Original article

Model of managerial competencies for the management of the cadre policy in hospital services



Modelo de competencias directivas para la gestión de la política de cuadros en servicios hospitalarios

Modelo de competência gerencial para o gerenciamento da política de quadros em serviços hospitalares

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ABSTRACT

The current Cuban context evidences the need to intentionally address managerial competencies, if the aim is to improve the management of the cadres policy, elements that should be prioritized in hospital services. The objective of this article was to propose a model of managerial competences for the management of the cadre policy in hospital services. The study employed methods, techniques and tools such as: analytical-synthetic, inductive-deductive, historical-logical, bibliographic review, brainstorming, surveys and the UCINET and SPSS software. As results of the work, it is demonstrated the need to conceive a new model of managerial competences for the management of the cadre policy in Cuban hospital services, due to the particularities of the political and organizational environment of the country. The model is composed of: a general objective, six principles, three premises and scope. For its implementation, it is proposed a procedure consisting

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of five stages and 15 steps. It is concluded that in the specialized scientific literature consulted by the authors, there is no evidence in Cuba of the existence of a model of managerial competencies for the management of the management of the cadres policy in hospital services. The proposed model contributes, through the interaction of the processes identified in the cadre policy, with the phases of the competencies, to a better management of the cadre policy. There is consensus among the experts consulted regarding the scientific validity of the proposal.

Keywords: managerial competencies; model; cadre policy; hospital services.

RESUMEN

El contexto actual cubano evidencia la necesidad de atender intencionadamente las competencias directivas, si se pretende perfeccionar la gestión de la política de cuadros, elementos que en los servicios hospitalarios deben trabajarse prioritariamente. El objetivo del presente artículo consistió en proponer un modelo de competencias directivas para la gestión de la política de cuadros en los servicios hospitalarios. En el estudio se emplearon métodos, técnicas y herramientas, tales como: analítico-sintético, inductivo-deductivo, histórico-lógico, revisión bibliográfica, tormenta de ideas, encuestas y los softwares UCINET y SPSS. Como resultados del trabajo, se demuestra la necesidad de concebir un nuevo modelo de competencias directivas si para la gestión de la política de cuadros en los servicios hospitalarios cubanos se trata, debido a las particularidades del ámbito político y organizacional del país. El modelo está compuesto por: un objetivo general, seis principios, tres premisas y alcance. Para su ejecución se propone un procedimiento de implementación conformado por cinco etapas y 15 pasos. Se arriba como conclusiones a que en la literatura científica especializada consultada por las autoras no se evidencia en Cuba la existencia de un modelo de competencias directivas para la gestión de la política de cuadros en los servicios hospitalarios. El modelo propuesto contribuye, a través de la interacción de los procesos identificados en la política de cuadros, con las fases de las competencias, a una mejor gestión de la política de cuadros. Se evidencia consenso entre los expertos consultados, respecto a la validez científica de la propuesta.

Palabras clave: competencias directivas; modelo; política de cuadros; servicios hospitalarios.

RESUMO

O contexto cubano atual mostra a necessidade de abordar intencionalmente as competências gerenciais a fim de melhorar a gestão da política de quadros, elementos que devem ser prioritários nos serviços hospitalares. O objetivo deste artigo foi propor um modelo de competências gerenciais para a gestão da política de pessoal em serviços hospitalares. O estudo empregou métodos, técnicas e ferramentas, tais como: analítico-sintético, indutivo-dedutivo, histórico-lógico, revisão da literatura, brainstorming, pesquisas e os softwares UCINET e SPSS. Os resultados do trabalho demonstram a necessidade de elaborar um novo modelo de competências gerenciais para a gestão da política de quadros nos serviços hospitalares cubanos, devido às particularidades do ambiente político e organizacional do país. O modelo é composto por: um objetivo geral, seis princípios, três premissas e um escopo. Para sua execução, é proposto um procedimento de implementação composto por cinco estágios e 15 etapas. As conclusões alcançadas são que, na literatura científica especializada consultada pelos autores, não há evidências em Cuba da existência de um modelo de competências gerenciais para a gestão da política de quadros em serviços hospitalares. O modelo proposto contribui, por meio da interação dos processos identificados na política de quadros com as fases das competências, para uma melhor gestão da política de quadros. Há consenso entre os especialistas consultados quanto à validade científica da proposta.

Palavras-chave: competências gerenciais; modelo; política de quadros; serviços hospitalares.

