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# Analysis of the Organizational Structure of the Health Service of the Principality of Asturias (SESPA). Past, Present and Challenges for the Future

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**Abstract** **Original Research Article**

This article deals with the reorganization of the health map in the Principality of Asturias, highlighting the reduction of the current eight areas to three as the central axis of the proposal. The unification seeks to optimize resources, improve operational efficiency and offer more integrated health services adapted to the changing needs of the population. Structural changes are detailed, including the possible creation of new departments and sub-directorates, as well as the concentration of healthcare services in the university hospitals, which could generate additional displacements for users. The concerns of healthcare professionals and unions are analyzed, especially in terms of forced mobility, which could affect job satisfaction and quality of care. Concerns about working conditions are also highlighted, as well as the possible effects on resource management and bureaucracy. The Regional Ministry of Health highlights the expected benefits, such as improved management of human and technological resources and the attraction of talent, as well as assuring that there will be no hospital closures, and that the reorganization will not negatively affect the quality of care or working conditions. Finally, the paper concludes that, although some objectives have been met, others require further analysis and could be the subject of future research.

**Keywords:** Public Management, Reorganization, Organizational Structure, Organizational Design, Public Service.



## INTRODUCTION

This article deals with a topic of great relevance and impact in the field of management and public administration, specifically in the field of health. The central focus is the proposed unification of health areas in the Health Service of the Principality of Asturias (SESPA), an initiative promoted by the Ministry of Health, which seeks to redesign and transform the entire health system in the region.

Since its creation, the SESPA has been the fundamental structure in the provision of public healthcare services to the Asturian population. However, over the decades, the dynamics of healthcare, demographic changes and the evolution of society's needs have generated the need to rethink the current organization of the system. In this context, the proposal of the Councilor for the unification of health areas arises as a strategic response to face contemporary challenges and to optimize the efficiency of the SESPA.

Currently, the SESPA operates with an organizational structure divided into eight Health Areas. The proposal analyzed here is based on the fact that a review is required to align with the current demands of health care: The increasing complexity of the care task, demographic aging, the evolution of human health resources and technological advances are factors that require an adaptation and transformation in the organization of the health system.

The dynamics of the aforementioned elements entail the need to adapt the structure and resources to adequately face the emerging challenges in the provision of public health services. Firstly, there has been a significant increase in the complexity of medical cases, with the presence of more complicated pathologies and

the need for specialized treatments. Likewise, the pressure on available resources, both human and material, has increased due to the growth in demand for services and the need for a more efficient allocation. This is compounded by ever-changing demographics, with an aging population and the emergence of new diseases, bringing added challenges. Ultimately, emerging technologies and the evolution of healthcare techniques and procedures offer opportunities for healthcare improvement.

In this context, the need arises to consider the unification of health areas in the SESPA as a strategic measure. Unification is presented as a potential response to optimize resources, improve coordination between areas and guarantee more effective care adapted to the changing needs of the population.

This article is justified by the need to explore whether the unification of Areas in the SESPA is presented as a viable strategy to address current and future challenges in the field of health care.

The evaluation of the feasibility of this proposal is essential to verify whether it will optimize both human and material resources, whether it will improve coordination between levels of care, facilitating more integrated and efficient care, or whether it will increase the quality of care and the patient experience, thereby generating a more fluid management.

## METHODOLOGY

The methodology of this research will be oriented towards a qualitative approach, a systematic and critical study of the case, focusing on the exhaustive review of documentation from various authors, existing regulations, relevant scientific articles and documentation provided by the Health Service of the Principality of Asturias (SESPA). The choice of a qualitative approach is justified by the analytical nature of this work.

The documentary review process will include consultation of specialized academic literature, analysis of current regulations related to the health organization and critical review of internal documents provided by the SESPA. A rigorous selection criterion will be applied to ensure the inclusion of relevant and updated sources that address key aspects of the unification of Health Areas.

This methodology will provide a solid basis for the formulation of conclusions that contribute to the debate on the feasibility and benefits of the unification of health areas in the SESPA.

### Theoretical Basis

Organizational structure in the public sector is a topic of growing interest due to the need to improve the efficiency and effectiveness of governmental organizations. This analysis focuses on how different approaches and structural characteristics can influence the performance and capacity of public organizations.

The study of organizational structure is fundamental to understanding how companies and public administrations manage their human and material resources to achieve their objectives. It determines how tasks are divided, authority relationships and the coordination of work within an organization, in order to achieve an optimal level of efficiency, effectiveness and adaptability of an organization in a changing environment.

In the theoretical framework of organizational structure, we will see the approaches that have been proposed by different authors in order to understand how to design and manage organizations and administrations effectively.

### Organizational Structure

Yu Lin (2013) highlights that changing the organizational structure in public administrations can significantly improve the organization's achievements, aiding in the reform of bureaucracy and improving efficiency in matters involving multiple tasks.

To understand organizational structure, we must know what an organization is, that is, a structured system where people with different roles, responsibilities and hierarchies collaborate to achieve a particular objective. Normally, it has rules, both formal and informal, that specify the place of each person within the structure and the tasks to be performed.

### Key Elements for Deciding the Organizational Design

Public administrations have an organizational structure, a formal distribution of jobs in an organization. “When managers create or change the structure, they engage in organizational design, a process that involves decisions regarding six key elements: job specialization, departmentalization, chain of command, span of control, centralization and decentralization, and formalization.” (Robbins, 2010, pp. 184-185).

***Specialization of Labor*:**

Also called division of labor, it aims to produce more and better with the same effort. Fayol (1916) stresses that tasks should be divided and concretized into separate jobs in order to contribute to efficiency and standardization. Jobs can be specialized horizontally or vertically.

***Departmentalization****:* Koonztz (2012) argues that it is the way in which jobs are grouped. The different forms of grouping are:

***Departmentalization by Process or Functional***: Groups positions according to functions. It seeks the advantages

of specialization. To a greater or lesser extent, this type of departmentalization is present in most organizations.

- *Departmentalization by purpose*: Creates organizational units according to the objectives of different activities. For example:
  - *Geographic*: Groups positions according to geographic region.
  - *By product:* Groups positions by product lines. It usually occurs in companies with multiple and large-scale production lines.
  - *By processes*: Groups positions based on product or customer flow.
  - *By customers*: Groups positions based on specific and exclusive customers with common needs.

- *Matrix organization:* According to Koontz (2012), it combines two departmentalization criteria when grouping the tasks performed in the company.

- ***New Organizational Models*:**

Nowadays there is greater complexity and dynamism in the environment where companies carry out their activities, so it is necessary to design new structure models. These must provide greater flexibility to innovate in processes and products, reduce costs and improve customer service. To this end, flatter and more horizontal structures are beginning to be favored in order to improve the company's adaptation to the environment. Through:

- *Downsizing*: Reducing the size of the company.
- *Rightsizing*: Adjusting the size of the organization.
- *Lean Management*: Simplification of management.
- *Reenginnering*: Redesigning the structure.

Some examples of these new structural models are as follows:

- ***Virtual Organization*:**

It is composed of a group of independent people or companies but linked through information technology. Their objective is to cooperate in order to achieve flexibility and thus be able to respond to market needs. This type of organization does not usually have an organization chart.

- ***Cloverleaf Structure*:**

Named for its cloverleaf shape, it is a core of managers and core workers supported by groups of external collaborators or subcontractors and supported by part-time staff.

The first leaf is made up of the organization's managers and key workers, thus being the professional core of the organization. It sets the general strategy of the company.

The second sheet is made up of the companies and freelancers hired to carry out the activities or processes not performed by the first sheet. They usually develop a more specialized work, thus increasing the efficiency of operations.

The third sheet is for temporary or part-time personnel hired by the company to replace personnel or due to increased production activity.

And finally, the fourth sheet is made up of the company's customers, since part of the work is carried out by the customer himself, such as self-service, ATMs, electronic banking, etc.

– ***The Feminine Organization*:**

This consists of valuing the people who work in the organization more as human beings than as occupants of a job. This quality can be especially important in business environments that require adaptability, creativity and responsiveness to new problems that may arise.

– ***Chain of Command*:**

This is the line of authority that runs from the highest levels of the organization to the lowest. This establishes the hierarchy within the company, and the worker knows at all times who his direct supervisor is, so that he can turn to him in case of doubt or when he needs to solve any problems that may arise.

Daft (2010) points out that three concepts can be distinguished in the chain of command:

- *Authority*: it is the formal and legitimate right of a manager to give orders and expect them to be carried out. Authority has three characteristics:
  - It is granted to positions, not to individuals. If the person leaves the position, he/she loses the authority granted by the position.
  - Subordinates accept it. A boss is considered to have authority only if subordinates accept the orders. It will disappear if the workers refuse to obey.
  - Authority flows down the vertical hierarchy. Higher level positions have more authority than lower level positions.

***There are two Different Forms of Authority***: line and staff. Line authority authorizes the manager to directly control subordinates. Staff authority is used to advise line managers.

