

# Transition of care for stroke patients: an integrative review

## Transição do cuidado à pessoa com acidente vascular cerebral: revisão integrativa

### How to cite this article:

Magagnin AB, Heidemann ITSB, Brum CN. Transition of care for stroke patients: an integrative review. Rev Rene. 2022;23:e80560. DOI: <https://doi.org/10.15253/2175-6783.20222380560>

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**Conflict of interest:** the authors have declared that there is no conflict of interest.

EDITOR IN CHIEF: Ana Fatima Carvalho Fernandes  
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### ABSTRACT

**Objective:** to analyze, based on scientific evidence, how the transition of care for people with stroke occurs after hospital discharge. **Methods:** integrative literature review, conducted in the databases Scopus, Web of Science, Pubmed/MEDLINE, Latin American and Caribbean Literature on Health Sciences, Nursing Database and The Cumulative Index to Nursing and Allied Health Literature. A total of 21 articles were included in the final sample, which were then descriptively analyzed. **Results:** factors related to the adequate transition of care included: organizational barriers of the health services involved in the transition of care, the importance of health information, and the adequate coordination of care. **Conclusion:** the studies express limits experienced by individuals, family members and health professionals in systems that are fragmented and rule out the possibility of integral care in times of transition. **Contributions to practice:** the study reveals the necessary articulation of those who provide health care to people with this grievance and their families, to recognize points to be improved in their health practices and minimize complications arising from failures in care transitions.

**Descriptors:** Stroke; Continuity of Patient Care; Transitional Care; Patient Discharge.

### RESUMO

**Objetivo:** analisar, com base nas evidências científicas, como ocorre a transição do cuidado das pessoas com acidente vascular cerebral pós-alta hospitalar. **Métodos:** revisão integrativa da literatura, realizada nas bases de dados *Scopus*, *Web of Science*, *Pubmed/MEDLINE*, *Literatura Latino-Americana e do Caribe em Ciências da Saúde*, *Base de Dados de Enfermagem* e *The Cumulative Index to Nursing and Allied Health Literature*. Totalizaram-se 21 artigos na amostragem final que, posteriormente, foram analisados de maneira descritiva. **Resultados:** os fatores relacionados à transição adequada do cuidado incluíram: barreiras organizacionais dos serviços de saúde envolvidos na transição do cuidado, a importância das informações em saúde e a coordenação adequada do cuidado. **Conclusão:** os estudos expressam limites vivenciados por pessoas, familiares e profissionais da saúde em sistemas que são fragmentados e afastam a possibilidade do cuidado integral nos momentos de transição. **Contribuições para a prática:** o estudo revela a necessária articulação dos que prestam assistência à saúde para pessoas com este agravo e seus familiares, a fim de reconhecer pontos a serem aprimorados em suas práticas de saúde e minimizar complicações decorrentes de falhas nas transições de cuidado.

**Descritores:** Acidente Vascular Cerebral; Continuidade da Assistência ao Paciente; Cuidado Transicional; Alta do Paciente.

## Introduction

Stroke (CVA) is characterized as a devastating brain injury, which culminates in high mortality and causes loss of function, often leading to disability<sup>(1)</sup>, social and financial challenges for the person, family members, and society. It is considered a public health problem, since cerebrovascular diseases are currently at the top of the conditions that most affect victims with deaths worldwide, second only to cardiovascular diseases<sup>(2-3)</sup>. These data imply about 6.5 million deaths annually, besides an estimated global cost of US\$ 891 billion (1.12% of the global gross domestic product)<sup>(3)</sup>.

In the context of stroke, care encompasses several points of the Health Care Network, which is why continuity of care is necessary to ensure integrality. In the hospital environment, there is a focus on immediate therapies in certain stroke situations, including the etiological identification, beginning of rehabilitation, and preparation for discharge. Subsequently, care is extended at home, requiring family action and support from Primary Health Care (PHC) teams<sup>(4)</sup>.

Transitions that occur in an uncoordinated and sudden manner may lead to several barriers to continuity of care, including lack of information about the disease, fear, and insecurity of the family to provide care at home, readmissions, and difficulties in identifying points of support within the health system<sup>(4-5)</sup>. There is little research examining longitudinal models of stroke care<sup>(6)</sup>, and no reviews addressing the transition of care for people with this injury following hospital discharge were found in the literature. Although it is evident that the integration of health services is essential for care coordination, there is usually no connection between these points accessed by people and professionals who ultimately act independently, causing loss of information and breaking the continuum of care<sup>(6)</sup>.

