CHALLENGES IN IMPLEMENTING THE CARE MODEL FOR CHRONIC CONDITIONS FROM THE PERSPECTIVE OF MANAGERS IN THE STATE OF PARANÁ

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ABSTRACT

Objective: to describe the confrontations experienced by professional managers in the process of implementing the Modelo de Atenção às Condições Crônicas (Care Model for Chronic Conditions) in the state of Paraná/Brazil. Method: this is a descriptive study with a qualitative approach. Semi-structured interviews were carried out with seven managers from different public institutions who participated in the process of implementing the Care Model for Chronic Conditions. The interviews were conducted at the interviewee's workplace, recorded, transcribed, and validated by the participants. Data collection took place in August 2018. Data analysis was performed through content analysis. Results: the analysis showed the following categories of analysis: the relevance of the command of municipal and state managers in the process of implementing the model; permanent education as a strategy for the implementation of the Care Model for Chronic Conditions; and hospital care as a limitation for care networks. Final considerations: the implementation of the Care Model for Chronic Conditions demands financial and political support from municipal and state managers and requires a trained and encouraged multidisciplinary team to be involved in the change process. The health area was unable to improve the Model of Attention to Chronic Conditions in the hospital environment.

Keywords: Health Management, Chronic Disease, Unified Health System.

INTRODUCTION

Chronic Non-Communicable Diseases (NCDs) are accountable for the annual death of 41 million people, corresponding to 71% of all deaths worldwide(1), representing a major threat to global health and development. In Brazil, about 72% of deaths are related to NCDs, and are mostly intensely evidenced in those belonging to vulnerable groups, such as the elderly, those with low education and income(2). In the state of Paraná, chronic diseases account for 80% of the disease burden(3).

Besides the high number of premature deaths, NCDs cause loss of quality of life, due to the high extent of limitation and incapacity for routine activities, and economic impacts for families, communities and society in general(1). However, the health care model in the country operates predominantly in an episodic, reactive and fragmented manner, aimed at acute conditions and exacerbations of chronic diseases(4). Centered on a perspective of the care model-curate, physician-centered and hospital-centered(5), its response to the care of chronic diseases is limited and inefficient.

Even the guidelines for the organization of the Redes de Atenção à Saúde (RAS) (Health Care Networks), within the scope of SUS, recommended in 2010(6), to guarantee comprehensive care, have shown a limited impact on the care of chronic diseases.

Due to the magnitude and need for care for people with chronic diseases, the Ministry of Health created, in 2011, the Plano de Ações Estratégicas para o Enfrentamento da DCNT (Strategic Action Plan for Coping with NCDs)(7). The Plan aims to prepare Brazil to face and stop NCDs by 2022, through the promotion, development and implementation of effective, integrated, sustainable and evidence-based public policies(7). Moreover the prevention and control of its risk factors, a proposal to challenge these problems would be the implementation of a care model that works permanently and proactively(4).

Thus, the Modelo de Atenção às Condições Crônicas (MACC) (Care Model for Chronic Conditions) is proposed, adjusted to the context...
of the *Sistema Único de Saúde* (SUS) (Unified Health System)\(^4\) and based on the Chronic Care Model (CCM), developed the MacColl Center for Health Care Innovation, in the United States, with six dimensions, including a model based on the community; in the organization of health care; supported self-care; in supporting evidence-based decisions; in the clinical information system; and in the design of service provision\(^8\).

The MACC is a model composed of five levels, being: at level 1, health promotion interventions; at level 2, interventions to prevent health conditions; at level 3, the management of simple chronic conditions; at level 4, the management of complex chronic conditions; and at level 5, the management of very complex chronic conditions\(^4\).

In this scenario, the State of Paraná, experiencing the burden of chronic diseases, chose, through the State Health Department, with support from the *Conselho Nacional dos Secretários de Saúde* (CONASS) (National Council of Health Managers), to implement the Care Model for Chronic Conditions in the 15\(^{th}\) Health Area in 2014\(^3\). Thus, it is considered important to understand the process of implementing this model against hegemony, in which the objective of the study is to describe the confrontations experienced by professional managers during the process of implementing the Care Model for Chronic Conditions in the state of Paraná/Brazil.

**METHODOLOGY**

This is a descriptive study, with a qualitative approach, carried out in a health area in the Northwest of Paraná, Brazil. The participants were key people, in management positions, involved in the process of implementing the MACC in the area.