– ***Responsibility*:**

It is the obligation on the part of the employee to comply with the orders or tasks assigned. Employees assume this obligation when they accept work in exchange for financial compensation.

– ***Unity of Command*:**

It is one of Fayol's fourteen principles of management, where it is established that a person must communicate with a single supervisor. Without this, the requests of several supervisors can be contradictory and create problems.

Although Fayol, Weber, Taylor and other authors believed that the chain of command was basic, today this concept is less important as information technology has advanced and employees can communicate with anyone in the organization without having to go through the chain of command.

- ***Span of Control (Span of Control):***

This refers to the number of employees who are supervised by a single immediate supervisor. The traditional approach recommended a number of approximately five to seven subordinates for a single supervisor, since above that number it was considered that good control could not be exercised. It is now recognized that there is no specific number of employees that should be supervised by a single person. It will depend on multiple factors including the skills and capabilities of both supervisors and employees, as well as, the similarity and complexity of tasks, the proximity of employees, the degree of standardization of procedures, the information system and the culture of the organization.

Factors that can influence the span of control can be:

- *Employee training:* Trained employees allow for wide span of control.
- The tasks being supervised: Similarity of tasks allows for wide span of control.
- *The complexity of the task:* The greater the complexity, the narrower the span of control, while routine tasks favor wide spans of control.
- *The manager's competence:* The greater the manager's knowledge of the department's operations and the problems faced by subordinates, the greater the span of control.
- *Technology*: This is one of the factors that most help managers to have wider spans of control.

***Centralization and Decentralization***

Gibbs (2009) refers to centralization being determined by the level of authority concentrated at the higher levels of the organization for decision making. When top-level managers make decisions without taking into account the lower levels, the organization is considered to have a higher degree of centralization. This enhances the use of knowledge, improving knowledge transfer from one unit to another. When the need for coordination is high and control challenges are significant, the company is more likely to adopt a centralized decision-making strategy. It is desirable to centralize decisions if the communication of information is difficult, either because it must be used quickly to maintain its relevance, because of its complexity, or because it requires a high level of expertise to understand. Conversely, if employees at lower levels have greater involvement in decision making or provide input, the organization is considered to be more decentralized.

Decentralization grants greater autonomy in decision making to lower levels because they have direct information and in-depth knowledge of the problem, so they are usually able to anticipate problems.

Currently, organizations tend to be more flexible and tend to be more decentralized, giving their employees the freedom to make decisions.

The advantages of decentralization are as follows:

a) It reduces the information overload on top management.
b) Employees are more motivated because they can make decisions.
c) The organization needs less staff for advisory tasks.
d) It helps to retain talented workers.
e) There is a faster response to changes in the organization.
f) Improves decision-making capacity.
g) Facilitates adaptation in dynamic environments.
h) Decision-making is more efficient and helps to reduce the costs of sharing and processing information.

However, Brickley (2003) also points out that it has disadvantages:

a) It makes it difficult to have uniform company rules or policy.
b) It can increase conflicts over incentives, as middle managers lack the motivation to maximize profits.
c) Coordination failures and conflicts over objectives increase.
d) Lower levels do not always have all the information to make decisions.

- ***Formalization*:**

This is the degree of standardization of work within an organization, both in rules and procedures. In highly formalized organizations there are well-defined organizational rules and procedures.

**Types of Organizational Design**

In order to establish an adequate structure, it must be taken into account that each business system is different, so that the most appropriate organizational structure for its objectives must be adopted, taking into account its size, its production system, etc. For this reason, and as a result of these characteristics of the organizational design, the different organizational

structures that fall into two groups are established. The mechanistic model and the organic model.

***Mechanistic Organization***

The mechanistic organization or also called bureaucratic organization is characterized by having a high specialization, rigid departmentalization, a clear definition of the chain of command, a limited span of control, high formalization, information that goes from the highest to the lowest levels and with little employee participation in decision making. This type of organization seeks to achieve efficiency through rules, clear and standardized tasks and similar controls. Within the mechanistic model we can find:

- ***The Mechanistic Bureaucracy*:**

The main coordination mechanism of this type of structures is the standardization by work processes and the design is based on the formalization of behavior and horizontal and vertical specialization.

The characteristics to highlight of this type of structure are:

- *High horizontal specialization*: The division of labor is very specialized and detailed, where each employee specializes in particular tasks within his functional area.
- *High vertical specialization*: The fact of having such a developed horizontal specialization forces to have a high vertical specialization, that is to say, positions that control the task performed by the horizontal specialists.
- *High degree of standardization*: Emphasis is placed on uniformity and consistency in work methods and organizational practices. Written rules and procedures are used to guide the behavior and actions of workers.
- *High level of centralization:* Decision-making is concentrated at the top levels of the organization, i.e., by the strategic apex. The individuals who make up the operations core have no autonomy within their job.

Machine bureaucracy will be used in organizations, or parts of them, where there are stable environments. This stability means that there are rules and regulations that last over time and indicate routine ways of performing tasks.

This type of system is used in Public Administrations, where the change of rules is usually slow and, therefore, experience and routine allow bureaucratized ways of working.

- ***Professional Bureaucracy*:**

This organizational model gives great importance to the specialized knowledge and technical skills of employees, who are highly qualified and perform complex tasks within the organization. Its main characteristics are:

- ***High Horizontal Specialization*:** Employees in this type of structure possess knowledge and skills to perform their work, therefore vertical specialization will not be needed.

- ***Formalization by Skills***: Prior to the introduction of the employee in the organization, specialized training will be required.

- ***High Degree of Decentralization*:** Because employees are highly qualified to perform their work, they do not need to be supervised to make decisions about their work. This allows for greater flexibility and adaptation to changing environments and customer needs.

This type of model is used in large organizations with stable but complex environments, suitable for organizations whose operational core is composed of specialists, technicians or professionals.

***Organic Organization***

The organic organization is characterized as a flexible structure, highly adaptive to possible market changes. Jobs are not standardized and are organized around work teams, workers are highly trained and have the authority to solve problems that may arise. This type of organization requires few formal rules and little direct supervision.

- ***Multidivisional Structure*:**

This model emerges as an alternative to the functional structure to address the challenges of diversification. It is characterized by having a central corporate office that is responsible for strategic planning, in addition to supervising and coordinating divisions with the authority to make strategic and operational decisions to achieve the proposed objectives.

- ***The Multidivisional Structure by Product*:**

Is the most common form of this type of organization, since it groups the functions related to a specific product within each division, thus improving efficiency.

- ***Adhocracy*:**

This is an organic structure that depends for its coordination on the mutual adaptation between highly qualified and specialized experts. These specialists are grouped in functional units, but work in teams based on formalization by skills and results.

High horizontal specialization empowers experts whose skills and capabilities have been developed in previous training programs.

Decentralization is fundamental, occurring both in teams and within the team itself, where each specialized individual will have the capacity to decide.

Adhocracy is used in organizations that face very dynamic and complex environments, where each project involves new challenges that must be overcome with creativity and great adaptability. It is usually associated with high-risk strategies, where organizational flexibility is essential to allow variations according to the new problems that may arise.

It is useful in the early stages of a new company, where greater flexibility is necessary to be able to enter the market to compete, in organizations in young sectors such as IT, and in parts of the company where innovation is the fundamental objective. For this reason, it can be used as a complement to bureaucratic structures in those aspects that require greater flexibility.

The concept of strategy and structure in an organization is interrelated, as pointed out by Alfred Chandler (1962), one of the first to investigate this relationship. He showed that certain structural designs are better adapted to different organizational strategies. For example, organic structures, with their flexibility and information flow, are suitable for organizations seeking to innovate.

The size of an organization also directly influences its structure, with larger organizations tending towards greater specialization, departmentalization, centralization and regulation compared to smaller organizations.

Another factor to consider that affects structure is technology. The first investigation of the effect of technology on structure can be attributed to Woodward (1965) where he reflects which structure was more effective depending on the type of technology the organization possessed. He found that organic structures were more effective in companies with high horizontal differentiation, low vertical differentiation and low formalization, while mechanistic structure was more suitable for organizations with high horizontal differentiation, low vertical differentiation and high formalization.

All this helps to understand how many organizations are now redesigning their structures to be much faster and more flexible in response to global competition, innovation and customer demands. Mechanical structures are not prepared to respond to environmental changes and the increasing uncertainty of the environment, thus becoming more organic.

**Types of Structures**

The organizational structure of a company refers to the design and arrangement of roles, responsibilities, hierarchies and relationships within an organization. It defines how work is organized from top management to the operational level, how work is distributed among the different departments, as well as how communication and decision making is coordinated at all levels of the company.

The graphic representation of the structure is the organization chart. In it you can visualize the different departments, levels of authority and those responsible for each area.

Depending on the type of distribution, there are the following structures:

- ***Simple Structure:***

This is one of the most common. It is usually used in small companies, where the manager makes almost all the decisions. It is characterized by a flat structure with few vertical levels, little specialization of tasks, a wide span of control where authority is centralized in a single individual, few rules and an informal communication system.

