committed and motivating leaders, the alignment of organizational culture with the organization's strategy, and the support and collaboration of all stakeholders (employees and leaders) (Gover et al., 2015). In this line of thought, Jacobs et al. (2013) argue that organizational culture can affect an organization's performance through a fusion of values, beliefs, and norms, shaping and adjusting employees' behaviour and interactions, as well as influencing decision-making ability, teamwork, learning capacity, and the setting of strategic objectives that can impact performance. According to Dixon-Woods et al. (2014), health organizations should emphasize developing people-centred cultures rather than task-centred ones, valuing good practices and reinforcing behaviours that enhance the quality of care, user satisfaction, and the well-being of health professionals. A cultural shift in health organizations is essential, and top management must lead this process of positive and constructive change for the future. In this regard, given the current demands for healthcare reform in Portugal and the context of organizational changes arising from the implementation of new management models, understanding the cultural profile of organizations is relevant and useful. Culture can contribute to the effective management of organizational change and, consequently, to the organization's success (Cruz & Ferreira, 2012).

### 2.3. CVF

The CVF has been widely used and cited in various scientific studies, and this study focuses on this model. Based on the model by Quinn and Rohrbaugh (1981, 1983), Cameron and Quinn (2006) propose a combination of the two axes, resulting in four quadrants, each representing different criteria of organizational effectiveness. The model developed by Cameron and Quinn (2006) allows for the evaluation of organizational culture by identifying four types of culture: Clan Culture, Adhocracy Culture, Hierarchy Culture, and Market Culture. Each type of culture has its main characteristics associated with different values and organizational models according to six dimensions of analysis: Dominant Characteristics; Organizational Leadership; Management of Employees; Organizational Glue/Strategic Emphasis; Organizational Climate/Internal Cohesion; and Criteria of Success. The dimension of dominant characteristics relates to employees' perception of their workplace and, depending on the cultural orientation, it can be a personal and pleasant environment or a structured and rule-bound one. Organizational leadership pertains to how the leader is perceived, whether as a parental or entrepreneurial figure, or alternatively, as organized or competitive. In terms of management of employees, this dimension seeks to understand how employees relate to their work management and whether it focuses on the individual or the group. Organizational glue/strategic emphasis is understood through group cohesion, placing loyalty, rules, and procedures at the extremes. The penultimate dimension, organizational climate/internal cohesion, evaluates the degree of employee commitment and their perspectives on the organization. The last dimension, criteria of success, clarifies whether success results from group development or efficiency and market penetration. The convergence of these six dimensions expresses the cultural values and assumptions of a given organization (Cameron & Quinn, 2006). According to Cameron and Quinn (2006), Clan Culture focuses on the internal organization and flexibility, and is based on familial values. It is characterized by participation, teamwork, knowledge sharing, and group cohesion, where all employees contribute to a common goal. In this type of culture, leaders play roles based on trust and loyalty, the work environment is governed by cohesion, and professional progression is seen not as a source of profit but as a means of valuing and increasing responsibility. These cultural characteristics, when developed, enhance greater employee engagement in professional activities. Adhocracy Culture focuses on the external environment and flexibility. It is based on a dynamic, entrepreneurial, and creative workplace, with objectives centred on growth and resource acquisition, and its effectiveness criterion is market share and business volume. Leaders are seen as innovative and willing to take risks. It is grounded on the principles of innovation and adaptation to change, aimed at creating new products to encourage and maximize creativity, entrepreneurship, and flexibility (Cameron & Quinn, 2006; Parreira, 2015). Hierarchy Culture is internally oriented and characterized by stability, where individuals accept authority, rules, and imposed procedures, and leaders are conservative and organized, expecting employees to perform their activities according to pre-established standards. The management style ensures job security, predictability, and relationship stability, and rewards are allocated according to the position each individual holds in the organization (Cameron & Quinn, 2006; Chung et al., 2012; Parreira, 2015). Market Culture is oriented towards the external environment, performance, control, and results, focusing on productivity and efficiency. Individuals and leaders are competitive and productive, with success resulting from the definition of ambitious goals and measurable objectives. This type of culture should not be defined as a company's orientation towards the market or marketing. The company itself is the market, focusing on the external environment, customers, and partners, and being results-oriented. The organizational climate is characterized by competition and goal achievement, and rewards are given according to the objectives reached (Cameron & Quinn, 2006; Chung et al., 2012; Yesil & Kaya, 2013). The CVF provides a set of tools that guide leaders in changing the organization through mechanisms that enhance performance. Its aim is to create a strong and unique culture to reduce uncertainty, establish social order—doing what is expected, perpetuate values and norms across generations, create collective identity and commitment, and build a vision for the future. The

