ORIGINAL ARTICLE

Transition of care for patients with Covid-19 from the hospital to other points in the care network: contributions from clinic management

Leonardo Pedro dos Santos Alves[1], Vanessa Alves Mendes[1], Jordany Lopes Viegas Pulcherio[1], Caroline Cechinel-Peiter[2], Gímerson Erick Ferreira[1], Mara Regina Rosa Ribeiro[1]

ABSTRACT

Introduction: The transition of care from hospital care to other points in the health care network constitutes a challenge to contemporary health management, as, depending on how it occurs, it can influence the patient's experience, as well as quality, safety and effectiveness of care. From the point of view of clinic management, a model that is guided by scientific evidence and consists of micromanagement technologies that aim for quality health care, this transition must be centered on the persons using the services and their health demands, aiming for better results and comprehensive care. However, in pandemic contexts, the transition of care can be compromised, and it is important and necessary to recognize this, in order to propose clinical management mechanisms that enhance an effective transition. **Objective:** to evaluate the transition of care for post-Covid-19 patients, from the hospital to other points in the health care network, in light of clinic management. **Methods**: This is a cross-sectional study with 29 patients, approached after discharge from a federal public hospital in the Brazilian center-west. An instrument was used for sociodemographic characterization, another containing information on hospitalization and clinical status, as well as to assess the quality and experience of patients in the care transition, the Care Transitions Measure (CTM-15) instrument was completed. **Results:** The transition of patient care, from hospital services to other points in the care network, was satisfactory in the investigated context, with an average score of 74.7. Among the factors evaluated, the one related to preparation for discharge had the highest score while the one related to the care plan had the lowest. There was a significant association between the CTM-15 factors and age, income and days spent in the ICU. **Conclusion:** From the perspective of clinical management, effective transition is achieved through the formulation and development of strategies and processes that allow satisfactory responses to the different demands related to transitional care, which is equivalent to implementing structural and procedural solutions for coordination, continuity of care and assistance integration, centered on the individual and their family, throughout the care continuum. The study points to the need and importance of involvement between the different actors involved in the production of care, in the construction of care plans that consider knowledge and potential to ensure the continuity and effectiveness of care.

Keywords: Transitional care, Patient-centered care, Patient discharge, Continuity of patient care, Covid-19.

INTRODUCTION

The transition of care from the hospital to other points in the health care network (HCN) is a contemporary strategic management challenge due to the fact that, when is flawed, it manifests itself in communication failures, users' long journeys

[1]Universidade Federal de Mato Grosso, Faculdade de Enfermagem, Cuiabá, (MT), Brasil.

[2]Universidade Federal de Santa Catarina, Departamento de Enfermagem, Florianópolis, (SC), Brasil

https://doi.org/10.11606/issn.2176-7262.rmrp.2024.215924

throughout the HCN, perception of lack of continuity of care, among other situations that negatively interfere with the patient's experience and compromise the quality, safety and effectiveness of care[1].

From the clinical management point of view, a model guided by scientific evidence and micro-management technologies aimed at quality health care, these transitions should be centered on the persons using the services and their health demands, aiming for better results and comprehensive care[1]. Transitional care refers to actions designed to ensure the coordination and continuity of care for people transferring across different services or levels of complexity in the HCN[2]. It is a broad and complex process that involves patients and their families, multi-professional staff and managers, at the different levels of health care and care devices, so that the articulation of services in the HCN is promoted effectively[3].

Within the context of the pandemic, the transition of care can be even more challenging, and it is important and necessary to recognize this, in order to propose clinical management mechanisms that enhance the transfer of information and responsibilities effectively. Studies have reported that patients with COVID-19 were hospitalized for between 10 and 33 days, depending on the severity of the infection and the history of comorbidities[4,5]. Staying in hospital for this length of time makes transitional care essential to ensure a successful move from hospital to other HCN services, playing a key role in preventing adverse events from the disease, reducing inflammation and improving lung function[6]. In general, patients infected with the severe form of COVID-19 showed signs and symptoms of viral pneumonia, which could culminate in Acute Respiratory Distress Syndrome (ARDS), acute heart failure, acute kidney injury, infection, sepsis or shock[7], as well as various sequelae that require continuity of care after hospital discharge.

In this sense, process management in favor of transitional care has been shown to improve the quality of health care, as it presupposes the articulation of mechanisms for coordination, continuity and integration of care at the various points of the HCN. To this end, it is essential for the multi-professional team to provide the family with tools for the transition of care, from the hospital to the other services in the HCN, according to the patient's health needs[8], and it is necessary to establish articulated processes and cooperation between the actors, management mechanisms and points of care involved.

