







# Construction and content validation of the patient safety practices self-assessment form for Long-Term Care Facilities

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## Abstract

**Objective:** To describe the methodological application of constructing a self-assessment form for safety practices in Long-Term Care Facilities in the city of Porto Alegre (RS), Brazil, and its content validation by experts. **Method:** Methodological study conducted in two stages. The first consisted of developing the Form through a focus group with 12 professionals from the Sanitary Surveillance service. The second involved content validation by eight experts in patient safety, sanitary surveillance, and gerontology, using the criteria of clarity, practical pertinence, and theoretical relevance. The Content Validity Index was applied to calculate item validity. **Results:** The construction process resulted in an instrument composed of 81 items organized into eight thematic domains, covering aspects such as structure, processes, safety of care, and indicators. Content validation showed high levels of agreement regarding clarity, practical pertinence, and theoretical relevance of the items. The initial Content Validity Index was 0.98, and after adjustments suggested by the experts, the final index value reached 1.0. **Conclusion:** This investigation enabled the development and validation of the form, based on national regulations and international guidelines, with a high content validity index, ensuring technical and semantic consistency. The form shows potential for application in institutional management and sanitary surveillance, supporting self-assessment, monitoring, and improving quality of care for institutionalized older adults.

**Keywords:** Patient Safety. Homes for the Aged. Public Health Surveillance. Total Quality Management.

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## INTRODUCTION

Population aging has occurred rapidly on a global scale, posing challenges to health, care, and social security systems<sup>1</sup>. The state of Rio Grande do Sul, Brazil, has the highest percentage of older adults in the country. Porto Alegre, the state capital, has fourth largest proportion of older adults among Brazil's cities, representing 15.76% of the local population<sup>2</sup>.

The World Health Organization's (WHO) Global Strategy on Aging and Health proposes that countries adopt measures and make investments, including the provision of long-term care<sup>3</sup>. In the Americas, although life expectancy has increased, healthy years of life have not kept pace, resulting in approximately 12 years lived with disabilities. This scenario increases the demand for continuous complex care. In response, the Pan American Health Organization (PAHO) published the Long-Term Care Policy 2025-2034, containing guidelines to support countries in strengthening sustainable, safe, and person-centered systems<sup>4</sup>.

In this context, Long-Term Care Facilities for Older Adults (LTCFs) play a strategic role in protecting and providing this population with comprehensive care, ensuring quality, safe assistance. These institutions are characterized by providing collective housing for older adults in situations of vulnerability or with functional limitations requiring long-term care<sup>5</sup>. Understanding the structure, processes, and practices of these institutions is essential to guarantee safe quality care for this population<sup>6</sup>.

In Brazil, the National Health Surveillance Agency (Anvisa) is responsible for the inspection and regulation of LTCFs<sup>7</sup>, defining them as health services according to current regulations<sup>8</sup>. According to Anvisa records, Porto Alegre has 325 LTCFs in operation<sup>9</sup>. According to the Demographic Census, approximately 161,000 older adults live in LTCFs nationwide, 24.8% in the southern region, reflecting the demand for long-term care in areas with greater population aging<sup>2</sup>.

Thus, patient safety guidelines are fundamental to prevent adverse events and avoidable harm in LTCFs, given the multiple risks present in caring

for institutionalized older adults<sup>6</sup>. This scenario became even more evident during the COVID-19 pandemic, when many of these facilities struggled in adopting effective protective measures for the older population. According to estimates, in the initial phases of the health crisis, almost half of all deaths recorded globally occurred in these institutional contexts<sup>10</sup>.

Anvisa published the Integrated Plan for Sanitary Management of Patient Safety, with the aim of assessing hospitals and guiding priority patient safety actions<sup>11</sup>. However, there are currently no systematized assessments available using tools specifically for LTCFs. The implementation of LTCF-adapted assessments are expected to stimulate and support preventive actions for the institutionalized older population. Additionally, the WHO's Global Patient Safety Action Plan 2021-2030 establishes Clinical Process Safety as its third strategic objective, toward promoting patient safety in all care settings, including LTCFs<sup>6</sup>.

For patient safety assessments in the LTCF context to be adequate, obtaining valid and representative data constitutes a fundamental step in designing scientific investigations. Forms and questionnaires are widely used, and the quality of results depends on instruments with solid evidence of validity and reliability<sup>12,13</sup>. Thus, the methodological construction and improvement of instruments is essential to ensure precision and consistency in evaluating theoretical constructs. Content validity is of particular importance, verifying whether an instrument's items clearly, coherently, and comprehensively represent the concepts and domains to be measured<sup>14</sup>.

Given the relevance of Patient Safety practices, specifically for older adults in long-term care, the growth of this population, the significant number of LTCFs, and the need to foster adherence to safe practices of high quality, the following research question was formulated: What is the process of constructing and validating a Patient Safety practices self-assessment form for Long-Term Care Facilities for Older Adults in the municipality of Porto Alegre/Rio Grande do Sul state (RS)?