model is useful in organizing and interpreting organizational phenomena, serving as an important tool for diagnosing and changing culture, thereby improving organizational performance. It is also valuable for researchers studying organizational culture (Cameron & Quinn, 2006). The CVF is the theoretical model of reference for this study to analyze the organizational culture profile of Family Health Units (USF) with different organizational models. According to Cameron and Quinn (2006), it is a precise, comprehensive, and practical model involving twelve dimensions with a focus on long-term organizational effectiveness, based on the analysis of the current and desired culture. Its advantages include ease of application within a reasonable time frame and being a validated instrument supported by empirical literature.

### **3. Methodology**

The present study focuses on identifying the current organisational culture and the ideal culture according to the perceptions of the respondents, doctors and nurses of Family Health Units (USF) with different organisational models, with the aim of formulating strategic recommendations for cultural change. A quantitative cross-sectional approach was followed, using a questionnaire survey as the main data collection instrument. A survey-based investigation was chosen due to its low cost, ease of execution, and quick return of the obtained data (Aragão, 2011).

#### **3.1. Sample**

The target population of this research study consists of 99 professionals, including nurses and doctors from the Family Health Units (USF). The sample was obtained through a non-probabilistic and intentional sampling process, meaning that elements were deliberately selected by the researcher. This indicates that the selection of study participants was not based on 'representativeness' but on a set of specific purposes (Bryman, 2014). With the aim of conducting a descriptive analysis of the cultural profile of USFs with two distinct organisational models based on the perceptions of doctors and nurses, a deliberate selection of USFs and professionals to be involved in the study was made. Additionally, the criterion of choosing the geographical areas where the USFs are located was considered. Besides these criteria, accessibility and proximity of the analysis units were also taken into account. From this sampling process, 99 professionals, including doctors and nurses, were involved in the study, with 15 from USF R., 16 from USF F., 13 from USF Al., 13 from USF O., 16 from USF G., 14 from USF M., and 12 from USF N (data obtained from the BI-CSP portal in 2021). After administering the questionnaires, a response rate of 47% was obtained from USF R., 81% from USF F., 38% from USF Al., 46% from USF O., 31% from USF G., 93% from USF M., and 67% from USF N, resulting in an overall response rate of 58%, which corresponded to a total of 57 responses (as shown in Table 1). Thus, the study sample consisted of 57 professionals from the Family Health Units. A população alvo do presente estudo de investigação corresponde a 99 profissionais, enfermeiros e médicos das USF.

**Table 1 - Response Rate of the USFs**

<b>Family Health Units</b>								
	<b>USF R</b>	<b>USF F</b>	<b>USF Al</b>	<b>USF O</b>	<b>USF G</b>	<b>USF M</b>	<b>USF B</b>	<b>Total</b>
<b>Questionnaires Delivered</b>	15	16	13	13	16	14	12	99
<b>Questionnaires Received</b>	7	13	5	6	5	13	8	57
<b>Answer Rate (%)</b>	47%	81%	38%	46%	31%	93%	67%	<b>58%</b>

Source: Own elaboration

### **3.2. Instruments and Procedures**

In order to identify the predominant type of organizational culture in units with different performance indices, analyze the discrepancies between the current and ideal culture and the cultural profiles generated by two professional groups, a questionnaire survey was used applied to doctors and nurses from the target Family Health Units (USF) and the Primary Health Care Identity Card (BI-CSP) database available on the BI-CSP Portal. For this purpose, the present study was based on the Organizational Culture Assessment Instrument (OCAI) developed by Kim S. Cameron and Robert E. Quinn (1999). Thus, an OCAI questionnaire was used, translated, validated and used in studies carried out in the health field by the author Sofia Cruz in 2013. The instrument consists of forty-eight closed-ended questions, with a Likert-type agreement scale and five response options (1 corresponds to strongly disagree, 2 to disagree, 3 to neither agree nor disagree, 4 to agree and 5 to strongly agree), whose coding of responses was done so that higher values meant greater agreement. Respondents were asked to respond to instrument I regarding the current organizational culture in their USF and instrument II, with the same questions but referring to the organizational culture considered ideal.