The literature shows how patients recovering from COVID-19 feel better prepared to leave hospital when they are discharged using clear protocols, adequate information resources and efficient communication strategies from the healthcare team[9]. When health services have implemented a well-established transition of care, there is a guarantee of protocols for symptom management to provide psychosocial care and communication with patients[6]. In this way, care transition strategies are propelling the qualification of care provided to patients in the process of dehospitalization[10], by promoting a complete cycle of care and providing better alternatives in relation to the health needs of people and society, which implies continuity of care and comprehensive care[1].

Although hospital discharge and transition of care are interlinked processes, this initiative is still very weak in Brazilian health institutions[10] . A recent study carried

out in the southeastern region of the country highlighted the existence of strong obstacles to ensuring discharge planning with a view to continuity of care, highlighting the lack of coordination of care, manifested by fragmentation between the different services and levels of care in the HCN, barriers in the flow of communication, polarization in hospital care and fragility in the coordination of care[11]. In itself, the transition of care between hospital care and the other points of the HCN is recognized as a context of risk for patient safety, since failure to carry out or even failures in the transition processes can increase morbidity and mortality, increase the risk of adverse events, delay treatment and recovery time, generate readmissions and emotional damage for patients and families, among other aggravating factors[12].

Although several studies consider the importance of evaluating transitional care[2,3,8-11], from the hospital to the various points of the HCN, there is an urgent need for greater investment in research that allows for changes in the formulation and development of strategies for the transition of care. This is because the management of articulated processes with a view to the continuity of patient care after hospital discharge has not yet been fully consolidated, which indicates the need for studies on this issue. Furthermore, it is believed that the patient's assessment of their experience in this process of transition from hospital to other points in the HCN has social and strategic relevance, as it provides opportunities for improvements in the quality of care and supports decision-making.

In view of the above, and considering the social and scientific need for concrete studies on the problem in question, we pose the following question: how do patients recovering from Covid-19 evaluate the transition of their care after discharge from hospital to home and other points in the HCN? Against this backdrop, the aim of this study was to evaluate the transition of care for patients recovering from COVID-19, from the hospital to other points in the healthcare network, under the perspective of clinical management of clinical management.

METHODS

This is a quantitative cross-sectional study, following the guidelines *Strengthening the reporting of observational studies in epidemiology* (STROBE)[13]. The study was carried out in a medium-sized university hospital located in the central-western region of Brazil, which provides care exclusively to the Unified Health System (SUS). During the COVID-19 pandemic, it became a reference for the care of severe cases of the disease.

The study population consisted of patients recovered from COVID-19 who were discharged from hospital during the data collection period, from April to December 2021, and who met the following eligibility criteria: fluency in Portuguese; having been hospitalized in a COVID-19 care unit at the hospital under investigation for at least 72 hours; having been discharged from hospital for more than seven days and less than 30 days. The exclusion criteria were: patients under the age of 18 and those who did not respond to three attempts to contact them by telephone.

To define the sample, the number of hospital beds was calculated using the Winpepi program, version 11.65. A margin of error of 4 points, a standard deviation

of 17.1 and a 95% confidence level were considered[14] . A minimum sample of 26 patients was therefore estimated. The sample consisted of 29 patients recovered from Covid-19 after being discharged from hospital to their homes, under the responsibility of primary health care services.

Data collection took place via telephone contact, as a measure to mitigate the risks of the COVID-19 pandemic, during the aforementioned timeframe, and was conducted by duly trained researchers. Patients were approached randomly, based on the availability of the service's monthly discharge list, which contained general patient information and contact telephone numbers. Individualized contact with eligible patients took place in the researchers' hospital environment, where they were invited to take part in the research by means of a brief presentation of the project, general explanations about the research and reading of the Informed Consent Form so that they could verbally express their consent to take part in the research. At the time of the telephone calls, the patients were assured of their anonymity in the dissemination of the results, and duly informed about the collection procedures adopted and the possible risks and benefits of their participation.

Once they had given their consent, the researchers filled in the sociodemographic characterization questionnaire to collect variables relating to them: gender, age group, schooling, race and municipality of residence. Next, they completed the questionnaire on hospitalization and the patient's clinical condition, in which data was collected on the patients' clinical status: days of hospitalization (general or ICU); use of invasive mechanical ventilation; smoking history; comorbidities; signs and symptoms of Covid-19. Finally, in order to assess the quality and experience of patients in the transition of care, it was filled the *Care Transitions Measure* (CTM-15) instrument, Brazilian version[15].

The instrument was developed in the United States, based on focus groups with patients and their caregivers, to assess the quality and experience of the transition of care in aspects related to the transfer of information, preparation of patients and caregivers, support for self-management and ensuring the preferences of patients and caregivers in the care plan. The Brazilian version was validated in 2016, showing semantic equivalence with the original, good applicability and easy understanding, as well as satisfactory face and content validation, internal consistency and temporal stability[15].