INTRODUCTION

In recent years, the concept of managerial competence has gained much importance. They are considered as those behaviors that the manager manifests for the successful exercise of the managerial function in correspondence with the organizational objectives (Miranda Lorenzo, León Reyes, González Paris, Delgado Fernández, & Robaina Rodríguez, 2023) and are a fundamental pillar for the management of the cadres policy, since they constitute the basis and in function of them each of the processes that integrate it are executed harmoniously, where the person is its main potential, since he/she is the subject and object of the policy.

In Cuba, managerial competencies play an essential role in the development of managers or cadres (Delgado Fernández et al., 2022) and of the organizations led by them, it being a reality that working with cadres is a priority (Council of State, 2020; PCC, 2021; President of the Republic of Cuba, 2021).

When delving into research on the subject, as far as the authors have been able to consult, the studies of managerial competencies in the country are based on the models of ISO 10015 (2019), ISO 9001 (2015) and NC 3000-3002 (2007), competency management, quality management system and human resources management system respectively, as well as on knowledge developed by authors, among which the following stand out: Delgado Fernandez et al. (2022) and Cuesta Santos et al. (2023). Although there is valuable research in sectors such as agriculture, education, health and tourism, none of it deals with management policy and its processes, for which the development of managerial competencies is required.

Following this approach, it is important to understand that a model represents the relationships that define a phenomenon, which facilitates its understanding (Abad Alfonso, 2022). In this sense, the authors consider as a model of managerial competencies the way in which the object of study is interpreted, taking into account the elements necessary for its development in the organizational context. This model should describe the entities, processes, attributes and the connections between them.

All this, in agreement with Miranda Lorenzo, León Reyes, González Paris, Delgado Fernández, & Robaina Rodríguez (2023) that the managerial competencies for the management of health services are identified as the set of knowledge, skills, attitudes, aptitudes, behaviors, values and medical ethics that a person possesses in the exercise of the managerial function successfully, being able to show mastery of the activity, capacities to form management cadres (reserves), as well as to encourage the work of their group in order to achieve the objectives of the organization. This is because it highlights medical ethics and the ability to form management cadres, vital aspects in health services.

The health sector remains one of the professional activities in which there is a need to deepen in that sense, because of its importance as a public service and because the patient's life can be affected by incorrect directive management (Miranda Lorenzo, León Reyes, González Paris, Delgado Fernández, & Robaina Rodríguez, 2023) and this requires an integrated orientation of quality (Antúnez Saiz et

al., 2017), innovation (Delgado Fernández et al., 2020) and competencies (Miranda Lorenzo, León Reyes, González Paris, Delgado Fernández, & Robaina Rodríguez, 2023).

Hospitals, as organizations in this sector that must guarantee medical care, play a leading role and need competent managers to lead their processes in order to contribute to the fulfillment of the specific objective of the National Economic and Social Development Plan until 2030 (PNDES, 2019): to raise the quality of the health service provided with the aim of achieving the satisfaction of the population.

In addition, García Brigos (2019) states that, among the main transformations necessary for the updating of the Cuban Economic Model are: perfecting management methods to increase the quality of public services and more effectively implement the policy of State and Government cadres and their reserves. Therefore, it is agreed with Miranda Fernández et al. (2021), that the improvement of management is a highly topical problem of national relevance, which leads to the search for competent managers to facilitate the fulfillment of the objectives of the organization.

This is due to the evident insufficiency in the performance of managers especially in the following aspects: the lack of competencies necessary for service management (Miranda Lorenzo, León Reyes, González Paris, Delgado Fernández, & Leal Torres, 2023); the existence of vacant managerial positions; the need for greater preparation for management development; and the poor strategic vision of the management body in relation to the promotional transition of managers.

In the case of health managers, although health administrators are trained in Cuba, this does not meet the demands of the sector, so they do not always have the necessary competencies when they assume the position and have to develop them as they perform it, and sometimes they have not even moved on to another position at the base level. All of this is also evidence of the shortcomings in the application of the cadre policy in the sector.

In this regard, the authors consider it a challenge and an opportunity for research to promote work in these institutions, where it is necessary to continue to deepen the subject (Dmitrichenkova et al., 2020; Hernández Valdés, 2020; Miranda Fernández et al., 2021; Miranda Lorenzo, León Reyes, González Paris, Delgado Fernández, & Leal Torres, 2023). In this sense, the aim of this article was to propose a model of managerial competencies for the management of cadre policy in hospital services.

