

# Operationalization and time dedicated by nurses in responsible hospital discharge

Operacionalização e tempo dedicado pelo enfermeiro na alta hospitalar responsável  
Operacionalización y tiempo dedicado por el enfermero en el alta hospitalaria responsable

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## Abstract

**Objective:** To investigate how nurses from different practice settings operationalize responsible hospital discharge, and how much time they dedicate to this process.

**Methods:** This is a web survey carried out with 71 nurses from 29 hospitals in the state of São Paulo between February and September 2021. Fourteen activities, validated by specialists in a previous stage, supported the construction of a questionnaire submitted to a pre-test. Respondents' personal and professional data were requested, as well as the regularity, moment, professionals involved and estimated time for carrying out activities at hospital discharge. For statistical analysis measures of central tendency and parametric and non-parametric tests were applied to compare the variables.

**Results:** Nurses were linked to teaching (n=46), public (n=14) and private (n=11) hospitals. They were mostly female, 66 (93%), with a mean age of 36 (SD 7.0), years and professional experience time of 11.8 (SD 7.1) years. For the most part, they performed a clinical/assistance role. It was reported that most activities were performed regularly in the first four days of hospitalization. Scheduling home visits, identifying post-discharge problems and telephone contact (up to seven days) were never carried out by nurses, 44(63.7%), 41(58.6%) and 51(71.8%), respectively. The estimated average time for the process represented 257.5 minutes.

**Conclusion:** Failure to systematically implement various activities and the significant time required in the process can guide managers in reviewing protocols related to responsible discharge and in managing practices to improve the process.

## Resumo

**Objetivo:** Investigar como enfermeiros de diferentes cenários de prática operacionalizam a alta hospitalar responsável, e quanto tempo eles se dedicam a este processo.

**Métodos:** *Web Survey* realizada com 71 enfermeiros de 29 hospitais do Estado de São Paulo, entre fevereiro e setembro de 2021. Quatorze atividades, validadas por especialistas em etapa anterior, embasaram a construção do questionário submetido ao pré-teste. Nele, foram solicitados dados pessoais e profissionais dos respondentes e, também, a regularidade, momento, profissionais envolvidos e tempo estimado para a condução das atividades na alta hospitalar. Para análise estatística aplicou-se medidas de tendência central e testes paramétricos e não paramétricos para comparação das variáveis.

**Resultados:** Os enfermeiros estavam vinculados a hospitais de ensino (n=46); públicos (n=14) e privados (n=11). Eram, majoritariamente, do sexo feminino 66(93%), com idade média de 36(DP 7,0); anos e tempo de atuação profissional de 11,8(DP 7,1) anos. Em sua maioria, desempenhava, função clínico/assistencial.

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**Conflicts of interest:** extracted from a master's thesis entitled "Transição do Cuidado na Alta Hospitalar: Tempo dedicado pela Enfermagem e Gestão do Processo" carried out with the Graduate Program in Nursing, Faculdade de Medicina de São José do Rio Preto (FAMERP), completed in 2022.

Relatou-se que a maioria das atividades era realizada com regularidade nos primeiros quatro dias de internação. Agendamento de visita domiciliar, identificação de problemas pós-alta e contato telefônico (até sete dias) nunca eram executados pelos enfermeiros; 44(63,7%), 41(58,6%) e 51(71,8%), respectivamente. O tempo médio estimado para o processo representou 257,5 minutos.

**Conclusão:** A não implementação de forma sistemática de várias atividades e o tempo significativo demandado no processo podem nortear os gestores na revisão de protocolos relativos à alta responsável e no gerenciamento das práticas para o aprimoramento do processo.

## Resumen

**Objetivo:** Investigar cómo enfermeros de distintos escenarios de práctica operacionalizan el alta hospitalaria responsable, y cuánto tiempo se dedican a este proceso.

