

# Instrument for home nursing consultation with patients with cancer: construction and validity

Instrumento para consulta de enfermagem domiciliar com paciente oncológico: construção e validação  
Instrumento para consulta de enfermería domiciliar con pacientes oncológicos: construcción y validación

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## Abstract

**Objective:** To develop an instrument for data collection in nursing consultation during home care of patients with cancer.

**Methods:** This is a methodological, qualitative and quantitative study, carried out in three stages: scoping review conduction, instrument preparation according to Callista Roy's adaptation model and material assessment by experts. The stages were developed according to Pasquali's psychometrics methodological framework. Instrument appearance assessment was performed based on the Suitability Assessment of Materials adjusted criteria. Delphi's technique was used to assess content and appearance in two rounds. The Content Validity Coefficient was used to assess the degree of agreement among experts. Descriptive and inferential statistics were used to analyze the data. Content Validity Coefficient >0.80 and among >80.0% in the Delphi technique, in addition to  $p \leq 0.05$  for statistical significance were adopted.

**Results:** All the instrument requirements reached agreement among judges greater than 80.0%. The assessment levels were statistically significant. At the end of Delphi, the instrument was valid for content (1.0 Content Validity Coefficient) and appearance (0.99 Content Validity Coefficient).

**Conclusion:** The final instrument presented content validity and appearance for data collection in nursing consultation, which may contribute to data collection among people with malignant neoplasms in the context of home care.

## Resumo

**Objetivo:** Desenvolver um instrumento para coleta de dados na Consulta de Enfermagem durante o atendimento domiciliar de paciente oncológico.

**Métodos:** Estudo metodológico, qualitativo e quantitativo, realizado em três etapas: realização de *scoping review*, elaboração do instrumento de acordo com o modelo teórico de Callista Roy e avaliação do material por especialistas. As etapas foram desenvolvidas segundo o referencial metodológico da psicometria de Pasquali. A avaliação da aparência do instrumento foi realizada a partir dos critérios ajustados do *Suitability Assessment of Materials*. Para avaliação de conteúdo e da aparência, empregou-se a técnica de Delphi em duas rodadas. Utilizou-se o Coeficiente de Validação de Conteúdo para avaliar o grau de concordância entre os especialistas. Os dados foram analisados por meio de estatística descritiva e inferencial. Adotaram-se Coeficiente de Validação de Conteúdo >0,80 e consenso >80,0% na técnica de Delphi, além de valor de  $p \leq 0,05$  para a significância estatística.

**Resultados:** Todos os requisitos do instrumento alcançaram concordância entre os juízes superior a 80,0%. Os níveis de avaliação foram estatisticamente significativos. Ao final do Delphi, o instrumento se apresentou válido quanto ao conteúdo (Coeficiente de Validação de Conteúdo de 1,0) e à aparência (Coeficiente de Validação de Conteúdo de 0,99).

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Conflicts of interest: nothing to declare.

**Conclusão:** O instrumento final apresentou validade de conteúdo e aparência para coleta de dados na Consulta de Enfermagem o qual poderá contribuir para a coleta de dados junto a pessoas com neoplasias malignas no contexto da atenção domiciliar.

## Resumen

**Objetivo:** Desarrollar un instrumento para la recopilación de datos en la consulta de enfermería durante la atención domiciliar de pacientes oncológicos.

**Métodos:** Estudio metodológico, cualitativo y cuantitativo, realizado en tres etapas: realización de *scoping review*, elaboración del instrumento de acuerdo con el modelo teórico de Callista Roy y evaluación del material por especialistas. Las etapas se desarrollaron según el referente metodológico de psicometría de Pasquali. La evaluación de la apariencia del instrumento se realizó a partir de los criterios ajustados de *Suitability Assessment of Materials*. Para la evaluación de contenido y de apariencia se utilizó la técnica de Delphi en dos rondas. Se utilizó el Coeficiente de Validación de Contenido para evaluar el grado de concordancia entre los especialistas. Los datos fueron analizados por medio de estadística descriptiva e inferencial. Se adoptó un Coeficiente de Validación de Contenido  $>0,80$  y consenso  $>80,0\%$  en la técnica de Delphi, además de valor de  $p \leq 0,05$  para la significancia estadística.