Due to its organic nature, this type of structure is suitable for small companies or those that have just been born, where innovation and flexibility prevail when launching a business idea.

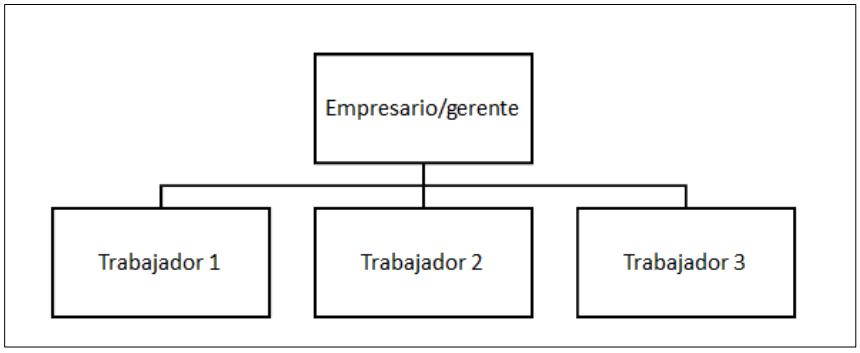


**Fig. 1**

**Source***: Own elaboration Simple organizational structure.*

Its main advantages are: flexibility to adapt to the demands of the environment, speed of response, low operating costs and clear lines of responsibility.

On the other hand, the fact that all the operation and decision making falls on a single person can jeopardize the survival of the company if he/she retires or leaves the company. Another problem generated by this type of structure is that the lack of specialization can lead to inefficiency and, in addition, if the company intends to grow in size, it can lead to a lack of coordination through direct supervision.

- ***Functional Structure*:**

It is based on a departmentalization design that groups individuals according to their specialization, since they use the same resources to perform the work. It presents a centralized coordination of the different departments, which means that each department depends on the others.

It usually has all the basic components of a structural model, i.e. a strategic apex, a middle or middle management line, a core of operations or set of employees, a technostructure that is responsible for the formalization of tasks and a staff that advises the higher levels.

This type of structure is usually found in medium-sized companies or those with a relatively small product range, with environments that are not very dynamic and with a search for efficiency based on specialization.

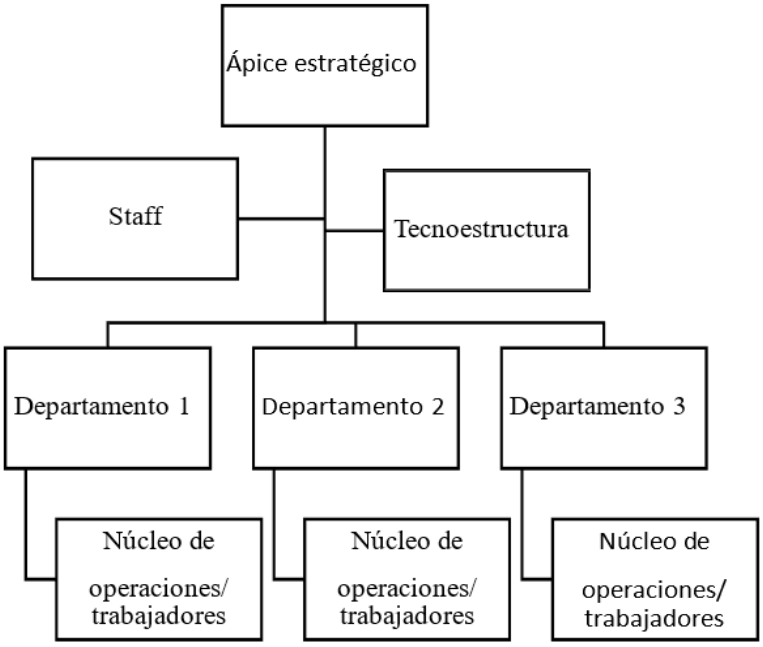


**Fig. 2**
**Source:** *Own elaboration Organization chart of a functional structure.*

The advantages of this type of structures are:

- Formalization as the basic form of coordination, making behavior predictable and making it possible to foresee the outcome of individuals' actions.
- The high degree of centralization, which reduces decision-making and defines who has the right to make decisions depending on the problem at hand.
- The specialization of activities, which makes it possible to efficiently use the resources available, encourage learning from subject matter experts, facilitate the work of each department, balance the workload, provide more effective supervision and achieve effective interdepartmental communication.

This type of structure presents several challenges or drawbacks that can limit its effectiveness and efficiency. One of the main ones is excessive horizontal specialization, which requires high vertical specialization with consequent cost increases. In addition, this can cause departments to act independently of other departments, tending to prioritize their individual objectives over those of the organization as a whole.

Another drawback is excessive formalization, which leads to a lack of flexibility in the internal workings of the company, since rules are meant to be stable and in dynamic environments, rules would become obsolete and would not be effective in solving new problems.

As for communication, it could be affected due to the high vertical specialization, since information has to pass through multiple hierarchical levels, which entails a high cost and the loss of information along the way.

- ***Divisional Structure:***

The company is structured into divisions that are autonomous parts of the company at the structural level. Each division operates as an independent entity within the organization, with its own structure and management team to perform its tasks.

This type of structure is common in companies that contain a high degree of diversification with multiple lines of business or in different geographical areas.

It is characterized by having a strategic apex, advised by staff, and a set of divisions that form the core of operations, which will possess their own structural design.

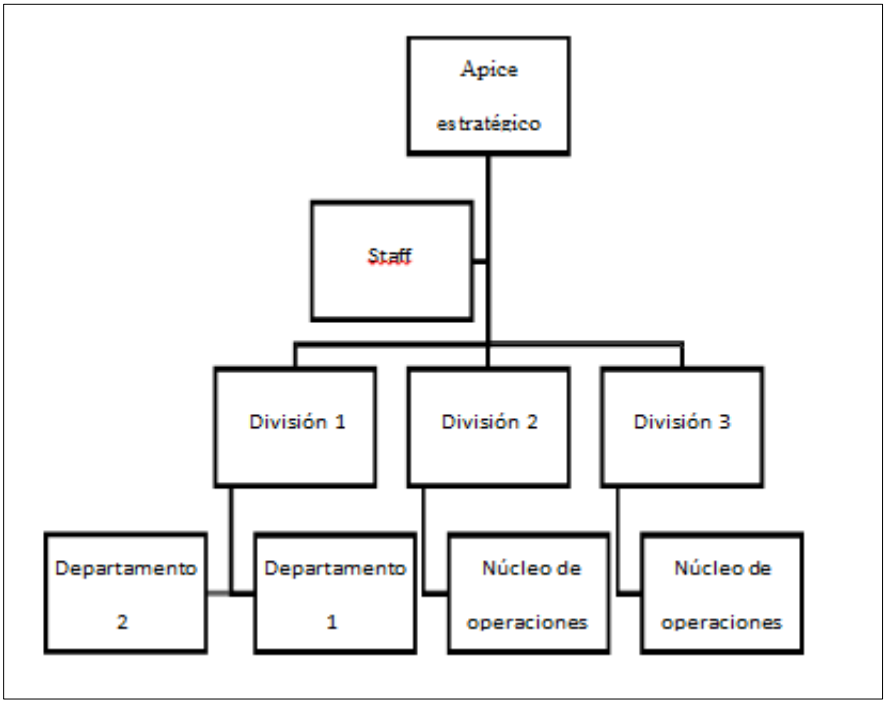


**Fig. 3**
**Source***: Own elaboration Divisional structure organization chart.*

***The Advantages of this type of Structure Are*:**

The great flexibility that allows companies to increase or decrease their business without affecting the rest of the autonomous units, thus being able to adapt to the conditions of the environment.

Another advantage is that, since there are decentralized divisions, planning and control is based on results, allowing management to know which parts of the company are generating profits or losses and thus make decisions that are more convenient for the company's future.

The divisional structure, however, presents several limitations and challenges. One is the difficulty in determining which functions should be managed by each division and which should be centralized. This structure can lead to duplication of efforts and resources, resulting in high costs for the company.

Another challenge is the lack of cooperation between divisions, which can lead to internal competition for allocated resources and create vertical communication channels that isolate some divisions from others, thus creating information asymmetries.

- ***Matrix Structure:***

The main characteristic of this type of structure is the joint and overlapping existence of functional and product or project-based groupings. This means that each team member must report to two supervisors, one based on the function and the other on the specific product or project they are working on. This type of structure seeks to combine functional efficiency with project-oriented flexibility and responsiveness.

As for the form of this type of structure, it is composed of a strategic apex and a double operations core, i.e. the members are grouped in a double dimension.

