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**ORIGINAL**

# Diagnosis of the implementation of nursing care management for closed healthcare in Chile

## Diagnóstico de la implementación de la gestión del cuidado de enfermería para atención cerrada en Chile

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## ABSTRACT

**Introduction:** the social role of nurses in 1997 is defined, nursing care management being established via the general administrative regulation N° 19. The implementation of assistant directorships for nursing care management becomes relevant in the results for both the patients and the nursing team.
**Goal:** describe the degree of implementation of the general administrative regulation N° 19 for close care at Chile's medium-and-high-complexity public health establishments.
**Methods:** a quantitative, descriptive, cross-sectional study was developed. With a convenience-intended sample of 56 centers, using an instrument to gather evidence of characteristics of Regulation N° 19.
**Results:** 75,0 % have an Assistant Directorship for Care Management and 3,57 % do not have any. High-complexity hospitals averaged 6,83 characteristics and medium complexity averaged 6,69 characteristics. The characteristics with the highest degree of fulfillment were those related to powers to grant safe care, the definition of job profiles corresponding to the structure, policies on communication with other offices, and having a set of care indicators for decision-making.
**Conclusion:** there is a disparity in implementation, a National Nursing Directorship dependent on the Ministry of Health with a supervising role and generating standardized policies, protocols, and guidelines to support the implementation is required to achieve care with a sense of social and universal justice.

**Keywords:** Nursing Administration Research; Shared Governance, Nursing; Health Management.

## RESUMEN

**Introducción:** se define el rol social de las enfermeras en 1997, estableciéndose la gestión del cuidado de enfermería a través de la norma general administrativa N°19. La implementación de las subdirecciones de gestión del cuidado de enfermería, cobran relevancia en los resultados tanto para pacientes como para el equipo de enfermería.
**Objetivo:** describir el grado de implementación de la norma general administrativa N°19 en atención cerrada de los establecimientos públicos de salud de mediana y alta complejidad de Chile.
**Métodos:** un estudio cuantitativo, descriptivo y transversal fue desarrollado. Con una muestra intencionada a conveniencia de 56 centros, utilizando un instrumento de recolección de evidencias de características de la norma N°19 presentes.
**Resultados:** el 75,0 % cuenta con Subdirección de Gestión del Cuidado y un 3,57 % no cuentan con ella. Los hospitales de alta complejidad tuvieron un promedio de 6,83 características y mediana complejidad un promedio de 6,69 características. Las características con mayor grado de cumplimiento fueron los relativos a las atribuciones para otorgar una atención segura, definición de perfiles de cargo correspondiente a la

estructura, políticas de comunicación con otras dependencias y contar con un conjunto de indicadores del cuidado para la toma de decisiones.
**Conclusión:** existe disparidad en la implementación, se requiere para un cuidado con sentido en justicia social y universal, contar con una Dirección Nacional de Enfermería, dependiente del Ministerio de Salud con rol fiscalizador, además generando políticas, protocolos y directrices estandarizadas para el apoyo en la implementación.

**Palabras Claves:** Investigación en Administración de Enfermería; Gobernanza Compartida en Enfermería; Gestión en Salud.

## INTRODUCTION

Since 1997, the social role of nurses was defined in the Chilean legislation, which assigns care management as a technical and administrative sphere of action. Later, in 2005, with the sanitary reform, it was incorporated into the structure of the health services.[1]

Under the general administrative regulation Nº 19 as of 2007, nursing care management is defined as "the application of a professional judgment in planning, organizing, motivating and controlling the provision of timely, safe, comprehensive care ensuring the continuity of treatment and based on the strategic policies and guidelines of each institution".[2] In turn, Campos et al.[3] mention that, due to their managerial and administrative function, nurses have a technical and administrative office of the nursing staff, which are defined as powers inherent in nursing care management.

