Original Article
Castro L, Rodrigues FO, Morelos-García EN, Camera FM, Sangoi KCM, Kolankiewicz ACB. Challenges in the transition of hospital care for individuals with chronic diseases: a mixed-methods study.
Rev Gaúcha Enferm. 2026;47:e20250299.
https://doi.org/10.1590/1983-1447.2026.20250299.en

Challenges in the transition of hospital care for individuals with chronic diseases: a mixed-methods study

Desafios da transição do cuidado hospitalar de pessoas com doenças crônicas: estudo de métodos mistos

Desafíos en la transición del cuidado hospitalario de personas con enfermedades crónicas: estudio de métodos mixtos

Letícia Y Castro [a,b] https://orcid.org/0009-0004-9649-788X
Francini De Oliveira Rodrigues [a,b] https://orcid.org/0000-0001-7618-4203
Edgar Noé Morelos-García [a,c] https://orcid.org/0000-0002-3344-8413
Fernanda Dal Maso Camera [d] https://orcid.org/0000-0001-5325-0298
Kelly Cristina Meller Sangoi [a,e] https://orcid.org/0000-0001-5550-0086
Adriane Cristina Bernat Kolankiewicz [a] https://orcid.org/0000-0003-1793-7783

[a] Universidade Regional do Noroeste do Estado do Rio Grande do Sul (UNIJUÍ), Ijuí, RS, Brasil.
[b] Hospital de Clínicas de Ijuí – HCI. Ijuí, RS, Brasil.
[c] Universidad Autónoma de Tamaulipas, Facultad de Enfermería de Tampico, Tamaulipas, México.
[d] Universidade Regional Integrada do Alto Uruguai e das Missões (URI), Erechim, RS, Brasil.
[e] Universidade Regional Integrada do Alto Uruguai e das Missões (URI), Santo Ângelo, RS, Brasil.

How to cite this article:
Castro L, Rodrigues FO, Morelos-García EN, Camera FM, Sangoi KCM, Kolankiewicz ACB. Challenges in the transition of hospital care for individuals with chronic diseases: a mixed-methods study. Rev Gaúcha Enferm. 2026;47:e20250299.
https://doi.org/10.1590/1983-1447.2026.20250299.en

RESUMO

Objetivo: Analisar a transição do cuidado hospitalar para o domicílio sob a perspectiva de pessoas com doenças crônicas e profissionais de saúde de hospital privado.
Método: Estudo de métodos mistos, sequencial explanatório, realizado no Sul do Brasil. A etapa quantitativa incluiu 166 pessoas com doenças crônicas avaliadas após a alta hospitalar por meio do *Care Transitions Measure*. A etapa qualitativa compreendeu dois grupos focais com profissionais de saúde (n=9; n=7).
Resultados: A avaliação geral da transição do cuidado foi insatisfatória (62,62 ± 9,03). O maior escore foi observado no fator Preparo para Autogerenciamento (73,24 ± 10,24) e o menor, no Plano de Cuidados (56,12 ± 17,56). Homens apresentaram escores mais elevados no Preparo para Autogerenciamento (p=0,008), no Plano de Cuidados (p=0,005) e na avaliação geral (p<0,001). União estável associou-se a melhor avaliação do Plano de Cuidados (p=0,002), e maior escolaridade a melhores escores no Entendimento das Medicações (p=0,016) e na avaliação geral (p=0,011). A etapa qualitativa evidenciou fragilidades no planejamento da alta, na comunicação interprofissional e participação de pacientes e familiares.
Conclusões: A transição do cuidado mostrou-se insatisfatória, indicando necessidade de qualificação do planejamento da alta, fortalecimento da comunicação interprofissional e ampliação do protagonismo do paciente.
Descritores: Doenças Não Transmissíveis; Cuidado Transicional; Gestão da Saúde da População; Equipe de Assistência ao Paciente; Alta do Paciente.

ABSTRACT
Objective: To analyze the transition of care from hospital to home from the perspective of people with chronic diseases and healthcare professionals in a private hospital.
Method: A sequential explanatory mixed-methods study conducted in Southern Brazil. The quantitative phase included 166 individuals with chronic diseases assessed after hospital discharge using the Care Transitions Measure. The qualitative phase comprised two focus groups with healthcare professionals (n=9; n=7).
Results: The overall evaluation of care transition found them to be unsatisfactory (62.62±9.03). The highest score was observed in Health Management (73.24±10.24) and the lowest in Care Plan (56.12±17.56). Men presented higher scores in Health Management (p=0.008), Care Plan (p=0.005), and overall evaluation (p<0.001). Being in a stable relationship was associated with better Care Plan (p=0.002), and higher educational level with better Medication Understanding (p=0.016) and overall evaluation (p=0.011). The qualitative stage revealed shortcomings in discharge planning, interprofessional communication, and patient and family participation.
Conclusions: Care transition was unsatisfactory, indicating the need to improve discharge planning, strengthen interprofessional communication, and enhance patient engagement.
Descriptors: Non-Communicable Diseases. Transitional Care. Population Health Management. Patient Care Team. Patient Discharge