The objective of this investigation was to describe the methodological application of devising a self-

assessment form for older adult safety practices in the city of Porto Alegre (Rio Grande do Sul state), Brazil, and report its content validation by experts.

## METHOD

A methodological study was carried out in two stages. Methodological studies aim to develop, improve, or evaluate scientific methods, contributing to the quality and reproducibility of research. In the health field, these studies are essential for constructing and validating measurement instruments, while ensuring their reliability, validity, and adequacy in relation to the theoretical constructs under analysis<sup>14,15</sup>.

The first stage consisted of devising the Patient Safety Practices Self-Assessment Form for LTCFs (FAPSP-LTCF), using the Focus Group Technique. The second stage involved content validation of the instrument by a panel of experts. This study is part of a research project entitled “*Efeitos de um ciclo de melhoria nos indicadores relacionados à segurança do paciente em instituições de longa permanência para pessoas idosas: um ensaio clínico randomizado*” (Effects of an improvement cycle on patient safety-related indicators in long-term care facilities for older adults: a randomized clinical trial).

Stage 1: The task of devising the Patient Safety Practices Self-Assessment Form for LTCFs (FAPSP-LTCF) was performed at the facilities of the Health Surveillance Directorate (DVS) of the Municipal Health Secretariat of Porto Alegre, Rio Grande do Sul state, Brazil.

Study participants were professionals from the Health Services Surveillance Team (EVSIS) of DVS who met the inclusion criteria of working in LTCF inspection or being part of the Center for Patient Safety of the Health Surveillance agency (NSP VISA). Exclusion criteria included professionals who had not been active for at least one year. Members of this team, according to their interest in participating, composed the focus group. The focus group sessions were held within the participants' work environment, with the consent of those responsible, justified by the need to develop a diagnostic form of interest to the service.

The focus group consisted of 12 Health Surveillance specialists: six inspection agents, three NSP VISA professionals (three nurses and one physician), and three Health Services Health Surveillance managers (one nurse, one veterinarian, and one inspection agent). Two group sessions were held, with scheduling agreed upon by the participants, in March and in April 2024.

The Focus Group procedure entailed stages that included planning, creating the setting, recruiting, and holding of group session, as described in the study by Kinalski<sup>15</sup>.

The devising of evaluative items on patient safety practices in the LTCF setting that make up the form was carried out participatively by the focus group. These items were developed based on Anvisa's Collegiate Board Resolutions (RDC) No. 36/2013 and No. 502/2021<sup>16,17</sup>, the National Patient Safety Program (PNSP)<sup>18</sup>, the WHO Global Patient Safety Action Plan 2021-2030<sup>6</sup>, and the International Patient Safety Goals<sup>18</sup>. These Goals represent a global reference, based on Joint Commission International recommendations, strongly supported by WHO and validated by the PNSP through its protocols<sup>18</sup>.

To finalize this stage, the resultant form was sent to the focus group participants for them to assess the correspondence of the items with the earlier discussions and decisions of the group.

In stage 2, content validation of the FAPSP-LTCF version was performed by a committee of expert judges. For data collection, the phases for content validation recommended by Davis<sup>19</sup> were followed: preparing form, selecting review panel of experts, conducting content validation, reviewing domain and items, provision of scoring for each evaluated item, and calculating the Content Validity Index (CVI).

Content validity corresponds to the degree to which the items of an instrument are considered appropriate and representative in relation to the construct evaluated<sup>20</sup>. According to Lynn, this involves two stages: instrument development grounded in theoretical and conceptual precepts, followed by critiquing of the items by experts<sup>21</sup>. Content validation was conducted based on the criteria of clarity and comprehension, practical

pertinence, and theoretical relevance, as suggested by Yusoff and outlined below<sup>20</sup>.

- Degree of clarity and comprehension: the clarity of instructions and language is related to the absence of ambiguity and precision in item formulation to avoid multiple interpretations, while comprehension concerns respondents' ability to adequately interpret the words and sentences used<sup>20</sup>. A four-point Likert scale was provided for experts: 1 = the item is not clear or comprehensible; 2 = the item is somewhat clear and comprehensible; 3 = the item is clear and comprehensible; 4 = the item is very clear and comprehensible.
- Degree of practical pertinence: practical pertinence aims to analyze whether the item is actually important in constituting the instrument<sup>20</sup>. A four-point Likert scale was provided for experts: 1 = the item has no practical pertinence; 2 = the item has little practical pertinence; 3 = the item has practical pertinence; 4 = the item has great practical pertinence.
- Degree of theoretical relevance: theoretical relevance seeks to evaluate the degree of association between the item and the supporting theory<sup>20</sup>. A four-point Likert scale was provided for experts: 1 = the item is not relevant; 2 = the item needs revision to assess relevance; 3 = the item is relevant, needs minor changes; 4 = the item is highly relevant.

An important aspect in this evaluation is the number and qualifications of expert judges. Participation of five to ten experts is recommended, considering the instrument's characteristics as well as the training, qualifications, and availability of the professionals involved<sup>21</sup>. Yusoff recommends a minimum of six experts, and not exceeding ten participants<sup>20</sup>.

