

RESEARCH ARTICLE (ORIGINAL) 

Validation of hospital effectiveness indicators in the patient-centered care dimension


Validação de indicadores de efetividade hospitalar na dimensão cuidado centrado no doente

Validación de los indicadores de eficacia hospitalaria en la dimensión de la atención centrada en el paciente


Leila Soares Seiffert¹

 <https://orcid.org/0000-0002-8461-0361>


Lillian Daisy Gonçalves Wolff¹

 <https://orcid.org/0000-0002-5152-4811>


Alexandra Lunardon Silvestre¹

 <https://orcid.org/0000-0002-4899-1734>


Talita Rennê Mendonça¹

 <https://orcid.org/0000-0002-5477-9860>


Elaine Drehmer de Almeida Cruz¹

 <https://orcid.org/0000-0002-7686-6340>

Maria Manuela Frederico Ferreira²

 <https://orcid.org/0000-0003-4032-9911>

António Fernando Salgueiro do Amaral²

 <https://orcid.org/0000-0001-9386-207X>

¹ Federal University of Paraná, Paraná, Brazil

² Health Sciences Research Unit: Nursing, Nursing School of Coimbra, Coimbra, Portugal

Corresponding author:

Alexandra Lunardon Silvestre

Email: alexandra_lunardon@yahoo.com.br

Received: 10.12.19

Accepted: 06.05.20

Abstract

Background: Indicators of effectiveness in the dimension of patient-centered care.

Objective: To validate indicators for determining attributes that make it possible to measure the effectiveness of hospital care in the dimension of patient-centered care.

Methodology: Quantitative survey type study, carried out in 2017 to judge eight indicators, considering 11 attributes, by 52 specialists, using the Delphi technique and the electronic Survey Monkey® platform. The internal consistency was tested by Cronbach's Alpha 0,98. A valid indicator was considered when there was a minimum consensus of 70% between the responses of the participants, in all attributes.

Results: Four indicators were validated: patient satisfaction; surgeries canceled on the scheduled day; hospital recommendation; and the patient's involvement in their own care, with high internal consistency (0,98).

Conclusion: The validated indicators favor the evaluation of the effectiveness of hospital care oriented to the valorization of the person as a care center. Non-validated indicators are the subject of future studies.

Keywords: patient-centered care; delivery of health care; healthcare quality indicators; hospitals; nursing care

Resumo

Enquadramento: Indicadores de efetividade na dimensão do cuidado centrado no doente.

Objetivo: Validar indicadores quanto à deteção de atributos que possibilitem medir a efetividade da assistência hospitalar na dimensão do cuidado centrado no doente.

Metodologia: Estudo quantitativo do tipo *survey*, realizado em 2017 para julgamento de 8 indicadores, considerando 11 atributos, por 52 especialistas, utilizando-se técnica Delphi e a plataforma eletrónica Survey Monkey®. A consistência interna foi testada pelo alfa de Cronbach de 0,98. Considerou-se indicador válido quando houve concordância mínima de 70% entre as respostas dos participantes, em todos os atributos.

Resultados: Foram validados 4 indicadores (satisfação do doente; cirurgias canceladas no dia agendado; recomendação do hospital pelo doente; e envolvimento do doente com o próprio cuidado), com alta consistência interna (0,98).

Conclusão: Os indicadores validados favorecem a avaliação da efetividade da assistência hospitalar orientada para a valorização da pessoa enquanto centro do cuidado. Os indicadores não validados são objeto de estudos futuros.

Palavras-chave: assistência centrada no paciente; assistência à saúde; indicadores de qualidade em assistência à saúde; hospitais; cuidados de enfermagem

Resumen

Marco contextual: Indicadores de eficacia en la dimensión de la atención centrada en el paciente.

Objetivo: Validar los indicadores relativos a la detección de atributos que permitan medir la eficacia de la atención hospitalaria en la dimensión de la atención centrada en el paciente.