MATERIALS AND METHODS

For the development of the research, the dialectical materialist method was used as a general method. The study carried out is classified as mixed, although qualitative analysis predominates. Theoretical and empirical methods were used due to their characteristics, advantages and disadvantages.

The first method was the analytical-synthetic method, which was carried out by relating the elements to each other and linking them to the problematic situation as a whole. In turn, the synthesis was produced on the basis of the results previously achieved by the analysis. On the other hand, the inductive-deductive method was used to evaluate the results of the variables of this research. The Marxist-Leninist approach on which the present article focuses allows recognizing that both methods are essential in thinking, which implies a deliberate use and adoption of a systemic approach in the exposition of the results reached in the same.

The historical-logical method and the bibliographic review were used to study the background of the model of managerial competencies for the management of the cadre policy in hospital services, which takes as a reference research carried out in the national and international context, especially related to managerial competencies, while the brainstorming was carried out with hospital sector managers and professors researching the subject, with the purpose of finding out who are the people who can be considered as possible experts in the research (candidates). The free variant was used, i.e., each participant made his or her proposal spontaneously.

The UCINET software version 6.743 was used for the purpose of analyzing and graphing the relationship of the words or elements most used by the authors in the models analyzed. For its use it is necessary to use the following acronyms: SP-public service, S-health, H-hospitals, C-Cuba, HRV-recognize man as a vital resource of the organization, Comp-competencies, CD-managerial competencies, I-identification, N-normalization, F-training, E-evaluation, C-certification, IG-propose general index to manage competencies, WD-work dictionaries, EP-elaborate profiles, GCD-recognize competency management as central axis in management processes, TR-take into account the work with the reserve, HI-possess computer tools, DSO-involve managers as subjects and objects of research, IEC-involve cadre specialists, TPr-take into account the promotional transit of managers, AO-organizational scope, AS-sectoral scope, WNJ-work all hierarchical levels of the organization and TD-doctoral theses.

The survey was conducted for the selection of experts to validate the proposed model from a theoretical point of view. For this purpose, a list of candidates was drawn up and selected taking into account the following criteria: knowledge of hospital services management issues and managerial skills; aptitude to participate in research and willingness; training in the topics under investigation, intuition, capacity for deduction, as well as ability to define priorities. The list was composed of: sector managers, sector specialists, researchers linked to the subject and/or the sector, as well as professors in charge of preparing and training managers. Candidates with a high competence coefficient, i.e., greater than 0.8, were considered.

The second questionnaire was conducted for the experts to validate the model. A Likert-type scale was used, with categories ranging from very adequate to inadequate. Subsequently, the reliability and content validity of the instrument applied, the concordance coefficient among the experts, as well as the mode, mean and median statistics for each of the elements of the model evaluated were calculated using SPSS v.19.0 software.

RESULTS AND DISCUSSION

In order to deepen the analysis of the background of the model of managerial competencies for the management of cadre policy in hospital services, the authors took into account 44 research studies carried out in the national and international context, which are classified into models of: direction competencies (19); managerial competencies (9); managerial skills (1); corporate competencies (1); leadership competencies (1); management for work with cadres (1); labor competencies (5) and developed in the health sector of the Matanzas territory in the topics of management by processes, planning of medicines and materials for medical use, capacity planning, measurement of intangible elements, performance management of the Science and Innovation System focused on academic processes and management of patient flows (6).

With them, a binary matrix was elaborated which compiles information regarding the researchers and elements to be observed, which was processed through the UCINET software, version 6.743 and is represented in figure 1. It is worth mentioning that the analysis of a methodology to elaborate the Profile of managerial competences in Cuba is included. Of the research: 34.1 % are from the Cuban context, 31.8 % are developed in the health sector, 25 % are results of PhD theses and although more than 50 % take into account managerial competences, only 0.05 % (2) allude to the

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management of cadre policy (a very particular element of the political and organizational environment in Cuba).