**Métodos:** Web Survey realizada con 71 enfermeros de 29 hospitales del estado de São Paulo, de febrero a septiembre de 2021. Catorce actividades, validadas por especialistas en etapa anterior, fundamentaron la construcción del cuestionario sometido a la prueba piloto. En la prueba se solicitaron datos personales y profesionales de los encuestados, además de la regularidad, momento, profesionales involucrados y tiempo estimado para la conducción de las actividades en el alta hospitalaria. Para el análisis estadístico se aplicaron medidas de tendencia central y pruebas paramétricas y no paramétricas para la comparación de las variables.

**Resultados:** Los enfermeros estaban vinculados a hospitales universitarios (n=46), públicos (n=14) y privados (n=11). Mayormente eran de sexo femenino 66 (93 %), con edad promedio de 36 (DP 7,0) años; y tiempo de actuación profesional de 11,8 (DP 7,1) años. En su mayoría, desempeñaba función clínica/ asistencial. Se reportó que la mayoría de las actividades era realizada con regularidad en los primeros cuatro días de internación. Programación de visita domiciliaria, identificación de problemas posteriores al alta y contacto telefónico (de hasta siete días) nunca eran ejecutados por los enfermeros; 44 (63,7 %), 41 (58,6 %) y 51 (71,8 %), respectivamente. El tiempo promedio estimado para el proceso representó 257,5 minutos.

**Conclusión:** La no implementación de forma sistemática de varias actividades y el tiempo significativo demandado en el proceso pueden orientar a los gestores en la revisión de protocolos relativos al alta responsable y en la gestión de las prácticas para el perfeccionamiento del proceso.

## Introduction

Responsible hospital discharge was implemented in the Brazilian health system in 2013, as a guideline for continuity of care through articulated actions between health care institutions and points of the Health Care Network (RAS - *Rede de Atenção à Saúde*).<sup>(1)</sup> Oncology patients, older adults, in chronic conditions, with cardiovascular and respiratory diseases and using devices and equipment for health at home are considered eligible.<sup>(2,3)</sup>

Nurses are recognized as mediators of interprofessional relationships and as articulators between different services.<sup>(4)</sup> It also stands out in educational activities and in the management of care and critical situations with patients/family members.<sup>(2)</sup> However, the lack of hospital protocols<sup>(5)</sup> and the work overload generated by the incorporation of discharge activities to clinical nurses' work can compromise the operationalization of this process.<sup>(6)</sup>

Preparing for discharge demands significant time.<sup>(7)</sup> There is great agreement regarding the beginning of activities upon admission, but only 2% of the eight daily hours of work are dedicated to preparing patients for discharge.<sup>(8)</sup>

In an attempt to find a solution to this problem, the exclusive practice of teams and/or nurses in the care transition process has been indicated.<sup>(2)</sup> Successful experiences are found in other countries<sup>(6,9,10)</sup> and emerge in Brazil.<sup>(11)</sup> In these, professionals called liaison, navigator or liaison nurses act in the active search, clinical and social assessment of patients who need continuous care, providing guidance and interactions with professionals, patients/family members and services.

Scientific productions have shown activities carried out by nurses and staff in different models of discharge planning and care transition, but do not consider the time required to carry out this process.<sup>(6,9,10,12)</sup> Moreover, other variables inherent to responsible discharge, such as the regularity of activities, when they occur and the professionals involved in the process, still need to be better explored. Because it is a national guideline and given this gap in knowledge, this investigation aims to answer the following question: *What is nurses' perception about the operationalization and the estimated time for carrying out the responsible hospital discharge?* Thus, this study aims to investigate how nurses from different practice settings operate responsible hospital discharge and how much time they dedicate to this process.

## Methods

This research is a web survey and was guided by the Checklist for Reporting Results of Internet E-Surveys (CHERRIES) guidelines.<sup>(13)</sup> It was conducted with hospitals in the state of São Paulo with good health practices proven by national and international accreditations. Data collection took place discontinuously, due to the pandemic, from February to September 2021.