Metodología: Estudio cuantitativo de tipo encuesta, realizado en 2017 para evaluar 8 indicadores, considerando 11 atributos, por 52 especialistas, para lo cual se utilizó la técnica Delphi y la plataforma electrónica Survey Monkey®. La consistencia interna fue comprobada por el alfa de Cronbach de 0,98. Se consideró como indicador válido cuando hubo una concordancia mínima del 70% entre las respuestas de los participantes en todos los atributos.

Resultados: Se validaron 4 indicadores (satisfacción del paciente; cirugías canceladas en el día programado; recomendación del hospital por parte del paciente, y participación del paciente en su propio cuidado), con una alta consistencia interna (0,98).

Conclusión: Los indicadores validados favorecen la evaluación de la eficacia de la atención hospitalaria destinada a valorar a la persona como centro de atención. Los indicadores no validados son objeto de futuros estudios.

Palabras clave: atención dirigida al paciente; prestación de atención de salud; indicadores de calidad de la atención de salud; hospitales; atención de enfermería



How to cite this article: Seiffert, L. S., Wolf, L. D. G., Silvestre, A. L., Mendonça, T. R., & Cruz, E. D., Ferreira, M. M. F., & Amaral, A. F. S., (2020). Validation of hospital effectiveness indicators in the patient-centered care dimension. *Revista de Enfermagem Referência*, 5(2), e19098. doi:10.12707/RIV19098



Introduction

The purpose of effectiveness indicators in the patient-centered care dimension is to measure the effectiveness of individualized care to the patient. The analysis of these indicators contributes to a better understanding of patient and family perspectives. It helps the healthcare team to go beyond the limits imposed by the hospital's techniques, daily routines, and internal rules and leads to changes in institutional priorities in the pursuit of healthcare excellence because the experience is defined by the person who receives it. In this way, these measures allow assessing the safety and, in particular, the quality of health care (Etingen, Miskevics, & Lavela, 2016). Based on these assumptions, this study aimed to validate indicators for identifying attributes that allow measuring the effectiveness of hospital care in the patient-centered care dimension.

Background

Patient-centered care is a dimension of quality that comprises the individual and his/her family because age- or disease-related cognitive impairments may be present and impact the development of educational activities for the continuity of care after discharge (Kruk et al., 2018). Care should be characterized by both the development of patients' and families' skills and the demand for resources available in the health system and the community to the benefit of the patient (Aued, Bernardino, Lapierre, & Dallaire, 2019). Therefore, patient-centered care is a significant and transformative concept of healthcare worldwide.

In nursing, patient- and family-centered care extends the partnership between the parties, encourages the sharing of knowledge and experiences in care planning, and can lead to positive outcomes for patients and health organizations (Delaney, 2018). However, the subjectivity involved in this type of care implies difficulties in establishing indicators for measuring the extent to which care is centered on the patient. When monitored, these indicators are based on patient satisfaction or experience surveys, with questions focused on organizational improvement, rather than on the centrality of the individual, disregarding the specifi-

cities of his/her experience in different services (Larson, Sharma, Bohren, & Tunçalp, 2019). In this context, acknowledging that patients are the only ones who are always present, observing and experiencing different situations can influence the outcomes of the programs aimed to promote safety and positive care experiences (Seiffert, 2019).

For understanding and delivering patient-centered care, the American Institute for Patient- and Family-Centered Care considers the following core concepts: dignity and respect, information sharing, participation, and collaboration. These concepts demonstrate that valuing their perspectives, values, beliefs, cultural backgrounds, and choices improves health care (DeRosa et al., 2019). In this way, receiving complete and unbiased information, as well as sharing it with health professionals, encourage patients and their families to make joint decisions about their own care. They also contribute to the improvement of policies, programs, facilities, research, and education in the institution (DeRosa et al., 2019).