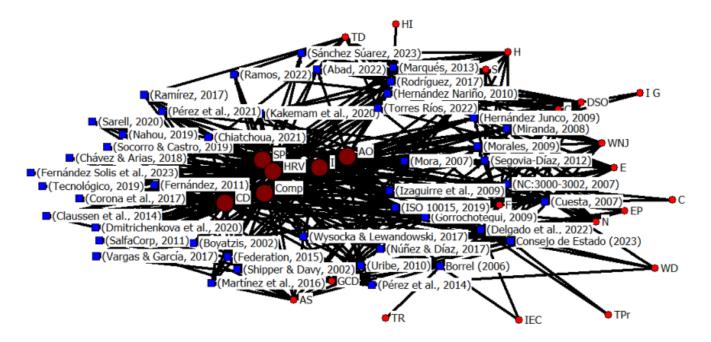


Figure 1. Presence of elements in the analyzed research Source: UCINET Software, Version 6.743

Figure 1, in the center, it is shown that the elements with more than 50 % of coincidence in the 44 research studies referred to were: they recognize man as a vital resource of the organization (100 %), address competencies (86.4 %), work on the identification phase (84.1 %), address managerial competencies properly (75 %), have organizational scope (63.6 %) and are developed in public services (59.1 %). As the most significant gaps of the models to be applied to the Cuban context of managerial cadres and in a public service, they resulted that:

- Only 2.3% of the models take into account the work with the reserve and have an informatic tool for technology transfer
- Only 4.5% of the models involve cadres' specialists, take into account the manager's promotional transit, propose a general index for managing competencies and work on certification
- 9.1 % of their work deals with dictionaries of competencies

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The elements presented so far, from a more in-depth analysis of the research that the authors were able to consult, showed that the studies on models of managerial competencies for the management of the cadre policy in the health sector in Cuba are limited. In this regard, only some aspects that contribute to the processes defined for the management of cadre policy are worked on, especially those related to the phases of competencies: identification, development and evaluation; directly related to the processes: selection and movement, reserve, preparation and improvement, as well as evaluation. Therefore, it is reaffirmed the need to progress in its research to understand the subject, not only in this sector in general, but also emphasizing hospital services.

In this sense, the conception of a model of managerial competencies for the management of the cadre policy in hospital services was considered relevant (Figure 2), which resulted from the concepts, elements and shortcomings identified in the literature review that was carried out, as well as from the theoretical and practical experience of the authors.

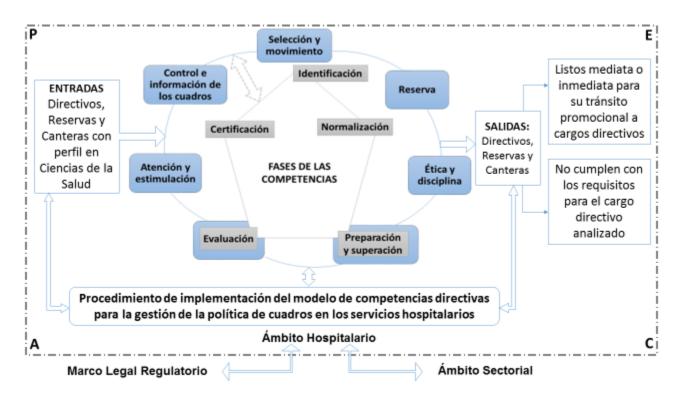


Figure 2. Representation of the managerial competency model for the management of the cadre policy in hospital services

Source: Own elaboration

It assimilates or adapts key elements that were addressed in the background information consulted, such as: the interrelation that should exist between individuals, demands and organizational environment, the importance given to organizational culture, work based on the phases of competencies, the elaboration of profiles and dictionaries of managerial competencies, the conception of the need and importance of the promotional transit that the manager should have, as well as taking into account the values as a starting point for the proposal of managerial competencies.

The general objective of its design is to contribute to the management of the cadre policy in hospital services. The principles on which the model is based are: logical consistency, flexibility, systematicity, transcendence, participation and training-action.

The following are identified as premises for the application of the model: commitment and involvement of the board of directors and managers at all levels of management for the recognition of managerial competencies and their development for better management of hospital services, personnel with basic professional preparation and open-mindedness, who contribute to the constant improvement of the organization's management policy, as well as a creative and innovative entity, which according to Abad Alfonso (2022) means that they wish to carry out the process of change, improvement and/or refinement of the tools, techniques, methods, mechanisms and instruments of evaluation currently in place.

The legal basis related to: managerial competencies, cadre policy and public health services, is considered the foundation of the model. The policy of cadres expressed in its seven processes: selection and mobilization, reserve, ethics and discipline, preparation and improvement, evaluation, care and stimulation, control and information, together with the five phases of competencies, are at the center. They interact through administrative management with a focus on permanent change and innovation, due to the current context of organizations and specifically those that provide hospital services.