Inclusion in the convenience sample was based on the following criteria: 1. medium-sized, large and/or extra-capacity hospitals; 2. General and specialized hospitals in oncology, pediatrics, neurology and orthopedics; 3. teaching hospitals, certified by the Interministerial Certification Program of the Ministries of Health and Education;<sup>(14)</sup> 4. accredited by the Brazilian National Accreditation Organization (ONA, in Portuguese)<sup>(15)</sup> as excellence (level 3); with Accreditation Canada International (ACI)<sup>(16)</sup> and Joint Commission International (JCI).<sup>(17)</sup>

Due to the high number of institutions found and the difficulty in identifying/contacting the population of interest, a sample of 29 hospitals was chosen. Priority was given to teaching hospitals (TH) linked to universities and hospitals managed by medical schools. Priority was also given to public (PU) and private (PV) hospitals, in order to cover, as much as possible, different Regional Health Departments in the state of São Paulo, seeking greater study representativeness. For the city of São Paulo, with a vast complex hospital system, most private hospitals accredited by JCI and ACI were chosen.

A questionnaire was constructed based on activities to be carried out by nurses at the responsible hospital discharge and validated, in a previous study, by specialists.<sup>(18)</sup> In order to delimit participants and avoid bias in the answers,<sup>(19)</sup> initially nurses should confirm their role in the responsible discharge process, then proceeding to personal, professional and hospital data. Sequentially, they were asked to indicate for each activity, the regularity with which they were performed, when they occurred, professionals involved and estimated time in minutes for their

execution. Participants were asked about the importance and practicability in hospital institutions of a non-validated activity, “Perform patient/family follow-up through telephone contact”, as it is referenced in the literature.<sup>(8,20,21)</sup>

The constructed questionnaire was inserted into Google Forms with the link available to contacts identified by email and social and professional media, after pre-testing and making adjustments. Participants were recruited through contacts via email, professional social networks (LinkedIn) and social media (WhatsApp), using the snowball sampling method.<sup>(22)</sup> There was also designation of nurses who would work at discharge responsible for being managers of the nursing service. Reminders were sent at 15-day intervals after the invitation.

Statistical tests were processed using the computer program The SAS System for Windows (Statistical Analysis System), version 9.2 (SAS Institute Inc, 2002-2008, Cary, NC, USA), considering a significance level of 5% ( $p < 0.05$ ). We applied: descriptive statistics with measures of central tendency; chi-square test for comparing categorical variables between types of hospitals or Fisher's exact test; the Mann-Whitney test and the Kruskal-Wallis test, when there was no normal distribution of variables, followed by Dunn's post-hoc test. Open-ended responses were categorized according to the study objectives.

The project was approved by the Research Ethics Committee (REC) of the institution where the study was carried out (Opinion 4.347.495/CAAE (*Certificado de Apresentação para Apreciação Ética* - Certificate of Presentation for Ethical Consideration) 08412019.4.0000.5415. Acceptance was obtained from participants upon signing the Informed Consent Form (ICF).

## Results

There was participation of 71 nurses linked to 29 institutions (TH:  $n=46$ ; PU:  $n=14$  and PV:  $n=11$ ) located in nine cities in the state of São Paulo. The hospitals were of a general nature – 59 (83.1%), of which 12 (16.9%) were specialized in pediatrics,

maternal and child care, palliative care and oncology. The access link dissemination to the survey through professional and social media made it impossible to calculate the response rate. Professionals were mostly female, 66 (93%), with a median age of 36 (SD 7.0; range 23-56) years, professional experience time of 11.8 (SD 7.1; range 0.8 - 36) years and in the discharge process of 4.3 (SD 2.8; range 0.5-9) years. Most of them performed clinical/assistance functions; six (8.4%) reported working specifically in transitional care positions such as navigator, Kanban and dehospitalization nurses. Some activities are never performed by nurses - variation 41(58.5%) to 51(71.8%). Among them, the following stand out: A12- Schedule home visits for patients with greater demand for care needs; A13 - Identify problems, after hospital discharge, via telephone or home visit, and establish a care plan to solve them; and A14 - Follow up patient/family through telephone contact within seven days after hospital discharge. A significant difference was found in frequency between hospitals ( $p < 0.01$ ) in activities: documentation/referrals (always in TH, frequent in PV, and never and always in PU); information sharing (sometimes frequent and always in TH; never and sometimes in PV; never in PU); teaching equipment handling (always in TH and PU, and frequent in PV) (Table 1).