In the present study, the judge committee comprised eight experts who met the adapted Fehring<sup>22</sup> criteria of at least seven points for the items: Master's degree (2 points); Doctoral degree (4 points); dissertation/thesis (2 points); residency and/or specialization (2 points); professional practice in gerontology, patient safety, or health services surveillance for at least two years (2 points); teaching

experience (1 point); and publication of articles in indexed journals and/or book chapters (1 point). Experts working in LTCFs located in the city of Porto Alegre (RS) were not invited. Notably, among those selected, two had expertise in patient safety, three in health services surveillance, two in gerontology, and one had experience in both gerontology and patient safety areas.

The CVI calculation enables examination of the clarity, relevance, and pertinence of the items comprising the instrument, ensuring conceptual coherence and semantic adequacy for the research objectives. Regarding the CVI score, in the case of five or fewer experts, unanimous agreement on each item's relevance is required<sup>20</sup>. With six or more evaluators, a minimum agreement score of 0.78 is recommended<sup>21</sup>. Yusoff adds that the CVI must be at least 0.80, preferably reaching 0.90 or more, to ensure greater robustness in content validity<sup>20</sup>.

The content validity index score<sup>21</sup> was calculated by summing the score of each expert's response who indicated score "3" or "4", divided by the total number of expert responses. Hence, the formula used was  $CVI = \text{number of "3" or "4" responses} / \text{total number of responses}$ . The CVI was initially calculated for each item, according to clarity and comprehension, practical pertinence, and theoretical relevance. Subsequently, the CVI was calculated for each domain and, finally, for the total FAPSP-LTCF. Items rated with a score of "1" or "2" were revised, a new evaluation round by experts conducted, and the CVI recalculated for each item, domain, and for the final FAPSP-LTCF version.

The present study is nested within a larger project, approved by the Research Ethics Committee under number 6,608,476 and permit CAAE 74671523.7.3001.5338, according to Resolutions No. 466/2012<sup>23</sup> and No. 580/2018<sup>24</sup>, duly authorized by the responsible parties of the institutions involved. All participants in the two stages signed the Informed Consent Form.

## DATA AVAILABILITY

The full data set supporting the results of this study is available upon request from the

corresponding author. The complete FAPSP-LTCF was made available in the figshare® repository and can be accessed at: <https://figshare.com/s/5487913f0e544e6b5633?file=61003045>, DOI: <https://doi.org/10.6084/m9.figshare.31045477>.

## RESULTS

In stage 1, during the focus group meetings, the FAPSP-LTCF was devised, composed of closed-ended questions. The focus group used the stages based on the study by Kinalski<sup>15</sup> as described below:

### a) Planning

The Focus Group planning envisaged the dimension of participants composing a thematic and methodological group, considering their prior experiences. This was coordinated by a moderator (PhD candidate, study author) and an observer (supervising professor heading the study). The tools used for conducting the group sessions included setting familiarization at study sites for participant recruitment and a structured theme guide centered around three main objectives, each serving as the central focus of a session. The synthesis of key moments from each meeting is presented in Chart 1.

**Chart 1.** Key moments of group sessions. Porto Alegre, Rio Grande do Sul state, 2024

FOCUS GROUP SESSIONS		
Key moments	Session 1	Session 2
Session opening	Reception, presentation of researchers and research objective.	Synthesis of previous session and clarification of this session's objective.
Presenting participants	Formal presentation of all participants.	Presentation of a participant absent from previous session
Clarifying participative dynamic and discussion	Information on session development and theme guide.	
Establishing setting	Agreement on logistical and dynamics aspects of sessions and electronic equipment use. Commitment to research confidentiality. Signing of Informed Consent Form.	
Debate	Theme defined for Session 1: general data, infrastructure, and work processes in institutions.	Theme defined for Session 2: older adult care safety, continuing and permanent education, and care indicators.
Synthesis	Review and validation of central discussion ideas.	
Session closing	Thanks and arrangements for next session.	Thanks for participation.

Source: adapted<sup>15</sup>

## b) Setting

The researcher conducted a preliminary visit to the field to identify the most appropriate strategy for participant recruitment and selection. At this time, a formal invitation was presented to the team, seeking to map the number of interested parties and, consensually, define the most suitable location, date, and time for the first group session.

## c) Recruitment

After the exploratory visit to the study field, the researcher sent institutional invitations to the team's work email, clarifying doubts and gauging interest in participating.

## d) Theme Guide

Structured theme guides were prepared, containing a script that guided the conduct of meetings, outlining the key moments of each session to favor directed and productive discussion. Two distinct thematic guides were developed, each aligned with the specific objectives of their respective session.

## e) Group Sessions

All stages were meticulously organized and set up to mediate the dimension of the task. During the sessions, the moderator facilitated group dynamics and recorded the narratives. The observer, acting as a participant, joined the group, helping conduct meetings, as well as observe and control time.