By identifying how the transition of care for people with stroke occurs and the processes involved, this study will contribute, with the innovation of care, to enable the identification of weaknesses that sometimes limit the health integrality of these people, whi-

ch may be neglected at some point of the health care network. Furthermore, it allows finding in the literature potentialities related to the transition, which can be replicated by the services. Seeking to fill these gaps, the aim of this study was to analyze, based on scientific evidence, how the transition of care for people with stroke occurs after hospital discharge.

## Methods

This is an integrative literature review through the following steps: identification of the study problem, literature survey, critical appraisal of the studies and data analysis<sup>(7)</sup>. The research question was structured according to the acronym PICO<sup>(8)</sup>: P=population (people with CVA); I=phenomenon of interest (transition of care) and Co=context (after hospital discharge). Thus, we have: How does the transition of care occur for people with stroke post hospital discharge?

Attending to the second stage, original full-text research articles available in English, Spanish or Portuguese were considered eligible, understanding the representativeness of these languages in bibliographic research and covering the national, Latin American and international scenario. Furthermore, articles published from January 2010 to December 2021 were sought. The time frame was based on the advances that have occurred in the last decade regarding the care of stroke patients. Exclusion criteria consisted of studies on transitions of care related to other diseases and articles identified as reflection/theoretical, editorial or letter-response, commentaries, theses, and dissertations. The databases used were SCOPUS, Web of Science, Medical Literature Analysis and Retrieval System Online (MEDLINE) via Pubmed, Latin American and Caribbean Literature on Health Sciences (LILACS), Database on Nursing (BDENF) and Cumulative Index to Nursing and Allied Health Literature (CINAHAL). The search expressions were combined by means of the Boolean connectors AND and OR, using the descriptors according to Medical Subject Heading (MeSH) and Health Sciences Descriptors (DeCS). The syntax of the searches is described in Figure 1.