In addition, the Institute of Medicine defines patient-centered care as care that is respectful of and responsive to individual patient needs, preferences, and values, and ensuring that these values guided the clinical decisions (Cleary, 2016). The organizational focus on patient-centered care does not preclude other actions in the search for continuous quality improvement, and may positively influence other outcomes. Thus, health systems are increasingly seeking to develop programs focused on patient-centered care to obtain broader improvements (Cleary, 2016).

In this way, the assessment of indicators in the patient-centered care dimension is critical to ensure quality care (Kruk et al., 2018). However, when the indicator does not have a clear purpose or is incorrectly specified or interpreted, it conveys inaccurate and unreliable information and generates losses in resources and political initiatives (Larson et al., 2019). Therefore, the selection of these indicators should consider whether their attributes characterize them as reliable and of good quality. Eleven attributes were identified in the literature that allow analyzing the indicators regarding their adequacy and intended use (Galhardi & Escobar, 2015; Silveira, Prado Junior, Siman, & Amaro, 2015). These attributes are presented and described below (Table 1).

Table 1
Attributes required to the appropriate use of quality indicators

Attribute	Specification
Availability	Data for structuring the indicator are easy to obtain
Reliability	Original sources and reliable data collection and processing methods
Simplicity	Easy calculation based on basic information, easy understanding and interpretation
Representativeness	It faithfully represents what it proposes to measure
Sensitivity	It distinguishes occasional variations with reflections on the outcome
Comprehensiveness	It synthesizes as many conditions or factors as possible that influence the situation under analysis
Objectivity	Clarity in the measuring objective

Low cost	Favorable cost-benefit ratio
Utility	Provides decision-making
Stability	The measurement series allows for monitoring and comparisons
Timeliness	Structured with current and timely information to use

Note. Adapted from “Indicadores para avaliação da efetividade assistencial de hospitais” by Seiffert (2019), Adapted from “Indicators of quality of nursing care” by Galhardi and Escobar (2015); Adapted from “The importance of using quality indicators in nursing care” by Silveira et al. (2015).

Research Question

Do the indicators have attributes necessary for measuring the effectiveness of hospital patient-centered care?

Methodology

The study was approved by the Research Ethics Committee for Health Sciences of the Federal University of Paraná, in Brazil, under Opinion 1.749.438.

A quantitative survey study was conducted using the online Survey Monkey® tool. Data were collected between May and September 2017 and analyzed through descriptive statistics.

Eight indicators were evaluated considering 11 attributes. Technical data sheets were drawn up based on the literature with the following aspects: name of the indicator, definitions or concepts, purpose or use, estimate method, type or unit of measurement, assessment method, frequency, and references (Seiffert, 2019). The survey was prepared based on a 5-point Likert scale ranging from *totally disagree, partially disagree, do not disagree or agree, partially agree, to totally agree*.

The recruitment of evaluators, here called participants, started from a list of 20 authors of articles on health indicators retrieved from the *Scientific Electronic Library Online* (SciELO) database using the keyword *Indicadores de qualidade em assistência à saúde* (Indicators of quality in health care) and 20 professionals with experience in quality management and patient safety in Brazilian accredited hospitals with a seal of quality or hospitals that were in the process of applying for this certification.

In addition, a search was made for research groups registered in the Directory of Research Groups in Brazil of the Council for Scientific and Technological Development (CNPq), located in Brazil, and with scientific papers on health indicators.

The third strategy for participant recruitment consisted of the snowball sampling method, in which one participant suggests other participants, who were contacted by email. Inclusion criteria were: being Brazilian, with professional experience or scientific productivity on hospital effectiveness indicators. The exclusion criterion was not answering at least 90% of the answers in the evaluation process. Participants who met one or more of the inclusion criteria were selected and their information was confirmed in their Lattes curricula were analyzed for confirmation. Each participant was assigned the letter P followed by a cardinal number, by order of completion of the survey. The preservation of anonymity is justified by the fact that a participant's answer can influence the other par-

ticipants' answers, as well as enable dissenting opinions and suggestions.