The sessions took place in March and April 2024, each lasting 2 hours. The group debated issues

related to institutional structure and processes, with a focus on health care safety. Eight domains were listed: general LTCF data, legal constitution, human resources, infrastructure, older adult care safety, work processes, continuing and permanent education, and care indicators; constituting a form with 92 questions. After review by the authors, 11 questions were removed due to similarity, for a total of 81 questions in the final version of the form in this stage.

Lastly, the final FAPSP-LTCF version was sent electronically to focus group participants, together with an invitation for critical review and feedback on the need for further adjustments. All participants confirmed the adequacy of content and the form of the FAPSP-LTCF, with no new suggestions or modification requests. Thus, the qualitative review of the construction phase was concluded, approving the final version in stage 1.

In stage 2, for FAPSP-LTCF content validation, the following phases were used:

a) Preparing content validation form: initial step consisting of preparing the instrument containing the FAPSP-LTCF, to ensure the expert judges committee clearly understood the task of analyzing the 81 items for clarity and comprehension, practical pertinence, and theoretical relevance criteria, as proposed by Yusoff<sup>20</sup>.

A sample of the instrument containing the FAPSP-LTCF sent to the expert judges committee for content validation is presented in Chart 2.

**Chart 2.** Sample of instrument containing the FAPSP-LTCF sent to expert judges committee for content validation. Porto Alegre, Rio Grande do Sul, state 2025.

DOMAIN 5 – SAFETY IN CARING FOR OLDER ADULT (RESIDENT)			
Form Questions (Items Tested)	Clarity and Comprehension	Practical Pertinence	Theoretical Relevance
35) Does the institution have a mechanism of identifying residents? If yes, check which mechanism(s) is(are) used: <input type="checkbox"/> Wristband with resident's name <input type="checkbox"/> Name plate on resident's bed <input type="checkbox"/> Name plate on wall <input type="checkbox"/> Name plate on room door <input type="checkbox"/> No resident identification mechanism <input type="checkbox"/> Others _____	1 ( ) Not clear or comprehensible 2 ( ) Somewhat clear and comprehensible 3 ( ) Clear and comprehensible 4 ( ) Very clear and comprehensible	1 ( ) No practical pertinence 2 ( ) Little practical pertinence 3 ( ) Has practical pertinence 4 ( ) Great practical pertinence	1 ( ) Not relevant 2 ( ) Needs revision to assess relevance 3 ( ) Relevant, needs minor changes 4 ( ) Highly relevant
Comments or suggestions			
36) Does the LTCF have visual guidelines (posters, folders) or reminders encouraging hand hygiene practice for staff, residents, and families? If yes, check which guideline(s) is(are) used: <input type="checkbox"/> Correct hand hygiene technique <input type="checkbox"/> WHO's 5 moments for hand hygiene <input type="checkbox"/> Messages about hand hygiene importance <input type="checkbox"/> LTCF has no visual guidelines/reminders at present <input type="checkbox"/> Others _____	1 ( ) Not clear or comprehensible 2 ( ) Somewhat clear and comprehensible 3 ( ) Clear and comprehensible 4 ( ) Very clear and comprehensible	1 ( ) No practical pertinence 2 ( ) Little practical pertinence 3 ( ) Has practical pertinence 4 ( ) Great practical pertinence	1 ( ) Not relevant 2 ( ) Needs revision to assess relevance 3 ( ) Relevant, needs minor changes 4 ( ) Highly relevant
Comments or suggestions			

**Source:** Author elaboration, 2025

b) Selecting expert review panel: based on adapted Fehring<sup>22</sup> criteria, which considered individual experience on the topic to be studied. The committee comprised eight expert reviewers.

c) Conducting content validation: after initial contact presenting the proposal, the FAPSP-LTCF version was sent to experts by email together with clear instructions.

d) Reviewing domains and items: experts were requested to provide a critical review of each domain and its items according to the established criteria. They were also encouraged to provide written comments to improve item relevance in relation to the target domain. All comments were taken

into consideration toward refining the domains and their respective items.

e) Provision of scoring for evaluated items: after reviewing each item in their respective domains, experts were asked to assign scores independently, using a 4-point Likert Scale, for each of the three criteria.

f) CVI calculation: after receiving the instrument containing the FAPSP-LTCF from each expert, a database was created in an Excel® spreadsheet containing all evaluations by item and domain. Excel® software was used for CVI calculation. The calculation was performed by item, by domain, and for the final form score. Subsequently, the scoring

classification was recoded as 1 (for scores 3 or 4) or zero (for scores 1 or 2).

The synthesis of scores according to each domain, by expert and criteria, conducted in the first stage of the Expert Committee is presented in Table 1.

Considering that the domains General Data, Infrastructure, Patient Safety, and Work Processes received suggestions for changes and scores of 1 or 2 in the clarity and comprehension dimension by experts A, E, and F, individual meetings were

held with these reviewers in January and February 2025. The meetings were to validate the proposed modifications and allow re-evaluation of the items. After re-evaluation, the experts assigned new scores, resulting in a CVI calculation of 1.0 for all items and their respective domains, as shown in Table 2.