Databases	Search strategies used
MEDLINE	(("Stroke"[Mesh] OR "stroke"[Title/Abstract] OR "strokes"[Title/Abstract] OR "Cerebrovascular Accident"[Title/Abstract] OR "Cerebrovascular Accidents"[Title/Abstract] OR "CVA"[Title/Abstract] OR "Apoplexy"[Title/Abstract] OR "apoplexies"[Title/Abstract] OR "Brain Vascular Accident"[Title/Abstract] OR "Brain Vascular Accidents"[Title/Abstract]) AND (((("Continuity of Patient Care"[Mesh] OR "Continuity of Patient Care"[Title/Abstract] OR "Patient Care Continuity"[Title/Abstract] OR "Continuum of Care"[Title/Abstract] OR "Care Continuum"[Title/Abstract] OR "Continuity of Care"[Title/Abstract] OR "Care Continuity"[Title/Abstract]) OR ("Transitional Care"[Mesh] OR "Transitional Care"[Title/Abstract] OR "Transition Care"[Title/Abstract])) AND ("Patient Discharge"[Mesh] OR "Patient Discharge"[Title/Abstract] OR "Patient Discharges"[Title/Abstract] OR "Discharge Planning"[Title/Abstract])))).
Web of Science	TS=("stroke" OR "strokes" OR "Cerebrovascular Accident" OR "Cerebrovascular Accidents" OR "CVA" OR "Apoplexy" OR "apoplexies" OR "Brain Vascular Accident" OR "Brain Vascular Accidents") AND TS=(("Continuity of Patient Care" OR "Patient Care Continuity" OR "Continuum of Care" OR "Care Continuum" OR "Continuity of Care" OR "Care Continuity" OR "Transitional Care" OR "Transition Care" AND "Patient Discharge" OR "Patient Discharges" OR "Discharge Planning").
CINAHL	"stroke" OR "strokes" OR "Cerebrovascular Accident" OR "Cerebrovascular Accidents" OR "CVA" OR "Apoplexy" OR "apoplexies" OR "Brain Vascular Accident" OR "Brain Vascular Accidents" AND "Continuity of Patient Care" OR "Patient Care Continuity" OR "Continuum of Care" OR "Care Continuum" OR "Continuity of Care" OR "Care Continuity" OR "Transitional Care" OR "Transition Care" AND "Patient Discharge" OR "Patient Discharges" OR "Discharge Planning".
SCOPUS	(("Stroke"[Mesh] OR "stroke"[Title/Abstract] OR "strokes"[Title/Abstract] OR "Cerebrovascular Accident"[Title/Abstract] OR "Cerebrovascular Accidents"[Title/Abstract] OR "CVA"[Title/Abstract] OR "Apoplexy"[Title/Abstract] OR "apoplexies"[Title/Abstract] OR "Brain Vascular Accident"[Title/Abstract] OR "Brain Vascular Accidents"[Title/Abstract]) AND (((("Continuity of Patient Care"[Mesh] OR "Continuity of Patient Care"[Title/Abstract] OR "Patient Care Continuity"[Title/Abstract] OR "Continuum of Care"[Title/Abstract] OR "Care Continuum"[Title/Abstract] OR "Continuity of Care"[Title/Abstract] OR "Care Continuity"[Title/Abstract]) OR ("Transitional Care"[Mesh] OR "Transitional Care"[Title/Abstract] OR "Transition Care"[Title/Abstract])) AND ("Patient Discharge"[Mesh] OR "Patient Discharge"[Title/Abstract] OR "Patient Discharges"[Title/Abstract] OR "Discharge Planning"[Title/Abstract])))).
LILACS and BDEFN	tw:((tw:(stroke OR strokes OR "Cerebrovascular Accident" OR "Cerebrovascular Accidents" OR "CVA" OR apoplexy OR apoplexies OR "Brain Vascular Accident" OR "Brain Vascular Accidents" OR "Accidente Vascular Cerebral" OR "AVC" OR "AVE" OR "Accidente Cerebral Vascular" OR "Accidente Cerebrovascular" OR "Accidente Vascular Encefálico" OR "Accidente Vascular do Cérebro" OR "Acidentes Cerebrais Vasculares" OR "Acidentes Cerebrovasculares" OR "Acidentes Vasculares Cerebrais" OR apoplexia OR "Derrame Cerebral" OR "Accidente Cerebrovascular" OR "ACV" OR "Accidente Cerebral Vascular" OR "Accidente Vascular Cerebral" OR "Accidente Vascular Encefálico" OR "Accidente Vascular del Cerebro" OR "Accidentes Cerebrovasculares" OR apoplejía OR ataque OR "Derrame Cerebral" OR ictus)) AND (tw:(("Continuity of Patient Care" OR "Patient Care Continuity" OR "Continuum of Care" OR "Care Continuum" OR "Continuity of Care" OR "Care Continuity" OR "Continuidade da Assistência ao Paciente" OR "Acompanhamento dos Cuidados de Saúde" OR longitudinalidade OR "Longitudinalidade da Assistência ao Paciente" OR "Longitudinalidade do Cuidado" OR "Continuidad de la Atención al Paciente" OR "Continuación de la Atención" OR longitudinalidad OR "Transitional Care" OR "Transition Care" OR "Cuidado Transicional" OR "Cuidado de Transição" OR "Cuidados de Transição" OR "Tratamento Transicional" OR "Tratamento de Transição" OR "Cuidado de Transición" AND "Patient Discharge" OR "Patient Discharges" OR "Discharge Planning" OR "Alta do paciente" OR "Alta Hospitalar" OR "Alta do Hospital" OR "Planejamento da Alta" OR "Alta del paciente" OR "Alta Hospitalaria" OR "Alta de Paciente" OR "Alta del Hospital" OR "Planificación del Alta" OR "Salida del Paciente")))).