The most reported moment for conducting responsible hospital discharge activities was during

hospitalization, ranging from 31 (68.9) to 60 (84.5%). Elaboration of a discharge plan occurs more frequently during hospitalization in TH and PV and at discharge in PU; and patient/family orientation during hospitalization in TH and PU and at discharge in PV ( $p < 0.05$ ). Nurses reported that 27 (39.1%) from preparing the discharge plan, 20 (29.4%) from patient/family orientation, 16 (23.9%) from teaching equipment handling and 10 (14.3%) from therapeutic project are carried out at discharge. There was mention, among those who implement the activities post-discharge telephone contact, scheduling home visits and identification/solution of post-discharge problems and their performance during hospitalization ( $n=6$ ), at discharge ( $n=6$ ) and also at post-discharge ( $n=19$ ). The first four days of hospitalization (D1-D4) are preferentially chosen to carry out responsible discharge activities in the different hospitals - variation 51.5% to 68.7%. Also noteworthy is the dispersion of responses and the absence of a defined date for many of them. No difference was found between the three types of health institutions (Table 2).

Telephone contact after discharge, an activity not validated by the judges in the final Delphi round, was considered very important by 42 (59.1%) and important by 28 (39.4%) for nurses from the researched institutions, for 41 (57.8%), as viable and very viable, and for 8 (11.3%), as non-viable. Fischer's exact test was not significant

**Table 1.** Regularity of carrying out responsible hospital discharge activities in the investigated institutions (teaching, public and private) ( $n=71$ )

Activity	Never n(%)	Sometimes n(%)	Frequently n(%)	Always n(%)	p-value
1. Eligibility criteria	1(1.4)	9(12.7)	24(33.8)	37(52.1)	NS
2. Medical contact/discharge projection*	-(-)	10(14.1)	24(33.8)	37(52.1)	NS
3. Therapeutic project	1(1.4)	8(11.3)	30(42.2)	32(45.1)	NS
4. Collect information	1(1.4)	12(16.9)	25(35.2)	33 (46.5)	NS
5. Patient/family communication	1(1.4)	6 (8.4)	19(26.8)	45(63.4)	NS
6. Elaboration of discharge plan	2(2.8)	7(9.8)	19 (26.8)	43(60.6)	NS
7. Professional team coordination	1(1.4)	7(9.9)	28(39.4)	35(49.3)	NS
8. Documentation/referrals	5(7.1)	14(19.7)	16 (22.5)	36(50.7)	<0.01
9. Information sharing	12(16.9)	25(35.2)	9(12.7)	25(35.2)	<0.01
10. Patient/family orientation	1(1.4)	4(5.6)	18(25.4)	48(67.6)	NS
11. Teaching equipment handling	3 (4.2)	5(7)	21(29.6)	42(59.2)	<0.01
12. Scheduling a home visit	44 (63.8)	10(14.5)	5(7.2)	10(14.5)	NS
13. Identification/solution of post-discharge problems	41(58.5)	13(18.6)	6(8.6)	10(14.3)	NS
14. Post-discharge telephone contact (7 days)	51(71.8)	10(14.1)	6 (8.5)	4(5.6)	NS

Fisher's exact test; \*Missing data; p-value - differences between hospitals; NS - not significant (between hospitals)

**Table 2.** Day of period of hospitalization for carrying out responsible hospital discharge activities in the investigated institutions (teaching, public and private) (n=71)