This questionnaire survey was pre-tested and applied to ten nurses from the Continuing Care Unit (UCC), from January to February 2021, in order to obtain suggestions for improvement regarding the presentation of the questionnaire, response time and interpretation of questions. After validating the pre-test, data collection proceeded, obtaining a total of 57 completed questionnaires. As for the reliability of the instrument, it should be noted that the results of the present study are between 0.8 and 0.9. The minimum value of this study is 0.89 and the maximum value is 0.91, thus confirming good internal consistency. The authors Pestana & Gageiro (2014) point out that Cronbach's alpha is one of the most used measures for verifying the internal consistency of a group of variables and varies between 0 and 1, with internal consistency considered inadmissible with  $\alpha < 0.6$ , weak between 0.6 and 0.7, reasonable between 0.7 and 0.8, good between 0.8 and 0.9 and very good  $> 0.9$ . The secondary data used in this work was extracted from the BI-CSP Database. The General Performance Index (IDG) data for the studied USFs are public and available on the BI-CSP online platform (Ministry of Health, 2021). The BI-CSP provides information on the weighting of each indicator, in an attempt to assess its relative importance, being provided by the Central Administration of the Health System (ACSS).

In the present study, the option was to use the results for the month of October 2021, so they coincide with the period of data collection through the questionnaire surveys. To achieve the objectives of the study, descriptive statistical analysis was used, through SPSS Statistics 26 Software. With the results obtained, a comparison was made of the types of current and ideal organizational culture, allowing the identification of the cultural characteristics represented in the CVF that best meet the challenges and objectives associated with the organizational models of the USFs.

Ethical issues were always present and respected from the beginning of the study process, with the elaboration of a formal authorization request to the Health Ethics Commission (CES) of the Regional Health Administration (ARS). The favorable opinion issued by the entity triggered the application of the questionnaires and informed consent, respecting the voluntary and confidential participation of respondents in the target USFs.

## **4. Results**

### **4.1. Socio-Demographic Characterization of USF Professionals**

The present study focused on USF model A and USF model B in the intervention area, with a total of seven USFs. According to data from the BI-CSP portal in 2021, the population of these USFs consists of a total of 99 nurses and doctors. Regarding the type of unit, 40.4% of respondents work in a USF-A and 59.6% work in a USF-B. 22.8% belong to USF F and an equal percentage to USF M (22.8%), 14.0% work at USF B, 12.3% at USF R, 10.5% at USF O, 8.8% of professionals work at USF G, and 8.8% at USF AI. Regarding gender, the sample

is not balanced, with a significantly higher representation of females (75.4%) compared to males (24.6%). Concerning the professional category, 36.8% of respondents are general and family medicine doctors, 5.3% are medical residents, 57.9% are nurses, and 28.1% of nurses are specialists. In terms of age, 29.8% of participants are between 30 and 39 years old, 35.1% are between 40 and 49, and 35.1% are over 50 years old.

#### **4.2. Characterization of the USF Performance Index**

Regarding the IDG of each USF, USF O has the best IDG at 66.4%, followed by USF R at 64.9%, USF M at 62.4%, and USF B with an IDG of 59.2%, these being USFs with a type B organizational model. The model A USFs have a lower IDG than model B, with USF F having the best IDG among model A USFs (50.8%), followed by USF G with 45.0%, and USF AI with 33.3%.