The complete final version of the FAPSP-LTCF is presented in Appendix A, Available from: <https://figshare.com/s/5487913f0e544e6b5633?file=61003045>. The structure of the eight domains and their respective 81 items are presented in Table 3.

**Table 1.** Content Validity Index of FAPSP-LTCF domains from first evaluation by the Expert Judges Committee, according to clarity and comprehension, practical pertinence, and theoretical relevance criteria (N=8 experts). Porto Alegre, Rio Grande do Sul state, 2025.

Expert Committee/ Criteria	FAPSP-LTCF DOMAINS								
	General and demographic data	Legal constitution	Human resources	Infrastructure	Safety of Patient/Older Adult	Work Processes	Continuing and Permanent Education	Indicators	CVI Total
CC	1.0	1.0	1.0	0.81	0.75	0.75	1.0	1.0	0.91
E1 PP	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
TR	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
CC	1.0	1.0	1.0	0.9	1.0	1.0	1.0	1.0	1.0
E2 PP	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
TR	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
CC	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
E3 PP	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
TR	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
CC	1.0	1.0	1.0	1.0	0.94	1.0	1.0	1.0	0.99
E4 PP	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
TR	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
CC	1.0	1.0	1.0	1.0	0.94	0.87	1.0	1.0	0.96
E5 PP	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
TR	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
CC	0.84	1.0	1.0	1.0	0.94	1.0	1.0	1.0	0.96
E6 PP	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
TR	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
CC	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
E7 PP	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
TR	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
CC	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
E8 PP	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
TR	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
CVI by domain	0.99	1.0	1.0	0.99	0.98	0.98	1.0	1.0	0.98

E1 to E8 = Participating Experts; FAPSP-LTCF = Patient Safety Practices Self-Assessment Form for LTCFs; CC = Clarity and Comprehension; PP = Practical Pertinence; TR = Theoretical Relevance; CVI = Content Validation Index. **Source:** Author elaboration, 2025

**Table 2.** Content Validity Index of FAPSP-LTCF domains from final evaluation by the Expert Judges Committee, according to clarity and comprehension, practical pertinence, and theoretical relevance criteria (N=8 experts). Porto Alegre, Rio Grande do Sul state, 2025.

Expert Committee/ Criteria	FAPSP-LTCF Domains								
	General and demographic data	Legal constitution	Human resources	Infrastructure	Safety of Patient/Older Adult	Work Processes	Continuing and Permanent Education	Indicators	CVI Total
E1	CC	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	PP	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	TR	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
E2	CC	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	PP	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	TR	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
E3	CC	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	PP	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	TR	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
E4	CC	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	PP	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	TR	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
E5	CC	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	PP	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	TR	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
E6	CC	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	PP	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	TR	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
E7	CC	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	PP	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	TR	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
E8	CC	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	PP	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	TR	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	CVI by domain	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

E1 to E8 = Participating Experts; FAPSP-LTCF = Patient Safety Practices Self-Assessment Form for LTCFs; CC = Clarity and Comprehension; PP = Practical Pertinence; TR = Theoretical Relevance; CVI = Content Validation Index. **Source:** Author elaboration, 2025.

**Table 3.** FAPSP-LTCF structure according to domain and respective number of items. Porto Alegre, Rio Grande do Sul state, 2025.

FAPSP-LTCF Domains	No. of items
Domain 1 - General and Demographic Data	13
Domain 2 - Legal Constitution	4
Domain 3 - Human Resources	6
Domain 4 – Infrastructure	11
Domain 5 – Safety of Patient/Older Adult	33
Domain 6 - Work Processes	8
Domain 7 - Continuing and Permanent Education	3
Domain 8 – Indicators	3
Total FAPSP-LTCF items	81

FAPSP-LTCF = Patient Safety Practices Self-Assessment Form for Long-Term Care Facilities for Older Adults. **Source:** Author elaboration, 2025.

## DISCUSSION

The PAHO Long-Term Care Policy emphasizes the importance of comprehensive, consistent, and culturally sensitive assessments in LTCFs, allied with the formulation of quality standards and implementation of monitoring and management mechanisms<sup>4</sup>. Such assessments should support continuous improvement of care practices, from preventive actions to end-of-life care<sup>3</sup>. Another fundamental element for strengthening LTCFs is the strategic use of information through consistent, transparent systems that represent the needs of institutionalized older adults, guide decision-making, and support evidence-based public policies<sup>4</sup>.

In applied research, there remains a significant gap in the availability of specific instruments for measuring patient safety in LTCFs. A recent scoping review identified 47 tools targeting different care settings, such as hospital, emergency, pre-hospital, and primary care; but none designed specifically for LTCFs<sup>25</sup>.

A 2024 methodological study on the construction and content validation of a care quality self-assessment instrument in LTCFs, although focusing on multidimensional standards, considering safety as one of the dimensions of quality, addressed issues related to environmental safety, older adult care, technical routines, and use of indicators<sup>26</sup>. Although

both instruments share underlying domains related to care quality, the FAPSP-LTCF differs by exploring aspects directly linked to safety in care provision for older adults. This specific emphasis reinforces the instrument's relevance for continuous monitoring, improving quality of care practices, and promoting safer environments within LTCFs.