Activity	D1-D2 n(%)	D3-D4 n(%)	D5-D7 n(%)	Daily n(%)	Near discharge day n(%)	No date n(%)
1. Eligibility criteria	18(32.7)	15(27.3)	8(14.6)	4(7.3)	3(5.4)	7(12.7)
2. Medical contact/discharge projection	20(35.1)	18(31.6)	2(3.5)	3(5.3)	1(1.7)	13(22.8)
3. Therapeutic project	16(33.3)	17(35.4)	3(6.3)	3(6.2)	1(2.1)	8(16.7)
4. Collect information	11(26.2)	14(33.3)	6(14.3)	2(4.8)	1(2.4)	8(19)
5. Patient/family communication	13(29.6)	11(25)	6(13.6)	2(4.5)	1(2.3)	11(25)
6. Elaboration of discharge plan	7(21.2)	13(39.4)	3(9.1)	3(9.1)	1(3)	6(18.2)
7. Professional team coordination	16(34)	13(27.7)	4(8.5)	4(8.5)	1(2.1)	9(19.2)
8. Documentation/referrals	7(21.2)	10(30.3)	4(12.1)	1(3)	3(9.1)	8(24.3)
9. Information sharing	3(12)	10 (40)	3(12)	1(4)	2(8)	6 (24)
10. Patient/family orientation	8(23.6)	10(29.4)	3(8.8)	1(2.9)	3(8.8)	9(26.5)
11. Teaching equipment handling	15(37.5)	8(20)	4(10)	3(7.5)	2(5)	8(20)

Fisher's exact test; Missing data and non-significant p-value (between hospitals) of all activities

**Table 3.** Time estimated by nurses (in minutes) to carry out responsible hospital discharge activities (n=71)

Activities	Teaching MD(IQR) n(%)	Public MD(IQR) n(%)	Private MD(IQR) n(%)	p-value
1. Eligibility criteria	10(10)	20(20)	42.5(40)	< 0.05 - PV ≠ TH/PU
2. Medical contact/discharge projection*	10(10)	10(5)	20(50)	< 0.05 - PV ≠ TH/PU
3. Therapeutic project	20(20)	15(20)	30(30)	< 0.05 - PV ≠ TH
4. Collect information	20(20)	15(20)	52.5(72.5)	< 0.05 - PU ≠ PV
5. Patient/family communication	20(30)	12.5(15)	30(30)	< 0.05 - PU ≠ PV
6. Elaboration of discharge plan	15(20)	20(20)	30(45)	NS
7. Professional team coordination	20(20)	20(20)	45(75)	< 0.05 - TH ≠ PV
8. Documentation/referrals	20(20)	10(18)	30(105)	NS
9. Information sharing	17.5(20)	5(20)	20(30)	NS
10. Patient/family orientation	20(15)	20(20)	20(45)	NS
11. Teaching equipment handling	30(25)	30(25)	30(45)	NS
12. Scheduling a home visit	20(30)	10(10)	10(10)	NS
13. Identification/solution of post-discharge problems	20(20)	5(0)	20(0)	NS
14. Post-discharge telephone contact (7 days)	15(20)	12.5(15)	30(0)	NS
Total mean time (variation)	257.5	205	410	

Kruskal-Wallis test and Dunn's post-hoc test; p-value differences between hospitals; NS- not significant (between hospitals); MD - median; IQR - interquartile range (IQR= Q3-Q1); TH- teaching; PU- public; PV - Private

for importance and operability. Several combinations of professionals involved in the 14 activities of the process were found. The most cited were: 1. nurses (N), doctor (D), social worker (SW), physiotherapist (P), nutritionist (N) and speech therapist (ST) - 27 (38.6%); 2. nurses, doctor, social worker - 8 (11.4%); 3. nurses, doctor, social worker, physiotherapist and nutritionist - 8 (11.4%); and 4. nurses only - 7 (10%). Nurses, individually or as part of the team, performed all activities. Team composition varied among the three types of hospitals ( $p \leq 0.05$ ). There was a higher frequency of the combination 'N, D, SW, P, N, ST' in TH and PU, and 'N' and combinations 'N, P, N, ST' and 'N, D, P, N, ST' in PV (A3 - Therapeutic project). In nurses' perception, the time spent to carry out respon-

sible discharge activities ranged from five minutes for information sharing activities and scheduling home visits in PU. There was an average of 52.5 (IQR 72.5) minutes to collect information in PV. The sum of the estimated time for the 14 activities that make up the responsible discharge process was 257.5 (range 205-410) minutes (Table 3).