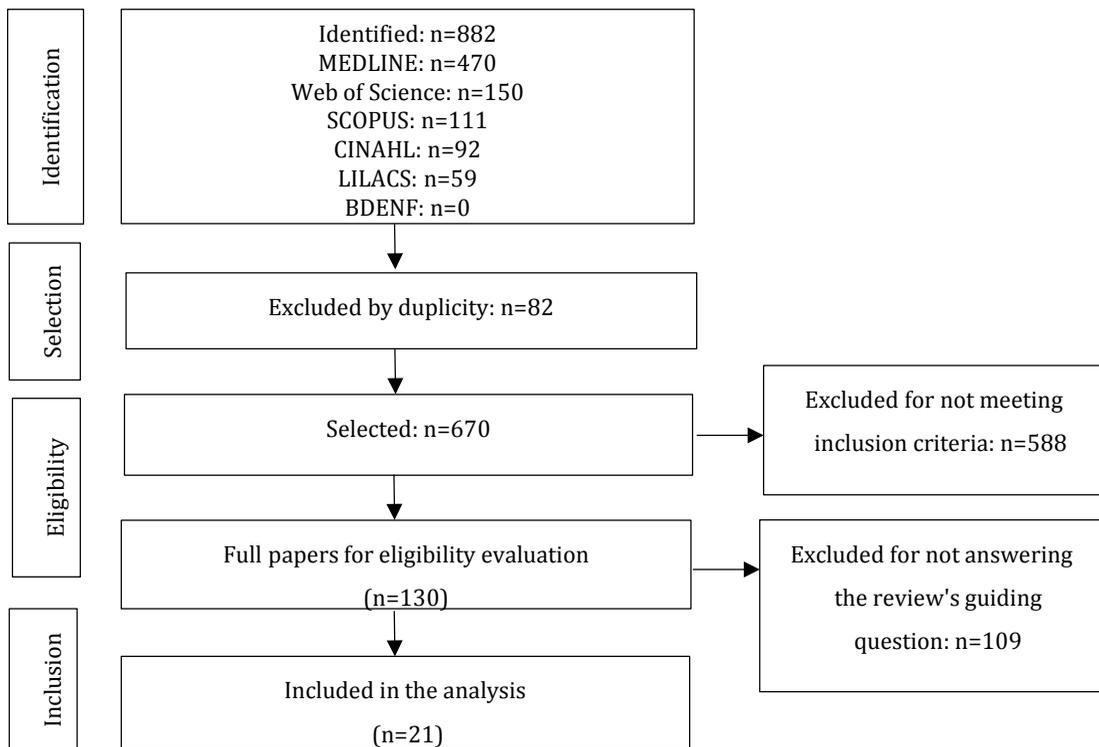
**Figure 1** – Descriptors, keywords, and search expressions used. Florianópolis, SC, Brazil, 2020

The data search occurred during the month of January 2022. The productions were accessed through the Coordination for the Improvement of Higher Education Personnel Periodicals Portal (CAPES), in a double and independent manner, by two reviewers in

three stages. In the first, the title and abstract were read; in the second, the articles were read in full; and in the third, with a third reviewer, inconsistencies and disagreements that emerged during the reading of the articles were analyzed to reach a consensus.

Based on the identification, and through the recommendations of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA), the titles and abstracts of 882 articles were read, using the EndNote Web reference manager. At the end of this process, 82 studies were removed for duplicity, and after exclusion of articles that did not fit the inclu-

sion criteria, a total of 130 pre-selected studies were obtained, which underwent a full content analysis. In the second critical and thorough reading, 109 articles were excluded for not fitting the study objective, resulting, in the end, in a total of 21 studies. The flowchart of this step is detailed in Figure 2.



**Figure 2** – Flowchart of the study selection process from the PRISMA methodology. Florianópolis, SC, Brazil, 2022

For data extraction, we used a specific instrument containing authors, year, country, title, method, theme, objective, main results, and variables related to the transition of care. Regarding the method used, the level of evidence of the study was also classified: Level I - systematic review or meta-analysis of randomized controlled trials; Level II - well-designed randomized controlled trials; Level III - well-designed clinical trials without randomization; Level IV - well-designed cohort and case-control studies; Level V - systematic review of descriptive and qualitative studies; Level VI - descriptive or qualitative study and Level VII - opinion of authorities and/or reports<sup>(9)</sup>.

## Results

The data were analyzed descriptively and are presented in Figure 3 with the main results as well as divided into three predominant themes that related to the transition of care for people with stroke: Organizational Barriers; Health Information; and Care Coordination. A thematic synthesis was performed, and a figure was constructed with a description of the data and main results of the studies.