Considering the study scenario, the implementation of the MACC was a proposal by the State Health Department of Paraná (SESA Paraná), and involved the contribution of regional health, municipal managers of the *atendimento primário em saúde* (APS) (primary health care) and managers of the *atendimento ambulatorial especializado* (AAE) (specialized outpatient care). It had the support of tutoring and consulting from the *Conselho Nacional dos Secretários de Saúde* (CONASS) (National Council of Health Managers).

The inclusion criteria for research were being a manager of any of the agencies involved in the process of implementing the model and having at least four years of experience in the position (period in which the model was implemented). The exclusion criterion was not to have participated in the model implementation process and to be on leave of absence or leave from work. This was an intentional sample, composed of seven participants, being a municipal APS manager, an AAE manager, a regional APS manager, a regional healthcare network manager, and a health care division manager, one SESA manager, and a manager of the *Conselho Nacional dos Secretários de Saúde* (National Council of Health Managers).

Data collection was carried out by two researchers, a doctoral student, and the advisor, both in charge of conducting the research and with previous experience in research interviews. The interviews took place in August 2018 and were carried out individually at the interviewee’s workplace, with a semi-structured script, previously scheduled by phone and/or electronic mail. Pilot interviews were conducted to prepare the approach with study participants. The script of questions included the participation of the manager in the process of implementing the model, the structuring of the Health Care Networks in the region, strategies for permanent education and training of team members led by the managers, and the physical and structural changes carried out in the process of implementation of the MACC.

Before starting the interview, the researchers introduced themselves, repeated the objectives of the study, informed the participants about ethical issues, and they signed the Informed Consent Form. Throughout the interviews, the researchers took notes of their perceptions. They were recorded, with an audio recording device, and lasted an average of ninety minutes. The recordings were transcribed and sent by e-mail so that the interviewees could read and validate the information. No changes were pointed out by the interviewees.

After confirming the content transcribed by the interviewees, data analysis was carried out...
by three independent researchers, with subsequent discussion and data examination using the content analysis technique\(^9\), according to the following steps: a) pre-analysis: the organization and careful reading of all material were carried out; b) exploration of the material; in this stage, we sought to associate the speeches, analyze the theme and divide the text by likeness and similarity in main themes; and c) treatment of results: inference and interpretation; the categories, which were used as units of analysis, were analyzed in the light of the current literature.

After analyzing the data, the following categories emerged: the relevance of the captaincy of municipal and state managers in the process of implementing the model; permanent education as a strategy to implement the Care Model for Chronic Conditions; and hospital care as a limitation for care networks.

The participants were identified by the letter “I”, for interviewee, followed by the Arabic number corresponding to the sequence of the interviews, to protect the identity of the participants. The study is in line with the guidelines and regulatory standards of Resolution no. 466/2012\(^{10}\).

The study was approved by the PontifíciaUniversidadeCatólica do Paraná Research Ethics Committee under opinion no. 2,424,071/2017 and its respective co-participating institutions.

RESULTS AND DISCUSSION

The following categories were designed to understand the experience lived throughout the implementation of the Care Model for Chronic Conditions.

The relevance of the captaincy of municipal and state managers in the process of implementing the model

The professionals mentioned that the implementation of the Model of Attention to Chronic Conditions was a plan of the state government of Paraná, through the State Health Department. The proposal included the implementation of the model in the regional health, initially in Primary Health Care and Specialized Outpatient Care, with subsequent expansion to hospital care.

State managers proposed the implementation of the model for the conditions of arterial hypertension and diabetes mellitus; pregnant women and children up to 01-year-old (Rede Mãe Paranaense - Paranaense Mother Network); later, the Rede de Atenção à Saúde do Idoso (Elderly Health Care Network).

Some passages from the interviewees’ statements explain the importance of municipal and state managers supporting the proposal to implement the Care Model for Chronic Conditions and providing support so that professionals can implement it.