Another feature that characterizes the managerial competencies model designed is its linkage with the process improvement cycle (Abad Alfonso, 2022), harmonized with the continuous quality management cycles (ISO, 2019) approved in the country-level work plans, aspects that are evidenced within it by a representation of Deming's theory, which states, according to Abad Alfonso (2022), that perfection is never achieved, but is always sought.

In this sense, the model, from its inputs, proposed components and outputs, allows planning through the identification of competencies and their standardization (development of profiles and dictionaries of competencies), the evaluation of gaps according to the positions being analyzed, taking into account the preparation of personnel and the creation of a favorable climate. Then, it is necessary to execute the activities planned for the training and development of those competencies that are not in their desired state.

In addition, it considers controlling, monitoring and evaluating the development activities according to the competency needs, as well as the indicators for competency management, which, since the implementation of the designed functional strategies and the digitalization of the process, can be monitored and certified more effectively. Finally, it is possible to act with the improvements that have been demonstrated as a new way of doing, where a final conclusion is issued that specifies the managers, reserves and quarries, ready or not, for their promotional transit according to the managerial position that is analyzed. Aspects that are modeled to the extent that the procedure of managerial competencies designed is executed and that is considered an essential element within the proposed model.

The deployment of the model gives importance to the prevailing organizational culture in the organizations in which it is implemented and in the health sector in general, since some of the components of the model may vary depending on it. Likewise, for the development and implementation of the model, teamwork and the criteria of experts are considered essential to carry out the identification of managerial competencies. In this way, the diverse knowledge of a multidisciplinary group, coordinated by experts with proven knowledge and prestige in the field of hospital services and the preparation and improvement of managers, is brought together. Its scope is determined by the management levels that exist in the organization where the model is implemented and its action with the policy of the public health sector in general.

In summary, the model offers the possibility of an improved cadre policy process, not only at an organizational level, but also at a sectoral level, by providing information with the precision that the cadre body needs about the managers, reserves and quarries (and their managerial competencies) according to the position being analyzed, which depends on the stability of the position, as well as on continuous improvement, where the results derived from these analyses are also used as comments, responses or opinions in the feedback process provided for in the model itself, so that they can be readjusted when necessary and pertinent, since if the information system is

systematically updated in this regard, there is a rigorous characterization that facilitates decision making in terms of cadre policy.

From all the above, it can be deduced the need to elaborate a procedure that helps the implementation in practice of the model, which was created following a structure of five stages and fifteen steps, conceived in a logical and consecutive way, likewise, it has as objective: To provide the methodological sequence through stages and steps that facilitates the implementation of the designed model and, in turn, the management of the cadre policy in the hospital entities of the health sector in which it is implemented. The description of each of the stages and steps of the procedure, outlining the objectives to be achieved with each stage, the steps that compose them, as well as the methods, techniques and/or tools to be used, are shown below.

Stage I "Familiarization with the object of study"

Its purpose is to become familiar with the organization based on the characteristics that distinguish its activity and to have an overview of the starting situation of the study.

Step 1: Characterize the organization. This is a preliminary step before undertaking any process. Information can be obtained through methods and techniques such as: document review, direct observation, interview and survey. Among the documents that need to be consulted are: the organization's strategic planning, the hospital's general regulations, process and procedure manuals, as well as industry standards and regulations.

Step 2: Analyze the initial situation. It is necessary to inquire in the organization in which the study is implemented, about the initial state of the institution with respect to the management of the cadres policy, that is, the situation of cadres, reserves and quarries, as well as the development of their managerial competences. For this purpose, information can be obtained through the following methods and techniques: analytical-synthetic, inductive-deductive, historical-logical, bibliographical review, documentary review, survey, brainstorming, problem tree, objective tree and testimonies.

Stage II "Formation of the working group"

Its objective is to select the people who will participate in the identification of managerial competencies.

Step 3: Structure the group. It is suggested to form a working group that takes into account that the proposal involves all areas and affects the processes that have to do with people throughout the organization. The group should be multidisciplinary, represent and/or know about the subject under investigation and have knowledge of the work of the area, as well as of related management issues. Its composition may vary depending on the management position being analyzed and the organization in which the research is implemented. The main method used to form the working group is brainstorming.