It is a Likert-type scale of agreement, with a score of 1 to 5, according to the patient's perception of their experience of continuity of care in the process of transfer between different services, where the score "1" refers to strongly disagree, "2" disagree, "3" agree, "4" strongly agree and "5" don't know/don't remember/doesn't apply. While encompassing 15 items, the CTM-15 is structured into four factors: 1) preparation for self-management; 2) understanding of medications; 3) preferences ensured; and, 4) care plan. The scale generates a score, which does not have a specific point at which it is possible to classify care as good or bad; however, low scores indicate a lower quality transition and high scores indicate a better transition[15].

The data collected was double-checked in Microsoft Office Excel® spreadsheets for subsequent processing using the *Statistical Package for the Social Science*

(SPSS). The data was analyzed using descriptive and inferential statistics, using the Mann-Whitney, Kruskal-Wallis and Spearman correlation tests. A significance level of 95% ($p<0.05$) was considered.

The ethical and legal precepts governing research with human beings were respected, including Resolutions 466/2012, 510/2016 and 580/2018 of the Ministry of Health. The multicentre project from which this study comes, entitled "Evaluation of nursing care for patients with COVID-19 in Brazilian university hospitals", was approved in a public call (nº 005/2020 - nº07/2020) for research to tackle COVID-19, its consequences and other severe acute respiratory syndromes (Process nº: 402392/2020-5), as well as by the Research Ethics Committee (CEP) of the Federal University of Santa Catarina under CAAE nº 4023392/2020-5, and in a local CEP, according to institutionalized ethical opinion nº 4. 466.821.

RESULTS

Across the overall sample (n=29), there was a predominance of female patients (79.3%), with an average age of 39.9 years (±15.8), brown (72.4%), with completed high school (44.9%), an average *per capita* income of 0.6 minimum wages (±0.9), from both the metropolitan region (55.2%) and the interior of the state (44.8%) (Table 1).

Table 1 - Descriptive statistics of the categorical variables of patients affected by COVID-19. Cuiabá, MT, Brazil, 2021.

Categorical variables	**n**	**%**
Sex		
Women	23	79.3
Men	6	20.7
Age range	**n**	**%**
21 ┤ 29 years	9	31.0
30 ┤ 59 years	16	55.2
≥ 60 years	4	13.8
Age average (±SD)	39.9 years (±15.8)	
Education		
Elementary incomplete	7	24.1
Elementary complete	3	10.3
High school	13	44.9
Higher education	6	20.7
Race (self-referred)		
Brown	21	72.4
Black	2	6.9
White	4	13.8
Other	2	6.9

Domicile (municipality)		
Metropolitan region	16	55.2
Interior	13	44.8

Source: research data, 2021.

It was also found that these patients had been in hospital for an average of 32 days (±33.0), with an average of 13 days in the ICU (±18.9). With regard to the health status of these patients, most of them reported having used invasive mechanical ventilation (48.3%) and denied a history of smoking (89.7%). The most common comorbidity was systemic arterial hypertension (24.1%), and the most common symptoms were shortness of breath (79.3%), fever (75.9%), fatigue (65.5%), body pain (69%) and cough (65.5%) (Table 2).

Table 2 - Patients' health status, according to survey criteria. Cuiabá, MT, Brazil, 2021.

Days of hospitalization	**Mean**	**SD**
General	32.6	33.0
ICU	13.1	18.9
Use of invasive mechanical ventilation	**n**	**%**
No	15	51.7
Yes	14	48.3
Smoking history	**n**	**%**
No	26	89.7
Yes	2	6.9
Comorbidities	**n**	**%**
High blood pressure	7	24.1
Diabetes	5	17.2
COPD	3	10.3
Obesity	4	13.8
CVD	2	6.9
Cancer	1	3.4
Signs and symptoms	**n**	**%**
Shortness of breath	23	79.3
Fever	22	75.9
Body pain	20	69.0
Fatigue	19	65.5

Cough	19	65.5
Headache	16	55.2
Nausea and vomits	14	4.3
Diarrhea	14	48.3
Loss of sense of smell and taste	12	41.4

Source: research data, 2021.

Table 3 shows the average total score of the instrument, by factors of the CTM-15, whose average score was 74.7 (±12.4), with the factor with the highest score being preparation for discharge (76.2) (±11.77), and the factor with the lowest score being the written care plan (71.3) (±12.52).

Table 3 - Distribution of the mean and standard deviation (±SD) of the CTM-15 instrument, by factors. Cuiabá, MT, Brazil, 2021.