With this legal denomination, nursing care management is incorporated into the Chilean sanitary code and the implementation of the model for nursing care management in high-and-medium-complexity establishments is determined as a minimal requirement for the self-managed network establishments (SNEs).[4]

In this context, incorporating leader nurses with a managerial role has been described as having a fundamental impact on hospital management, which translates into reduced economic costs, improved care quality and satisfaction of patient-family, shorter hospital stay, lower infection rates, and more satisfaction of nurses, among other benefits.[5]

The need to have evidence-based indicators related to care management to plan those services directed by the managerial nursing entities has become evident, with particular relevance in the safety of users. This definition of indicators is included in the functions established in the general regulation Nº 19 for close care.[2,6,7]

Today we know that, when nurses with a managerial role have a presence at the executive level in health organizations, it is 3 times more probable to have a matrix of indicators related to fundamental care than in other organizations where there is no executive participation of nurses.[8]

In turn, risk management is inherent in care management, with an ethical and legal connection, and it contributes to decision-making for the health care of those persons who go to sanitary organizations, thus being a moral and professional imperative to Chilean nursing.[9]

On the other hand, the diverse international nursing networks of the Americas have aligned themselves with the international policies established by the World Health Organization (WHO), which focus on universal access to health and its coverage, being an essential core for these nursing networks, fostering access with no discrimination whatsoever in a comprehensive, adequate, timely and quality manner. Likewise, regarding coverage, it includes all the diverse areas of health: promotion, prevention, treatment, rehabilitation, and palliative care.[10]

The importance of an organizational nursing structure is recognized at the international level. Taking into account that the shortage and rotation of nurses impair the policies put forward by the WHO is a cross-sectional phenomenon in the Americas (and worldwide). One of the factors contributing to this shortage is the lack of organizational policies and planning barriers, factors related to rotation, stress, and exhaustion.[11]

In Chile, the impact of the staff of nurses on the mortality of patients, fewer incidents, fewer hospital readmissions, and shorter hospital stays has become evident.[12]

According to the report "*Nursing, a voice to lead*", potentiating the leadership of nurses is as important to the care for the health of people as the skills needed for bedside care, to implement individualized care plans, new care models, health innovation, with organizational policies and plans, and make executive and legislative decisions.[13] Currently, there is no available evidence of the degree of fulfillment and implementation of administrative regulation Nº 19 for care management,[14] it is for this reason that the general goal of this piece of research was to explore the implementation of the general administrative regulation Nº 19 for close care at medium-and-high-complexity public health establishments in Chile.

Because of the above, the general goal of this piece of research was to describe the degree of implementation of the general administrative regulation Nº 19 for close care at medium-and-high-complexity public health establishments in Chile.

## METHODOLOGY

*Type of study*: a quantitative, descriptive, cross-sectional study was developed

*Universe and sample:* the universe for this piece of research was the public records from a total of 91 public centers listed as high and medium complexity by the Chilean Ministry of Health. Records evidencing the implementation of Regulation Nº 19 on Nursing Care Management for Close Care with Exempt Resolution 1127 published on December 14, 2007, for these centers were collected.[2]

A convenience-intended sample was used and only those centers where we could corroborate the presence (or not) of the characteristics of implementation collected in the instrument were included.

*Criteria for inclusion:* the following were used as criteria for inclusion: a) public records including the designation/appointment of the figure of the assistant director for nursing care management (or its counterpart) for close care in medium-and-high-complexity hospital establishments and b) public records on the functions entrusted in the current regulation.

*Information-gathering instrument:* a data-gathering instrument was used, with two parts:

a) The first part about the characterization of the sample: it included characteristics of the institution like dependent health service, level of complexity, and general characteristics such as maximum hierarchical level at the institution (assistant director, coordinator, or referent care management unit), degree of the position, year of implementation of the position;

b) The second part is about characteristics of the implementation of the regulation with a resolution, such as the presence of an administrative nursing manual, the budget allocated for continuous provision of nursing care by the Assistant Directorship for Care Management (ADCM), or similar entity, nursing processes associated to the structure, job profiles associated to the structure, policy on the development of competences, management of performance and labor satisfaction, indicators proper to the ADCM, service portfolio of nursing care management, risk matrix for care management and annual improvement plan, policies on welfare teaching integration and research for care management, a minimum basic set of data for decision making, technological tools for management control, policy on communication with other offices and internal communication (manual, protocol, induction, for instance). This second part included 13 dichotomous characteristics (present or absent), 0 standing for minimum performance and 13 for maximum performance, the instrument has no cut score neither does it diagnose beyond the level of implementation.