Main author/ Year/Country	Type of study/Level of evidence	Theme/Main results
Rodrigues RAP et al. 2013/Brazil <sup>(10)</sup>	Qualitative VI	Care Coordination/Although there is a health policy that determines the reference and counter-reference system, the health network still presents weaknesses for care.
Struwe JH et al. 2013/Denmark <sup>(11)</sup>	Qualitative VI	Organizational Barriers/Continuity of care organization is important to maintain the quality of care and includes the assignment of nurses, who are responsible for coordinating interdisciplinary care.
Lutz BJ et al. 2013/US <sup>(12)</sup>	Qualitative VI	Health Information and Care Coordination/Stroke Survivors* and their caregivers do not have adequate time to deal with the shock and crisis of the stroke event, the hospital discharge, and all the new responsibilities they must deal with.
Hill KM et al. 2014/United Kingdom <sup>(13)</sup>	Cohort IV	Organizational Barriers and Health Information/Trust relationship develops over time, growing as relationships with care providers become more established and contributes to continuity of care.
Chouliara N et al. 2014/United Kingdom <sup>(14)</sup>	Qualitative VI	Organizational Barriers/Early supported discharge services were considered successful in providing rehabilitation. The mission and impact of services should be clear and demonstrable, with teams strengthening links with other providers.
Nordin A et al. 2015/Sweden <sup>(15)</sup>	Qualitative VI	Care Coordination/May be beneficial to thoroughly explore patients' expectations prior to discharge, as certain feelings and thoughts may interfere with this process.
Cassoudealle H et al. 2016/France <sup>(16)</sup>	Cohort IV	Care Coordination/Highlights the value of coherent organization at the local level between the different partners in the health sector both public and private.
Ghazzawi A et al. 2016/Canada <sup>(17)</sup>	Qualitative VI	Health Information/Relationships with health care providers, informational support, and continuity in case management influence the family care experience and ensure quality of care during transition.
Waring J et al. 2016/United Kingdom <sup>(18)</sup>	Qualitative VI	Organizational Barriers and Health Information/The most common threats to discharge were classified as: direct patient harm (e.g., falls); proximal factors (e.g., patient education); and distal factors (e.g., discharge planning).
Davoody N et al. 2016Sweden <sup>(19)</sup>	Qualitative VI	Health Information/Potential e-Health services can be beneficial for sharing information in the various stages of stroke.
Ratray NA et al. 2017/USA <sup>(20)</sup>	Qualitative VI	Health Information/Some factors influence communication between health services, such as: consistent and complete treatment and medication plans; standardized and reliable discharge documentation; and use of multiple modes of communication.
Gilmore-Bykovskiy AL et al. 2018/USA <sup>(21)</sup>	Cohort IV	Health Information/Not designating a service responsible for post-hospital follow-up - described in the discharge summary - may be associated with worse 30-day post-discharge outcomes.
Kable A et al. 2019/Australia <sup>(22)</sup>	Qualitative VI	Organizational Barriers/Continuity of care is affected by pressure for hospital discharge, inadequate or late discharge summaries, and challenges involving caregivers. Post-discharge, barriers include unavailability of services, delays and waiting lists, caregiver-related problems, and long-term follow-up.
Bettger JP et al. 2019/USA <sup>(23)</sup>	Randomized Clinical Trial II	Health Information and Care Coordination/Poorly executed transitions or discontinuous care increase the risk of medical and medication errors, underutilization, overuse of health care services and procedures, and patient and caregiver stress.
Yang CP et al. 2019/Taiwan <sup>(24)</sup>	Descriptive VI	Care Coordination/Continuity of treatment correlates with one-year survival.
Krishnan S et al. 2019/USA <sup>(25)</sup>	Qualitative VI	Health Information/Practice shared decision making, engaging stroke survivors in discussions during discharge planning, and providing options for various facilities are key to providing patient-centered care.
Deutschbein J et al. 2020/Germany <sup>(26)</sup>	Qualitative VI	Care Coordination/Care coordination is a potentially effective tool to support stroke survivors as they organize and utilize needed and available health services in the community in a coherent manner.
Lindblom S et al. 2020/ Sweden <sup>(27)</sup>	Qualitative VI	Organizational Barriers and Health Information/There is a great need for more involvement and dialogue among patients and significant others regarding health conditions, procedures in the hospital, and preparation for self-care after discharge.
Bierhals CCBK et al. 2020/Brazil <sup>(28)</sup>	Randomized Clinical Trial II	Care coordination/nursing educational interventions at home generated greater use of outpatient services. However, greater integration between health services based on an effective referral and counter-referral system is needed.
Sheehan J et al. 2021/Australia <sup>(29)</sup>	Qualitative VI	Health Information and Care Coordination/Better integration of services is needed to support an effective approach in hospital and community settings to improve continuity of care after stroke.
Pedersen RA et al. 2021/Norway <sup>(30)</sup>	Cohort IV	Health Information/Discharge summaries have not fulfilled their potential to serve as tools for collaboration, knowledge transfer, and guideline implementation. Instead, they may contribute to sustaining the gap between hospital and aftercare.