[...the involvement of the mayors, which must be the front line [...], the state department must have the leading role, must be the leadership of the secretary. (I2)]

[... In 2014, there was a proposal by SESA (State Health Department) of the Regional Health to be a pilot for the implementation of the MACC. (I3)]

[... the MACC implementation process occurred gradually and started to be conceived after the Health Consortia management workshops, promoted by SESA in 2014. (I7)]

[... the process of structuring the MACC in the municipality was consolidated after a visit by SESA technicians, by SESA consultants, in October 2014. (I6)]

[... some issues that were considered for the choice of municipalities were: [...] the municipality to have an accessible manager, with good leadership and open to changes. (I4)]

The relevance of the leadership of state and municipal managers in the process of implementing a new care model is evident, contributing decisively and being one of the motivating factors to cause the change.

In Brazil, a similar experience of implementing the MACC was carried out through the Laboratório de Inovações de Atenção às Condições Crônicas (LIACC) (Laboratory of Care Innovations to Chronic Conditions) in Santo Anônio do Monte/MG, with the integration of the provision of chronic care as one of the main strategies to minimize the burden of these diseases\(^{11}\). One study, which evaluated the implementation in Santo Antônio do Monte, concluded that the
The development of care networks and the implementation of the MACC need a robust and consistent plan and agents of change that support the process\(^\text{12}\).

As a health manager or management team, one of the main challenges is to create a plan that favors improvements to the health of the territory’s population, reconciling the teams’ adherence, and achieving results, ensuring the strengthening of SUS. In traditional normative planning, the guiding hypothesis is that the manager and the management team design and reach an agreement, and the rest of those involved in the health system perform. Therefore, the way to plan and execute actions is ineffective\(^\text{13}\).

In the scenario of SUS, it is considered that the manager will show greater effectiveness if he succeeds in instigating and reaching all individuals incorporated in the health care production network. Managing SUS also requires the skill of working collectively, even with obstacles and controversies. Thus, the identification of conflicts and disagreements, their management and the construction of understandings that allow progress in management are essential\(^\text{14}\). Involving ethical, political, strategic, technical and administrative dimensions, health management therefore requires the intermediation of different interests (managers, professionals and population), power interactions and boundaries of autonomy, triggered by decisions and validated in technological combinations, methods, techniques, instruments and intermediate activities in institutionalized systems of action\(^\text{15}\).

The central principle of health management is decision-making, which triggers the process of mediation and implementation of policies. Health service managers spend most of their time analyzing circumstances and making decisions. The decision-making process involves aspects such as motivations, interests, rationalities, intuition, knowledge, cognitive abilities, skills, strategic quality, investment and resource control (time, information, technologies, financing). Finally, characteristics of the profile of managers and not only of systems or services themselves\(^\text{16}\).

Therefore, adopting a decision-making model, decreases the chance of choosing biased and ineffective solutions. Thus, deciding to take on the challenge of implementing a new health care model in a territory requires understanding the factors involved in the decision-making process. These assist in the promotion of activities related to planning, communication, conflict management, negotiation, leadership that are intrinsic to the managerial dimension, as well as the principles of Management that support and direct managerial practice\(^\text{15}\).

In the reorganization of health servicesperspective, the need for managers with leadership skills appears. Leadership has a direct impact on promoting continuous improvement in services. To develop it, it is necessary to combine personal characteristics with the development of skills related to the organizational dimension, especially concerning communication and human interaction, supporting the relationship of trust between all professionals who participate in the multidisciplinary health team, sharing organizational values, beliefs, and cultures. In this perspective, effective leadership in health services can contribute to the reorganization of health care and work, allowing the creation of an environment focused on improving service to the system user and a motivating climate for health professionals\(^\text{17}\).

**Permanent education as a strategy to implement the Care Model for Chronic Conditions**

The implementation of the Care Model for Chronic Conditions demands changes in the work process of health teams, as well as in the care flows and organization of the care network. Concerning the changes in the professionals ‘work process, it was found, through the participants’ statements, that permanent education was one of the tools used to expand the understanding of the professionals involved.

It was a really big change, because we went from a biomedical model to a multidisciplinary service. I remember the difficulty of convincing the first specialist doctor to work in this arrangement. There were many barriers, from the creation of a new profile of the professionals themselves in serving differently and working in an interdisciplinary way, breaking hierarchy barriers.
between medical and non-medical professionals, to the most technical changes [...].