RESUMEN
Objetivo: Analizar la transición del cuidado hospitalario al domicilio desde la perspectiva de personas con enfermedades crónicas y profesionales de salud de un hospital privado.
Método: Estudio de métodos mixtos, secuencial explicativo, realizado en el Sur de Brasil. La fase cuantitativa incluyó 166 personas con enfermedades crónicas evaluadas tras el alta hospitalaria mediante el Care Transitions Measure. La fase cualitativa comprendió dos grupos focales con profesionales de salud (n=9; n=7).
Resultados: La evaluación global de la transición del cuidado fue insatisfactoria (62,62±9,03). El mayor puntaje se observó en Preparación para el Autocuidado (73,24±10,24) y el menor en Plan de Cuidados (56,12±17,56). Los hombres presentaron puntajes más altos en Preparación

para el Autocuidado (p=0,008), Plan de Cuidados (p=0,005) y evaluación global (p<0,001). La unión estable se asoció con mejor evaluación del Plan de Cuidados (p=0,002), y mayor escolaridad con mejores puntajes en Comprensión de Medicamentos (p=0,016) y evaluación global (p=0,011). La fase cualitativa evidenció fragilidades en la planificación del alta, la comunicación interprofesional y la participación de pacientes y familiares.
Conclusiones: La transición del cuidado fue insatisfactoria, indicando la necesidad de fortalecer la planificación del alta, la comunicación interprofesional y el protagonismo del paciente.
Descriptores: Enfermedades No Transmisibles. Atención Transicional. Gestión de La Salud poblacional. Grupo de Atención al Paciente. Alta del Paciente

INTRODUCTION

The transition of care is a complex, dynamic, and relational process, more than a simple transfer between health services. It is a patient-centered process of continuity of care, involving interprofessional coordination, medication reconciliation, structured discharge planning, and improvements in self-management skills in the post-discharge period[1]. The quality of discharge does not depend only on the paths between the hospital and the Health Care Network (HCN), but also on the organizational, communicational, and educational articulation that supports the experience of the patient and their family in their health care trajectory.

Hospital discharge is a critical moment, marked by a high risk of care fragmentation, due to the clinical and social complexities of patients and the need for coordination between different health services and professionals[1]. This complexity is even more challenging in the case of people with noncommunicable diseases (NCDs). These diseases have a multifactorial etiology, are long-lasting, have latency periods, require continuous care, and are often associated with disabilities and permanent functional incapacities[3].

The transition of care must be effective to reduce the inadequate use of health resources, the search for emergency services, avoidable hospital readmissions, mortality rates, and health care costs[1]. Current evidence suggests that health education, when targeted at patients and caregivers, has an essential role in preventing and controlling NCDs, as it reduces behavioral risk factors, promotes healthy life choices, supports early detection, and improves self-care abilities, contributing, simultaneously, to the three levels of prevention of these chronic conditions[4].

Despite its relevance, however, the process of transition of care still has important weaknesses, related to the practices of health workers and to institutional and national health policies[5]. These challenges include shortcomings in effective interdisciplinarity and in the

integration of the coordination of care, which compromise the continuity of care after discharge[6]. These limitations show the need to improve the processes involved in the transition between different points of the HCN, including contexts that are seldom explored in literature[5-7].

The prior knowledge accumulated by the authors of this study suggests that the scientific production about the transition of care of people with NCDs is mostly focused on studies developed in the Single Health System (SUS). These studies are mostly quantitative[8-9]; qualitative, involving patients or health workers[10-11]; case studies[12]; in addition to mixed-methods studies with cancer patients[13]. However, there is a gap in the knowledge produced, which relates to the understanding of transitions in the private sector of health. This sector serves clients whose sociodemographic characteristics, health care trajectories, and access to health are different from those in the public system and, thus, can influence the experience of the patient and the organization of post-discharge care.

Considering the complexities of this phenomenon, integrative approaches become necessary. Mixed-method studies can help expand and dive deeper into the understanding of complex phenomena, such as the transition of care, by integrating quantitative and qualitative data. This enables a broader analysis of the process, one that is sensitive to a context that encompasses the practice of care, the preferences of users, and the experience of health workers[14].

Thus, this study aims to analyze the transition of care from hospital to home, from the perspective of people with NCDs and health workers from a public hospital.

METHOD

Mixed-methods [14], sequential, and explanatory study, using notations (QUAN->qual), developed in a private hospital in the South of Brazil.

Quantitative stage

Cross-sectional study conducted in the clinical hospitalization unit of a private hospital in the South of Brazil, with 88 private and semi-private beds for admission for different specialties. The hospital serves 52 cities in the Northwest region of the state. Furthermore, the institution has an "Integral Health Care Preventive Medicine" program, in which patients are monitored and participate in activities for the promotion, prevention, and recovery of health.

The population included patients admitted due to noncommunicable diseases (NCDs), 18 y/o or older, hospitalized for 24 h or more, from April to August 2023. The study included

diagnose registered in electronic records (hypertension, diabetes, chronic obstructive pulmonary disease, heart failure, coronary artery disease, chronic kidney disease, neoplasms, and cerebrovascular diseases). Patients were excluded if they could not be contacted via phone after discharge, had cognitive impairments, were in the puerperium or post-operative period, or were admitted to other institutions after discharge.

Considering a finite population of 370 eligible patients in the study period, the sample size was calculated considering a confidence level of 95% (α=0.05), maximum sampling error of 7.5%, and an expected proportion of 50% satisfactory transitions of care, defined by the global score of CTM-15 ≥70[7]. Since there was no previous estimate for the context investigated, the proportion of 50% was adopted, as it represented the highest population variability, leading to the largest sample size. After adjusting for the finite population, the minimum sample was estimated to include 118 participants.

Participants were recruited by convenience, leading to 166 patients during our initial bedside invitation process. As the study continued, there were 13 losses (9 deaths and 4 patients who did not answer the phone), leading to 153 participants who could be analyzed using the Care Transitions Measure (CTM-15).

Two Master's students (a physician and a nurse) and four research auxiliaries (undergraduates) conducted data collection, after being trained by the main researcher. They received theoretical training and were supervised at the beginning of the process, in order to standardize procedures.