## Discussion

No databases containing hospitals that implemented responsible hospital discharge for transition and continuity of care were identified and, despite representing a region of the country, the participation of institutions was limited, especially regarding private

hospitals. Other studies may approach or present a reality different from that shown. Considering the pandemic context, the compliance of nurses who worked on the front line may also have been compromised, despite the wide dissemination.

This investigation supports the dissemination and appreciation of the responsible discharge process and allows comparison between teaching, public and private institutions. It highlights the high demand for time to carry out this process and the workload generated for nurses when jointly taking over clinical/assistance activities and transition and continuity of patient care. It also guides managers in the preparation or revision of protocols related to responsible discharge, workforce composition and process assessment aiming at an effective transition and continuity of patient care. It is also important to highlight the support for educators in professional training, favoring, above all, the comprehensiveness and quality of health care.

From a list containing 14 activities, 13 of which were validated,<sup>(18)</sup> it was possible to examine the operationalization of hospital discharge responsible for nurses from different Brazilian practice settings.

The findings point to the absence of established institutional protocols to guide the conduct of this process, despite the fact that 11 years have passed since the Brazilian regulations were implemented.<sup>(1)</sup> Many nurses were unable to specify the moment in which the activities took place, indicating that they did not seem to follow a pre-established sequence, being related to professionals' and unit's availability. The lack of time limits for starting/carrying out actions can lead to inadequate management by the person in charge. The lack of protocols and counter-referral was also mentioned by nurses from a university hospital in southern Brazil as a weakness in continuity of care, aggravated by the lack of an integrated computerized system and management of indicators.<sup>(5)</sup>

Nurses reported conducting activities predominantly during the first four days of hospitalization in the researched institutions. However, there is a dispersion of answers indicating a significant percentage of actions performed late, at the time of discharge, such as: therapeutic project, preparation

of a discharge plan (mainly in PU), patient/family guidance (in PV) and teaching equipment handling. This can perhaps be explained due to reduced length of stay of patients in private institutions or other demands taken over by nurses in public hospitals.

This conduct is at odds with the recommendations for starting patient/family member preparation for discharge 24 to 48 hours after admission.<sup>(5,10,19,20,23)</sup> Although nurses recognize the discharge plan as a professional attribution and some reported starting activities at the time of admission, work overload at wards often makes this planning unfeasible or it occurs late, at the time of discharge.<sup>(5)</sup> The accumulation of actions in this period can compromise continuity of care in the community.

Therapeutic complexity and continuous patient education management, in addition to contributing to the transition of care, are activities inherent to the profession.<sup>(24)</sup> Some skills, however, need to be developed/improved in nursing practice, such as technical and scientific knowledge about the RAS and patient-centered care, especially in services that do not have a team(s) dedicated to managing discharge.<sup>(5)</sup> Thus, actions for care self-management can be prioritized and implemented during hospitalization,<sup>(4)</sup> in order to meet care needs after hospital discharge.

Diverging from national<sup>(20,25)</sup> and international recommendations,<sup>(8,21)</sup> scheduling home visits for patients with greater demand for care needs and identifying problems after hospital discharge, via telephone or home visit with the establishment of a care plan for their resolution, are not routinely implemented, both in educational institutions and in public and private ones.