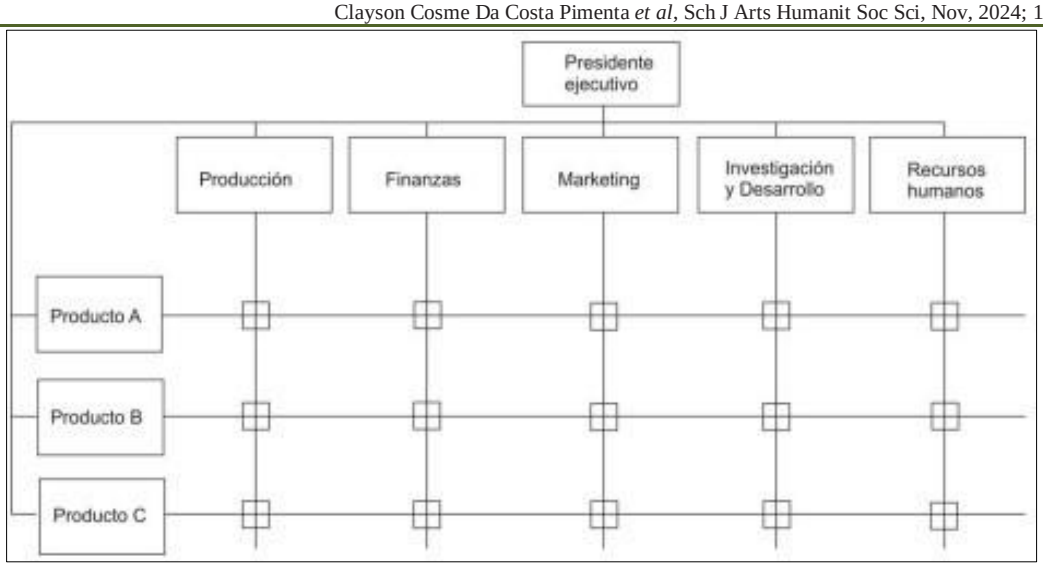


**Fig. 4**
**Source:** *Own elaboration. Matrix structure organization chart*

***Organizational Chart Matrix Structure***

The advantages of this type of structure are the improvement of decision making by involving people with different specializations, the flexibility in the allocation of resources according to the projects to be carried out, as well as the implementation of control systems by treating each product direction as a profit center and each functional direction as a cost center. On the other hand, the utilization of shared resources will make the company more efficient across multiple projects or products.

Among the most prominent challenges of this type of structure are high bureaucratic costs and communication difficulties, resulting in duplicity of roles and complexity in decision making. The existence of two lines of authority can produce an imbalance, generating conflicts when different units have different objectives, in this sense, departments tend to protect their interests instead of working towards a common goal.

**Organizational Integration**

Organizational integration in the public sector is a crucial issue for improving the efficiency and effectiveness of public policies and services.

Castañer *et al*., (2018) posits that organizational integration is a crucial factor for operational coordination, innovation and strategic effectiveness within companies. This concept encompasses the integration of different organizational subsystems and the alignment of these with the strategic objectives of organizations.

Axelsson *et al*., (2006) refers to the fact that integration in the field of public health requires interorganizational collaboration across different sectors of society, organized mainly in multidisciplinary teams. This form of organization is fragile and needs a lot of managerial support to survive.

Mintzberg (1979) emphasizes that integration in an organization refers to the search for coordination of positions, functions and divisions to work together to achieve the organization's objectives. The higher the level of differentiation of a company, i.e., the more diversified its activities are, the greater the integration necessary for the organizational structure to function effectively. Three integration mechanisms are used to achieve this integration: mutual adaptation, direct supervision and standardization.

- ***Mutual Adaptation*:**

This involves coordination through person-to-person communication, where co-workers who have similar roles share information about the activities to be performed. Galbraith (1977) indicates, on the other hand, that if discrepancies arise, there are no formal mechanisms for resolving conflicts outside the authority of the superior. From the point of view of information processing, mutual accommodation helps to reduce the information burden by decentralizing decisions from higher levels of the hierarchy to lower levels.

- ***Direct Supervision*:**

It achieves coordination through the responsibility of one person over the rest of the group members, giving them instructions and controlling their actions.

- ***Normalization or Standardization:***

Refers to a set of mechanisms that coordinate work by providing standards and procedures so that employees know how to perform their tasks without the need to communicate constantly with their supervisors or peers. Four standardization processes are distinguished:

- ***Standardization of Work Processes:*** Achieves coordination by specifying the content of tasks through standards and procedures developed by management, such as work instructions. When standards and procedures are written down, this is called formalization.

- ***Standardization of Results***: It consists of defining the objectives of different jobs, allowing employees to choose how to achieve them.

- ***Standardization of Skills*:** Coordination is achieved by specifying the skills and knowledge required to perform a specific task. This standardization can be implemented by hiring professionals from outside the organization or by training the company's existing employees.

- ***Behavioral Standardization*:** It implies that the members of a group or organization share a set of beliefs about what types of behaviors are socially accepted.

These coordination mechanisms hold the organization together. As the work becomes more complex, the means of coordination tend to change from mutual adaptation to direct supervision, then to standardization, and finally back to mutual adaptation.

## RESULTS

### Organizational Structure in the Public Sector

From what has been presented so far, we can draw some conclusions about organizational structures. From highly bureaucratic and inflexible models to more contemporary and adaptable structures have been described. The latter are not only influenced by human aspects, but also by the impact of technology.

The differences between different organizational structures often create significant challenges for companies, so some choose to reformulate their organizational structure. In this restructuring process, companies focus on fundamental aspects such as the search for innovation, cost optimization and the selection of a structural design that best suits their objectives.

As in companies, this search can be extrapolated to the Administration. When we speak of the organization of an Administration, we are referring to all the available means, both personal and material, that it possesses to carry out its activity. It is recognized the organizational power, it is granted the faculty or capacity to self-organize.

### Principles on Which the Organization of the Public Administrations is based

The right to self-organization, as established in Article 103 of the Spanish Constitution, implies the application of fundamental principles such as hierarchy, decentralization, deconcentration and coordination. Anabitarte (2001) emphasizes that this right requires the satisfaction of the general interest of the Public Administration, as well as legal security and efficient administrative action.

From these principles contained in Article 103.1, we can extract the system of organization of the Public Administration.

- ***Principle of Hierarchy*:** It is a system organized in levels of authority, where higher officials supervise lower ones, allowing citizens to appeal decisions of lower authorities before their superiors through established procedures. Thus, a pyramidal structure of administrative bodies with similar competencies is established.

- ***Decentralization*:** It grants organic and technical autonomy to departments, ministries, institutions or agencies that are not directly under the hierarchical authority of the central government administration. In a decentralized system, territorial entities have competencies recognized by the State and other entities, which allows them to manage matters autonomously. They have their own legal personality, which means that they exist as separate entities from the central State.

- ***Territorial Decentralization*:** Competencies are transferred from the central government to subnational entities, such as Autonomous Communities, provinces or municipalities. These may range from the transfer of competencies to the creation of autonomous entities with their own legislative and administrative capacity.

- ***Functional Decentralization:*** Focuses on the redistribution of functions within the central administrative structure of the government, transferring functions to specialized administrative units to improve efficiency and effectiveness in the provision of public services.

- ***Deconcentration:*** Process by which functions and responsibilities are delegated from a central authority to subordinate administrative units within the same organizational structure in order to improve efficiency. It maintains authority and control in the hands of the central administration, but distributes operational responsibilities to administrative units at the regional or local level.

- ***Coordination*:** Coordination is defined as the effective realization of the principle of unity, with the aim of achieving economy, speed and efficiency in administrative action. Each of the Administrations must act freely, but ensure, in turn, that different public sector bodies and entities work

together to achieve common objectives. This principle seeks to avoid duplication of functions and efforts.

Article 3.1 of Law 40/2015, of October 1, on the Legal Regime of the Public Sector, establishes, in addition to the above, the following general principles:
"1. The Public Administrations serve with objectivity the general interests and act in accordance with the principles of efficiency, hierarchy, decentralization, deconcentration and coordination, with full submission to the Constitution, the Law and the Law.

They shall respect the following principles in their actions and relations:

a) Effective service to citizens.
b) Simplicity, clarity and proximity to citizens.
c) Participation, objectivity and transparency of administrative action.
d) Streamlining and agility of administrative procedures and material management activities.
e) Good faith, legitimate trust and institutional loyalty.
f) Accountability for public management.
g) Planning and direction by objectives and management control and evaluation of the results of public policies.
h) Efficiency in the fulfillment of the objectives set.
i) Economy, sufficiency and strict adequacy of the means to the institutional purposes.
j) Efficiency in the allocation and use of public resources.
k) Cooperation, collaboration and coordination among the Public Administrations".

The same regulation includes the organization of the Public Administrations in Article 2, where the subjective scope is described and the territorial and institutional division is established.