Scores by factor	**Mean**	**(±SD)**
Factor 1 - Preparation for discharge	76.2	(±11.77)
Factor 2 - Use of medication	74.3	(±12.35)
Factor 3 - Period in hospital	75.8	(±21.20)
Factor 4 - Care plan	71.3	(±12.52)
Total transition	**74.7**	**(±12.4)**

Source: research data, 2021.

In the evaluation of the CTM-15 by item (Table 4), items 4 and 5, which assess guidance and information for self-care, obtained the highest scores, respectively. Items 12 and 15, which respectively assess whether the team provided the patient with a list of appointments and tests that should be carried out later to monitor the condition, and the patient's orientation in relation to the possible side effects of their medication, obtained the lowest scores.

Table 4 - Distribution of means and standard deviation (±SD) by CTM-15 item. Cuiabá, MT, Brazil, 2021.

	Factor	CTM-15	Mean	SD
1	3	Before I left hospital, the healthcare team and I agreed on goals for my health and how they would be achieved.	75.9	(±11.4)
2	3	The hospital staff considered my preferences and those of my family or caregiver to decide what my health needs would be after I left the hospital	76.2	(±21.2)
3	3	The hospital staff considered my preferences and those of my family or caregiver in deciding where my health needs would be met after I left the hospital	75.3	(±24.5)
4	1	When I left the hospital, I had all the information I needed so that I could look after myself	79.3	(±12.3)
5	1	When I left the hospital, I clearly understood how to take care of my health	78.2	(±12.1)
6	1	When I left the hospital, I clearly understood the warning signs and symptoms I should watch out for to monitor my health condition	77.0	(±11.8)
7	4	When I left the hospital, I received a written, legible and easy-to-understand plan outlining how all my health needs would be met	74.7	(±10.9)
8	1	When I left the hospital, I had a good understanding of my health condition and what could make it better or worse	75.9	(±11.4)
9	1	When I left the hospital, I really understood what my responsibility was to take care of my health	75.0	(±18.6)
10	1	Quando eu saí do hospital, eu me senti seguro de que eu sabia o que fazer para cuidar da minha saúde	75.9	(±11.4)
11	1	When I left the hospital, I felt confident that I would be able to do the things I needed to do to look after my health	72.4	(±11.7)
12	4	When I left the hospital, I was given a written, legible and easy-to-understand list of the appointments or tests I needed to attend within the next few weeks	67.8	(±14.1)
13	2	When I left hospital, I clearly understood the reason for taking each of the drugs	75.9	(±11.4)
14	2	When I left the hospital, I clearly understood how to take each of my medications, including the quantity and schedule	79.3	(±12.3)
15	2	When I left the hospital, I clearly understood the possible side effects of each of my medications	67.8	(±15.6)

Source: research data, 2021.

In the inferential analysis, there was an association between factors 2, 3 and 4 with age, 1 and 4 with *per capita* income and 1 and 2 with days in the ICU. Of the total, there was a significant association between age and days in ICU with the CTM-15 factors (Table 5).

Table 5 - Association between age, per capita income, hospitalization days and CTM-15 factors. Cuiabá, MT, Brazil, 2021.

Variables	Factor 1 rs * (P)+	Factor 2 rs * (P)+	Factor 3 rs * (P)+	Factor 4 rs * (P)+	Total rs * (P)+
Age	0.435 (0.010)	**0.465 (0.006)**	**0.362 (0.032)**	**0.441 (0.009)**	**0.464 (0.006)**
Per capita income	**0.354 (0.032)**	0.127 (0.260)	0.227 (0.127)	**0.386 (0.021)**	0.299 (0.061)
Days of hospitalization	0.136 (0.246)	0.210 (0.142)	0.043 (0.416)	0.093 (0.319)	0.146 (0.230)
Days of hospitalization in ICU	**0.377 (0.024)**	**0.387 (0.021)**	0.159 (0.214)	0.155 (0.215)	**0.364 (0.028)**

Source: research data, 2021.
*r= Spearman correlation coefficient; +p-value = significance level.

DISCUSSION

The results of the study allowed to assess the quality of the transition of care from the hospital to other points of the HCN, seen from the perspective of people recovered by COVID-19, in a university hospital in the central-western region of Brazil. The average CTM-15 score was 74.7 (±1.98). Although there is no record in the literature of a pre-defined cut-off point for the instrument, recent studies carried out in Brazil, in emergency services[16] and clinical hospitalization[17.18], considered averages similar to this as a satisfactory result, indicating moderate quality for the transition of care[16.18].