The invitation and the sociodemographic data collection took place in person, at bedside, using a structured interview. Clinical data was extracted from the electronic records. The CTM-15 scale[1] was applied at a point from 7 to 30 days after discharge. This scale was validated for use in Brazil[15] and includes 15 items, distributed in four domains. The scores were converted into a scale from 0 to 100, with values ≥70 being considered to be satisfactory[5].

For the statistical analysis, the dependent variable (outcome) included the score of the transition of care, as measured by the CTM-15 on a continuous scale from 0 to 100. The ≥70 cutoff point was chosen as the parameter to classify the quality of the transition of care as satisfactory or not, as per the recommendations of the scale. The independent variables included the sociodemographic and clinical characteristics of the participants.

Quantitative data was analyzed using the Statistical Package for the Social Sciences (SPSS®), version 25.0, for Windows®, using descriptive statistics (absolute and relative frequencies, means, and standard deviations). Normality was evaluated using Kolmogorov-

Smirnov's test. The internal consistency of CTM-15 domains was evaluated using Cronbach's alpha. For the inferential analysis, we compared the mean scores of the CTM-15 domains with its general score, considering sociodemographic variables (marital status, educational level, and sex) through the use of an analysis of variance (ANOVA). When statistically significant differences were found, the *post-hoc* tests of Tukey or Scheffé were applied, depending on the homogeneity of variance, to find the differences between the groups. The significance level adopted was 5% ($p<0.05$).

Qualitative stage

The qualitative stage was conducted in focus groups, directed using the Deliberative Dialogue as a reference. This is a methodological strategy that favors structured interactions between stakeholders, which is based on the articulation of scientific evidence, empirical results of the study, contextual knowledge, and the practical experience of participants[16]. This process enabled a collective analysis of complex issues, considering different perspectives and organizational conditions related to the transition of care, favoring the collective construction of applicable solutions.

The main researcher conducted the meetings and was the main responsible for the qualitative stage. She was trained in the guidance of focus groups beforehand, under the supervision of the last author, who had previous experience conducting qualitative studies, and was accompanied by a scholarship holder who was trained to provide operational support and record the meetings in audio. It is worth noting that the study did not aim to reach a formal institutional consensus, nor to deliberate on the immediate implementation of strategies, but to understand, via deliberative dialogue, the organizational and communicational conditions that influence the transition of care in the context investigated.

Participants included 12 health professionals who worked in the hospital. Given that they were directly involved in the discharge process and in the continuity of care, they were selected intentionally, so all professional categories involved in the transition of care would be included. The methodology proposed prescribes the participation of the same professionals in both deliberative meetings, since these are conceived as sequential stages of the same process of deliberative dialogue. However, due to the dynamics of the health care service and the availability of the participants on the scheduled dates, there were only nine workers in the first meeting and seven in the second. The number of participants decreased from one meeting to the next due to occasional absences caused by work activities. There was no formal withdrawal from the study. Despite the variation in the number of participants, there were still participants

from all professions present, making it possible to listen to different perspectives and to lead to the interaction necessary for an understanding of the factors that influence the transition of care in the context under investigation.

There were two meetings in December 2023, one of which lasted for one hour, while the second lasted for one hour and thirty minutes. They took place in a room of the hospital that was reserved for this purpose, ensuring that participants had privacy and could express themselves freely. Invites were sent 30 days earlier, both manually and digitally. Before the meetings, participants were sent materials synthesizing evidence on the transition of care and the results of the quantitative stage, in order to give theoretical support to the discussions. There was a planned interval of one week between meetings.

The first meeting aimed to present the results of the quantitative stage and to promote reflection, leading participants to understand the results. The discussion was guided, and participants were encouraged to move towards a collective reflection in which their experiences were integrated and mediated by the researcher. We decided to address all CTM-15 domains during discussions. The groups were conducted using a semi-structured script previously elaborated by the researchers. This script was organized using the CTM-15 factors and the objectives of the study, including guiding questions that were related to discharge planning, guidance to the patient and their family, interprofessional communication, medication use, and the participation of the patient in their own care.

The sessions were recorded in full on an electronic device, and later transcribed in full for analysis. To ensure anonymity, participants were identified by codes that corresponded to their profession (RN 1, 2, 3, PHAR, PT., ADM, PHYS, NUT, PREV, TEC).

The qualitative analysis was conducted manually by two researchers, following the stages of content analysis proposed by Maria Cecília de Souza Minayo[17]. At first, a pre-analysis was conducted. The texts were skimmed and then read carefully, so there could be an immersion into the corpus. Then, materials were explored. The units of register and the context were identified and coded, and organized according to CTM-15 factors and the goals of the study. Two researchers coded the study independently. The coding was discussed later until they reached a consensus regarding thematic organization. In the stage of data treatment and interpretation, the findings were analyzed in the light of deliberative dialogue, enabling the construction of inferences and their integration with quantitative results.

The excerpts were selected according to how well they represented the core meanings found and expressed the interpretative convergences and expansions of the phenomenon being investigated. The integration between qualitative and quantitative data was conducted using a

joint display to favor meta-inferences and expand the understanding of the complex phenomenon[18].

The study was approved by the Research Ethics Committee (Opinion 5.915.197), as per Resolution 466/2012.

Results

Quantitative stage

The study included 166 people who had been hospitalized due to NCDs. 153 of them formed the final CTM-15 analysis. The most common NCDs were cardiovascular (153; 92.2%), metabolic (40; 24.1%), neurological (41; 24.7%), and neoplasms (38; 22.9%). An expressive portion of the sample had more than one morbidity. The mean age in the sample was 69,3 ± 9.03 (varying from 25 to 97). Most participants were female (87; 52.4%) and white (159; 95.8%). Most knew how to read (95.2%) and write (95.8%). As for their educational level, 92 (55.4%) did not study and only had elementary school. 70 (42.2$) had had NCDs for more than 14 years.