International studies corroborate the relevance of evaluative instruments in LTCFs, while initiatives have been run for this purpose. The Nursing Home Survey on Patient Safety Culture by the Agency for Healthcare Research and Quality assesses safety culture in LTCFs<sup>27</sup> but fails to assess care practices, infrastructure, and institutional processes according to national regulations, a gap that the instrument validated in the present study seeks to fill. In South Korea, authors validated a questionnaire for assessing safety and care quality in LTCFs, covering domains such as emergency response, comfort management, infection prevention, staff training, material resources, and personnel adequacy<sup>28</sup>. Similarly, the FAPSP-LTCF was designed to evaluate care safety in Brazilian LTCFs, considering the particularities of the national regulatory scenario aligned with international guidelines.

A study conducted in the Netherlands validated the Quality Evaluation Questionnaires – Nursing Homes (QEQ-NH) for measuring care quality from three complementary perspectives: residents,

families, and professionals, with good validity and reliability ( $\alpha > 0.70$ ), but focused on subjective dimensions<sup>29</sup>. Although the QEQ-NH captures multiple care quality dimensions, its main focus is on subjective perceptions, while the FAPSP-LTCF incorporates objective and normative dimensions, grounded in regulatory mechanisms. Both tools share the same goal of supporting quality management and fostering organizational culture focused on quality and safety of care for institutionalized older adults.

In Italy, a study highlighted that measuring patient safety in LTCFs is strategic for fostering quality interventions and consolidating an institutional culture based on transparency, accountability, and participation of professionals and families<sup>30</sup>. This rational converges with the FAPSP-LTCF's aim of promoting an organizational environment committed to care safety.

In Brazil, the LTCF Quality Assessment Matrix<sup>31</sup> applied to entities participating in the Unified Social Assistance System Census represents progress in institutional evaluation, based on a multidimensional model covering care and social aspects. However, its approach differs from the FAPSP-LTCF scope, which was specifically designed to assess health care safety, focusing on practices and indicators directly linked to adverse event prevention and compliance with health regulations.

Promoting patient safety in LTCFs requires specific instruments attuned to the Brazilian institutional and regulatory context. The FAPSP-LTCF excels in this scenario by filling a methodological gap and providing a tool to support management practices, evaluation, and continuous quality improvement of care. Application of the tool can strengthen safety culture, articulated with public policies and aligned with international guidelines. Additionally, the FAPSP-LTCF demonstrates the importance of expanding applied research on long-term care as an essential strategy to ensure the safety, integrity, and well-being of institutionalized older adults.

Although the structuring of the themes that composed the focus group discussion was grounded in robust references related to Patient Safety, Gerontology, and Health Surveillance, the lack of a systematic literature review was identified as

a weakness. Another limitation that may hamper generalization of the form to other regions of the country, due to structural, regulatory, and cultural differences, involves the profile of focus group participants and the expert judges committee, predominantly composed of professionals from the city of Porto Alegre, with the exception of one judge working in another Brazilian state.

## CONCLUSION

This study presented the methodological description for constructing and validating the Patient Safety Practices Self-Assessment Form for Long-Term Care Facilities for Older Adults, based on national regulations and international guidelines, allowing the formulation of items contextualized to institutional practices. Content validation revealed clarity and comprehension, practical pertinence, and theoretical relevance, with an initial Content Validity Index of 0.98 and final index of 1.0 after adjustments suggested by experts. These results confer semantic consistency and technical foundation to the instrument for application in care safety management.

Given the scarcity of specific instruments for Long-Term Care Facilities for Older Adults, the Patient Safety Practices Self-Assessment Form for LTCFs represents a valuable tool to help support self-assessment, monitoring, and improvement of institutional practices, favoring a safety culture focused on the institutionalized older population. The form also shows potential for use by municipal and state Health Surveillance agencies, supporting inspection actions and promoting improvements in care and safety standards. This investigations may serve to stimulate new studies and integrated actions involving academia, public management, and services, promoting evidence-based practices centered on safety and quality of care.