Step 4: Prepare the members of the working group for the implementation of the procedure. This requires developing their preparation, which should correspond to the role played by each member of the group and to their prior knowledge of the above-mentioned topics. The strategic objectives of the entity and individual motivations and interests are taken into account. It is explained to the working group about the need, importance and benefits to be obtained with the implementation of the study, as well as the main methods, techniques and tools to develop the research. In order to carry out this step, group dynamics are mainly used in the conferences, workshops and training sessions that are carried out to train the members of the working group.

Step 5: Create a favorable institutional climate. In order to promote the conditions that contribute to the achievement of a favorable institutional climate in the process of implementing the procedure, group dynamics techniques will be used in the same development of the activities carried out in the previous step. These techniques contribute to the motivation of workers in a general sense, where the use of role-playing, creative exercises, case studies and motivational techniques predominate, where the active participation of those involved is a priority, as well as the use of communication, group work and innovation.

Stage III "Identification of managerial competencies"

Its purpose is to define the managerial competencies for the organization's management positions.

Step 6: Define managerial competencies. This is done through an exchange with the working group formed in the previous step. For this purpose, three rounds of the Delphi method are applied. First round: List the competencies that emerge from the working group based on the question: What are the managerial competencies that the manager of position X in the organization should possess? To help the working group, a list of competencies identified in the scientific literature is provided through

a literature review and in documents related to the managerial position being analyzed (document review).

Second round: Each member of the working group will be given the information resulting from the previous round and will then be asked the following question: Do you agree that these are the competencies that the manager of position X in the organization should have? If necessary, add another one that you consider. And then those involved will mark with an X those competencies with which they agree.

Third round: Determination of the level of importance of the competencies listed, where one will be the most important and n will be the least important, based on the following question: What level of importance would you give to each of the managerial competencies, with the objective of ordering them according to their importance in the effective performance of the manager of position X in the organization? Once the answers have been collected, the weightings will be ordered according to the value of the sum by rows indicated by Rj, after which the level of agreement of the members of the working group formed through the Kendall method will be calculated. In addition, in this round, the desired state of the identified competencies, defined by the members of the working group as the level at which each competency should be, is specified, where descriptive statistics (median) are used.

Once the information obtained in the third round has been processed, it is defined which of the identified managerial competencies can be improved through training and control over their execution, development or manifestation, with the participation of the members of the working group together with the research personnel.

Step 7: Develop competency profiles. Once the managerial competencies in the managerial position under study have been identified, the competency profile is prepared. For this purpose, the aspects that a managerial competencies profile should contain according to Presidential Decree 208/2021 (President of the Republic of Cuba, 2021) are taken into account. For the development of this step, the theoretical, bibliographical and documentary review methods are used.

Step 8: Drawing up the dictionary of competencies. To prepare the dictionary of managerial competencies of the organization, once the competencies have been identified, they are conceptualized and their associated behaviors are identified with the work group, where recommendations for their implementation are also included. The methods and techniques used for

the development of the step are: bibliographic review, documentary review, brainstorming and group dynamics.

With the implementation of the steps that make up the present stage, the bases are laid for the management of the processes of the cadre policy, fundamentally in: selection and movement, reserve, ethics and discipline, evaluation, preparation and improvement.

Stage IV "Evaluation of managerial competencies"

Its purpose is to evaluate the managerial competencies identified for the managerial position of the organization being analyzed.

Step 9: Elaborate the instruments to be used. The starting point for the evaluation of managerial competencies is the design of the instruments. For their elaboration, the bibliographic review and the considerations of the working group with which the identification of managerial competencies is carried out through the group dynamics carried out by means of brainstorming are taken into account. The instruments designed are: questionnaires, interview and observation guides. The preparation of these instruments, ways of asking questions, selecting and representing the information are determining aspects of the research results, which requires a detailed study and discussion.

Step 10: Select the personnel. To select the personnel that will be used in the research to evaluate the current state of the managerial competencies of the position to be analyzed, the position under study is taken into account, as well as the positions that interact with it. For the selection of the personnel, both the staff with their criteria (self-evaluation) and the opinion of the boss, subordinates, managers of the same level and even possible clients of the organization who have interacted with the manager of the position being analyzed are considered. The selection of personnel is done by brainstorming.