#### **4.3. Organizational Culture Profile by Unit Type**

To describe the organizational culture profile of the target USFs, the perceptions of participants were analyzed, considering the values based on the relative weight of the dimensions of each cultural typology, as shown in Table 2. Regarding the Dominant Characteristics dimension, the Hierarchical and Market Cultures are predominant in model A and model B USFs, respectively. Model A USF professionals perceive the current dominant characteristics as being of the Hierarchical Culture type (43.5%), while professionals from model B USFs mostly identify with the Market Culture (70.5%). When analyzing the dominant characteristics that professionals would like to see developed in the USFs, it was found that model A USF professionals prefer to see dominant characteristics of the Market Culture type (82.6%) implemented, while those from model B USFs prefer to maintain the current characteristics - Market Culture (85.3%). Concerning the current Organizational Leadership dimension, respondents from model A USFs consider that the organizational leader has characteristics of all culture types: Clan Culture (47.8%), Adhocracy Culture (47.8%), Market Culture (47.8%), and Hierarchical Culture (47.8%). In model B USFs, they identify the leader as having cultural characteristics of the Market Culture type (70.5%). In terms of perceptions of the desired leader, it was found that model A USFs preferred a leader with characteristics of two culture types, Market Culture (74.0%) and Hierarchical Culture (74.0%), while model B USFs chose a leader with characteristics of the Hierarchical Culture type (97.0%). Regarding the current Management of Employees style dimension, it can be seen that in both model A and model B USFs, the existing management style is of the Clan Culture type (39.1% in USF-A and 67.6% in USF-B). When analyzing what they would like to see implemented, the two models differ, with model A USFs preferring to maintain the same Clan culture type management (82.6%), but model B USFs preferring the Hierarchical Culture type (91.2%). Concerning the Internal Cohesion dimension of the health units, different positions can be observed. Respondents consider that the internal cohesion of model A USFs is of the Hierarchical Culture type (65.2%), while model B USFs have an internal organizational cohesion of the Market Culture (67.7%) and Hierarchical Culture (67.7%) types. When asked about the ideal internal cohesion, professionals would like model A USFs to be of the Clan Culture (87%) and Market Culture (87%) types. Model B USFs intend to maintain the Hierarchical Culture (94.2%). Regarding the Organizational Principle dimension, it was found that in both model A and model B USFs, an organizational principle of the Hierarchical Culture type is lived (65.2% model A USF and 70.6% model B USF). As for what they would like to see in their unit, model A USFs would prefer the Adhocracy Culture type (78.3%) in this dimension, while model B USFs consider maintaining the same organizational principle they currently have, Hierarchical Culture (97.1%). In the Success Criteria dimension, it appears that in model A USFs, the current success criteria are considered to be of the Clan Culture type (52.2%), while in model B USFs, the success criteria are integrated into the Clan Culture type (64.7%) and the Hierarchical Culture (64.7%). Concerning the ideal success criteria considered by the units, it appears that both model A and model B USFs would like to maintain criteria of the Clan Culture type (82.6% USF-A and 97.1% USF-B).

**Table 2 - Organizational Culture Profile by Unit Type**

		USF Model A		USF Model B	
		Current	Ideal	Current	Ideal
<b>Dimensions of the Organizational Culture</b>	<b>Dominant Features</b>	Hierarchical (43,5%)	Market (82,6%)	Market (70,5%)	Market (85,3%)
	<b>Organizational Leadership</b>	Clan (47,8%) Adhocrática (47,8%), Market (47,8%) Hierarchical (47,8%)	Market (74,0%) Hierarchical (74,0%)	Market (70,5%)	Hierarchical (97,0%).
	<b>Employee management</b>	Clan (39,1%)	Clan (82,6%)	Clan (67,6%)	Hierarchical (91,2%)
	<b>Internal Cohesion</b>	Hierarchical (65,2%)	Clan (87,0%) Market (87,0%)	Market (67,7%) Hierarchical (67,7%)	Hierarchical (94,2%)
	<b>Organizational Principle</b>	Hierarchical (65,2%)	Adhocracy (78,3%)	Hierarchical (70,6%)	Hierarchical (97,1%)
	<b>Success Criteria</b>	Clan (52,2%)	Clan (82,6%)	Clan (64,7%) Hierarchical (64,7%)	Clan (97,1%)

Source: Own elaboration

**4.4. Organizational Culture Profile by Professional Category**

Based on the information collected from the OCAI questionnaires applied to USF model A and USF model B, the perceptions of nurses and doctors regarding the current and ideal culture were compared, as shown in Table 3.

In the dimension “Dominant Characteristics” perceived by nurses and doctors, it was found that nurses perceive the current dominant characteristics as being of the Market Culture type (66.7%), and doctors consider that the current dominant characteristics are of the Hierarchical Culture type (54.1%). When analyzing the type of dominant characteristics, they would like to see implemented, it was found that nurses want dominant characteristics of the Market Culture type (84.8%), and doctors want the Adhocracy Culture type (87.3%).

Regarding the “Organizational Leadership dimension”, nurses consider that the organizational leader has characteristics of the Market Culture (69.7%). Doctors identify the leader as having cultural characteristics of the Market Culture type (50.0%) and Adhocracy Culture type (50.0%). When addressing perceptions of the desired leader, it was found that both nurses and doctors prefer a leader with characteristics of the Hierarchical Culture type (84.9% nurses and 91.6% doctors).