## AUTHORSHIP

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## REFERENCES

1. Organização das Nações Unidas. Envelhecimento da população mundial 2023: destaques [Internet]. Nova York: Organização das Nações Unidas; 2023. [Accessed on: 2026 Jan 12]. Available from: [https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/undesapd\\_2024\\_wpa2023-report.pdf](https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/undesapd_2024_wpa2023-report.pdf)
2. Instituto Brasileiro de Geografia e Estatística. Censo demográfico 2022: população residente por idade e sexo: resultados preliminares. Rio de Janeiro: IBGE; 2023. [Accessed on: 2026 Jan 12]. Available from: <https://censo2022.ibge.gov.br/panorama/indicadores.html?localidade=BR>.
3. Organização Pan-Americana da Saúde. Década do envelhecimento saudável nas Américas (2021–2030). Washington (DC): OPAS; 2020. [Accessed on: 2026 Jan 12]. Available from: <https://www.paho.org/pt/decada-do-envelhecimento-saudavel-nas-americas-2021-2030>.
4. Organização Pan-Americana da Saúde. Política de cuidados de longa duração [Internet]. Washington (DC): Organização Pan-Americana da Saúde; 2024. [Accessed on: 2026 Jan 12]. Available from: <https://www.paho.org/sites/default/files/2024-08/cd61-8-p-cuidados-longa-duracao.pdf>.
5. Guimarães MRC, Giacomini KC, Ferreira RC, Vargas AMD. Avaliação das Instituições de Longa Permanência para Idosos no Brasil: um panorama das desigualdades regionais. *Ciência & Saúde Coletiva*. 2023;28(7):2035-50. Doi: <https://doi.org/10.1590/1413-81232023287.15792022>
6. Organização Mundial da Saúde. Plano de ação global para a segurança do paciente 2021–2030: em busca da eliminação dos danos evitáveis nos cuidados de saúde. Genebra: Organização Mundial da Saúde; 2021. [Accessed on: 2026 Jan 12]. Available from: <https://iris.who.int/handle/10665/343477?locale-attribute=pt>.
7. Brasil. Lei nº 9.782, de 26 de janeiro de 1999. Define o Sistema Nacional de Vigilância Sanitária, cria a Agência Nacional de Vigilância Sanitária e dá outras providências. *Diário Oficial da União*; 26 jan 1999. [Accessed on: 2026 Jan 12]. Available from: [https://www.planalto.gov.br/ccivil\\_03/leis/L9782.htm](https://www.planalto.gov.br/ccivil_03/leis/L9782.htm).
8. Agência Nacional de Vigilância Sanitária. Salões, tatuagens, creches e outros serviços de interesse para a saúde. Brasília: Anvisa; 2020 Set 21. [Accessed on: 2026 Jan 12]. Available from: <https://www.gov.br/anvisa/pt-br/assuntos/servicosdesaude/saloes-tatuagens-creches>.
9. Prefeitura Municipal de Porto Alegre. Secretaria Municipal de Saúde. Cadastro ILPI atualizado. Porto Alegre: Prefeitura Municipal de Porto Alegre; 2025. [Documento não publicado].
10. Dyer AH, Fallon A, Noonan C, Dolphin H, O'Farrelly C, Bourke NM, et al. Managing the Impact of COVID-19 in Nursing Homes and Long-Term Care Facilities: An Update. *J Am Med Dir Assoc*. 2022;23(9):1590-602. Doi: <https://doi.org/10.1016/j.jamda.2022.06.028>
11. Brasil. Agência Nacional de Vigilância Sanitária. Plano integrado para a gestão sanitária da segurança do paciente em serviços de saúde 2021–2025. Brasília: Agência Nacional de Vigilância Sanitária; 2021. [Accessed on: 2026 Jan 12]. Available from: <https://www.gov.br/anvisa/pt-br/centraisdeconteudo/publicacoes/servicosdesaude/publicacoes/plano-integrado-2021-2025-final-para-publicacao-05-03-2021.pdf>
12. Salbego C, Nietsche EA, Greco PBT, Girardon-Perlini NMO, Cogo SB, Ramos TK, et al. Elaboração e validação do Instrumento para Avaliação de Modelos metodológicos voltados ao Desenvolvimento de Tecnologias. *Rev. Bras. Enferm*. 2023;76(4):e20230046. Doi: <https://doi.org/10.1590/0034-7167-2023-0046pt>