Step 11: Diagnose the current state of the competencies. The instruments designed in step 9 are used to carry out this step. They should be applied to the persons selected in the previous step. In the processing of the results, the use of the SPSS statistical package is recommended, as well as the use of office tools such as Microsoft Word and Excel. Descriptive statistics (median) is used to process the results obtained from the questionnaires with the SPSS statistical package, as well as the analysis

of their reliability and validity. In the step, the information necessary for the evaluation process of the tables is taxed.

Step 12: Analyze the gap between current managerial competencies and their desired state. Through the results obtained by the different instruments, the evaluation of the identified managerial competencies is carried out. Once the managerial competencies have been diagnosed in the position to be analyzed, it is determined which ones do not show the desired development, which provides information to the management body linked to processes such as: selection and movement, reserve, preparation and improvement, evaluation, attention and stimulation. For the development of this step, methods and techniques such as: analytical-synthetic, inductive-deductive, general-particular, group dynamics and the median statistician are used.

Stage V "Management of managerial competencies"

It sets out the purpose of managing managerial competencies in the organization.

Step 13: Propose indicators for the management of managerial competencies. Two indicators are formulated: competency deviation and performance index, based on studies developed by Hernández Junco et al. (2014), which show in a more detailed way to the top management and to the department of management the behavior of the existing gaps in each position analyzed and the performance in percent of the managers according to the evaluations carried out in the institution. This analysis allows the organization to know how many positions are rated as high, medium or low, as well as how many competencies of each position studied are rated in the same way.

With the results generated in this step, information is provided to the management body to manage all the processes of the organization's management policy. The methods and techniques to be used are: analysis-synthesis, induction-deduction, general-particular, group dynamics, competence deviation indicator, performance index indicator and median.

In the development of the current step, in addition to the proposed indicators, those currently carried out for the implementation of the cadre policy in organizations according to Decree Law 13/2020 (Council of State, 2020) and Presidential Decree 208/2021 (President of the Republic of Cuba, 2021) are included.

Step 14: Design the functional strategy for the improvement of managerial competencies. Once the competencies to be improved have been identified, the working group and managers proceed with the definition of the strategy, with its actions and control system for its development, which contributes, fundamentally, to the process of preparation and improvement of the management policy. According to Ramírez Álvarez (2023), this strategy must be characterized by its dynamism and flexibility; the actions carried out must involve individual and collective commitment to the transformation process. Methods and techniques such as group dynamics with the use of brainstorming and interviews are used.

Step 15: Digitize the process. A software is proposed to automate the elements related to managerial competencies for the management of the cadre policy in hospital services. For this purpose, the methodology to be followed is defined, as well as the technologies to be used for the realization of the software. As a starting point, during the project's exploration period, the requirements for the development of the software are gathered. For this purpose, a multidisciplinary group is formed with the participation of researchers, specialists, managers, computer specialists from the Matanzas Scientific and Technological Park and developers. As an aspect to distinguish the use of the Scrum methodology stands out, which has as a directive to consider the client as part of the team, since this guarantees a good communication and the success of the project.

As methods and techniques for the realization of this step are: literature review, document review, brainstorming, group dynamics and Scrum methodology, for the software requirements gathering.

As part of the procedure, a systematic and interdependent feedback process is conceived, so that the management body can follow up on the results achieved from the implementation of each stage. This process provides the necessary information to know which step of the procedure to return to, since the results derived from these analyses make it possible to make the necessary readjustments, which does not always lead to starting from the first proposed step. For this purpose, it is conceived the elaboration of reports that make known the results achieved, either to the management of the center or to the authorities of the territory, in order to contribute to a better decision making for the management of the cadre policy in the organization under study.

The process is characterized by a systematic control, where the information related to the execution of actions aimed at the improvement of managerial competencies in the organization's cadres is foreseen as a vital point of focus. In turn, it is considered that during the monitoring, diagnosis and

evaluation of the results it is necessary to take into account: the performance of the managerial staff, as well as the performance of the reserves and quarries of the managerial position in question; the fulfillment of the organizational objectives and the satisfaction of the clients.

It is necessary to guarantee objectivity and impartiality during the development of the procedure in general. To achieve this, it is necessary to ensure the adequate competence of the personnel performing such activities. This should be based on knowledge and mastery of the methodological foundations of the model and the particularities of the cadre policy in hospital services.

In the research process, it was decided to carry out a theoretical validation, based on the expert criterion method, with the purpose of assessing and demonstrating the scientific validity of the model, as well as acquiring qualitative criteria for its correction before deploying the practical application. Once the list of candidates had been drawn up, which included a total of 36 people, 26 experts were selected because they obtained a high competence coefficient (greater than 0.8), to whom a survey was applied so that they could express their evaluations on the aspects of the model submitted to their criteria.