In the current “Management of Employees dimension”, it can be seen that both nurses and doctors consider that the existing type of management is of the Clan Culture type (60.5% nurses and 50.0% doctors). When analyzing what they would like to see implemented, the two professional profiles differ. Nurses would like management to be of the Hierarchical Culture type (84.9%), but also with Clan characteristics (84.8%), while doctors would like to see the following types of management implemented: Clan Culture (87.5%) and Adhocracy Culture (87.5%).

Regarding the “Internal Cohesion dimension” of the professional profiles, similar positions can be seen. Both nurses and doctors consider that the current internal cohesion is of the Hierarchical Culture type (63.7% nurses and 70.9% doctors). When asked about the ideal internal cohesion, nurses would like internal cohesion to maintain characteristics of the Hierarchical Culture type (87.9), while doctors would prefer the Clan Culture type (91.6%) and Market Culture type (91.6%).



In the “Organizational Principles dimension” experienced by nurses and doctors, it was found that both nurses and doctors consider the organizational principle to be of the Hierarchical Culture type (63.6% nurses and 75.0% doctors). As for what they would like to have in their unit, in this dimension, nurses would like to maintain the cultural characteristics of the Hierarchical type (87.9%), and doctors would like the Clan Culture type (91.7%).

In the “Success Criteria dimension”, for nurses, the current success criteria are considered to be of the Clan Culture type (63.7%), and for doctors, the success criteria are integrated into the Hierarchical Culture type (62.5%). Regarding the ideal success criteria, it is found that both nurses and doctors would like to have success criteria of the Clan Culture type (90.9% nurses and 91.7% doctors).

**Table 3 - Organizational Culture Profile by Professional Category**

		Nurses		Doctors	
		Current	Ideal	Current	Ideal
<b>Dimensions of the Organizational Culture</b>	<b>Dominant Features</b>	Market (66,7%)	Market (84,8%)	Hierarchical (54,1%)	Adhocracy (87,3%)
	<b>Organizational Leadership</b>	Market (69,7%),	Hierarchical (84,9%)	Adhocracy (50,0%) Market (50,0%)	Hierarchical (91,6%).
	<b>Employee management</b>	Clan (60,5%)	Hierarchical (84,9%) Clan (84,8%)	Clan (50,0%)	Clan (87,5%) Adhocracy (87,5%).
	<b>Internal Cohesion</b>	Hierarchical (63,7%)	Hierarchical (87,9%)	Hierarchical (70,9%)	Clan (91,6%) Market (91,6%)
	<b>Organizational Principle</b>	Hierarchical (63,6%)	Hierarchical (87,9%)	Hierarchical (75,0%)	Clan (91,7%)
	<b>Success Criteria</b>	Clan (63,7%)	Clan (90,9%)	Hierarchical (62,5%)	Clan (91,7%)

Source: Own elaboration

## **5. Discussion of Results**

After a detailed analysis of the verified data in the previous graphs and with the aim of addressing the study's objectives, it becomes essential to interpret the results based on the CVF. Regarding the perception of the current dominant characteristics in the different organizational typologies, the Hierarchical type culture is evident in Model A Family Health Units (FHUs), which means they are highly structured units where people are guided by norms and procedures (Cruz & Ferreira, 2012). As for the Model B FHUs, what characterizes them is competition and emphasis on performance, the predominant characteristics of the Market culture type. In this cultural typology, the definition of goals is essential, and compensatory rewards are allocated according to the number of objectives achieved (Chung et al., 2012). This aligns with the organizational model of these FHUs, which present greater organizational evolution and a more demanding level of contracting, performance, and institutional incentives. Financial incentives are added to the base salary guaranteed by the State to professionals of Model B FHUs if they meet the objectives they set out to achieve; if not, they do not receive them (ACSS, 2020). Comparing the current perceptions with those they would like to see implemented, it appears that both FHUs consider the dominant characteristics advocated by the Market typology to be ideal. It is understood that Model B FHUs intend to maintain their identity through what characterizes them, but they also wish to change in certain characteristics, namely in the