- *Territorial division*: These are public entities made up of citizens residing in a territory.
  - *State*: Endowed with legal personality, it is the General Administration of the State.
  - *Autonomous Communities*: Administrations of the Autonomous Communities.
  - *Local*: Entities that make up the Local Administration, municipalities, provinces and islands.
- *Institutional division*: These are public entities and bodies endowed with legal personality linked by their public function or their relationship with the State.
  - Public bodies and public law entities linked to or dependent on the Public Administrations.
  - Private law entities linked to or dependent on the Public Administrations.
  - Public Universities, which will be governed by their specific regulations and, in addition, by the provisions of this Law.

**Organizational structure of the Health Service of the Principality of Asturias**

Joining all the information of the previous points we can conclude that the type of organization used in most of the Public Administrations, specifically in the SESPA, is the professional bureaucracy. We will now delve more deeply into the meaning of bureaucracy.

The term bureaucracy was coined by Max Weber in his work "Economy and Society". In it, bureaucracy is presented as a model of social organization designed to achieve complete predictability of human behavior. The word bureaucracy derives from "buro" (office, desk) and "cracia" (government), suggesting the control of those who occupy desks, whether in the public or private sector.

The importance of bureaucracy in the democratic context has been emphasized, since it establishes rules of operation that contribute to stability and continuity in public policies, as well as a neutral and objective exercise of public power. In this sense, the ideal model of bureaucracy developed by Weber is connected with the effectiveness of democracy and the legitimacy of the exercise of power through the impartial application of the Law.

This model also has disadvantages in that its characteristics encourage the reduction of competition, the insensitivity of employment and the reduction of flexibility. The incentive problem due to the absence of competition makes both organizations and employees numb by not discriminating performance and merit. Ortún (1998) emphasizes that legality can negate efficiency, prevention of arbitrariness can limit the discretion needed for good management, and bureaucracy does not conform to how it would in a competitive market.

Mintzberg (1992), as we have seen previously, proposes two distinctions within bureaucracy, the mechanical and the professional.

The professional bureaucracy is one that has a large number of professionals or specialists who carry out the fundamental activities, is governed by established rules that regulate its functioning, and usually has a process of training professionals that takes place outside the organization.

In the case of SESPA, this type of bureaucracy includes doctors, nurses, pharmacists or laboratory technicians among other specialists working in hospitals, health centers and other healthcare facilities. These professionals are subject to a wide variety of regulations

and protocols established to ensure quality and safety in medical care.

Coordination between professionals is based on the standardization of skills and knowledge acquired through training and clinical experience, thus, a physician follows established protocols and clinical guidelines for the diagnosis and treatment of diseases.

Professionals contracted by the SESPA usually have a high degree of control over their work, which means that they work relatively independently from other physicians, but in close collaboration with the patients they see.

In terms of participation in decision-making, SESPA health professionals are usually represented in the Committees and management bodies of hospitals and health centers. These Committees are composed of professionals from different specialties and are responsible for establishing work protocols within the organization. The training of SESPA professionals begins at the Universities, where they acquire the knowledge and skills to practice their profession, subsequently, they continue their training through residency programs and supervised internships in hospitals and health centers.

As for the organizational structure of the SESPA, the core of operations is made up of health professionals who provide direct care to patients. These professionals have considerable autonomy in their work, as their work is highly specialized.

As support staff we would find the management and services staff, such as the administrative body, the laundry, maintenance, transport, logistics, etc. They are basically in charge of supporting the operations core and their main mission is to facilitate the most routine tasks to be performed by the operations core.

All this refers to the organizational structure at its most basic level, i.e. in the Health Area, but if we look at the SESPA as a whole we will find a type of divisional structure.

The divisional structure is a form of organization characterized by dividing the company into autonomous units or divisions, each of which, in the case of the SESPA, is responsible for a specific territory.

The SESPA, in accordance with the guidelines issued by the Regional Ministry in matters of health, will act under the "principles of equity, solidarity, effectiveness, efficiency, deconcentration, decentralization, coordination, cooperation, transparency and participation with full submission to the Law and the Law". Art. 121 of Law 7/2019, of 29 March, on Health.

The SESPA has eight geographical divisions, called Health Areas, and a central strategic apex, called the Central Body of Direction and Management of the SESPA, commonly called Central Services.

At the head of this Central Body is the Management Directorate of the SESPA, whose essential functions are:

- The direction, management and internal inspection of all the activities and services of the SESPA.
- Coordinate and evaluate all the management bodies of the SESPA.
- To assume the direction of the SESPA staff.
- Promote and evaluate the performance of the staff of all the services and centers of the SESPA.

The variable of decentralization is an element that defines this model, in this case, the Health Areas have a certain degree of autonomy for making decisions related to the provision of services and budget allocation. We can affirm, therefore, that this structure has the advantage of generating global managers, since in each of the Areas there will be a general management whose function is to make decisions at that level, so that managers with a more generalist background will be necessary.

Despite the autonomy of the Areas, the Central Services play a leadership and management role in accordance with Article 124 of the Law of the Principality of Asturias 7/2019, of 29 March, on Health. For this purpose, three central bodies are structured: Board of Directors, Board of Directors and Management Board.

This type of structure allows greater flexibility and adaptability to the territorial needs of each Health Area, including, for example, specific prevention and promotion programs for each territory, as well as the allocation of resources according to the demand and demographic characteristics of each Area.

The main disadvantages of this type of structure are that there are many divisions and, consequently, coordination problems may arise on the part of Central Services. We may also encounter information asymmetries that will exist between Central Services and Area Managers, which may lead to inefficiency and the need to duplicate some functions and positions, so that activities that could be carried out jointly are more costly to perform independently.

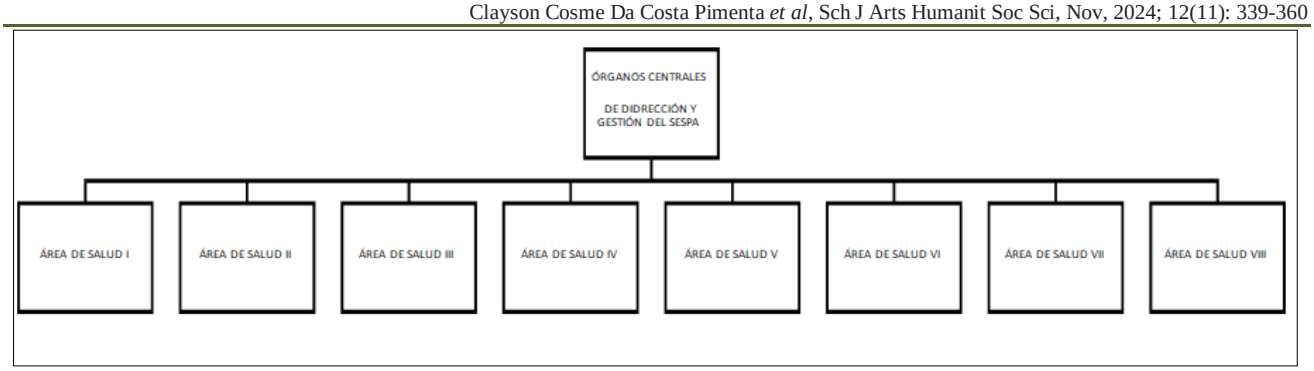


**Fig. 5**
**Source***: Own elaboration. Organizational chart of the SESPA*

**Analysis of the Structure of the Health Service of the Principality of Asturias Past, Present and Future**

Due to the exclusive competence of the State regarding the establishment of bases and general coordination of health, established in Article 149.1. 16.ª of the Spanish Constitution, and in order to guarantee the right to health protection of Article 43 of the same, Law 14/1986, of April 25, 1986, General Health Law, was enacted for the gradual and progressive creation of a National Health System. This System is formed through the coordination and integration of the Health Services of the Autonomous Communities in accordance with their statutory competencies.

The fundamental aim of this Law is the universalization of healthcare, the optimization of resources, comprehensive care, the coordination and integrated operation of services, together with the decentralization of management in Health Areas to guarantee efficiency, the sectorization of healthcare and community participation.

Article 56 of this regulation establishes that the Autonomous Communities must delimit and establish demarcations known as Health Areas in order to organize a coordinated and integrated healthcare system.

These Areas represent the essential geographical and functional structures of the healthcare system, responsible for managing in a unitary manner the centers and establishments of the Health Service of the Autonomous Community in its territory, as well as the corresponding healthcare services and programs.

Prior to this law, Royal Decree137/1984, of January 11, on basic health structures, regulated the delimitation of the health area as the territorial framework for primary health care.

In the Principality of Asturias, Decree 112/1984, of September 6, 1984, approved the health map of Asturias and established rules for its implementation, adapting this map to the criteria introduced by Royal Decree 137/1984, of January 11.

Subsequently, and in exercise of the powers of legislative development and execution in matters of health and hygiene, established in article 11, section g), of Organic Law 7/1981, of December 30, 1981, of the Statute of Autonomy for Asturias, Law 1/1992, of July 2, 1992, on the Health Service of the Principality of Asturias, was passed. This Law created the SESPA and organized the health system in territorial demarcations called Health Areas, constituting the fundamental units of function and management of the health service and establishing the number of areas, the head towns and the councils included in each one of them.