An online survey was conducted to assess the indicators based on the premise that the opinion of a group is more valid than individual opinions, and that heterogeneity produces qualitatively better results. The purpose was to achieve $\geq 70\%$ of agreement in the participants' answers, as a criterion for validation of the attributes for each indicator.

In the first phase, the participant's file, the research guidelines, and the technical data sheets, with the request of suggestions for improvement, were submitted. In this phase, 52 participants completed the online survey. The questions with at least the minimum level of agreement were retained, and the datasheets were revised based on the suggestions.

In the second phase, the results of the first phase were presented in graphs to the participants, and the technical files with adjustments incorporated were sent along with eight indicators to be evaluated; 43 participants completed the online survey. In this way, with the aggregation of the opinions from the participants who were experts on the study subject, data were collected through the serial and intensive application of a survey, with feedback (Avella, 2016). The following participants completed the survey in two phases: 65.38% were nurses, 15.38% were physicians, 9.62% were pharmaceuticals, 5.77% were administrators, and 3.85% were from other professional categories. As for their academic qualifications, 36.64% had a bachelor's degree, 36.64% had a master's degree, and 26.72% had a doctoral degree.

Data were analyzed using descriptive analysis via IBM SPSS Statistics®, version 22.0. An indicator was valid if it had at least 70% of agreement in the participants' answers in relation to all attributes. Cronbach's alpha coefficient was used to analyze the internal consistency of the questions and answers in the first and second phases, respectively, whose desirable values are between 0.70 and 1.00.

Results

The participants' evaluation resulted in the validation of four of the eight indicators of effectiveness in the Patient-centered care dimension, through the achievement of consensus ($\geq 70\%$ of agreement) in 11 attributes for each indicator. Reliability tested by Cronbach's alpha reached 0.98, in both phases, thus confirming internal consistency. An indicator was valid if it had at least 70% of agreement in all attributes.

Tables 2 and 3 show the validated and non-validated indicators, respectively.

Table 2
Validated indicators of effectiveness in the patient-centered care dimension

Indicators	Level of agreement regarding the correspondence between the indicators and the studied attributes
Patient's recommendation of the hospital	Representativeness (80%), Sensitivity (80%), Simplicity regarding ease of calculation (78.85%), Simplicity in the interpretation of the indicator (80.77%), Utility (80.77%), other attributes (>71.15%).
Patient engagement with self-care	Reliability (77.89%), Simplicity regarding ease of calculation (82.69%), Utility (80.77%), other attributes (>71.15%).
Patient satisfaction	Objectivity (84.62%), Simplicity regarding ease of calculation (90.38%), Simplicity in the interpretation of the indicator (94.23%), other attributes (>73.08%).
Surgeries canceled on the day of surgery	Simplicity regarding ease of calculation (96.08%), Simplicity in the interpretation of the indicator (98.08%), Representativeness (92.31%), other attributes (>80.77%).

Note. Adapted from "Indicadores para avaliação de efetividade assistencial de hospitais" by Seiffert (2019).

Table 3
Non-validated indicators of effectiveness in the patient-centered care dimension

Indicators	Level of agreement regarding the correspondence between the indicators and the studied attributes
Patient guidance (effective communication, clear information)	Comprehensiveness (81.05%), Availability (67.37%), Sensitivity (78.95%), Simplicity regarding ease of calculation (78.85%), other attributes (>72.62%).
Patient's perception about the effectiveness of discharge planning	Reliability (64.21%), Availability and low cost (64.21%), Objectivity (76.92%), Simplicity regarding ease of calculation (80.77%), Simplicity in interpretation (78.85%), other attributes (>71.58%).
Patient's understanding of their medication (in the transition of care)	Comprehensiveness (62.10%), Reliability and low cost (62.11%), Availability (50.53%), Stability (66.32%), Sensitivity (69.47%), Simplicity regarding ease of calculation (77.89%), Simplicity in the interpretation of the indicator (73.12%), Timeliness (75.79%), other attributes (>71.58%).
Patients informed by the team about the occurrence of adverse events	Reliability (60.00%), Availability (54.74%), Objectivity (80.77%), Simplicity regarding ease of calculation (81.05%), Simplicity in the interpretation of the indicator (88.46%), Timeliness (88.47%), Utility (78.85%), other attributes (>71.15%).