dimension of organizational leadership and management style. However, Model A FHUs desire characteristics different from their current ones, namely in dominant characteristics, internal cohesion, and organizational principle. It is presumed that this is due to the desire of these FHUs to evolve to the Model B organizational model (ACSS, 2020). Leadership plays a crucial role in directing and motivating employees, by integrating the needs of individuals with the goals of the organization (Mateus, 2021). Regarding the perception of the organizational leader, it appears that model A USFs do not have a leader with unique characteristics, but rather a multiplicity of characteristics that aligns with the four types of organizational culture: Clan, Adhocracy, Market, and Hierarchy. The results show that the role of the leader in model A USFs does not seem to have a strong identity at the cultural level, as they possess traits from different cultural typologies. Although the organic structure of typologies A and B is similar, the perception of organizational leadership is distinct in the two typologies. Model A USFs aspire to have a productive and competitive leader, of the Market Culture type, and concomitantly, an efficient leader with organizational and coordination abilities, of the Hierarchical Culture type. But they also desire a leader who is seen as a parental figure, a mentor and facilitator of the Clan Culture type (Monteiro & Valente, 2007; Cruz & Ferreira, 2012). In terms of employee management style, it is clearly visible that both model A USFs and model B USFs consider that the current management style is characterized by teamwork, consensus and participation – the Clan culture type. Model A USFs maintain the same choice for their ideal, while model B USFs intend to have a management style focused on security, employment, compliance, predictability and stability of relationships, characteristic of a Hierarchical management type (Cameron & Quinn, 2006; Monteiro & Valente, 2007; Cruz & Ferreira, 2012). With regard to internal cohesion, some incongruities are observed in the responses of respondents from model A USFs and model B USFs. In model A USFs, organizational cohesion is maintained through policies, formal rules and procedures – the Hierarchical culture type. However, they aspire to a cohesion that values loyalty and mutual trust, with a high degree of commitment to the unit – the Clan culture type, but at the same time valuing performance and achievement of objectives, reinforcing competitiveness and success – the Market culture type. Model B USFs, on the other hand, consider that cohesion has characteristics of the Market culture type, valuing performance and results, but with formal rules, policies and stability – the Hierarchical culture type, and it is these latter characteristics that they aspire to maintain in the future (Cameron & Quinn, 2006; Monteiro & Valente, 2007; Cruz & Ferreira, 2012). The organizational principle in force in both typologies is exactly the same. Both Family Health Unit (USF) model A and model B consider that the organizational principle/strategic emphasis present is of the Hierarchical type, emphasizing formal principles, rules and stability, maintaining effectiveness, efficiency and control. As for what they perceive for the future, model B USFs would like to maintain the same cultural characteristics, however model A USFs idealize highlighting the acquisition of new resources and challenges, experiences and opportunities – Adhocracy culture type (Cameron & Quinn, 2006; Monteiro & Valente, 2007; Cruz & Ferreira, 2012).

Regarding the current success criteria, model A USFs consider clan-type performances, focusing on people, human resource development and teamwork, and idealize maintaining this in the future. In addition to considering having success criteria like model A USFs, model B USFs also think that success is defined based on efficiency, with cost planning and control being crucial, essential characteristics of the Hierarchical type. However, they would like to maintain success criteria of the Clan type only (Cameron & Quinn, 2006; Monteiro & Valente, 2007; Cruz & Ferreira, 2012). Both USFs are directed towards stability, control and centralization. However, Cruz and Ferreira (2012) concluded that in the USF model the clan culture stands out and the hierarchical culture is the least prominent, which contradicts the results of this study. In the present study, in model A and B USFs, there is a predominance of typologies oriented towards control, stability and centralization, Hierarchical Culture and Market Culture types, with the exception of the following dimensions: organizational leadership, employee management and success criteria. When analyzing the results of cultural

profiles by professional category, it appears that the perception of the dominant characteristics in force falls on the Market culture type perceived by nurses. They consider being competitive and working towards very result-oriented objectives, and this is the perspective they idealize maintaining in the future. As for doctors, they currently perceive that the units have characteristics of the Hierarchical culture type, are highly structured and people are guided by norms and procedures. However, they consider the entrepreneurial, dynamic and creative spirit, where risk is assumed - Adhocracy culture type - as ideal (Monteiro & Valente, 2007; Cruz & Ferreira, 2012). On the other hand, Sasaki et al., (2017) in their study found that doctors consider the Clan and Hierarchical cultures to be dominant. Nurses strongly identify with the Hierarchical culture.