After the transfer of competences under Royal Decree 1471/2001, of 27 December, on the transfer to the Principality of Asturias of the functions and services of the National Health Institute, the Law of the Principality of Asturias 7/2019, of 29 March, on Health, which repealed Law 1/1992, configured the health map as the main instrument of territorial health planning.

This regulation seeks the correct allocation of its resources, including the sectorization of services, in accordance with Article 15.1 of the same, establishing its organization in Health Areas, Basic and Special Health Areas and Health Districts. This Law stipulated that the approval and modification of the health map should be carried out by means of a Decree of the Government Council, at the proposal of the Regional Ministry of Health, following the opinion of the Health Council of the Principality of Asturias.

Since the approval of the health map by Decree 112/1984, of September 6, 1984, it has undergone multiple modifications to reflect the changes in the demand for health care and the social and health conditions of the population until the current one, Decree 16/2021, of March 26, of the eighth modification of Decree 112/1984, of September 6, 1984, which definitively approves the Health Map of Asturias and establishes the rules for its implementation.

This Decree 112/1984 establishes eight Health Areas in the Principality of Asturias, each with a

designated head town, as well as the municipalities that form part of each Area.

The main objective of the establishment of this Health Map was to improve the accessibility of the citizenship to the health resources in Asturias. To achieve this, the Primary Care network was expanded and peripheral hospitals were created in Areas I, II and VI.

The 1984 Decree provided for an annual review of the Health Map; however, as of the eighth and last modification, Decree 16/2021, of March 26, the review must be carried out at the latest every five years after the entry into force of the last approved modification.

**Tab. 1**

| AREA | HEADER |
|---|---|
| **I** | JARRIO (Coaña) |
| **II** | CANGAS DE NARCEA |
| **III** | AVILÉS |
| **IV** | OVIEDO |
| **V** | GIJÓN |
| **VI** | ARRIONDAS |
| **VII** | MIERES |
| **VIII** | RIAÑO (Langreo) |

**Source***: Own elaboration. Denomination of Areas and their head locality*

The now repealed Law 1/1992, of July 2, 1992, of the Health Service of the Principality of Asturias, consolidated the Health Map in terms of territorial organization through its article 19.5, which delimited the Health Areas and specified the Councils comprising each one of them. Currently, Law 7/2019, of 29 March, on Health, territorially orders the Public Health System, however, unlike Law 1/1992, it does not delimit the Areas nor does it determine their number or head town. This means that the specification of these Areas and their characteristics will be carried out later by means of the enactment of a specific Decree which will establish the implementation of the Health Map.

This approach, from a structural point of view, will allow adjusting the delimitation of the Areas according to the specific needs and conditions of each territory within the Principality of Asturias.

The new proposal for updating the Health Map aims to improve health outcomes in a context marked by chronicity and population aging. Faced with these challenges, it seeks to implement a new organizational model that favors a greater integration of the actions of all professionals involved in the health process of individuals, including both Primary Care and Mental Health and Hospital Care.

In this proposal, it proposes the concentration of the eight Health Areas, which currently exist, into three Health Areas according to the attached table:

**Tab. 2**

| **New denomination** | **Health Area I West Coast** | **Health Area I Center-Southwest** | **Health Area I East** |
|---|---|---|---|
| **Grouping Current Areas** | Áreas I y III | Áreas II, IV y VII | Áreas V, VI y VIII |
| **Population** | 183.480 | 407.424 | 405.118 |

**Source***: Own elaboration. Table of unification of Areas.*

The new grouping would mean that each new Area would have a university hospital with a high level of complexity. In addition, this grouping is based on the natural and usual flows of the population, which would facilitate citizens' access to health services. For example, in the case of the current Area I, the usual commuting flow is to Avilés, while in the current Areas VII and VIII, Oviedo and Gijón are common destinations for citizens from different regions. This geographic distribution aligns with population mobility patterns and would facilitate equitable access to health services.

Each area would have a sufficient population base to ensure an adequate level of activity in health centers and hospitals. This would make it possible to take advantage of the benefits derived from the concentration of services, which would contribute to improving health care safety and efficiency in health care.

It is important to bear in mind that, although the population volume in the area resulting from the grouping of the current areas I and III (West-Coast) is lower, this situation could be compensated for with careful planning of resources and an efficient distribution of health services.

The reordering proposal would not imply modifying the Basic Health Zones comprising each of the current Areas. However, the reordering of the Health Map could consider changing these Zones between different Areas.

To determine whether a change of Basic Health Zone is feasible, the physical location of the Health Center or Consultorio could be used as a reference and the distances and travel times to the primary hospitals could be calculated.

## ARGUMENTS PROVIDED IN THE REORDERING PROPOSAL

### Demographic Changes

From a demographic perspective, the population of Asturias, according to the population census data, has experienced a constant decrease throughout the period between 1986 and 2023, with negative inter-annual variations in most years. In total, these decreases have resulted in a reduction of the total population of Asturias, from 1,109,943 inhabitants in 1986 to 1,005,283 in 2023.

However, this decrease has not been uniform in all areas of Asturias, and differentiated patterns have been observed between Health Areas. While Health Areas IV (Oviedo) and V (Gijón) have increased their population during this period, the rest of the areas have suffered decreases.

This shows an internal migration characterized by a continuous decrease in population in the peripheral areas, while the central areas have maintained or recorded slight growth.

Not only has the population decreased, but it has also aged and life expectancy has increased, reaching 85.83 years for women and 80.27 for men. This aging is higher in Areas I (Jarrio headwaters) and II (Cangas de Narcea headwaters).

### New Epidemiological Patterns of the Disease

The aging of the population has produced an increase in chronic diseases, mainly cardiovascular diseases, diabetes, osteoarthritis, certain types of cancer (renal, colorectal), respiratory diseases (asthma, COPD) and certain mental health problems (depression). Likewise, people at the end of their lives require specialized care for both oncological diseases and serious chronic non-oncological diseases.

In this context, the progressive increase in the average age of the population, especially in rural areas, means that the management of processes must be rethought. For this reason, the new Health Map is intended to be a useful instrument for responding to the new healthcare needs of the population.

### New Road Infrastructures

Since the first drafting of the Health Map, there has been a change in travel time, since it has been considerably reduced and the most peripheral areas have been brought closer to the center. Except for Area II, the other Areas are less than an hour away by car, taking as a reference the location of the reference hospitals.

### Public Transport Logistics

The Government of the Principality of Asturias is working on a revision of the concession map of the road passenger transport network, managed through the Asturias Transport Consortium (CTA). The main objective of this revision is to adapt to mobility flows and habits, favoring access to health, assistance and social services in Asturian municipalities and prioritizing access to reference hospitals.

This process represents an opportunity to coordinate the design of the Health Map with the transport network, ensuring travel times and schedules that allow access to the head towns.

An example of this coordination can be found in the Jarrio hospital, which has adjusted the appointment times to the frequencies and schedules of the different CTA routes in the region. In addition, the service has been extended through the extension of new rural lines from neighboring municipalities to the hospital, using a shuttle cab at no additional cost to passengers.

Following this line, a new transport line has been put into operation connecting Panes with Arriondas and Gijón to cover the need to transport patients to the Hospital de Cabueñes.

### Development of Primary Care

From 1984 to the present, 69 Health Centers and 144 Peripheral or Local Clinics have been built. Most of these resources are based on criteria established by the former INSALUD and have hardly been modified since the health transfers. These criteria include aspects such as the size of the quotas, the distinction between urban and rural areas, the organization of continuous care and geographical dispersion.

Under this prism, several lines of action have been proposed, among which we can highlight the provision of greater autonomy to Primary Care Teams, the increase in resolution capacity through investments in diagnostic equipment, the development of the Collaborative Virtual Consultation and the promotion of research in Primary Care.

In addition, a digital transformation process is being carried out in Primary Care, which includes the implementation of electronic medical records, decision support systems and home monitoring platforms, among others. These advances are having a significant impact on the organization of care and management of Primary Care Teams, and should be considered in an eventual reorganization of the Health Map.

### Development of Hospital Care

The Hospital Network has undergone significant development from 1984 to the present, with the entry into operation of the new Hospital Universitario Central de Asturias and Hospital Álvarez Buylla, as well as the completion of the remodeling of the Hospital Universitario de Cabueñes, which is currently in the execution phase.

However, it is important to consider some issues that impact on Hospital Care:

- Current hospitals have focused mainly on acute pathology care. However, given demographic trends and the evolution of morbidity patterns, it is necessary to reorient these centers to meet the needs of a population with a high prevalence of chronic pathology.
- The advance of new technologies has a significant impact on the provision of hospital services, affecting both the place and the way in which these services are provided.
- Social changes, such as the new expectations of healthcare professionals in relation to working conditions and work-life balance, require adjustments in the organization of healthcare centers to meet these demands.