Note. Adapted from "Indicadores para avaliação de efetividade assistencial de hospitais" by Seiffert (2019).

Discussion

To increase study reliability, criteria were established for the inclusion of participants, such as experience in the use of health indicators and scientific productivity on the topic. The high internal consistency using Cronbach's alpha coefficient in both phases confirmed the excellent reliability of the questions and answers.

The indicator "patient's recommendation of the hospital" aims to measure satisfaction with the structure, the administrative and care delivery procedures, and the treatment outcomes.

The simplicity in its interpretation and the high levels of agreement in relation to the other attributes indicate that the patient's recognition refers to the Donabedian's triad (structure, process, and outcome), culminating in the recommendation of the health service to their contacts (Mahdavi et al., 2018) based on their level of satisfaction.

The structure comprises adequate facilities, sufficient and operational equipment and supplies, as well as qualified human resources with technical and interpersonal skills. The process refers to efficiency in administrative and care delivery procedures, adjusted to the patient's needs, in a timely manner. The outcome refers to the patient's expectations at admission that have a positive impact on their health, such as correct diagnosis, appropriate and safe treatment, and humanized care (Mahdavi et al., 2018). The indicator "patient engagement with self-care" makes it possible to evaluate if the patient was regarded as an essential partner and respected from care planning to care delivery (Gandhi et al., 2018). Historically, patients have had a passive participation in care, whereas the centrality of care implies increasing their control in planning their own care. In this way, it is important to encourage the patient to make joint decisions with the health professionals, which implies changing the paternalistic behavior

of health teams. On the other hand, taking into account patients' expectations can reduce hospital length of stay and hospital readmissions (Grocott & Mcsherry, 2018). Although this indicator had 11 validated attributes, some participants scored aspects of the care process that can turn into obstacles to its use, such as the patient's level of dependence, consciousness, and autonomy, and the costs for its practical application. However, the factor that most strongly influences the availability of data for the calculation of this indicator is the patient's fear of being neglected in care delivery for being proactive and showing his/her beliefs about the care received (Seiffert, 2019). "Patient satisfaction" is an indicator that measures the outcome of treatment and care received and enables the monitoring of the quality of hospital care. As an outcome of the effectiveness of the care received, this indicator may vary according to the severity of the health condition or age range, although a study shows that these variables have little influence on patients' perceptions, and that the indicator "patient satisfaction" can influence several other outcomes (Cleary, 2016). The invaluable participation of patients in identifying gaps in the service and in assessing and developing solutions to meet their needs is confirmed by the high level of agreement obtained by this indicator of patient satisfaction and the attributes of simplicity and objectivity. An example are hospitals that use methodologies for measuring this indicator, such as patient satisfaction surveys at admission or after discharge (Cleary, 2016).

The indicator "surgeries canceled on the day of surgery" for reasons not attributable to the patient seeks to identify the problem and minimize it in the medium term, considering that the cancellation causes anxiety and, consequently, influences the patient's trust in the institution and health team, with an impact on health, resources, costs, and quality of care (Talalwah & Mcltrot, 2019). In addition, it is worth highlighting the ethical aspect observed in relation to dissonant oral and written information, when the surgical procedure differs from planned and when surgery is canceled without any records or justification (Talalwah & Mcltrot, 2019).