Regarding the perception of the organizational leader, it appears that nurses and doctors consider the leader to have Market-type characteristics, where leadership is oriented towards an objective, competitive, and results-driven approach. Doctors also add to organizational leadership attributes related to adhocracy, where leadership is oriented towards entrepreneurship and innovation. On the other hand, both professional profiles agree that the ideal leadership could be of the Hierarchical type (Monteiro & Valente, 2007; Cruz & Ferreira, 2012). With regard to the management style, it is clear that both professional profiles consider that the type of management is characterized by teamwork, consensus and participation – the Clan type. When assessing the ideal management style, it is noted that doctors maintain their initial position, adding to management attributes of individual initiative, innovation, freedom and originality, while nurses would like to see hierarchical management assumptions focused on job security, compliance, predictability and stability of relationships implemented (Cameron & Quinn, 2006; Monteiro & Valente, 2007; Cruz & Ferreira, 2012).

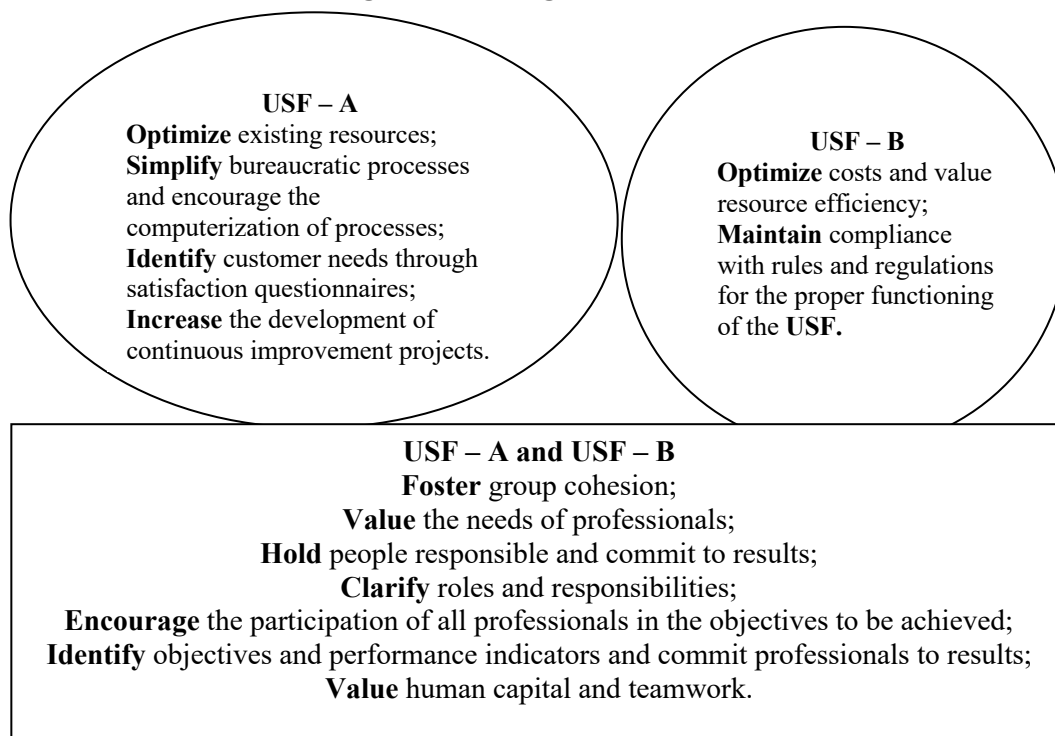
Regarding the internal cohesion dimension, what is considered current by nurses and doctors is internal cohesion with hierarchical characteristics, valuing formal rules, policies and detailed procedures. These particularities wish to be maintained in the future by nurses, while doctors aspire for cohesion based on loyalty, cohesion and teamwork (Clan culture), focused on production and results (Market culture) (Cameron & Quinn, 2006; Monteiro & Valente, 2007; Cruz & Ferreira, 2012). The current organizational principle/strategic emphasis is shared by nurses and doctors, who consider that in their units emphasis is placed on stability, with effectiveness, efficiency and control being important, assumptions of the Hierarchical culture. However, their responses differ in what they consider ideal. Nurses maintain the same position, the Hierarchical culture, but doctors would like importance to be given to personal valorization, based on trust, openness and participation, qualities inherent to the Clan culture. (Cameron & Quinn, 2006; Monteiro & Valente, 2007; Cruz & Ferreira, 2012). Regarding the current success criteria, we have nurses agreeing that success is defined based on human resource development and teamwork and commitment (Clan culture) and that is what they intend to maintain in the future. Doctors consider success based on efficiency, with planning and cost control being crucial, essential characteristics of the Hierarchical type, but they would like to put into practice Clan-type success criteria (Cameron & Quinn, 2006; Monteiro & Valente, 2007; Cruz & Ferreira, 2012).