**Centralization of Supplies and Common Auxiliary Services**

Although the primary function of healthcare centers is to provide patient care, it is crucial to recognize that the quality, effectiveness and efficiency of this service depend on the proper functioning of a complex network of ancillary services and non-healthcare supplies.

Separating the healthcare function from ancillary services and supplies allows healthcare centers and professionals to focus on their main task, while facilitating the management of ancillary services by specialized personnel and organizational structures. In the scope of the National Health System, experiences of centralization of purchases and ancillary services have been carried out for years. These experiences are not limited to the different autonomous regions, since the Ministry of Health has also developed centralization instruments, such as purchasing catalogs, which can benefit all the autonomous regions.

The SESPA has followed this trend, carrying out a progressive centralization of supplies and services common to several health centers or health areas. This process is reflected in Decree 50/2022, of July 20, which establishes the basic structure of the SESPA's management and direction bodies, where the Central Purchasing Office will report to the Deputy Directorate of Management.

The centralization of supplies and auxiliary services would imply the management of resources that were previously managed by organizational structures at the level of the health center, Health Area or Zone. The Health Map, as a territorial planning tool, will reorder the management of these auxiliary services and purchases for a more efficient allocation of resources and a better sectorization of services.

Necessity of new organization for reasons of regulatory technique.

The Regional Ministry of Health indicates that after the different modifications made to Decree 112/1984, it is difficult to understand the regulations, in addition to the language and terms in force at a higher level. For example, reference is made to “Health Areas” and “Health Zones” instead of “Health Areas” and “Basic Health Zones”, as established in Law 7/2019, of March 29, on Health.

In view of these considerations, it would be necessary to update the regulation of the organizational structure of healthcare in Asturias, in coherence with Law 7/2019.

**The Health Map in the Context of the Demographic Challenge Policy**

The Demographic Plan of the Principality of Asturias 2017-2027, commissioned by the Ministry of the Presidency and Citizen Participation, establishes a detailed strategy to address the demographic challenges of the region. Within this strategy, several relevant objectives are contemplated for the regulation of the Health Map:

- To favor a network of infrastructures, equipment and basic services that guarantees equitable access and without the need to move the population's residence.
- To work to achieve a territorial rebalancing that ensures services and equipment in rural areas and avoids exclusion.

To address the demographic impact on the public health system, comprehensive and specific strategies are proposed to adapt to changes in the demographic structure and guarantee health services. It also seeks to coordinate and optimize the expenditure of available resources to reverse demographic decline.

In this context, the Plan suggests strengthening the county capitals as functional centers and reinforcing the health network throughout the regional territory, making use of technological advances to optimize health services.

Specifically in the health field, the draft Law includes provisions in Chapter II of Title IV (articles 34-37):

- Reflects the need to enhance Primary and Hospital Care services and actions in areas with demographic difficulties.
- Encourage policies that promote the retention of health professionals in rural environments, especially in the field of Primary Care. In order to achieve this objective, a series of measures are proposed for Primary Care centers in rural environments:

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- *Review and improvement of infrastructures and equipment*: ensuring that they have adequate facilities and the necessary equipment to provide quality health care.
- *Improvement of the catalog of diagnostic tests*: Providing a catalog of diagnostic tests to facilitate the diagnosis and treatment of diseases.
- *Training plans*: Developing specific training plans for healthcare professionals working in these settings, focusing on the particular needs and challenges of these areas.
- *External rotations:* Implementing these programs so that medical students and health professionals can gain hands-on experience in these settings. This can help familiarize professionals with the particularities and needs of these communities, and foster their interest in working in these areas in the future.

- Ensure access to emergency and urgent health services that are appropriate to the needs and characteristics of these areas. To achieve this, several measures are proposed:

- ***Organization of the Attention to the Urgent Demand*:** Establishing an attention system that allows any user to receive the necessary attention in case of emergency or urgency, regardless of their place of residence.

- ***Adaptation to the Unique Characteristics of the Areas***: Taking into account geographical dispersion, limited access to health services and the possible lack of infrastructure.

- ***Resource Optimization*:**

Optimizing the use of available resources to ensure quality care despite demographic constraints. This may involve the training of specialized emergency teams, the implementation of telemedicine technologies for remote care, and collaboration with other emergency services, such as fire departments and civil protection, to improve emergency response.

- Coordination with public transport services, incorporating into patient appointment systems mechanisms to coordinate attendance at consultations and diagnostic tests with public transport services.
- Strengthening of socio-health care convalescence units and home hospitalization, allowing patients to receive medical care in their own environment.

- ***Encouraging Health Promotion and Teleassistance*:**

Promoting the use of information and communication technologies. This includes health promotion programs to educate the population about healthy habits and disease prevention, as well as the development of advanced telecare services that allow remote monitoring of patients and remote health care.

**Benefits of Updating the Health Map According to the Proposal**

The rearrangement of the Health Map may contribute to the achievement of health policy objectives such as equity, safety and quality of the health service provided to the public. Consequently, having listed the reasons why a revision of the Map and the Decree that regulates it is advisable, the following are the reasons why the rearrangement can help to achieve these objectives.

**Improvement of Equity**

The approval of the first Health Map in 1984 provided a framework for the expansion of the network of primary care facilities and the extension of the network of county hospitals. This initiative, together with its evolution to the present, has made it possible to establish an extensive network of centers that guarantees equity in terms of accessibility to health services, regardless of people's geographic location.

However, Garrido (2016), points out that equity in the provision of healthcare goes beyond geographical accessibility, it also refers to equality in the quantity and quality of care provided.

The rearrangement of the Health Map could improve the provision of services by providing an integrated, uniform and sufficient set of benefits that guarantee the right to health protection, of Article 43 of the Spanish Constitution, in a wider geographical area.

This would involve centralizing the management of services currently administered by several Health Areas under a single Directorate, which could facilitate the adoption of measures to standardize procedures and protocols and reduce unjustified variability in healthcare practice.

**Strengthens Patient Safety**

Reducing variability in medical practice not only promotes equity in care, as mentioned in the previous point, but also contributes to improving patient safety. The reordering of the Health Map could strengthen patient safety by facilitating the unification of processes and the creation of common care circuits. This homogenizing approach helps to reduce undesired variability in clinical practice among professionals, which can represent a potential risk for patients.

**Strengthens Primary Care**

The restructuring places primary care at the center of the health system to achieve more comprehensive, community-oriented care. With the

creation of a Primary Care Directorate in each Health Area, a body specifically dedicated to directing and organizing the primary care network in its corresponding area is established. This directorate will not only supervise the Primary Care Teams, but will also coordinate activities related to public health and collaboration with socio-health devices in the area. This new structure gives Primary Care a hierarchical level comparable to the hospitals integrated in the Health Area.

**It Expands the Portfolio of Services**

The expansion of the portfolio of services of the new Health Areas would imply a greater integration and coordination of different care units under a single manager, which could improve the quality and safety of health care.

In healthcare planning, there is a tension between centralization and decentralization, especially with regard to the volume and diversity of cases attended by a hospital, and its impact on the safety of care.

Therefore, it is believed that the rearrangement of the Health Map, by contributing to a better adequacy of the care mass of Units, Services and professionals, could be a tool to improve the safety of health care.

**Improvement of Human Resources Planning**

Resource planning is based on an analysis of the healthcare activity to be carried out by each Health Area. This activity must be determined by the needs of the population, reflected in its demographic and epidemiological structure.

Human resource planning is essential in any organization, especially in public services, where citizen satisfaction depends to a large extent on the work of professionals. This planning should not only determine the number of professionals needed, but also identify the competencies required and the mechanisms for maintaining and improving professional excellence. This involves both the development of core competencies and the acquisition of new skills in response to the evolution of knowledge, technology and citizens' expectations.

**It Enhances Networking**

Recent technological advances, with the implementation of digitalized medical records, diagnostic imaging tools and electronic prescriptions, as well as applications for administrative and support management, allow for integrated patient care regardless of location. This would facilitate collaboration between healthcare professionals and the configuration of functional networks to address the most relevant healthcare processes.

The reference units in the SESPA should lead the integration and networking to ensure a comprehensive view of the patient from the beginning, considering their probable evolution and the need to access more complex consultations, techniques or tests.

The reorganization of the Health Map, by centralizing technological resources, reference units and administrative structures under the same management structure, can promote networking.

**It Favors the Management of the Organization's Knowledge and the Training of Professionals in Specialized Health Training**

The reorganization of the Health Areas could facilitate the management of knowledge and the improvement of patient care by integrating a greater number of professionals and centers of different complexities under the same Health Area, favoring the common management of medical knowledge and the possibility of sharing good practices among professionals.

By grouping the Health Areas together, a better collaboration and use of all the healthcare centers as centers for training, research, development and innovation could be promoted.

**Contribute to More Efficient Logistics Management**

This restructuring could be an effective way to improve the logistics management of SESPA by concentrating auxiliary and non-health services, such as laundries.