The results obtained show that the instrument applied is reliable with a value of 0.765 (greater than 0.7) and valid, with values between 0.415 and 0.675 (greater than 0.4). In the interpretative analysis of the evaluations provided by the experts, they refer that: it is a very relevant topic due to its importance in the territory and in the services in which it is proposed; it constitutes a necessary contribution to strengthen the management of the cadre policy; it is supported by scientific bases, and it highlights the integration of the cadre policy with the phases of the competencies. Figure 3 shows the results obtained through the mode, mean and median statistics.

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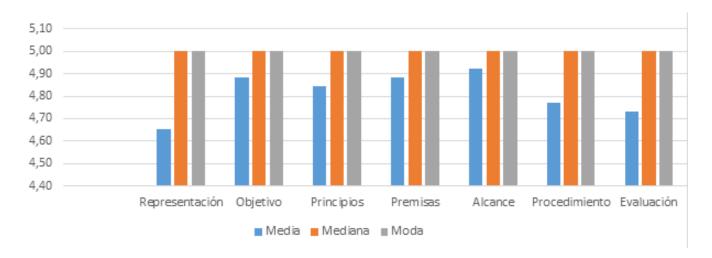


Figure 3. Results of the survey applied through the mean, mode and median statistics Source: SPSS, version 19.0

As can be seen in the previous figure, there is consensus among the experts in evaluating the theoretical elements analyzed as very adequate or quite adequate, and no aspect was evaluated as inadequate or inadequate. Nevertheless, elements were expressed that allowed the authors to make the necessary modifications to improve the scientific result. The suggestions made were mainly related to: improving the scheme that represents the structure of the model, placing connectors between interrelated elements, as well as not putting the feedback on the inputs and outputs identified in the model, writing the general objective, including in the procedure a step that addresses the characterization of the object of study, in order to better contextualize the subject under investigation.

In general, the model was improved by considering in particular the suggestions made by the experts. It was considered that the comments made do not invalidate the applicability or the possibility of responding to the problems posed, but, on the contrary, allowed for its improvement.

Based on the consultation of 44 research studies, the most significant gaps were identified as the lack of treatment of elements such as: working with the reserve, support in an informatic tool for technology transfer, involving management specialists, taking into account the manager's promotional transition, proposing a general index to manage competencies, working on certification, as well as working on competency dictionaries.

The specialized scientific literature, based on the in-depth study and analysis carried out by the authors, states that there is no evidence in Cuba of the existence of a model of managerial competencies for the management of the cadre policy in hospital services. The main differences between the proposed model and the previous studies consulted are: it includes the processes stated in Decree Law 13/2020 (Council of State, 2020) and based on Presidential Decree 208/2021 (President of the Republic of Cuba, 2021); it relates the phases of managerial competencies with the processes of the cadre policy; it takes into account the cadre bodies and their specialists; it allows obtaining arguments on the manager, as well as to select and develop competencies in reserves and quarries; it proposes the development of a computer tool that facilitates the work of the cadre body.

The proposed model contributes through the interaction of the processes identified in the cadre policy, with the phases of the competencies, to a better management of the cadre policy through its components, relationships and dynamics, expressed in the implementation procedure through its five stages and 15 steps. In the theoretical validation carried out by the experts, the main recommendations for its improvement and subsequent practical application referred to: the improvement of the graphic scheme made, the wording of the general objective, as well as the inclusion within the procedure of a step that addresses the characterization of the object of study.

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Conflict of interest

Authors declare that they have no conflicts of interest.

Authors' contribution

Yadney Osmaida Miranda Lorenzo: Conceptualization and systematization of ideas, formulation of objectives, theoretical and methodological basis of the topic, data collection, application of techniques to analyze data and conclusions. Writing of the original manuscript. Preparation, creation and presentation of the work.

Yenisey León Reyes: Data collection, application of techniques to analyze the study data and conclusions. Writing of the original manuscript and updating of the bibliography.

Evelyn González Paris: Elaboration of the original idea. Writing of the original manuscript. Critical revision, substantive translation, presentation of the data and of the work in general.

Mercedes Delgado Fernández: Critical revision, substantive translation, presentation of the data and of the work in general.



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