13. Vizzotto PA. O coeficiente de validade de conteúdo (CVC) como ferramenta para validação de questionários: exemplo de uso na pesquisa em Educação e Ensino de Ciências. *Revista Educar Mais*. 2025 Jan 16;9:1–23. Doi: <https://doi.org/10.15536/reducarmais.9.2025.4089>
14. Khalil H, Munn Z. Guidance on conducting methodological studies – an overview. *Current Opinion in Epidemiology and Public Health*. 2023 Mar;2(1):2. Doi: <https://doi.org/10.1097/PXH.0000000000000013>
15. Kinalski DDF, Paula CCD, Padoin SMDM, Neves ET, Kleinubing RE, Cortes LF. Focus group on qualitative research: experience report. *Rev Bras Enferm*. 2017;70(2):424–9. Doi: <https://doi.org/10.1590/0034-7167-2016-0091>
16. Brasil. Resolução RDC nº 36, de 25 de julho de 2013. Institui ações para a segurança do paciente em serviços de saúde e dá outras providências. *Diário Oficial da União*; 25 jul 2013. [Accessed on: 2026 Jan 12]. Available from: [https://bvsms.saude.gov.br/bvs/saudelegis/anvisa/2013/rdc0036\\_25\\_07\\_2013.html](https://bvsms.saude.gov.br/bvs/saudelegis/anvisa/2013/rdc0036_25_07_2013.html)
17. Brasil. Resolução RDC nº 502, de 27 de maio de 2021. Dispõe sobre o funcionamento de Instituições de Longa Permanência para Idosos de caráter residencial. *Diário Oficial da União*; 27 maio 2021. [Accessed on: 2026 Jan 12]. Available from: <https://www.in.gov.br/en/web/dou/-/resolucao-rdc-n-502-de-27-de-maio-de-2021-323003775>
18. Brasil. Ministério da Saúde. Documento de referência para o Programa Nacional de Segurança do Paciente. Brasília: Ministério da Saúde; 2014. [Accessed on: 2026 Jan 12]. Available from: [https://bvsms.saude.gov.br/bvs/publicacoes/documento\\_referencia\\_programa\\_nacional\\_seguranca.pdf](https://bvsms.saude.gov.br/bvs/publicacoes/documento_referencia_programa_nacional_seguranca.pdf)
19. Davis LL. Instrument review: Getting the most from a panel of experts. *Appl Nurs Res*. 1º de novembro de 1992;5(4):194–7. Doi: [https://doi.org/10.1016/S0897-1897\(05\)80008-4](https://doi.org/10.1016/S0897-1897(05)80008-4)
20. Yusoff MSB. ABC of content validation and content validity index calculation. *Educ Med J*. 2019;11(2):49–54. Doi: <https://doi.org/10.21315/eimj2019.11.2.6>
21. Lynn MR. Determination and quantification of content validity. *Nurs Res*. 1986;35(6):382–5. Doi: <https://psycnet.apa.org/doi/10.1097/00006199-198611000-00017>
22. Fehring RJ. The Fehring Model. In: Carroll-Johnson RM, editor. *Classification of the nursing diagnosis: proceedings of the tenth conference*. Philadelphia: Lippincott; 1994. p. 55–62.
23. Brasil. Conselho Nacional de Saúde (CNS). Resolução nº 466, de 12 de dezembro de 2012. Diretrizes e normas regulamentadoras de pesquisas envolvendo seres humanos. Brasília: Ministério da Saúde; 2012. [Accessed on: 2026 Jan 12]. Available from: [https://bvsms.saude.gov.br/bvs/saudelegis/cns/2013/res0466\\_12\\_12\\_2012.html](https://bvsms.saude.gov.br/bvs/saudelegis/cns/2013/res0466_12_12_2012.html)
24. Brasil. Conselho Nacional de Saúde. Resolução nº 580, de 22 de março de 2018. Dispõe sobre as especificidades éticas das pesquisas de interesse estratégico para o Sistema Único de Saúde (SUS). Brasília: Ministério da Saúde; 2018. [Accessed on: 2026 Jan 12]. Available from: [https://bvsms.saude.gov.br/bvs/saudelegis/cns/2018/res0580\\_16\\_07\\_2018.html](https://bvsms.saude.gov.br/bvs/saudelegis/cns/2018/res0580_16_07_2018.html)
25. Nunes E, Sirtoli F, Lima E, Minarini G, Gaspar F, Lucas P, et al. Instruments for Patient Safety Assessment: A Scoping Review. *Healthcare*. 2024;12(20):2075. Doi: <https://doi.org/10.3390/healthcare12202075>
26. Carvalho Vieira B, Martins A, Ferreira R, Vargas A. Construção e validação de conteúdo de instrumento de autoavaliação da qualidade do cuidado em instituição de longa permanência para pessoas idosas. *Rev Bras Geriatr Gerontol*. 2024;27:e230173. Doi: <https://doi.org/10.1590/1981-22562024027.230173.pt>
27. Agency for Healthcare Research and Quality (AHRQ). *Surveys on Patient Safety Culture (SOPS)* [Internet]. Rockville (MD): AHRQ; 2025. [Accessed on: 2026 Jan 12]. Available from: <https://www.ahrq.gov/sops/index.html>
28. Min D, Kim S. Development and validation of the resident safety activity questionnaire for long-term care facility staff. *Geriatr Nurs*. 2024 Mar-Apr;56:278–284. Doi: <https://doi.org/10.1016/j.gerinurse.2024.02.019>
29. Triemstra M, Menting J, van den Berg B. Quality evaluation questionnaires - nursing homes (QEQ-NH); validation of questionnaires for measuring quality of care in nursing homes from various perspectives. *BMC Health Serv Res*. 2021 Sep 13;21(1):961. Doi: <https://doi.org/10.1186/s12913-021-06823-4>
30. Tocco Tussardi I, Tardivo S, Mazzi MA, Rimondini M, Visentin D, Busch IM, et al. Unpacking Perceptions on Patient Safety: A Study of Nursing Home Staff in Italy. *Healthcare*. 2024;12(14):1440. Doi: <https://doi.org/10.3390/healthcare12141440>
31. Guimarães MRC, Ferreira RC, Giacomini KC, Vargas AMD. Indicadores para avaliação das instituições de longa permanência para pessoas idosas: desenvolvimento e validação. *Revista Brasileira de Geriatria e Gerontologia*. 2020;23(5). Doi: <https://doi.org/10.1590/1981-22562020023.200265>