### **5.1. Necessary Recommendations to Achieve Cultural Change**

Within the scope of this study, it was not possible to analyze the reasons that led to the discrepancies between the current and ideal culture, however it is verified that the professionals of the USFs desire changes in the organizational culture in most dimensions of the OVC (Cameron & Quinn, 2006). The USFs reflect and desire a combination of cultures. The great challenge for those who manage is to balance the cultural types, so that each of the USFs achieves its objectives. Thus, managers should have a generalist vision and multidisciplinary knowledge so that professionals can achieve their goals in a participatory and personally satisfying organizational climate. Managers must exercise leadership in a proactive environment, adopting appropriate management principles and instruments, keeping people informed about the objectives to achieve the desired results and improve performance (Mateus,

2021). In order to balance the different cultural forces desired by all stakeholders, the following strategic actions are suggested to the studied USFs (according to Figure 1), based on the desired cultural profiles.

**Figure 1 - Strategic Actions**



## **6. Conclusions**

The present study on organizational culture aimed to understand the profile of the organizational culture of the Family Health Units (USF) with different organizational models and, as such, it was important to identify and analyze their cultural profiles and formulate strategic actions based on the comparative analysis of the cultural profiles identified in the different USFs studied, with a view to achieving the necessary changes for improving management practices. In this sense, it was possible to reach the following conclusions:

- The CVF and the Organizational Culture Assessment Instrument (OCAI) proved to be adequate and consistent for identifying the type of organizational culture that predominates in the USFs with different organizational models, for analyzing the discrepancies between the current and preferred culture, analyzing the cultural profiles generated by the different professional groups of the target USFs, and for identifying the cultural characteristics represented by the model that best meets the challenges and objectives of the USFs;
- The proposed objectives were met, making it possible to characterize the predominant organizational culture in Model A and Model B USFs. The study results revealed that the professionals of Model A USFs identify the Hierarchical culture as predominant and the professionals of Model B USFs perceive the Market culture as dominant. The study also showed differences in perceptions between the two professional groups, with nurses identifying the Market culture and doctors considering the Hierarchical culture as the predominant ones. However, the discrepancies between the current (existing) culture and the preferred (ideal) culture indicated that the professionals, despite wishing to maintain these cultures in certain dimensions, prefer to work in an organization with characteristics of the four cultural typologies;

- Certain cultural characteristics should be readjusted to enable change within the organization and foster the success of the USFs;
- To achieve change, the USFs want a combination of the four cultural types that should be aligned with the professionals' expectations and the environment in which the organization operates (Cameron and Quinn, 2006). The four desired cultural typologies are based on stability, control and flexibility, evidencing teamwork with a commitment to efficiency and achieving results and organizational goals.
- For change within the USFs, it is necessary to develop strategies to balance the various cultural typologies, to drive change and improve USF performance, through a participative organizational climate and personal satisfaction, with organized leadership, adopting appropriate management tools, keeping people informed and involved to achieve the desired culture and improve performance.

### **6.1. Study Limitations**

The study limitations include: i) The use of Likert-type scales may have influenced the respondents' answers. In this regard, it is recommended to use ipsative scales to assess organizational culture. Ipsative scales allow respondents to provide more accurate responses by assigning higher scores to each item according to its importance; ii) Organizational culture is characterized only from the perspective of nurses and doctors, therefore, future research could consider technical assistants; iii) The fact that it is a cross-sectional study, which does not allow establishing causal relationships since it does not prove the existence of a temporal sequence.

### **6.2. Suggestions and Knowledge Transfer**

It is suggested to conduct studies that seek to understand and relate the influence of other factors, such as leadership, that affect the performance of the units, as well as to analyze the existence of correlations between the variables of organizational culture and performance. In addition, the study could be expanded to other units of Aces Central or other Aces of the National Health Service. Finally, it is considered that the present research work contributed positively to the development of the topic of Organizational Culture in the context of the performance of Public Health Units and, mainly, to raise awareness among managers and/or future managers for reflection and for the importance of knowing the values that guide professionals and identifying needs for cultural changes in the different organizational models of Family Health Units.

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