The transition of care, as evaluated by the CTM-15, had a mean of 62.62 ± 9.03, indicating inadequate transitions, as it is below the cutoff point established. The only adequate mean result was in the factor Health Management Preparation (73.24 ± 10.24). On the other hand, the factors Medication Understanding (65.46 ± 14.54), Care Plan (56.12 ± 17.56), and Important Preferences (55.66 ± 17.97) had inadequate results, indicating which were the main shortcomings in the process of transition of care (Table 1).

Table 1 - Descriptive statistics and internal consistency of CTM-15 factors in people with noncommunicable diseases. Ijuí/RS, Brazil, 2023

CTM-15 Factors	Mean	SD	Cronbach's alpha
Important preferences	55.66	17.97	0.701
Health management	73.24	10.24	0.73
Care plan	56.12	17.56	0.867
Medication understanding	65.46	14.54	0.653
General CTM-15	62.62	9.03	

Source: The authors, 2024.
Captions: CTM-15 - Care Transitions Measure; NCD - noncommunicable diseases; SD - standard deviation.

There were statistically significant differences in the analysis of the association between the CTM-15 scores and the sociodemographic characteristics (Table 2). Males gave higher scores to the factors: Health Management Preparation (p=0.008); Care Plan (p=0.005); and the CTM in general (p<0.001).

People in stable unions gave better grades to the Care Plan (p=0.002), showing an association between this factor and marital status. There was an association between educational level and Medication Understanding (p=0.011), according to which patients with a higher educational level graded this element of the transition of care as better (p=0.016).

Table 2 - Comparison of the mean of CTM-15 factors, according to sociodemographic characteristics. Ijuí/RS, Brazil, 2023

					CI 95%		
			Mean	**SD**	**Ll**	**Ul**	**p**
Important preferences	Marital status	Stable union	56.31	18.25	52.67	59,95	**0,547**
		Lives alone	54.47	17.56	49.68	59,26	
	Educational level	Did not study/EE	53.41	18.03	4947	57,35	**0,208**
		Médio	57.41	17.77	51.39	63,07	
		Upper	59.63	17.72	53.24	66,02	
	Sex	Female	53.04	18.35	49.01	57,08	**0,053**
		Male	58.68	17.16	54.62	62,74	
Health management preparation	Marital status	Stable union	73,34	10,13	71,32	75,36	**0,882**
		Lives alone	73,08	10,53	70,2	75,95	
	Educational level	Did not study/EE	72,8	10,99	70,4	75,2	**0,745**
		Médio	74,34	9,49	71,22	77,46	
			73.1	9,2	69,78	76,42	
	Sex	Female	71,21	10,41	68,92	73,49	**0,008**
		Male	75,6	9,58	73,33	77,87	
Care plan	Marital status	Stable union	59,34	15,8	56,19	62,49	**0,002**
		Lives alone	50,23	19,19	44,99	55,47	
	Educational level	Did not study/EE	54,51	17,73	50,64	58,39	**0,095**
		Médio	54,6	19,36	48,23	60,97	
			62.10	13,65	57,18	67,97	
	Sex	Female	52,43	17,61	48,56	56,3	**0,005**
		Male	60,38	16,63	56,44	64,32	
	Marital status	Stable union	64,39	16,22	61,15	67,63	**0,217**

Medication understanding	Educational level	Lives alone	67,43	10,64	64,53	70,34	**0,016**
		Did not study/EE	62,45	15,95	58,96	65,93	
		Médio	68,20	10,4	64,78	71,62	
			70.05	13,36	65,23	74,87	
	Sex	Female	63,41	14,74	60,17	66,65	**0,06**
		Male	67,84	14,03	64,51	71,16	
General CTM-15	Marital status	Stable union	63,34	9,1	61,53	65,16	**0,183**
		Lives alone	61,30	8,82	58,89	63,71	
	Educational level	Did not study/EE	60,79	9,62	58,69	62,89	**0,011**
		Médio	63,59	7,49	61,13	66,06	
			66.22	8,04	63,32	69,12	
	Sex	Female	60,02	8,11	58,24	61,81	**p<0,001**
		Male	65.62	9,15	63,46	67,79	

Source: The authors, 2024.
Captions: CTM-15 - Care Transitions Measure -15; SD - standard deviation; CI95% - confidence interval of 95%; Ll - lower limit; Ul - upper limit; *p* - Significance value.

Qualitative stage

The composition of the focus groups and the distribution of participants according to their professional categories are detailed below (Chart 1).

Chart 1 - Composition of focus groups according to professional category. Ijuí/RS, Brazil, 2023.

Focus Group 1	Focus Group 2
1 hospital administrator	1 hospital administrator
1 preventive medicine nurse	1 preventive medicine nurse
2 nurses from the hospitalization unit	2 pharmacists
	1 physical therapist
1 pharmacist	1 nutritionist
1 physical therapist	1 nursing technician
1 physician	
1 nutritionist	
1 nursing technician	

Source: The authors, 2024.

During the focus group discussions, the professionals explained that Health Management Preparation was positive, given that, especially in surgical patients with devices such as probes and ostomies, the team would guide and train the patient and their relatives to continue providing this type of care at home. This health situation involves, in general, more

concrete and objective measures than caring for people with NCDs, as the discharge of these patients is more predictable.