By grouping the Health Areas, the purchasing capacity for supplies and services could be centralized, which would increase bargaining power and the possibility of obtaining better supply conditions. In addition to reducing costs, this centralization could optimize inventory management and facilitate the standardization of criteria in terms of quality standards, simplifying administrative procedures.

The concentration of purchases and administrative processes in larger Health Areas would complement the process of centralization of purchases in the Central Services of the Health Service. In some cases, it could even be an intermediate step towards the total centralization of certain supplies and services contracted from the Central Services for all areas.

This process of logistics concentration and centralization would allow a better separation between the healthcare function, which resides in the healthcare centers, and the logistics function.

**Strengthens the Network of Regional Hospitals**

The integration of rural county hospitals into a broader management structure, as in the proposed grouping of health areas, would allow greater fluidity in

the sequence of care for patients requiring more complex care.

By sharing the portfolio of services with larger hospitals, rural hospitals could offer more stable care and access to more complex services.

**It Favors Continuity of Care and Coordination between Primary Care Centers and Hospital Services**

The reorganization of the Health Map would include a university hospital of a certain level of complexity in each Health Area, which would mean that the care of the most complex processes would be managed under the same management structure, thus reducing referrals to hospitals currently located in a different Health Area.

Currently, patients from several Health Areas are referred to the three existing university hospitals, which implies the intervention of two different Health Areas in the care of the same complex process.

With the reorganization of the Map, as all the processes depend on the same Health Area, the coordination of integral patient care in these complex processes would be facilitated. This would make it possible to reorganize the circuits and procedures that patients must follow, making them more accessible, agile and efficient.

## NECESSARY ADAPTATIONS FOR THE RESTRUCTURING OF THE SESPA

It is essential to recognize that any reorganization of the Health Map, especially when it involves the management under the same structure of what were previously different Areas, will have consequences that may range from the internal organization of Health Centers and Hospitals to the coordination between different levels of care and services.

One of the main considerations is the transition period needed to implement the changes. During this period, it is crucial to guarantee continuity in the provision of health services, minimizing interruptions and ensuring that patients receive the necessary care without inconvenience. In addition, the necessary resources and support must be provided for healthcare professionals to adapt to the new processes and structures.

Another aspect to consider are the administrative and logistical implications of the realignment. This includes the redistribution of human and material resources, the revision of administrative procedures and the integration of health information and technology systems. It is essential to ensure efficient and coordinated management to avoid redundancies and optimize available resources.

In addition, it is important to take into account the impact on the community and patients. Changes in the structure and location of health services may affect the accessibility and comfort of users. Therefore, it is crucial to effectively communicate changes and ensure that services remain accessible to all citizens, especially those residing in rural or demographically challenged areas.

In terms of adapting information systems, the integration of areas that previously operated with different systems can present significant challenges in terms of interoperability and operational efficiency.

For example, the integration of a new hospital into Health Area IV would involve the coexistence of two different information systems (Selene and Milleniun). This implies the need to develop interfaces or integrations between the existing systems, as well as the standardization of processes and data to ensure a smooth and consistent operation.

In the primary care setting, the implementation of systems such as ECAP can facilitate realignment by providing a common platform for the management of clinical and administrative information. However, challenges may still arise in terms of integration with other systems and in the standardization of processes between different areas.

Information systems related to logistics and pharmacy should also be considered. Integration of areas may require adjustments and modifications to these systems to ensure efficient management of resources and proper distribution of drugs and supplies.

In the case of purchasing and supplies, the adaptation process would depend on the validity of contracts prior to the restructuring and the legal feasibility of modifying them.

Finally, the current structure of the management teams is regulated in Chapter III of Decree 50/2022, of July 20, which establishes the basic organic structure of the management bodies of the Principality of Asturias Health Service.

The management structure of a Health Area, described in this Decree, consists of a Management Department, to which a Health Care and Public Health Department, a Care and Nursing Management Department, and a Financial and Professional Department will report hierarchically. In addition, and reporting to the Health Care and Public Health Directorate, is the Hospital Directorate.

However, with the updating of the Health Map, it will be necessary to review and define a new management structure that will have a general outline for

each Area, complemented by the management bodies that will be considered at the time to facilitate the best management and coordination of the centers, taking into account the peculiarities of each Area.

**CURRENT STATUS OF THE PROPOSAL**

The reorganization of the Health Map in the Principality of Asturias, proposed by the Regional Ministry of Health and presented in January, has led to a process of consultation and revision that has delayed the finalization of the definitive document beyond the date initially planned in March. This proposal has raised numerous doubts and concerns among healthcare professionals and their union representatives.

The main concerns about the reorganization of the healthcare map revolve around the impact of the distribution of employment, the distance and orography of the region, the concentration of units and services, administrative costs, worker representation, quality of care and working conditions.

Regarding the distribution of employment, it is feared that the reorganization may increase the distance between work centers and employees' homes, which is especially relevant in a region with a complex orography such as Asturias. Given the limited staffing levels, depriving one area of personnel and transferring them to another leaves the first without the necessary professionals.

In relation to the concentration of units and services, there is concern that some health care services are concentrated in a few hospitals, forcing users to make additional trips to receive care that was previously provided closer to their homes.

With regard to administrative costs, although the merger of areas could reduce the number of management units, there are doubts as to whether this will really be effective. For the possible creation of additional departments or sub-directorates could maintain or even increase administrative costs.

Finally, the union representatives propose that the final document should include a commitment that the restructuring will not negatively affect either the quality of care received by users or the working conditions of professionals.

In view of all these concerns and doubts, the Regional Minister of Health has appeared before the General Meeting of the Principality to explain that the reorganization of the map will not imply the closure of hospitals or the reduction of their portfolio of services, nor will the quality of healthcare be reduced, but rather a more operative and less bureaucratic system will be created, thus reducing waiting lists.

It guarantees the rights of the professionals and their capacity of representation in the territory and in the healthcare centers. Aspects related to the impact on professionals are being discussed with professional associations, scientific societies and trade unions. The aim is not to have a negative impact on the working conditions of professionals.

In addition, it is intended to make peripheral areas more attractive for filling hard-to-fill positions with incentives for those who fill these positions.

A position will be considered difficult to fill when the demand for employment in its category or specialty is deficient or non-existent, when it is not possible to find professionals through ordinary selection procedures or when there are added difficulties due to its geographic location, such as isolation and dispersion.

These positions would be 18 Health Centers, ten in the west and 8 in the east, all the emergency positions in Primary Care and those of continuous care. As for hospitals, some specialties would have this consideration.

This classification will be updated annually and will entail a series of incentives:

- Economic compensation through a specific complement from the third month of permanence in the position. This will be maintained for two years.
- Flexibility in the working day in order to reconcile work and personal life.
- Preferential access to continuous training and research projects.
- They will receive more points in the temporary employment pool, specifically 20% more in the first year and 40% if they remain in the position for three years.

## CONCLUSIONS

In the context of this research on the unification of SESPA Health Areas, an exhaustive analysis has been carried out to determine whether this reorganization would optimize resources, improve operational efficiency and offer more integrated health services adapted to the changing needs of the Asturian population.

Modern organizational structures, based on horizontal management, offer opportunities for both commercial and government agencies to achieve objectives, with no single ideal type suitable for all organizations.

The analysis conducted indicates that the proposed realignment aims to centralize management and unify processes, which should lead to resource optimization and greater operational efficiency. The

reduction of management positions and the reduction of administrative bureaucracy are measures that point in this direction. In addition, an improvement in the integration of health services is anticipated, with a broader portfolio of services and a greater focus on primary care.

The analysis of the current organizational structure of the SESPA reveals a configuration with eight Health Areas, each with its own management and directive structure. The proposed reorganization seeks to simplify this structure by reducing the number of Health Areas to three, while maintaining a more streamlined and efficient management structure. This should facilitate a more coherent and unified management of resources and services.

The realignment poses challenges in terms of staff mobility and union representation. There are concerns about the distance between work centers and employees' homes, as well as the impact on working conditions and quality of care. However, the reorganization is expected to improve human resource planning and facilitate talent recruitment. In addition, commitments have been made to ensure that the restructuring does not negatively affect working conditions and quality of care.

In summary, the analysis suggests that the unification of the SESPA Health Areas, as described in the proposal, has the potential to optimize resources, improve operational efficiency and offer more integrated health services adapted to the needs of the population.

Population's needs. While there are legitimate challenges and concerns, especially in relation to staff mobility and union representation, the expected benefits of greater coherence and efficiency in the management of healthcare resources appear to justify the proposed realignment. An open and continuous dialogue with all stakeholders is crucial to address these challenges and ensure a successful implementation of the restructuring.

Some issues for future research include assessing the long-term impact of the realignment on quality of care and professional satisfaction, further investigating staff mobility and its impact on talent retention, analyzing in more detail the administrative costs associated with the creation of new directorates and their impact on operational efficiency, and, most importantly, conducting studies to assess the impact of the realignment on the quality of care and professional satisfaction. Most importantly, conduct studies to measure the quality of care and patient experience in the new unified areas.

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