**Resultados:** Todos los requisitos del instrumento alcanzaron una concordancia entre los jueces superior al  $80,0\%$ . Los niveles de evaluación fueron estadísticamente significativos. Al final del Delphi, el instrumento demostró ser válido con relación al contenido (Coeficiente de Validación de Contenido del 1,0) y a la apariencia (Coeficiente de Validación de Contenido del 0,99).

**Conclusión:** El instrumento final presentó una validez de contenido y apariencia para la recopilación de datos en la consulta de enfermería que podrá contribuir para la recopilación de datos de personas con neoplasias malignas en el contexto de la atención domiciliar.

## Introduction

According to the Pan American Health Organization, cancer is the second leading cause of death in the world, accounting for one in six deaths. In 2018, 9.6 million deaths caused by cancer were reported. About 70% of them occur in low- and middle-income countries. Approximately 40% of these deaths could be prevented with measures to control and prevent risk factors for the occurrence of malignant neoplasms. It is known that 30% of cases have the possibility of cure if detected early and treated correctly.<sup>(1)</sup>

Cancer treatment is interprofessional and multidimensional. Clinical staging and the set of data of anatomopathology, immunohistochemistry and, more recently, genetic panels make up quality so that diagnosis and prognosis are increasingly accurate. There are several forms to treat cancer, the most used being antineoplastic chemotherapy, which includes cytotoxic drugs, molecular target therapy, immunotherapy, endocrine therapy (hormone therapy), biological response modifiers, teletherapy, brachytherapy and intraoperative radiotherapy, in addition to surgeries. Such therapies can be used both individually and together, varying only in terms of susceptibility of tumors to each of the therapeutic modalities and the best sequence of their administration.<sup>(2,3)</sup>

In order to ensure and promote, on an equal basis, access to adequate treatment and the exercise of the fundamental rights and freedoms of people

with cancer, in order to ensure respect for dignity, citizenship and their social inclusion, Law 14,238 of November 19, 2021 establishes the Person with Cancer Statute and other measures. This Law establishes essential principles and objectives for protecting the rights of people with cancer and implementing public policies to prevent and combat cancer.<sup>(4)</sup>

The current overview of cancer in Brazil and in the world leads to reflection of the impact caused by the health education process in nursing consultations, not only in preventing the disease development, but also in coping with the psychosocial repercussions derived from it, through multiprofessional actions aimed at the well-being of patients with malignant neoplasms.<sup>(5)</sup>

A care scenario that has recently expanded to develop such actions to cancer patients refers to home care, which is articulated with other Health Care Network levels and aims to offer at home a set of actions to prevent and treat diseases, rehabilitation, palliation and health promotion, ensuring continuity of care. Elaborated outside the hospital space, home care seeks the most humanized and personalized care, enabling greater autonomy and speed in patient recovery, expansion of access to services by bedridden or domiciled users, optimization of hospital beds and solution of part of the overload in emergency services.<sup>(6)</sup>

In this context, carrying out a nursing consultation operationalized by the Nursing Process (NP) provides greater safety to patients, improving quality of care and autonomy to nursing professionals.

This is a private activity of nurses, performed at all levels of public or private health care, including the health of patients with cancer.<sup>(7,8)</sup>

A nursing consultation comprises interrelated, interdependent and recurrent actions, including data collection, nursing diagnosis, planning, implementation and assessment. For data collection, it is suggested the use of recording instruments in order to guide and make it systematized to support the other steps that involve the Systematization of Nursing Care (SNC).<sup>(9-11)</sup>

Using nursing theories with theoretical support for developing NP is foreseen in Resolution 358 of 2009 of the Federal Nursing Council, in order to guide this process, from data collection, the establishment of diagnoses and the planning of nursing interventions, to the assessment of the results achieved.<sup>(10)</sup>

Thus, although several conceptual models and nursing theories have been developed in recent decades, the foundation proposed by Callista Roy, called Adaptation Theory, was used in this study, which considers the objective of nursing to promote the adaptation of individuals and groups in the four adaptation modes (adaptive mode: physiological, self-concept, interdependence and role performance), which were adapted and used to build the instrument for data collection during the nursing home consultation of patients with cancer.<sup>(12,13)</sup>

In particular, the first stage (assessment action pointed out by Roy), which represents the focus of this research, it is worth mentioning that it is considered essential for the NP construction, representing much more than filling out a form, as it demands specific skills from the professional, clinical reasoning, interpersonal communication and knowledge of clinical condition. In this case, patients with cancer, emphasizing that a data collection instrument for adequate nursing consultation for people with malignant neoplasm in home treatment will help in this context.<sup>(13)</sup>

The relevance of this study lies in the fact of the novelty of Callista Roy's adaptation model framework in a specific instrument for nursing consultation of patients with cancer assisted at home.