The multiprofessional team provides guidance for discharge in the form of booklets teaching how to handle devices, specific orientations, and simulations of the use of these devices at the bedside, in order to provide health education/training to the patient. Clinical hospitalizations, in turn, are more likely to be met with complications, which makes discharge less predictable.

The statements showed that there was no advanced preparation for discharge. This is due to the fact that discharge is not predictable, especially in the case of clinical conditions. This leads the multiprofessional team to start providing guidance at a time close to the patient's discharge, harming the ideal delivery of the Care Plan.

When the discharge is announced early, the team can set it up so Medication Understanding is adequate, reiterating guidance about drug use and resorting to oral guidance and booklet delivery. On the other hand, early announcements depend on medical conduct, given that these professionals do not always make all necessary electronic records.

As for the Important Preferences, we found that participants had trouble understanding this concept at first, and the Master's student who was guiding the discussion needed to provide more encouragement. Then, participants pointed out shortcomings associated with the fact that people with NCDs and their caregivers often had trouble accepting and adapting to the vulnerabilities they acquired due to their disease. This issue, pointed out by professionals, impairs the ability of caregivers and patients to be part of the care, making Health Management Preparation harder.

Integrated Results

The integrated analysis showed that interpretations of the qualitative and quantitative data converged and expanded in a significant way. The adequate score found in the factor Health Management Preparation (73.24 ± 10.24) converged with professional reports about structured guidance in surgical situations and the use of devices, even though focus groups showed that the effectiveness of this preparation directly depends on the predictability of the hospital discharge. The factor Medication Understanding, in turn (65.46 ± 14.54), was found to be associated, in debates, with challenges such as polypharmacy and inconsistencies in formal prescriptions at the time of discharge.

The low scores in Important Preferences (55,66 ± 17,97) showed that there is a chronic conflict between the expectations of the family and the actual possibilities of the institution, which generates tension. The Care Plan factor, in turn, showed strong convergence (56.12 ± 17.56), with inadequate results being given more profound meaning by reports indicating the lack of consistency in discharge summaries, in addition to the fact that medical decisions were announced too late. This context, according to participants, impairs the multiprofessional coordination of the discharge process as a whole.

Chart 2 - Real quotations of the health workers and the manager, related to the CTM-15 factors. Ijuí/RS, Brazil, 2023

CTM-15 factors **Mean quantitative results (min-max)**	**Qualitative results**	**Meta-inferences**
Health management preparation 73,24 (39,29–100,00)	Surgical patients who go home with devices, such as probes, we give them guidance and a booklet [...] we take the case to them, make a checklist, we send WhatsApp videos. (NUT, TEC) The discharge is fast for surgical patients, we monitor them [...] for clinical patients, that's more complicated. (PT) We try to prepare the patient to go home not only in the day of discharge (RN1) [...], but we often only give them the educational materials a bit before discharge. (RN2) It is important for the patient and the caregiver to be the main ones responsible for their care. A physician's visit is always fast [...], even if you try to explain simply, the relative doesn't understand [...] the team that spends more time with the	There was an association between the quality of the training for self-management and the organizational predictability of discharge, suggesting that the structuring of care varies according to the type of hospitalization and the degree of clinical stability.

	patient ends up being the ones to explain. (PHY)	
Medication Understanding 65,46 (0,00–100,00)	We delivered a booklet with guidance about the medication and got the prescription written by hand by the physician, which is not in our system, to compare the prescription that the patient was using and group it. The physician doesn't always prescribe the drugs they will use at home [...] we give orientations associated with the things we believe they will be using at home. (PHAR) One thing that improved a lot is that the physicians print out prescriptions more often, whereas in the past they wrote everything longhand. (PHYS) Oftentimes, as you are giving discharge orientations, the patient is packing up [...] this week I had to discharge a patient at the reception [...] Uninterested caregivers. (PHAR) Many heart failure patients, for example, come back because there's no treatment adherence. (RN 3)	The understanding of medications was influenced by the clinical complexity of NCDs, especially by polypharmacy. This shows how challenging it is to adapt guidance to the individual post-discharge needs of patients.
Important preferences 55,66 (0,00–91,67)	I will examine them at the time the machine is available, this isn't much of a choice. The client/patient is not satisfied with that. (ADM) They pay for health insurance, and they want us to do what is comfortable for them. (RN2) The physician discharges them, and the son comes back to the nurse station saying: "Hey, I'm	The ability of patient and family to assume the main role in their care was conditioned by sociocultural factors related to the acceptance of the chronic condition and the reorganization of care at home. This limited the possibility of incorporating them as a structuring element of care transition.

	not taking my dad home like this." Then the whole team has to explain everything all over again. (RN1) If the patient has some type of limitation, the family would have to hire a caregiver, meaning that it's cheaper to stay in the hospital. (PHYS) It's difficult for the family to accept the new health condition. The family loses strength, they want to take them home the same way they were before getting sick, which is not possible. (PREV) From a social standpoint, the hospital is a safe haven for many families, a place of relief. The hospital is still the role model of health centers. (ADM)	
Care plan 56,12 (0,00–100,00)	Some physicians do not write discharge summaries. (RN1, RN2, PHAR, P.T., PREV, ADM, PHYS) If there is no discharge summary, the professional responsible for the patient after discharge will depend exclusively on the information and interests of the caregiver. (PREV) Paramedic professionals are more mature, apt to adhere to protocols. Physicians are individualistic, they don't like to follow protocol. [...] Intra-hospital care is a symphony, and the physician is the conductor, if they don't move the baton at the right pace, no one will be able to play well. (ADM)	The shortcomings in the care plan reflect gaps in the formalization of discharge and in the articulation between health workers, showing that there are shortcomings in clinical governance. In this context, the availability of technological resources did not automatically translate into an integrated coordination of care. This suggests that there are challenges in the articulation between medical decisions and multiprofessional planning.