[...] we started to study the guidelines that the state was proposing, even to review what we had to do differently for the population. (I6)

[...] they (nurses from the AAE) started calling the municipalities to do training. Before more municipalities enter here (model), they called the municipalities, met, train, they talk, right? (I1)

[...] there were also moments of training for professionals in the municipalities on the guidelines, instruments for stratification and implementation of flows. (I3)

The permanent education strategy supported the instrumentalization of the professionals involved in the process to understand the new model, as well as their attributions regarding the new health actions. Care lines were sought for greater effectiveness, the integration of different teams, permanent education procedures to improve the qualification of professionals and reinforce coordination, attributions and results agreed between those involved (I8).

The Educação Permanente em Saúde (EPS) (Permanent Health Education) is designed as a proposal for learning at work, so that “learning” and “teaching” are included in the daily life of organizations. EPS is based on a meaningful learning methodology and the possibility of changing professional practices, through triggering themes for reflection on the work process, self-management, institutional change, and transformation of service practices. The EPS is supported by the teamwork and the autonomy of the professionals to be co-responsible for the construction of individual, collective and institutional learning objects (I9).

Permanent Health Education, associated with the search for increases in routine practices, based on existing theoretical, scientific, technological and methodological resources, is incorporated in essential constructions of bonds and processes of the agents covered, implying organizational practices in the health sector or institution and in the policies in which health practices are inserted (I20).

In this way, Permanent Education contributes not only to the improvement of the training of health professionals, but also to the strengthening of SUS, as it enables, at the same time, the personal development of Health professionals and the development of institutions. Another important aspect of EPS is the link between training actions with the management of the system and services, with the work of health care and with social control (I21).

The proposal to change the health care model cannot be created alone or vertically, from top to bottom, that is, be decided by the central levels without considering local realities. Health professionals must be part of the implementation strategy, be articulated with each other, with actions being created from the problematization of local realities, involving the different segments. In this way, the professionals themselves can question themselves about their way of acting, teamwork, the quality of individual and collective attention and the organization of the system as a single network (I22).

The EPS strategy is a counter-hegemonic practice when it adopts the proposal to generate knowledge from the democratization of knowledge. For this reason, it is also considered an important tool for the management of collectives, as it presents a concept and an action that are different from the Continuing Education processes (I20).

A study on the experience of Health Care Planning in the Federal District, DF, emphasized continuing education as one of the strengths of the planning process and affirms that it expanded the field of work of professionals and qualified actions at both levels of care, as well as consolidated the shared care with the possibility of mutual adjustment and technical support between the APS and AAE teams (I22).

Hospital care as a limitation for care networks

As the main challenge for the implementation of the Care Model for Chronic Conditions within the scope of the Unified Health System, based on care networks, the professionals interviewed emphasized the limitation in expanding the model for hospital care.

[...] there is primary care, there is secondary care, and they want to close the network with hospital care [...], but this, we are only talking here, because they don’t … I don’t know if it is official already. (I1)
at the hospital, for now, we have only the Paranaense mother network, which is a gateway; other than that, we did not enter. (15)

the hospitals in the regions have some that have received a lot of resources from the state government, but the offer, the management of these services is still fragmented. It does not guarantee to follow up [...]. (16)

The main confrontation evidenced in the study, in the perception of managers, is the limitation of expanding the model for hospital care, which restricts care in solving care networks at all levels.

The speeches of the managers seem to show a clear lack of understanding of the role of the hospital as an essential element of the care networks, as well as its role and adequacy of the hegemonic hospital care and management model in the RAS. A systematic review study concluded that some factors inherent to the health system define and limit the way hospitals operate in the RAS. Among them, the inadequate distribution of these services and their scale levels in the territories; a considerable number of small hospitals that, because they do not have a defined role, do not fully meet the demands of the population; the weaknesses in the organization of network services, a consequence of little communication between network points; and yet, the hegemony of the biomedical model(23).

In 2010, because of the three-party agreement involving the Ministry of Health, Conass and the Conselho Nacional de Secretarias Municipais de Saúde (Conasems) (National Council of Municipal Health Managers), Ordinance no. 4,279, of December 30th, 2010, was published, which establishes guidelines for the organization of the Redes de Atenção à Saúde (RAS) (Networks of Health Care), within the scope of SUS. In the object, the RAS is conceptualized as “organizational arrangements for health actions and services, of different technological densities, which integrated through technical, logistical and management support systems, seek to guarantee the integrity of care”(6).