*Information-gathering technique:* information was gathered from September to December 2022 and three strategies were laid out:

a) Request for the public records via assistant directorships, coordinators, or close-care nursing units at the medium-and-high-complexity hospital establishments;

b) Request for the public records via the maximum authority of medium-and-high-complexity hospital establishments;

c) Request for public records by way of Law Nº 20.285 on access to public information.[15]

*Analysis of information:* the information was analyzed with the statistical package SPSS version 26 for Mac OS. A descriptive analysis was carried out for the variables under study; depending on the nature of data, recount (n), mean (m), standard deviation (SD), and relative importance (RI%) were used and analysis of variance (ANOVA) was used to compare the means (F) with a level of significance of 0,005 (p).

*Ethical aspects:* this piece of research focuses on the secondary analysis of public records with no access to individualized information, so there is no manipulation and/or intervention with humans.

## RESULTS

### Characterization of the sample

A total of 56 administrative care management structures were included (answer rate of 61.54%); according to the sample, they were distributed into 71,43 % of high complexity (n = 40) and 28,57 % of low complexity (n = 16). The answer rate by level of complexity was 62,5 % for high and 59,25 % for medium. The centers the administrative care management structures belong to were distributed into 28 health services, the health services in Arica, Iquique, Antofagasta, Aconcagua, Metropolitano Central, Talcahuano, Biobío, Arauco, Araucanía Norte, Osorno, del Reloncaví and Aysén being the ones with fewest centers in the sample each one (n = 1. RI = 1,79 %). In turn, the service contributing more centers was Maule Health Service (n = 6. RI = 10,71 %).

Regarding the administrative structure in the organization chart, 75,0 % (n = 42) have an Assistant Directorship for Care Management, 16,07 % (n = 9) have a coordinator, 5,36 % (n = 3) have a unit, and 3,57 % (n = 2) do not have any structure. Out of these units, 87,50 % are represented at the executive level and have a direct directorship office.

Likewise, the creation of the administrative structures has a dissimilar development, though kept over time, most of them were created in 2008 (n = 11) and in 2018 and 2019 new ones were not created, their creation in 2 establishments (figure 1) still being pending.