**Figure 3** – Studies selected for the research. Florianópolis, SC, Brazil, 2022

The predominant type of study was the level of evidence VI (descriptive and qualitative), located in 13 productions<sup>(10-12,14,17-20,22,24-25,27,29)</sup>. The United States of America was the country with the largest number of studies<sup>(12,20-21,23,25)</sup> on the subject, with a total of five studies. Regarding the period of publication of the studies, there was no emphasis on recent years. The predominance of studies occurred in 2016<sup>(16-19)</sup> and 2019<sup>(22-25)</sup>, with four articles in each year.

Despite the organizational barriers found in the study, some limits for the adequate transition are mentioned, which involve elements corresponding to the institutions and ways of working. The importance of dialogue spaces for building a relationship of trust, sharing decisions, and identifying the needs of each stroke patient and family is highlighted<sup>(13,27)</sup>. Organized teams understand the role of each professional and consider it in decision making<sup>(18,27)</sup>, also considering that the proximity among team members enables professionals to know how and when to request support and rely on their assessments<sup>(13,27)</sup>.

Services with complete teams to provide care become a crucial factor in the quality of work and, consequently, culminate in the decrease of professional turnover<sup>(11)</sup>. On the other hand, places with high staff alternation cause failures in the processes and fragility in the care routines, leading to dissatisfaction of hospitalized people<sup>(27)</sup> as well as places with lack of resources, such as inadequate equipment or physical structure<sup>(11)</sup>.

Weak communication between the points of the Health Care Network can generate misinterpreted information and little trust among the teams. The feedback between health services facilitates the understanding of the process and makes it possible to identify weak points of the transition for further planning and execution of improvements. Furthermore, it certifies the professionals of the hospital environment if the performance before discharge was effective for the affected person<sup>(27)</sup>. During the care routine of the hospital team, the caregiver should also be inserted in the practices, including monitoring, and assisting the

provision of care so that he/she feels safe in the transition to the home<sup>(22)</sup>.

The participation of a health professional of trust in the realization of care in the first moments of the transition is essential, since this is a point of support that families can turn to in situations of doubts or anxieties<sup>(21,27)</sup>. Services that provide primary care become important in this context, since they have a greater bond and information about the families' reality<sup>(27)</sup>.

Discharge planning should be the focus from the moment people are admitted to the hospital sectors. Contact with other services through meetings can facilitate the alignment of decisions and planning of care to be continued at home, including necessary adaptations at home, even before discharge<sup>(11)</sup>.

Regarding the health information available for the adequate transition, we mention inadequate discharge planning and communication failures that may impact the continuity of care and make it impossible to involve the stroke patient in rehabilitation<sup>(19,30)</sup>.

Many services and professionals still consider the traditional "discharge summaries", however, they are not ideal and often have limited information, besides the fact that the family health team will only have access to these documents days after the de-hospitalization. Information via telephone can also generate great confusion<sup>(18-19)</sup>. The use of different information systems may lead to losses or duplicity. Therefore, it is necessary to reinforce the importance of using common tools for the health care points, facilitating collaboration and communication among all those involved<sup>(18,23,29)</sup>.

Sometimes, the information described is important at the time of hospitalization, while the most relevant issues for later follow-up in primary care are omitted. Often forgotten, bureaucratic information is also important, including guidance on prescriptions, dispensing of medications, rights, and responsibilities of the person with stroke, and rehabilitation<sup>(30)</sup>. In addition, there must be justification for decisions made during hospitalization regarding interventions and future proposals<sup>(20)</sup>.

The discharge records should also clarify who is responsible for the care and enable the congruent follow-up to the plan<sup>(21,25)</sup>. Another item to be considered is that the care provided in hospital care usually occurs with several professionals of the same category, which can generate fragmented information<sup>(13,17)</sup>.