However, no item had an average score equal to or greater than 80%, as has already been highlighted in other investigations[18], which reflects the need to boost investments in actions to employ better quality standards with regard to transition processes. For clinical management, the standardization of work processes based on evidence-based clinical guidelines are mechanisms for coordinating care that allow management through programming systems based on results indicators[1], making it possible to implement quality referrals and transitions. Transitions have become more challenging during the COVID-19 pandemic[19]. This perception may be related to the fact that COVID-19 patients, in general, were more vulnerable in their health condition, with a high risk of clinical deterioration. A Chinese study showed that patients affected by the infection who received transitional care on discharge from hospital to home showed a significant improvement in the typical symptoms of the disease, such as anxiety, depression and improved lung function[6].

Thus, it is presumed that moments of transition generate insecurity for people, especially with regard to a real understanding of clinical actions and the trajectory at the various points of care in continuity of care. These conjectures reaffirm the importance of investing in mechanisms that promote clinical management, since the model aims to empower users to be more proactive in the production of their health, presupposing collaborative and person-centered care, with emotional support and relief from fear and anxiety, and respecting their values, preferences and needs in access, transition and continuity of care[1].

A set of factors are highlighted in the literature as facilitating or inhibiting the transition of care for elderly patients from hospital to home, as underlined in a recent meta-synthesis, which identified that respecting the patient's independence and decision-making power in care; maintaining bonds of involvement in family care, as well as uninterrupted care can facilitate the transition of care for elderly patients from hospital to home[6]. Furthermore, the benefits of ensuring the transition of care on discharge from hospital for adult patients refers to a reduction in hospital admissions, mortality, hospital costs and an improvement in quality of life and patient satisfaction[11].

Considering the identified benefits, it is postulated that the adoption of a professional case manager, as proposed by clinic management through one of its micro-management technologies, would be a driver for undertaking quality transition processes. For clinical management, the incorporation of case management technology translates into a cooperative process that develops between a case manager and a person with a certain health condition and their support network, in order to plan, monitor and evaluate care options and coordination of care, according to the person's needs, aiming for quality and humanized care1 .

When evaluating the factors of the CTM-15, it was observed that factor 1, which concerns preparation for discharge, had the highest score, demonstrating quality in the transition of care in this area, which corroborates other studies already described in the literature[16.18.20]. This is a finding, linked to the result presented above, which deserves to be analyzed critically by managers and decision-makers, as it attests to the fact that strategies such as discharge planning, safe discharge, nurse liaison and home care are fundamental to facilitating the transition of care[3], as they are able to prepare the patient and their family[2]. That said, and taking into account the existing communication barriers between the various points of the HCN, and consequent weaknesses in accountability for the transition of care, it would be strategic to have liaison professionals between these points of care, intensifying communication between services, and providing clear information necessary for greater understanding, autonomy and safety in self-care from the time of preparation for discharge.

Following the proposal of case management, during a hospital discharge, the case manager would be responsible for monitoring the person's stability and needs, providing guidance on the care to be provided after discharge, preparing the contact details of the referring professionals and checking the conditions of transportation, reception and accommodation of the person at home[1]. In this respect, factor 2, which assessed understanding of the use of medication, had the second highest average score in the CTM-15 factor assessment.

However, in the evaluation by items of the instrument, the lowest score was for item 15, which refers to this factor, indicating that patients understand the reason for taking each medication and its dosage, but are unaware of the medication's side effects. Good communication is an essential action to mitigate the chances of serious medication errors in the transition of care, which makes it one of the priority actions in this context, as already highlighted in the World Health Organization's 3rd Global Patient Safety Challenge, which addresses Medication without Harm[21]. These findings point to possible needs for improvement,

especially in the communication skills of health professionals, with the aim of empowering people under care and increasing adherence to treatment.

Consequently, it is important that when assessing the patient's needs in transitional care, in addition to providing information about daily care, medication and signs and symptoms of possible complications, linking access to the different equipment in the network, and promoting user-centered, comprehensive and continuous care[3], it is ensured that the patient has a real understanding of their health condition and the plan of interventions necessary for continuity of care. Health literacy is the ability to obtain, develop, process and understand basic information that allows users to make decisions and make full use of services for the benefit of their health[1].

It is worth noting that in this study, factor 4, care plan, had the lowest mean CTM-15 score in the evaluation by factors and by item, with item 12 standing out, which assesses whether the patient received the appropriate referrals for follow-up appointments and tests after discharge from hospital[20]. This does not mean that this study indicates that the care plan for discharge in the reality investigated is inadequate, not least because the empirical results of the research do not support such a statement; rather, it points to the importance of it being constantly monitored to check that its objectives and goals are being met, determining the need for adjustments to the interventions. In addition, these difficulties were also highlighted in a study carried out in the southern region of Brazil in the emergency service[16], which highlights the similarity of these problems in different types of services and regions, and reinforces the potential of case management, whose ultimate goal is the quality of health care and the efficient use of resources, providing people with maximum autonomy and independence[1].