	Everything is right in the multi-team, but the physician doesn't have the time to read about the progress of every patient and talk to everyone. (NUT) Surprise discharges on the weekends or at the day's end, without telling anyone or adding it to the records. (PHAR) Discharge summaries are important because the patient does not have a single physician. (PHYS) Oftentimes, the relative that receives the guidance is not the one that will care for the patient at home. (PT)	

Our results suggest that the factors with the worst results in the transition of care were Care Plan and Important Preferences. This is due, especially, to the lack or inconsistency of discharge summaries, late announcement of medical decisions, low predictability of discharge, and low participation of patient and family in therapeutic planning. These elements show that the difficulties found are not merely individual, but the expression of organizational and communicational factors that condition the discharge process.

DISCUSSION

This study integrated quantitative and qualitative evidence to analyze the transition of care from hospital to home, in people with NCDs in a private hospital in the south of Brazil. Meta-inferences showed that the quality of care transition is not determined by a single factor, but by interdependent dimensions that involve organizational predictability, clinical complexity, sociocultural aspects, and care governance. These findings suggest that, even in contexts where there are more resources available, such as the private sector, there are still challenges related to the integration of care that cannot be solved only through the use of technology or protocols, requiring, instead, a reorganization of care processes and an increase in multiprofessional work.

The transition of care was generally evaluated as inadequate, with shortcomings in the factors Care Plan and Important Preferences. Although the score of the factor Health Management was satisfactory, our integrated analysis showed that its performance is linked to the predictability of hospital discharge, a common feature of surgical hospitalizations and situations with established protocols. Studies have pointed out that early discharge planning is essential for a safe and successful transition[6-19], as are other elements, such as the sociodemographic and cultural characteristics of patients and their families; the lack of communication with the HCN; the perception of not being prepared for discharge; and their trouble understanding the guidance provided by the team[20].

However, in clinical hospitalizations due to NCDs, often more impacted by instability and multimorbidity[3], preparation often depends on communication within the medical team and on the circumstantial organization of the team. Thus, the good performance is not necessarily a result of a structured model of chronic disease management, but of an organizational logic that is associated with predictable events.

The low scores in the Care Plan domain were associated with reports indicating the lack or inconsistency of discharge summaries, little interprofessional communication, and the late announcement of discharges. The individual autonomy of the physicians, associated with their main role in the decision-making process — a common feature of private care arrangements — , had an impact on the multiprofessional construction of the therapeutic plan. Evidence showed that structured documents, with clear language and standardized communication, are essential elements for a safe transition of care[21-22], and the standardization of documents is a strategy that is associated with the reduction of readmissions[23]. In this regard, the shortcomings found go beyond an educational dimension and show gaps in clinical governance and care coordination.

In the Important Preferences domain, there was tension between the expectations of families and the possibilities of the institution. The professionals reported that, in a private context, where patients are paying for health insurance, their demands are not always in line with clinical protocol. A qualitative study has found that patients often see themselves as having the main role in their care, but have little participation in the decision-making process(11). The integration of the data found that, in the hospital investigated, the role of the patient was conditioned by institutional culture and relational dynamics. It was not fully institutionalized as a structural axis of the care plan. It is worth highlighting that this is the perspective of

professionals, as there was no stage in which the patients deliberated on their opinions - a limitation that must be considered when interpreting our findings.

This study found that the transition of care did not entirely respect the patient as being a main character in the transition of care, at least from the perspective of the professionals that participated in the focus groups. Even though the references used value the main role of the patient when constructing a therapeutic plan, the qualitative stage only considered institutional stakeholders, limiting the direct understanding of the experience of the user in the deliberative process. This methodological choice enabled us to dive deeper into organizational aspects of transition, but signalled the need for further investigation that incorporates the voice of patients in the analysis and elaboration of improvements for transitional care.

In the factor Medication Understanding, a lower educational level was associated with worse scores, corroborating literature that relates health literacy and medication safety[24]. The qualitative stage helped advance our understanding in this regard, showing issues such as polypharmacy, multimorbidity, and electronic prescription inconsistency. Studies have shown that failure in medication reconciliation is one of the main causes of adverse events and rehospitalization[25]. Thus, the transition of care in NCDs is a process with a high degree of clinical and organizational complexity, requiring multiprofessional systematization and early planning.

The integration of the results enabled interrogating the context of the private sector. Although there were electronic records available and easy to use, there was a fragmentation in the communication between the hospital and the outpatient follow-up, impairing longitudinal care. An analysis of the Brazilian private sector has shown that its expansion does not imply, necessarily, in an integrated coordination of care[26]. Evidence shows that structured incentives for transitional care reduce readmissions and costs associated with care[27], a strategy that is still incipient in the country.

The unpredictability of hospital discharges was also a shortcoming. Depending on the decision of a single physician to determine the time of discharge had an impact in the organization of multiprofessional care and the effectiveness of planning. Previous national studies had pointed out that the lack of early planning and work overload compromise the quality of care[6-11-28], suggesting that the phenomenon found in the private hospital investigated here shares structural challenges with other contexts, despite having specificities in its institutional governance.

The use of mixed methods[14], in association with deliberative dialogue[16], enabled this study to transcend the mere measuring of scores, identifying organizational aspects that influence the quality of the transition of care in the context under investigation. This approach gave support to the production of knowledge that is in context with the setting studied, articulating scientific evidence and the experience of participants. In regard to nursing management and the organization of services, our findings reiterate the need for the use of standardized multiprofessional discharge summaries in the institution, in addition to determining early the predicted dates of discharge and effectively incorporating the preferences of patients and caregivers in care plans.