Although it has not been previously validated<sup>(18)</sup> and is not operationalized in most of studied hospitals either, telephone contact to monitor patient/family member, to clarify doubts and provide guidance was considered an important and viable activity for most nurses. This form of contact and the home visit within seven days after discharge are considered important strategies for assessing and continuing care for patients and should be conducted in conjunction with primary care.<sup>(2)</sup>

It is interesting to note that although 57.8% of nurses perceived telephone contact as feasible, only 28.2% reported carrying out this activity in their field of practice. The viability of these activities, in some institutions, may be linked to the collaboration of home care services. It is assumed that work overload and the absence of institutional protocols for the discharge process may be associated with the low operationalization of this activity. Therefore, future investigations need to confirm this conjecture.

Teamwork in responsible discharge was marked by common activities among professionals, demonstrating the interdependence of actions.<sup>(26)</sup> The central role of nurses in the process based on the findings is confirmed, since they act, individually or in groups, in all activities. The composition of the most cited teams fundamentally includes a nurse, a doctor and a social worker, similar to other studies,<sup>(2,6)</sup> in addition to other professionals such as a physiotherapist, nutritionist and speech therapist.

Participants also mentioned coordinating inter-professional actions and carrying out interaction/referrals to the RAS. Although there is a predominance in the registration of referrals (referral and counter-referral), the non-execution of this activity in public hospitals was significant. National legislation<sup>(1)</sup> determines the organization of hospital services within the health system, but even so fragmentation in communication with potential discontinuity of patient care is identified.

Nurses' reports in this investigation pointed to the sum of estimated time for activities, even if intermittent, up to six times higher than the discharge plan intervention indicated in the international literature.<sup>(27)</sup> However, it is important to consider that, while clock time is objective and uniform, psychological time is perceptive and depends on internal and external contextual factors such as memory, history, experience and expectations.<sup>(28)</sup> The self-reported time may differ (greater or lesser) from the measured time.<sup>(29)</sup>

Nurses from private hospitals estimated more time dedicated to responsible discharge. More than 40 minutes were dedicated, on average, to activities such as identifying eligibility criteria, collecting information about patients and coordinating the professional team. It is inferred that sociocultural

aspects inherent to communication with patient/family member and the necessary articulation between public and private services to continue providing care can influence the time devoted by nurses. It was not possible to establish a comparison with other studies.

Corroborating other findings,<sup>(5,11)</sup> activities to follow up the responsible discharge procedure were evidenced in the various hospitals investigated, being conducted by nurses from inpatient units, overlapping with other clinical/assistance demands. This can cause work overload and reduce the time dedicated to this activity, thus compromising the process performance and effectiveness.<sup>(6,8)</sup>

In this way, time management becomes a fundamental aspect in the responsible discharge process. Experiences of nurses acting exclusively in the active search and coordination of the discharge process and transition of care are reported in hospitals in North America,<sup>(10,12)</sup> Europe<sup>(6,9)</sup> and in a Brazilian institution.<sup>(11)</sup> However, in this research, only six (8.4%) nurses reported working specifically in transitional care positions such as navigator, Kanban and dehospitalization nurses, showing that this is not yet a reality in Brazilian institutions.

The practice scenarios portrayed encourage reflection on the impact of the current model of responsible hospital discharge on nurses' workload. The complexity of actions and interactions within and between services demand time and this professional dedication needs to be foreseen in clinical team sizing or, then, of a specific professional/team for discharge management. In addition to instrumental aspects (flows, protocols and information shared and managed), the adequate provision of team personnel and training can be understood as determining factors for continuity of care after patient discharge and also for reducing nurses' workload.

## Conclusion

It was evident that, at responsible hospital discharge, nurses participate in all planned activities, individually or as a team, and mostly perform them in the first four days of hospitalization. More than four hours

are dedicated intermittently to the process. In the different institutions, telephone contact and home visits after discharge are not systematically implemented.

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## Collaborations

Zanetoni TC contributed to data analysis and interpretation, article writing and critical review. Cucolo DF collaborated with the project design, data analysis and interpretation, critical review and final approval of the version to be published. Perroca MG cooperated with the project design, data analysis and interpretation, critical review and final approval of the version to be published.

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