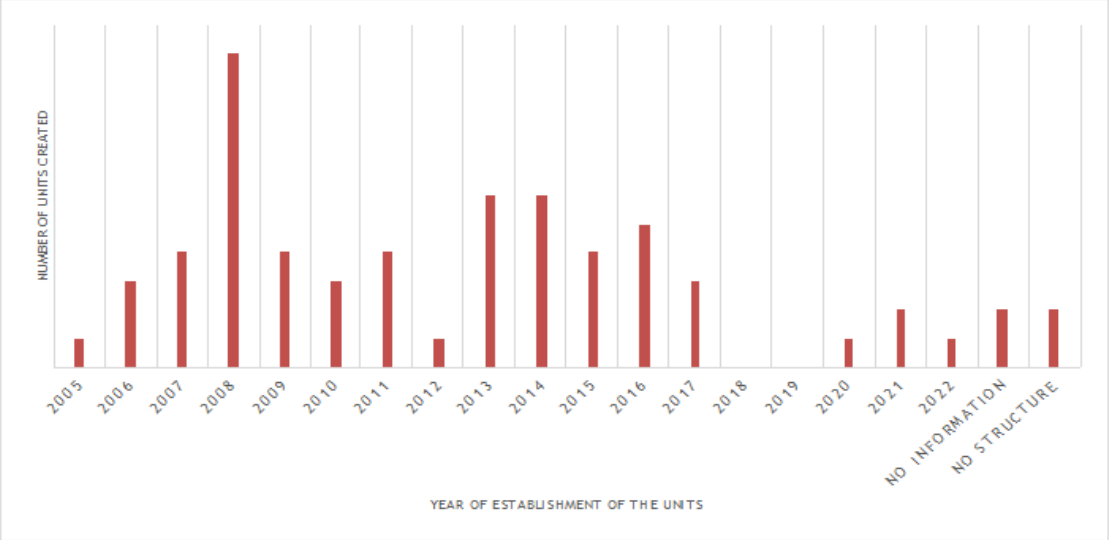


**Figure 1.** Distribution of units by year of creation (n = 56)

Concerning the grade of the position, which is based on the Single Salary Scale (EUS), they concentrate on 75,00 % between EUS grades 4 and 7. Likewise, 25,00 % is between EUS grades 8 and 14 (figure 2).

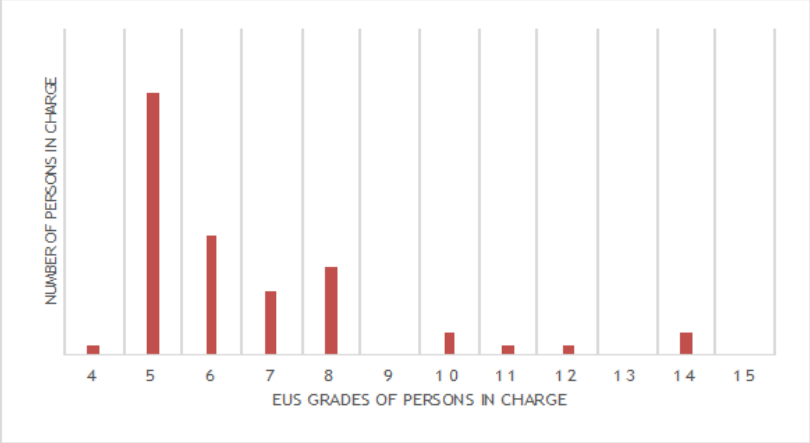


**Figure 2.** Distribution of persons in charge/according to EUS grades (n=56)

**General level of implementation**

The units had a minimum of 1 criterion present and a maximum of 13 criteria. Only 1,78 % have evidence for the 13 criteria (n = 1).

The units inserted in high-complexity hospitals averaged 6,83 characteristics (SD ± 2,87) and medium-complexity averaged 6,69 characteristics (SD ± 2,50), no statistically significant differences by complexity were found (F = 0,028; p = 0,867). The average for the sample was 6,71 characteristics (SD ± 2,71) (figure 3).

**Level of implementation by characteristics**

The units had different behaviors by characteristics, only one characteristic is in the fourth quartile with 92,86 % of fulfillment (Do you have powers to organize, supervise, assess and promote quality improvement in nursing care in order to provide safe, timely, continuous care with cultural relevance and in compliance with the policies and regulations established by the Ministry of Health?) and there are two characteristics that were in the first quartile with 19,64 % (Do you have any budget allocated for continuous provision of nursing care by the assistant directorship, coordinator or nursing care management unit?) and 23,21 % (Do you have any policies on the development of competences, management of performance and labor satisfaction associated with the assistant directorship, coordinator or nursing care management unit?). Figure 4 shows the distribution by each of the characteristics.