This study has limitations that must be considered when interpreting its findings. The investigation was conducted in a single private hospital, with its own organizational setting. This can limit the transferability of our findings into other contexts of care, especially those with different governance arrangements, population profiles, or models of care. Furthermore, the qualitative stage only included health workers, not bringing patients into the deliberative discussion. This prevents us from understanding, directly, how the users experience their role.

CONCLUSION

The transition from hospital to home care was found to be inadequate for people with chronic diseases in a private hospital. Its main shortcomings were found in the domains Care Plan and Important Preferences. Although the domain Health Management presented an appropriate score, the integration of quantitative and qualitative findings showed that this result was associated with the organizational predictability of discharge, not necessarily with the existence of a structured model of transitional care.

An integrated analysis showed that the quality of transition is influenced by organizational, communicational, and relational factors that go beyond a mere transference of information between services. Metainferences suggest that aspects such as clinical governance, interprofessional communication, structured records of discharge, and patient participation are central elements to explain the phenomenon.

The use of mixed methods to incorporate data improved our understanding of the conditioning factors of care transition in the private sector, helping bring to light organizational elements that must be improved in the care process.

REFERENCES

1. Coleman EA, Mahoney E, Parry C. Assessing the quality of preparation for posthospital care from the patient's perspective: the Care Transitions Measure. Med Care. 2005;43(3):246-55. https://doi.org/10.1097/00005650-200503000-00007

2. Sousa LS, Pontes MLF, Pereira RR, Leite MAP, Nova FALV, Monteiro EA. Transição do idoso do hospital para o domicílio na perspectiva do cuidador/idoso: revisão de escopo. Acta Paul Enferm. 2023;36:eAPE03631. https://doi.org/10.37689/acta-ape/2023AR03631

3. World Health Organization (WHO). Noncommunicable diseases progress monitor 2022 [Internet]. Geneva: World Health Organization. 2022 [cited 2026 Jan 10]. Available from: https://www.who.int/publications/i/item/9789240047761

4. Rudwan A, Saeed L, Mahir LM, Ibrahim M, Hasabelgawi LH, Rudwan H. Health education and its role in the prevention and management of non-communicable diseases: a review. Cureus. 2025;17(9):e92207. https://doi.org/10.7759/cureus.92207

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

6. Petersen AGP, Tronco CS, Casagrande D, Pluta P, Winter VDB, Carvalho FF, et al. Psychometric validation of the Care Transitions Measure (CTM-15) for Brazilian use in high-risk puerperal women. Texto Contexto Enferm. 2023;32:e20220341. https://doi.org/10.1590/1980-265X-TCE-2022-0341en

7. Tomazela M, Valente SH, Lima MADS, Bulgarelli AF, Fabriz LA, Zacharias FM, et al. Care transition of older adults from hospital to home. Acta Paul Enferm. 2023;36:eAPE00291. https://doi.org/10.37689/acta-ape/2023AO00291

8. Rodrigues CD, Lorenzini E, Romero MP, Oelke ND, Winter VDB, Kolankiewicz ACB, et al. Care transitions among oncological patients: from hospital to community. Rev Esc Enferm USP. 2022;56:e20220308. https://doi.org/10.1590/1980-220X-REEUSP-2022-0308en

9. Berghetti L, Danielle MBA, Winter VDB, Petersen AGP, Lorenzini E, Kolankiewicz ACB. Transition of care of patients with chronic diseases and its relation with clinical and sociodemographic characteristics. Rev Latino-Am Enfermagem. 2023;31:e4015. https://doi.org/10.1590/1518-8345.6594.4015

10. Lanzoni GMM, Gourlarte AF, Miotelo M, Peiter CC, Koerich C, Wachholtz LF. Transição do cuidado da pessoa com doença crônica na alta hospitalar: perspectiva de enfermeiros. Rev Baiana Enferm. 2023;37:e47254. https://doi.org/10.18471/rbe.v37.47254

11. Ingvarsson E, Shildmeijer K, Hagerman H, Lindberg C. Being the main character but not always involved in one's own care transition- a qualitative descriptive study of older adults experiences of being discharged from in-patients care to home. BMC Health Serv Res. 2024;24:571. https://doi.org/10.1186/s12913-024-11039-3

12. Sousa SM, Bernardino E, Utzumi FC, Aued GK. Integration strategies for caring for chronic noncommunicable diseases: a case study. Rev Bras Enferm. 2021;74(1):e20190563. https://doi.org/10.1590/0034-7167-2019-0563

13. Rodrigues CD, Lorenzini E, Onwuegbuzie AJ, Oelke ND, Garcia CF, Malkiewie MM, et al. Care transition from the perspectives of oncological patients and the multiprofessional care team: a mixed methods study. Cancer Nurs. 2024;47(1)E47-E56 https://doi.org/10.1097/ncc.0000000000001160

14. Creswell JW, Plano Clark VL. Designing and conducting mixed methods research. 2nd ed. Porto Alegre: Penso; 2013. 457p

15. Acosta AM, Lima MADS, Marques GQ, Levandovski PF, Webeer LAF. Brazilian version of the Care Transitions Measure: translation and validation. Int Nurs Rev. 2017;64(3):379-87. https://doi.org/10.1111/inr.12326

16. Acosta AM, Oelke ND, Lima MADS. Theoretical considerations of deliberative dialogue: contributions for nursing practice, policy and research. Texto Contexto Enferm. 2017;26(4):e0520017. https://doi.org/10.1590/0104-07072017000520017