A higher level of agreement was found among the participants in relation to the attributes of simplicity regarding ease of calculation and interpretation of this indicator for being used to improve the management of surgical rooms, optimizing occupation (Seiffert, 2019).

The indicator "patient guidance" measures the relationship between the patient and the healthcare team, the breaking down of communication barriers, and the creation of an environment of open dialog and trust (Pereira, Santana, Morais, Soares, & Silva, 2016). Communication plays a significant part in patients' complaints about care delivery and interferes with patient satisfaction. From the patients' perspective, achieving more effective ways of communicating creates opportunities for the implementation of a cutting-edge health system and a more egalitarian society (Grocott & Mcsherry, 2018).

Communication, particularly in health, covers several aspects of care, such as diet and dietary restriction, physical activity, medication and drug interactions, signs

and symptoms, and self-care. The language must be clear and simple, and it is important to assess if the guidelines provided are understood (Weber, Silva Lima, Acosta, & Marques, 2017). Furthermore, the lack of strategies for clear information transfer can lead to gaps in the health care system, such as an increase in health costs, delay in solving problems, and loss of continuity of care. Therefore, the implementation of methods to achieve assertiveness in communication avoids the loss of information, rework, and duplication of actions (Aued et al., 2019).

In this context, and considering the patient-centered care model, communication is also essential in discharge planning, which should be oriented towards the patient's needs that include their socio-economic status, health history, and current health conditions, as well as their care needs after discharge (Aued et al., 2019).

In a complementary way, the indicator on the "patient's perception about the effectiveness of discharge planning" aims to assess the effectiveness of the actions carried out by the multidisciplinary team, especially the nursing team, with a view to preparing patients to autonomously perform their self-care, under the perspective of working with the patient and not for the patient (Pereira et al., 2016). Participants considered that the attribute of simplicity regarding ease of calculation was the best property of this indicator. In contrast, the lack of data was considered harmful, generating mistrust in the results.

The indicator "patient's understanding of their medication" is associated with the patient's involvement in their critical decisions. The simplicity regarding ease of calculation and interpretation, and the timeliness in the use of this indicator, were the attributes with the highest level of agreement among participants; the use of the survey was considered the most effective way for collecting data. As regards the timeliness attribute, the communication of timely and accurate information is essential for effective care transitions. The availability of an indicator which allows monitoring if patients play an active role in expressing their concerns about the use of medication and if they understood the guidance received is important for nurses who are responsible for providing the majority of this type of guidance to patients (Liu, Gerdtz, & Manias, 2016).

The five non-validated attributes on this indicator are associated with the lack of systematic surveys concerning the patients' understanding of their medication.

In Brazil, but not restricted to this reality, hospitals should implement the opinion survey with questions on the patient's understanding of the guidance and information about their medication in times of care transition, as well as the patient's understanding of their responsibility for using medication at hospital discharge.

The indicator "patients informed by the team the occurrence of adverse events" refers to transparency in the timely communication in such events, which is essential to learning and planning actions aimed to minimize damage and prevent similar events. Hospitals that seek optimal results include patients and families in their incident management system and implement institutional mechanisms to encourage the patient to ask questions

whenever they suspect something is not right with their care (Ewing, Austin, Diffin, & Grande, 2015).

The attributes with the highest levels of agreement for this indicator were the simplicity in understanding the technical data sheet for managing the indicator and the sensitivity to recognize variations that can impact results. The attributes of data availability for calculation of the indicator and, consequently, the reliability of results were not validated.

Despite the lack of preparation of health organizations to cope with errors, especially due to the fear of high judicial compensation, this scenario is changing. In a survey conducted in 1,457 hospitals in the United States of America on patient and family engagement in adverse events, the authors found advances associated with the existence of formal policies for disclosing errors (66.6%), a procedure which revealed errors in care delivery with apologies to the patient and family, in routine interviews and facilitated participation in root-cause analysis (46.9%; Herrin et al., 2016).