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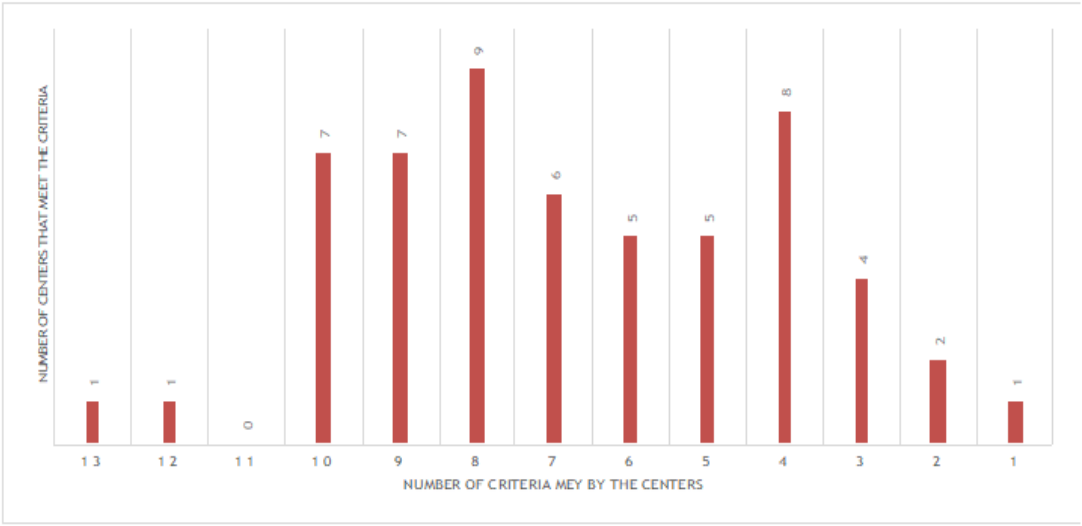


**Figure 3.** Distribution of units by the number of met criteria (n = 56)

| The figure of sub-director, coordinator or referent of the care management unit or nursing unit | Present | | not present | |
|---|---|---|---|---|
| | n | % | n | % |
| 1 Do you have powers to organize, supervise, assess and promote quality improvemente in nursing care in order to provide safe, timely, continuous care with cultural relevance and in compliance with the policies and regulatios established by the Ministry of Health? | 52 | 92,86% | 4 | 7,14% |
| 2 Do you have a nursing manual associated with the sub-director, coordinator or care management unit or nursing? | 28 | 50,00% | 28 | 50,00% |
| 3 Do you have any budget allocated for continuous provision of nursing care by the sub-director, coordinator or nursing care management unit? | 11 | 19,64% | 45 | 80,36% |
| 4 Do you have nursing processes associated with the structure of the sub-director, coordinator or nursing care management unit. | 32 | 57,14% | 24 | 42,86% |
| 5 Do you have job profiles associated with the structure of the sub-director, coordinator or care management or nursing unit. | 46 | 82,14% | 10 | 17,86% |
| 6 Do you have any policies on the development of competences, management of performance and labor satisfaction associated with the sub-director, coordinator or nursing care management unit? | 13 | 23,21% | 43 | 76,79% |
| 7 Do you have indicators specific to the sub-director, coordinator or care management unit or nursing? | 26 | 46,43% | 30 | 53,57% |
| 8 Do you have a portfolio of services from the sub-director, coordinator or care management unit or nursing? | 26 | 46,43% | 30 | 53,57% |
| 9 Do you have a portfolio of nursing care management services associated with the sub-director, coordinator or unit? | 14 | 25,00% | 42 | 75,00% |
| 10 Do you have policies for the integration of teaching and care and research for the management of nursing care associated with the sub-director, coordinator or nursing unit? | 27 | 48,21% | 29 | 51,79% |
| 11 Do you have a minimum basic set of data for decision making associated with nursing care management associated with the sub-director, coordinator or nursing unit? | 34 | 60,71% | 22 | 39,29% |
| 12 Do you have technological tools for management control associated with the sub-director, coordinator or nursing unit? | 26 | 46,43% | 30 | 53,57% |
| 13 Do you have communication policies with other departments and internal communication? | 41 | 73,21% | 15 | 26,79% |

**Figure 4.** Level of implementation by characteristics (n = 56)

## DISCUSSION

For contextualizing the implementation, it is fundamental to based on Decree 140 of the organic rules of the health services establishing, in number II of the administrative order, that the director is entrusted with the tasks of organizing the internal structure of the direction of the service and its dependent establishments, assigning the tasks and duties to their office. Despite this decree, establishments are still without structure (3,57 %).[16]

In turn, the aforementioned decree describes that the director should dictate the regulations for the internal

functioning of the establishments under their office, in compliance with the laws and rules in force and the ministerial guidelines issued in this respect. In this context, only one center has all the characteristics (n = 13; RI = 1,78 %) established in the general administrative regulation Nº 19.[2,16]