17. Minayo MCS. O desafio do conhecimento: pesquisa qualitativa em saúde. 14th ed. São Paulo: Hucitec; 2014. 407p

18. McCrudden MT, Marchand G, Schutz PA. Joint displays for mixed methods research in psychology. Methods Psychol. 2021;5:100067. https://doi.org/10.1016/j.metip.2021.100067

19. Gupta S, Perry JA, Kazar R. Transitions of care in geriatric medicine. Clin Geriatr Med. 2019;35(1):45-52. https://doi.org/10.1016/j.cger.2018.08.005

20. Gama LMP, Ribeiro KRC, Oliveira JLC, Costa MAR, Acosta AM, Souza VS. Transition from hospital to home care: a mixed methods study in light of Meleis's Theory. Rev Bras Enferm. 2025;78(1):e20230357. https://doi.org/10.1590/0034-7167-2023-0357pt

21. Yahalom S, Manias E. Nurses engaging with referral letters and discharge summaries: a qualitative study. J Clin Nurs. 2024;33(6):2309-23. https://doi.org/10.1111/jocn.17054

22. Huyen NTT, Tsakitzidis G, Tam NM, Valcke M, Chuong HV, Wens J. Perceptions and experiences of primary healthcare providers toward interprofessional collaboration in chronic disease management in Hue, Vietnam. J Interprof Care. 2023;38(1):52-61. https://doi.org/10.1080/13561820.2023.2227650

23. Tate K, Cummings G, Jacobsen F, Halas D, Van den Bergh G, Devkota R, et al. Strategies to improve emergency transitions from long-term care facilities: a scoping review. Gerontologist. 2024;64(7):gnae036. https://doi.org/10.1093/geront/gnae036.

24. Beiter ER, Shanbhag A, Junge-Maughan L, Knoph K. Interdisciplinary videoconference model for identifying potential adverse transition of care events following hospital discharge to postacute care. BMJ Open Qual. 2024;13(2):e002508. https://doi.org/10.1136/bmjoq-2023-002508

25. Marshall M, Hornung T, Bauerle A, Weigl M. Quality of care transition, patient safety incidents, and patients' health status: a structural equation model on the complexity of the discharge process. BMC Health Serv Res. 2024;24:576. https://doi.org/10.1186/s12913-024-11047-3

26. Instituto de Estudos para Políticas de Saúde (IEPS); UMANE. Setor privado e relações público-privadas da saúde no Brasil: em busca do seguro perdido-sumário executivo. IEPS [Internet]. 2024 [cited 2026 Jan 10]. https://ieps.org.br/setor-privado-relacoes-publico-privadas-saude-brasil-sumario-executivo/

27. Ouayogodé MH, Hardy B, Mullahy J, Smith MA, Meara E. Care transition management and patient outcomes in hospitalized Medicare beneficiaries. Am J Manag Care. 2024;30(9):e266-e273. https://doi.org/10.37765/ajmc.2024.89605

28. Danielle MBA, Lorenzini E, Oliveira ALM, Onwuegbuzie AJ, Trindade LF, Ferreira DS, et al. Facilitating and hindering factors in the implementation of a transitional care strategy: mixed method study. Gastrointest Disord. 2025;7:1-16. https://doi.org/10.3390/gidisord7040071

Availability of data and materials

"The set of data can be accessed upon request to the corresponding author."

Acknowledgements

Toe the National Council of Scientific Development (CNPq), for the granting of a Research Productivity Scholarship to the last author (Process No. 301694/2025-7) and by providing financial support through the scholarships of the Institutional Program of Scientific Initiation Scholarships (PIBIC).

Author contributions:

Conceptualization: Letícia Y. Castro, Adriane Cristina Bernat Kolankiewicz.

Data curation: Letícia Y. Castro, Francini De Oliveira Rodrigues, Adriane Cristina Bernat Kolankiewicz.

Formal analysis: Letícia Y. Castro, Adriane Cristina Bernat Kolankiewicz.

Acquisition of funding: Adriane Cristina Bernat Kolankiewicz.

Investigation: Letícia Y. Castro, Francini De Oliveira Rodrigues, Edgar Noé Morelos-García, Fernanda Dal Maso Camera, Kelly Cristina Meller Sangoi.

Methodology: Letícia Y. Castro, Adriane Cristina Bernat Kolankiewicz.

Project administration: Adriane Cristina Bernat Kolankiewicz.

Resources: Adriane Cristina Bernat Kolankiewicz.

Software: Letícia Y. Resources: Adriane Cristina Bernat Kolankiewicz.

Supervision: Adriane Cristina Bernat Kolankiewicz.

Validation: Letícia Y. Castro, Francini De Oliveira Rodrigues, Edgar Noé Morelos-García, Fernanda Dal Maso Camera, Kelly Cristina Meller Sangoi, Adriane Cristina Bernat Kolankiewicz.

Visualization: Letícia Y.

Writing - original draft: Letícia Y. Castro, Francini De Oliveira Rodrigues, Edgar Noé Morelos-García, Fernanda Dal Maso Camera, Kelly Cristina Meller Sangoi, Adriane Cristina Bernat Kolankiewicz.

Writing - revision and editing: Letícia Y. Castro, Francini De Oliveira Rodrigues, Edgar Noé Morelos-García, Fernanda Dal Maso Camera, Kelly Cristina Meller Sangoi, Adriane Cristina Bernat Kolankiewicz.

The authors declare that there are no conflicts of interest.

Corresponding author:
Adriane Cristina Bernat Kolankiewicz
adri.saudecoletiva@gmail.com

Received: 10.15.2025
Approved: 06.08.2026

Associate editor:
Aline Marques Acosta

Editor-in-chief:
João Lucas Campos de Oliveira