Against this backdrop, it is believed that sharing care plans in hospital transition processes is strategic for hospital care management, as it presupposes the adoption of preventive and monitoring measures, which reduces the number of unnecessary hospitalizations and adverse events. In this study, COVID-19 was predominantly found in men over the age of 60, a finding that corroborates international literature which has discussed the more severe outcomes of the disease in men and the elderly[22]. In addition, in the study, systemic arterial hypertension and diabetes were the most prevalent comorbidities, conditions that increase the risk of the patient developing the most severe form of the disease and having greater complications[23].

Similar data has been identified in the national literature, in studies of the quality of care transitions in various age groups, such as adults with a CTM of 69.5[16], 90.1 (± 19.5) in children[19], and 68.6 in the elderly[20]. It can be assumed that, regardless of age group, there is a need for professionals from different points of care to get to know each other, get to know people's needs and work together through a shared care plan.

With regard to hospitalization days, this study found that these were higher than in other regions of the country[5,24], but there was no significant relationship between quality in the transition of care and hospitalization days. In any case, it is essential to reduce the length of stay in healthcare facilities without compromising quality, and it is essential to recognize the appropriate mechanisms for this reduction.

Discussions about the patient's experience in the process of transition from hospital care to other points in the HCN have become increasingly relevant to the management of health services and, with this, the need for related strategies to be thought out, formulated and implemented in everyday practice. However, integration between services at the different levels of healthcare in the HCN presents challenges, such as fragile communication between services and centralization of actions in the hospital[11,25], which can hinder strategies related to the transition of care to ensure coordination and continuity of care in PHC.

Specifically, patients' experiences of recovering from COVID-19 after being discharged from hospital to their homes have been reported in the literature, highlighting that better verbal communication and even patient education by the team is more necessary than written information or packages provided[9]. Using the clinical management approach, coordination of care is essential and it is necessary to break away from fragmented models so that mechanisms can be produced to ensure effective communication between the different points of health care[1]. It is therefore up to health management to formulate and implement strategies so that fluid communication occurs between the different production units of the HCN, through powerful regulatory solutions aimed at quality, effectiveness, efficiency and equity of care.

Seen from this perspective, care coordination is beneficial, especially in the process of de-hospitalization, in which patients and their families must be prepared for clinical substitution, making the transition from professional care to supported self-care. To this end, PHC must be a strong ally in ensuring a successful and quality transition of care, as it can offer face-to-face consultations and home visits, which can have an impact on reducing readmissions, increasing adherence to treatment and strengthening the bonds between the PHC team and patients, caregivers and family members[25,26]. It is therefore essential that efficient coordination is present in hospital care, and that in-hospital and out-of-hospital transitions are properly coordinated, as this breaks down barriers to access and inappropriate use of other HCN services, reduces waiting lines, duplicate complementary tests, unnecessary referrals, hospital readmissions, average length of stay, etc.; enhancing communication between the various points of care and allowing users of health services to feel a sense of continuity of care and satisfaction in relation to the transition of their care[1].

The results of this study on the transition of care, interpreted in the light of the framework adopted, allow us to postulate that processes guided by the dictates of clinical management can favor strategic processes that contribute to guaranteeing adequate flows and transitions, through the use of micro-management technologies that promote quality among the points of care of the HCN. That said, the transformative nature of its implementation can help ensure the solidity of transitional care, allowing for its continuity and boosting operationalization mediated by the principles and technologies of clinical management.

The limitations of this study are: the difficulty in contacting patients by telephone, the fact that many calls were not answered, or even the participants' fear of passing on information by telephone, even with the prior presentation and identification of the researchers, which restricted the sample. In view of this, investigations using

other research techniques, or even qualitative approaches or mixed-methods research, are suggested in order to gain a deeper understanding of the transition of care from hospital care to other parts of the health care network, so that the patient's experience in this process of transition of care in these services can be better revealed.

CONCLUSION

It can be concluded that the patient's transition of care from hospital services to other points in the care network is satisfactory in the investigated context, considering the average score of 74.7 on the CTM-15. From the perspective of clinical management, effective transition is achieved by formulating and developing strategies and processes that enable satisfactory responses to the different demands related to transitional care, which means implementing structural and procedural solutions for coordination, continuity of care and integration of care, centered on the individual and their family, throughout the entire continuum of care.

Therefore, in order to promote and enhance effective strategies in transitional care, the implementation of proactive and permanent actions related to the care plan, an aspect that scored lowest in this study, tends to be one of the main strategies, and should be carried out in an interdisciplinary manner, between professionals, users and their families, and with solutions to support the transition based on the joint transfer of responsibilities and information necessary for the continuity of care, and ensuring that these have, in fact, been understood. On the other hand, the findings show that patients are somewhat prepared for de-hospitalization, which in this study was the highest quality factor. This implies preserving and enhancing promising strategies in order to stimulate the implementation of transitional care aimed at quality, efficiency, effectiveness and equity in care practices.