Continuing with the stipulations in Decree 140, the hospital is entrusted with the task of granting, within the scope of its jurisdiction, the health services assigned by the Director of the Service in compliance with the technical regulations dictated by the Ministry of Health on this matter. In this study, 57,14 % have nursing processes, 46,43 % have a service portfolio, 25,0 % have a risk matrix, and 19,64 % have a budget allocated for continuous provision of care, these tools being necessary for health assistance and pursuant to the technical regulation Nº 19.[2,16]

In turn, Decree 140 states that the hospital must instruct, train and develop its staff, and disseminate the acquired experience and the accumulated knowledge professionally and permanently. Bearing this obligation in mind, the results show us that 48,21 % have policies on welfare teaching integration and research and 24,21 % have policies on the development of competencies, management of performance, and labor satisfaction.[2,16]

The general administrative regulation Nº19 indicates that the hospital director and their direct office is the one responsible for entrusting the executive functions for nursing care management. Out of all the participating hospitals, 75 % are constituted as assistant directorships for care management; therefore, it entails executive participation within the hierarchical line, and it is the top nursing authority in establishments of the public welfare health network.[2]

As regards the appointment to EUS grades associated with a salary according to the responsibilities and functions of the job, there is a substantial difference between the structure defined by one health service and another. In this sense, the regulation mentions that the salary of the top nursing entity must be in agreement with the relevance and strategic nature of the role. In this point, 25 % of the centers remunerate their care management representatives with grades ranging from EUS 8 to EUS 14 which are salaries approved by supervisors and/or coordinators of units/services and even clinical nurses.[2]

As regards implementation, the regulation establishes its function is to design and keep the nursing service portfolio updated; however, it was observed that only 46,4 % have a formal nursing service portfolio, the same percentage for indicators proper to nursing that make it possible to monitor and establish strategies for continuous improvement of nursing services.[2,9]

Today we know that, when nurses participate at the managerial or executive level, it is 3 times more likely to have care-management-sensitive indicators; therefore, in those establishments where nurses do not participate at the executive level, it is more unlikely to obtain better results with the patients receiving nursing services.[5]

In turn, Exempt Resolution 1127 establishes that the regulation must be implemented in the years 2007 through 2009; at that date, only 41,07 % of centers had the structure and, in this study, 87,5 % of centers had a representation at the executive level and a direct office of the directorship of the institution.[2]

As limitations of this study, we can mention that, as the universe of centers was not available and the sample was convenience-intended, there is a bias of representativeness in the current sample. Likewise, as only records of the presence of tools were consulted, this study does not seek to assess the quality of these tools. In turn, any initiative that is being implemented or assessed to be implemented is left out as it has not been made official.

Due to the aforementioned limitations, these results cannot be extrapolated to the universe, nor can they be generalized to all Chilean medium-and-high-complexity public centers providing close care.

## CONCLUSIONS

Fifteen years after the technical regulation on nursing care management for close care in Chile was promulgated, there is a disparity in the implementation of its characteristics at the high-and-medium-complexity public establishments of the welfare network. Regardless of the complexity of the centers, the tools of the regulation have been implemented similarly. There is an important breach in criteria that generates opportunities for improvement of different degrees for each center.

Though the regulation is clear concerning those aspects that should be identified, developed, and assessed, as no central technical and administrative figure supervises, controls, and assesses the implementation of this regulation (with a salary by the managerial responsibilities of that position), it remains free from supervision. This unique, centralized, national figure within the Ministry of Health should have the overseeing role but should also generate policies, protocols, and standardized guidelines to support the implementation.

Consequently, it is fundamental to have a nursing directorship with a technical and administrative office allowing it to establish, supervise, organize, and monitor the implementation of the regulation currently in force to improve both the results in patients and the management of health establishments. Besides, currently, there is no regulation to regulate nursing care management in open care, which hinders the correct articulation and continuity of care and its management in the whole welfare health network.

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The author Felipe Machuca-Contreras declares that he is an associate editor of this journal, but was not involved, directly or indirectly, in the peer review process.

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