Conclusion

Among the eight hospital effectiveness indicators evaluated in the Patient-centered care dimension, four were validated because they obtained satisfactory results in the 11 attributes listed. The other four indicators did not obtain satisfactory results, thus they were not validated. The following indicators were validated: patient satisfaction; surgeries canceled on the day of surgery; patient's recommendation of the hospital; and patient engagement with self-care.

Among the non-validated indicators, a minimum consensus was not reached on the attributes of trust in the outcomes, cost-benefit ration in obtaining information, and data availability. It should be noted that the difficulties in obtaining data to build the indicator were associated with all of them. These conditions should be tackled through actions that enhance the culture of patient-centered care and encourage correct and timely records, with the support of intelligent systems.

Therefore, managers should analyze the specificity, clarity, and reliability of the indicators of effectiveness being used or proposed in order to achieve the organizational purpose of patient-centered care.

The monitoring of the use of the indicators validated in this study will potentially contribute to the identification of important aspects of the effectiveness of care delivery, together with other contributions, with a view to creating and implementing measures for continuous improvement, in the search for excellence in health care.

A limitation of this study was the subjectivity involved in survey research. To minimize the possibility of bias in the results, the criterion of a minimum level of agreement was established for validation based on the analysis of experts with experience in the use of health indicators. In addition, internal consistency was also calculated as an evaluation parameter.

Contribuição de autores

Conceptualization: Seiffert, L. S., Wolff, L. D. G., Silvestre, A. L., Mendonça, T. R., Ferreira, M. M. F.

Data curation: Seiffert, L. S., Wolff, L. D. G., Silvestre, A. L., Ferreira, M. M. F., Amaral, A. F. S.

Methology: Seiffert, L. S., Wolff, L. D. G., Ferreira, M. M. F.

Writing - original draft: Seiffert, L. S., Wolff, L. D. G., Silvestre, A. L., Mendonça, T. R.

Writing - review & editing: Seiffert, L. S., Wolff, L. D. G., Silvestre, A. L., Mendonça, T. R., Ferreira, M. M. F., Cruz, E. D. Almeida.

Funding

This study is part of a doctoral project funded by the *Coordenação de Aperfeiçoamento de Pessoal de Nível Superior* (Coordination for the Improvement of Higher Education Personnel, Capes, Ministry of Education of Brazil).

References

- Aued, G. K., Bernardino, E., Lapiere, J., & Dallaire, C. (2019). Liaison nurse activities at hospital discharge: A strategy for continuity of care. *Revista Latino-Americana de Enfermagem*, 27(e3162), 1-8. doi:10.1590/1518-8345.3069.3162
- Avella, J. R. (2016). Delphi panels: Research design, procedures, advantages, and challenges. *International Journal of Doctoral Studies*, 11, 305-321. doi:10.28945/3561
- Cleary, P. D. (2016). Evolving concepts of patient-centered care and the assessment of patient care experiences: Optimism and opposition. *Journal of Health Politics, Policy and Law*, 41(4), 675-696. doi:10.1215/03616878-3620881
- Delaney, L. J. (2018). Patient-centred care as an approach to improving health care in Australia. *Collegian*, 25(1), 119-123. doi:10.1016/j.collegn.2017.02.005
- DeRosa, A. P., Nelson, B. B., Delgado, D., Mages, K. C., Martin, L., & Stribling, J. C. (2019). Involvement of information professionals in patient- and family-centered care initiatives: A scoping review. *Journal of the Medical Library Association*, 107(3), 314-322. doi:10.5195/jmla.2019.652
- Etingen, B., Miskevics, S., & Lavela, S. L. (2016). Assessing the associations of patient-reported perceptions of patient-centered care as supplemental measures of health care quality in VA. *Journal of General Internal Medicine*, 31 (Sup. 1), S10-20. doi:10.1007/s11606-015-3557-2
- Ewing, G., Austin, L., Diffin, J., & Grande, G. (2015). Developing a person-centred approach to carer assessment and support. *British Journal of Community Nursing*, 20(12), 580-584. doi:10.12968/bjcn.2015.20.12.580
- Galhardi, N. M., & Escobar, E. M. (2015). Indicators of quality of nursing care. *Revista de Ciências Médicas*, 24(2), 75-83. doi:10.24220/2318-0897v24n2a2639
- Gandhi, T. K., Kaplan, G. S., Leape, L., Berwick, D. M., Edgman-Levitan, S., Edmondson, A., & Wachter, R. (2018). Transforming concepts in patient safety: A progress report. *BMJ Quality & Safety*, 27, 1019-1026. doi:10.1136/bmjqs-2017-007756
- Grocott, A., & McSherry, W. (2018). The patient experience: Informing practice through identification of meaningful communication from the patient's perspective. *Healthcare*, 6(26), 1-14.