In any case, the results of this study can support important reflections and discussions on the subject, for subsequent decision-making among hospital care managers and professionals, in order to identify aspects that need to be improved with a view to coordinating care at the different points of care in the HCN, and considering the real needs of users. They also allow for a rethink of communication practices and co-responsibility between managers, professionals and users, so that they can act together in the care transition process.

REFERENCES

1. Mendes EV. Desafios do SUS. Brasília, DF. CONASS, 2019.

2. Bernardino E, Sousa SM de, Nascimento JD do, Lacerda MR, Torres DG, Gonçalves LS. Cuidados de transição: análise do conceito na gestão da alta hospitalar. Esc Anna Nery. 1º de novembro de 2021;26:e20200435. DOI: https://doi.org/10.1590/2177-9465-EAN-2020-0435

3. Belga SMMF, Jorge A de O, Silva KL. Continuidade do cuidado a partir do hospital: interdisciplinaridade e dispositivos para integralidade na rede de atenção à saúde. Saúde debate. 17 de junho de 2022;46:551–70. DOI: https://doi.org/10.1590/0103-1104202213321

4. Pontes L, Danski MTR, Piubello SMN, Pereira J de FG, Jantsch LB, Costa LB, et al. Perfil clínico e fatores associados ao óbito de pacientes COVID-19 nos primeiros meses da pandemia. Esc Anna Nery. 15 de outubro de 2021;26:e20210203. Doi: https://doi.org/10.1590/2177-9465-EAN-2021-0203

5. Rebouças ERN, Costa RF da, Miranda LR, Campos NG. Perfil demográfico e clínico de pacientes com diagnóstico de COVID-19 em um hospital público de referência na cidade de Fortaleza-Ceará. Journal of Health & Biological Sciences.

10 de novembro de 2020;8(1):1–5. Doi: https://doi.org/10.34117/bjdv8n12-265

6. Sun M, Liu L, Wang J, Zhuansun M, Xu T, Qian Y, et al. Facilitators and inhibitors in hospital-to-home transitional care for elderly patients with chronic diseases: A meta-synthesis of qualitative studies. Front Public Health. 13 de fevereiro de 2023;11:1047723. Doi: https://doi.org/10.3389/fpubh.2023.1047723

7. Tsai PH, Lai WY, Lin YY, Luo YH, Lin YT, Chen HK, et al. Clinical manifestation and disease progression in COVID-19 infection. J Chin Med Assoc. 1º de janeiro de 2021;84(1):3–8. DOI: https://doi.org/10.1097/jcma.0000000000000463

8. Kuntz SR, Gerhardt LM, Ferreira AM, Santos MT dos, Ludwig MCF, Wegner W. Primeira transição do cuidado hospitalar para domiciliar da criança com câncer: orientações da equipe multiprofissional. Esc Anna Nery. 29 de janeiro de 2021;25:e20200239. Doi: https://doi.org/10.1590/2177-9465-EAN-2020-0239

9. Ganton J, Hubbard A, Kovacs Burns K. Patients with COVID□19 share their experiences of recovering at home following hospital care transitions and discharge preparation. Health Expect. dezembro de 2022;25(6):2862–75. Doi: https://doi.org/10.1111%2Fhex.13595

10. Gheno J, Weis AH. Transição do cuidado na alta hospitalar de pacientes adultos: revisão integrativa de literatura. Texto contexto - enferm. 3 de setembro de 2021;30:e20210030. Doi: https://doi.org/10.1590/1980-265X-TCE-2021-0030

11. Mauro AD, Cucolo DF, Perroca MG. Hospital – primary care articulation in care transition: both sides of the process. Rev esc enferm USP. 2021;55:e20210145. Doi: https://doi.org/10.1590/1980-220X-REEUSP-2021-0145

12. WHO. World Health Organization. Transitions of care. Technical Series on Safer Primary Care. Geneva, 2016. Available at: https://apps.who.int/iris/handle/10665/252272

13. Vandenbroucke JP, von Elm EB, Altman DG, Gøtzsche PC, Mulrow CD, Pocock SJ, et al. Strengthening the Reporting of Observational Studies in Epidemiology (STROBE): Explanation and elaboration. International journal of surgery. 18 de julho de 2014;12(12):1500–24. Doi: https://doi.org/10.1016/j.ijsu.2014.07.014

14. Agranonik M, Hirakata VN. Cálculo de tamanho de amostra: proporções. Clinical and Biomedical Research. 03 de novembro de 2011;31(3):382-388. Doi: https://seer.ufrgs.br/index.php/hcpa/article/view/23574/15837

15. Acosta A m., Lima M a. d. s., Marques G q., Levandovski P f., Weber L a. f. Brazilian version of the Care Transitions Measure: translation and validation. International Nursing Review. 2017;64(3):379–87. DOI: https://doi.org/10.1111/inr.12326

16. Acosta AM, Lima MADDS, Pinto IC, Weber LAF. Care transition of patients with chronic diseases from the discharge of the emergency service to their homes. Rev Gaúcha Enferm. 2020;41(spe):e20190155. DOI: https://doi.org/10.1590/1983-1447.2020.20190155.