From this definition, the basic components of RAS emerge, with common objectives; operate cooperatively and interdependently; constantly exchange resources; there is no hierarchy between health care points, organizing in a polyarchic way; offering comprehensive care with promotional, preventive, curative, caregiving, rehabilitation and palliative interventions; characterize APS as a care provider; offering timely care, at the right times and in the right places, offering safe and effective services, in line with the available evidence; focus on the complete cycle of care for a health condition(24). Thus, the RAS can be more effective in health production, cooperating to advance the SUS effectiveness process and improve the efficiency of the health system management in the regional space. The places of care mean the process of working in a network, in which everyone is equally important to compose resolutive care, ensuring a conception of appropriate and specific complexity for the different types of services(24).

In 2011, Law no. 7.508 was published, which presented health planning, health care and interfederative articulation, and defines the institution of health regions, with shared management within the scope of care networks, aimed at strategies for improving assistance. The Decree also defines that they must be constituted at least by primary care services; urgency and emergency; psychosocial care; specialized outpatient and hospital care; and health surveillance(25). Understanding the RAS as an organizational arrangement, it is understood that the limitation in expanding the Model of Attention to Chronic Conditions for hospital care causes the loss of follow-up and continuity of care provided to the person with a chronic condition.

The Política Nacional de Atenção Hospitalar (PNHOSP) (National Hospital Care Policy), established through Ordinance 3,390 of December 30th, 2013, establishes the guidelines for the hospital organization and defines its roles in the Health Care Network. This policy resulted from the need to reorganize and qualify hospital care within the scope of SUS, and offers hospital accessibility, user embracement, matrix support, clinical audit, risk classification, expanded clinic, therapeutic guidelines and projects, adequate bed management to the need and priority of hospitalization, as well as management of hospital units and efficient management of municipal, state and federal health managers(26).
It is considered that the approach of the complexity of the hospital insertion in the RAS of the regional systems would allow advancing in the rupture of critical points of the health system, such as the overcrowding of the hospital emergency services, the waiting for receiving care, the crisis of access to medium complexity and the discontinuity of care between its specialized and primary care levels. The insertion of hospitals in the RAS would also allow planning centered on social needs in the health of a present and prospective character, projecting the current and future needs in the complex and integrated constitution, considering effective care results for users(27).

Thus, to accomplish the concepts of the integrality of health services in the care of chronic diseases, it very important that the actions of promotion, prevention, assistance and rehabilitation are offered in an articulated way, such as the reference and counter-referral system, crucial to keep up with the health care network proposes(28).

**FINAL CONSIDERATIONS**

This study, which aimed to understand, from the perspective of managers, the challenges of implementing MACC in the context of RAS, shows that, for the implementation of a new model of care, teamwork and encouragement from local managers is required, in a way that can offer technical, financial, and human resources support to promote the activities to be carried out.

It is also understood the need for permanent health education and awareness of the professionals involved in all stages of the process, so that they can understand their role and contribute in the best possible way for the model to work according to its proposal. It is understood that the team must be aligned, seeking a common goal.

It is observed that hospital care is still an obstacle to be overcome in the implementation of RAS for the care of chronic diseases, to guarantee continuity of care and health care at the most complex levels.

This study has limitations because it is a local experience, with peculiar characteristics. However, the study contributes to health management when it points out challenges and possibilities for advances in the implementation of new models of health care. The results evidenced in this study support the reflection of managers for planning actions that can overcome adversity and work as a tool for making future decisions.
proceso de utilización del Modelo de Atención las Condiciones Crónicas. Las entrevistas fueron realizadas en el lugar de trabajo del entrevistado, grabadas, transcritas y validadas por los participantes. La recolección de datos ocurrió en agosto de 2018. El análisis de datos fue conducido por medio de análisis de contenido. Resultados: el análisis evidenció las siguientes categorías de análisis: la relevancia del comando de los gestores municipales y estatales en el proceso de utilización del modelo; educación permanente como estrategia para la utilización del Modelo de Atención a las Condiciones Crónicas; y la atención hospitalaria como limitación para las redes de atención. Consideraciones finales: la utilización del Modelo de Atención las Condiciones Crónicas demanda apoyo financiero y político de los gestores municipales y estatales, y exige un equipo multidisciplinario capacitado motivado para involucrarse en el proceso de cambios. La regional de salud no consiguió cumplir el Modelo de Atención a las Condiciones Crónicas en el ámbito hospitalario.


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