- doi:10.3390/healthcare6010026
- Herrin, J., Harris, K. G., Kenward, K., Hines, S., Joshi, M. S., & Frosch, D. L. (2016). Patient and family engagement: A survey of US hospital practices. *BMJ Quality & Safety*, 25(3), 1-8. doi:10.1136 / bmjqs-2015-004006
- Kruk, M. E., Gage, A. D., Arsenault, C., Jordan, K., Leslie, H. H., Roder-DeWan, S., & Pate, M. (2018). High-quality health systems in the sustainable development goals era: Time for a revolution. *Lancet Global Health*, 11(6), 1196–1252. doi:10.1016/s2214-109x(18)30386-3
- Larson, E., Sharma, J., Bohren, A. U., & Tunçalp, Ö. (2019). When the patient is the expert: Measuring patient experience and satisfaction with care. *Bulletin of the World Health Organization*, 97(8), 563–69. doi:10.2471/BLT.18.225201
- Liu, W., Gerdtz, M., & Manias, E. (2016). Creating opportunities for interdisciplinary collaboration and patient-centred care: How nurses, doctors, pharmacists and patients use communication strategies when managing medications in an acute hospital setting. *Journal of Clinical Nursing*, 25(19-20), 2943-2957. doi:10.1111 / jocn.13360
- Mahdavi, M., Vissers, J., Elkhuisen, S., van Dijk, M., Vanhala, A., Karampli, & Evan de Klundert, J. (2018). The relationship between context, structure, and processes with outcomes of 6 regional diabetes networks in Europe. *PLoS One*, 13(2), e0192599. doi:10.1371/journal.pone.0192599
- Pereira, S. K., Santana, R. F., Morais, V. S., Soares, T. S., & Silva, D. M. (2016). Planejamento da alta hospitalar no pós-operatório de idosos: Estudo de casos múltiplos. *Revista Cuidado Fundamental*, 8(4), 4949-4955. doi:10.9789/2175-5361.2016.v8i4.4949-4955
- Seiffert, L. S. (2019). *Indicadores para avaliação da efetividade assistencial de hospitais* (Doctoral thesis). Universidade Federal do Paraná, Brasil.
- Silveira, T. V., Prado Junior, P. P., Siman, A. G., & Amaro, M. O. (2015). The importance of using quality indicators in nursing care. *Revista Gaúcha de Enfermagem*, 36(2), 82-88. doi:10.1590/1983-1447.2015.02.47702
- Talalwah, N. A., & McIltrout, K. H. (2019). Cancellation of surgeries: Integrative review. *Journal of Peri Anesthesia Nursing*, 34(1), 86-96. doi:10.1016/j.jopan.2017.09.012
- Weber, L. A., Silva Lima, M. A., Acosta, A. M., & Marques, G. Q. (2017). Transição do cuidado do hospital para o domicílio: Revisão integrativa. *Cogitare Enfermagem*, 22(3), e47615. doi:10.5380/ce.v22i3.47615