17. Weber LAF, Lima MADS, Acosta AM. Quality of care transition and its association with hospital readmission. Aquichan. 30 de janeiro de 2020;19(4):1-11. Doi: https://doi.org/10.5294/aqui.2019.19.4.5

18. Sousa F, Arrais DJL, Riegel F, Cunha CLF, Parente AT, Aben-Athar CYUP, Ramos AMC. Cuidado transicional de pacientes pós-COVID-19: da alta hospitalar para o domicílio. 23 de maio de 2023. Doi: https://doi.org/10.1590/SciELOPreprints.4152

19. Cechinel-Peiter C, Lanzoni GM de M, de Mello ALSF, Acosta AM, Pina JC, de Andrade SR, et al. Quality of transitional care of children with chronic diseases: a cross-sectional study. Rev esc enferm USP. 8 de abril de 2022;56:e20210535. Doi: https://doi.org/10.1590/1980-220X-REEUSP-2021-0535

20. Tomazela M, Valente SH, Lima MAD da S, Bulgarelli AF, Fabriz LA, Zacharias FCM, et al. Transição do cuidado de pessoas idosas do hospital para casa. Acta paul enferm. 6 de fevereiro de 2023;36:eAPE00291. Doi: http://dx.doi.org/10.37689/acta-ape/2023AO00291

21. WHO. World Health Organization. Medication Without Harm. Geneva, 2017. Available at: https://iris.who.int/bitstream/handle/10665/255263/WHO-HIS-SDS-2017.6-eng.pdf

22. Wray S, Arrowsmith S. The Physiological Mechanisms of the Sex-Based Difference in Outcomes of COVID19 Infection. Front Physiol. 9 de fevereiro de 2021;12:627260. Doi: https://doi.org/10.3389%2Ffphys.2021.627260

23. Feitoza TMO, Chaves AM, Muniz GTS, Cruz MCC da, Junior I de FC. COMORBIDADES

E COVID-19. Revista Interfaces: Saúde, Humanas e Tecnologia. 31 de outubro de 2020;8(3):711–23. DOI: https://doi.org/10.16891/800

24. Bierhals ND, Knod EB, Weber AF, Valim AR de M, Possuelo LG, Renner JDP. Caracterização genética, clínica e epidemiológica de pacientes com Covid-19 em uma região do Sul do Brasil. Saúde e Pesquisa. 18 de novembro de 2022;15(4):1–11. Doi: https://doi.org/10.17765/2176-9206.2022v15n4.e10740

Portela MC, Grabois V, Travassos C. Proposta de matriz de linha de cuidado covid-19 na rede de atenção à saúde. Editora Fiocruz. 2022, pp. 165-184. Informação para ação na Covid-19 series. ISBN: 978-65-5708-123-5. https://doi.org/10.7476/9786557081587.0010

25. Santos MM dos, Peradotto BC, Micheletti VCD, Treviso P. Transição do cuidado da atenção terciária para a atenção primária: Revisão integrativa da literatura. Nursing. 15 de julho de 2022;25(290):8173–82. Available at: https://www.revistanursing.com.br/index.php/revistanursing/article/view/2610/3179

Contributions of each author:
LPSA- Substantial contribution to the outline of the study or the interpretation of the data; Participation in the writing of the preliminary version; Participation in the review and approval of the final version; Compliance with being responsible for the accuracy or completeness ofany part of the study.
VAM- Substantial contribution to the study design or interpretation of data
Participation in the writing of the preliminary version; Participation in the review and approval of the final version.
JLVP - Participation in the drafting of the preliminary version
CCP - Substantial contribution to the study outline or data interpretation
Participation in the review and approval of the final version.
GEF - Substantial contribution to the study outline or data interpretation
Participation in the drafting of the preliminary version; Participation in the review and approval of the final version.
MRRR - Substantial contribution to the study outline or data interpretation
Participation in the drafting of the preliminary version; Participation in the review and approval of the final version.
Sources of support or funding
National Council for Scientific and Technological Development

Corresponding author:
Vanessa Alves Mendes
vanessaa.mendes03@gmail.com

Received: sep 13, 2023
Approved: nov 07, 2023
Editor: Profa. Dra. Ada Clarice Gastaldi