One aspect that requires attention from professionals is not to offer large volumes of information at the same time, since it negatively affects the family caregiver's ability to absorb them<sup>(12)</sup>. Furthermore, the verticalized relationship with the caregivers, based on several limits and rules, can make them believe that they are bothering them and do not feel comfortable to interact, which can lead them to become unmotivated in the professional orientation and seek other sources of information, such as the internet or other support people<sup>(17)</sup>.

The care process that goes through several points of the services generates discharge summaries, referrals, specific assessments, team decisions, development of skills with caregivers, receiving information from specialized teams and contact with other services<sup>(13,27)</sup>. This large network generates the need for the creation of process synthesis, which could be performed through links, enabling standardization of the understanding of the individual's needs and more assertive judgments about future care<sup>(27)</sup>. The e-Health services can also be a good strategy for integration of important data<sup>(19)</sup>.

Care coordination after discharge becomes as important as care in the acute phase of stroke. Initiatives that bring primary care and hospital teams closer together are needed, which may favor the understanding of necessary care and rehabilitation goals, since discharge summaries may be insufficient<sup>(29)</sup>.

The search for reducing hospitalization time may culminate in the "stroke crisis": the moment of greatest stress for families and individuals after the event<sup>(12)</sup>. They find themselves in the task of reflecting and determining everything that needs to be done, which includes modifications in the house, purchase of equipment, adaptation of employment ties, income

maintenance, social support, among other items of a list that seems infinite<sup>(12,15)</sup>.

The dialogue and coordinated care between the health and community network points optimize, facilitate, and harmonize the information<sup>(10,16-17)</sup>. After discharge, people with stroke and their families seek follow-up with professionals who have already had an established relationship, generally occurring in the PHC<sup>(10)</sup>. It is at this point of the network that professionals can recognize the Social Determinants of Health, such as conditions for adequate nutrition, socioeconomic condition, and social support<sup>(23)</sup>.

The counter-reference is urgent in this context that requires complexity of care, and integrality can only be effective in the performance of all points of the Health Care Network<sup>(10,16)</sup>. It happens that not all people have knowledge or access about their reference services in the community and can feel frustrated when they need assistance, but do not know how to request it<sup>(10)</sup> or when there is a lack of experience of the professionals themselves in relation to stroke care<sup>(17)</sup>. The continuity of care must be based on the orientations of health professionals and development of abilities started inside the hospital institution, avoiding that the family performs care in an empirical way or according to previous experiences<sup>(10,15)</sup>.

Data from a study with more than 19,000 people with stroke over an eight-year period evidenced that continuity of care through outpatient visits for this group is correlated with one-year survival<sup>(24)</sup>. A randomized clinical trial<sup>(28)</sup> found that the group of people who received visits from nurses after discharge had greater access to hospital outpatient services, which can be justified by the greater bond and effectiveness in health orientations.

Care coordination enables patients to access adequate health services in primary care and can also avoid overloading hospital sectors<sup>(26)</sup>. In the context of stroke, assigning care coordination to the nurses in charge is also pointed out as a relevant item for the quality of interdisciplinary care<sup>(11)</sup>.

## Discussion

Hospital discharge is not an end point in care, but one of the multiple transitions within the journey that requires health care<sup>(12)</sup>. This continuum of care requires a long-term relationship between an individual/family and health services, encompassing continuity of information, interconnected care management, and continuity of the relationship between professionals, families, and users<sup>(4,24)</sup>.

Communication is listed as a challenge for teamwork. The experience of discussions among all professionals is reported in a Brazilian study, which used the experience of the interdisciplinary round to demonstrate the positive impact on the quality of care and safety of the hospitalized person. It is noteworthy that the decentralization of medical knowledge enables greater interaction and complementation of technical skills of those involved<sup>(31)</sup>. In the meantime, recognizing the role of each professional in care, as well as the alignment among teams, promotes quality care<sup>(32)</sup>.

Besides the multidisciplinary importance of care, nursing is an essential pillar for successful transitions, because in their training they develop skills for care management through systematization of care and development of self-care and health education<sup>(33)</sup>.

The interlocution involving the hospitalized person and his/her family members allows the identification of gaps to be worked out still during hospitalization. On the other hand, poorly executed transitions increase the risk of inappropriate behaviors and generate a series of uncertainties for families<sup>(23)</sup>. People who suffered a stroke and have continuous rehabilitation needs must have access to specialized outpatient services after discharge, either at home or in a facility, based on individual needs<sup>(34)</sup> and the soonest possible assessment<sup>(32)</sup>.

Interventions by primary care teams should focus on continuous follow-up and timely update of information to users and caregivers. Strategies aimed at the development of skills help self-care and mini-

mize stroke complications<sup>(35)</sup>. This practice maximizes family participation and assists them by reducing the stress of the role<sup>(32)</sup>. Among the transitional care interventions, home visiting programs stand out. This practice reduces mortality at all follow-up times and strengthens activities of daily living after the de-hospitalization<sup>(36)</sup>. Moreover, PHC services enable an integral look at health and its determinants, in which other services may be less prepared<sup>(37)</sup>.

In Brazil, the Care Line for People with Stroke enables improvement in the quality of care and encourages institutions to adopt coherent care practices, which require a series of alignments in the health services. Despite the common pressure to reduce hospitalization time, there must be common sense in hospital discharge, avoiding early discharge that may culminate in clinical worsening or even readmission<sup>(38)</sup>.

Regarding health information, the excess can be as unfavorable as its scarcity. Large volumes of information, sometimes conflicting and from various health services, may prevent adequate understanding by caregivers and patients<sup>(35)</sup>. It is important for the professional to make sure that the clarifications have been truly understood<sup>(32)</sup>.

Recent advances in mobile technologies (smartphones) offer unique opportunities to use them to improve health awareness and empower people to self-manage their risk factors, which may be particularly attractive to populations with limited access to services, such as in rural areas<sup>(39)</sup>. However, thinking about improving health informatization goes beyond implementation in non-existent settings. Health managers need to create appropriate conditions for the use of these tools, enabling the development of professional skills and establishing coordinated mechanisms at all points of the Health Care Network<sup>(40)</sup>.

The transition of care becomes fundamental in the current demographic context due to the transformations of the epidemiological profile and the predominance of older people, which leads to an increase in chronic conditions and their consequent implications<sup>(37)</sup>. Besides the reduction in readmission

rates, the adequate transition encourages people with stroke and their caregivers to exercise their autonomy and independence in health practices after discharge.

The effectiveness of the transition processes in the Health Care Network may influence not only periods of change hospital-home, but any other subsequent transitions<sup>(41)</sup>. Developed countries like the USA present advanced discussions regarding the care of people with stroke, including the development of guidelines and directives that are followed throughout the continent<sup>(42)</sup>. In addition, they demonstrate primary discussions and models regarding the transition of care, which may justify the greater number of articles selected for this review<sup>(41,43)</sup>. At the national level, there is still a gap regarding the production of knowledge on this topic.

### Study limitations

Most of the studies approached the transition of care from a single perspective, such as the perception of caregivers, professionals, or the person with stroke. Studies that contemplate the integrality of the transition of care may help the understanding of this process.

### Contributions to practice

Identifying the main obstacles and relevant points for an adequate transition instigates reflections and instrumentalizes managers and the multi-professional team about how care can be qualified in times of transition, ensuring the adequate continuity of care, avoiding readmissions or illness of the family caregiver.

### Conclusion

The study allowed us to identify relevant items involved in the transition of care that occurs between the health services used by the person with stroke, including organizational barriers, care coordination

and health information. With the predominance of curative practices in the institutional environment, the family member, and the person him/herself may be excluded from the de-hospitalization process and, therefore, without participation in discharge planning and skills development.

Added to this, the pressure of hospital routines and verticalized work relationships generate fragmented discharge summaries and early discharges. The review demonstrated the importance of articulated services to ensure a safe transition. In addition, it encourages reflection so that the teams are trained for this, aligned with the other points of the network with necessary access to technologies for sharing health information.

### Authors' contribution

Conception and design or analysis and interpretation of data; writing the manuscript or relevant critical review of the intellectual content; final approval of the version to be published and Responsibility for all aspects of the text in ensuring the accuracy and completeness of any part of the manuscript: Magagnin AB. Writing of the manuscript or relevant critical review of the intellectual content and final approval of the version to be published: Heidemann ITSB.

Conception and design, data analysis and interpretation, and writing of the manuscript or relevant critical review of the intellectual content: Brum CN.

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