This study aimed to develop an instrument for data collection in nursing consultation during home care of patients with cancer.

## Methods

This is a methodological study, with quantitative and qualitative approach, using its various stages: theoretical procedures, empirical procedures and analytical procedures, based on Pasquali's psychometrics methodological framework,<sup>(14)</sup> developed from October 2020 to May 2021 in three stages: scoping review, instrument construction and material content assessment by judges.

In the first stage, the results from literature review were demonstrated in order to identify scientific evidence regarding instruments for data collection during the nursing consultation at the homes of patients with cancer. The stage was elaborated through scoping review, according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses for Scoping Reviews (PRISMA-ScR) recommendations<sup>(15)</sup> and the method proposed by the Joanna Briggs Institute Reviewer's Manual 2020,<sup>(16)</sup> based on national and international scientific evidence.

During the instrument elaboration, the construct was subdivided into seven parts (identification, household conditions, clinical history, physiological mode, self-concept mode, role role mode and interdependence mode).

According to the assessment criteria established by Pasquali,<sup>(14)</sup> the instrument was assessed for behavior, objectivity, simplicity, clarity, relevance, accuracy, variety, modality, typicality, credibility, breadth and balance. A chart elucidating each of these 12 criteria was presented, which were assessed using a Likert-type scale.

The appearance judgment was performed using the Suitability Assessment of Materials (SAM):<sup>(17)</sup> content, language, illustrations, layout, motivation and culture, in addition to the final assessment of the objectives to which it was proposed and its recommendation of use/application.

For the selection of possible judges, Fehring's model<sup>(18)</sup> was adapted and used, giving a maximum score of 14 points. However, for this choice, a minimum score of 5 points was assigned: Master's and PhD degrees in nursing or related areas (mandatory criterion).<sup>(18)</sup>

The first 40 eligible judges were chosen, who received an invitation letter by e-mail, with a period

of up to 20 days to return the instrument. They also received the Informed Consent Form and instructions to be able to analyze and assess the instrument.

The instrument to be completed for assessment was made in Google Docs, with initial information on participant characterization, the form items and guidelines. After each item, there was a space in which the judges could record suggestions for modification and improvement.

This process was regulated by the Delphi technique, in which experts answered, through two rounds, an evaluative questionnaire. Of the 40 possible judges selected, 12 agreed to participate in the form assessment, which corresponded to the first round (Delphi I), when there were suggestions for changes in material for its improvement. After analyzing the data from Delphi I and reformulating the instrument, as recommended by judges, they were contacted and a new electronic form was sent to them with the instrument adapted for a new assessment (Delphi II). Nine judges participated in this stage. A deadline of 20 days was set for sending the assessment to the researcher.

To assess the instrument, judges' assessments were inserted into a database in Microsoft Excel 2016 and, after analysis, the scores attributed to each item were verified. The item relevance was obtained by applying the Content Validity Coefficient (CVC).<sup>(19)</sup> It was considered valid the item that presented more than 80% agreement among judges (rated adequate) and CVC >0.80.<sup>(20)</sup>

Descriptive and inferential analyses (binomial test) were performed. For this, a p-value of  $\leq 0.05$  was adopted as a parameter for statistical significance.

The study was approved by the Research Ethics Committee of the *Universidade Federal de São João del-Rei*, under Opinion 2,010,532 and CAAE (*Certificado de Apresentação para Apreciação Ética - Certificate of Presentation for Ethical Consideration*) 65824617.2.0000.5545.

## Results

The instrument was made, structured for data collection, data recording and content and appearance validity by a committee of expert judges, composed

of 12 professionals, in the first assessment round, and nine in the second. The loss of three occurred due to non-return of the assessment of the protocols within pre-established deadline. Among participants, the minimum age was 39 years, and the maximum was 63 years (52.0 mean, 8.35 standard deviation in Delphi I; in Delphi II, 53.7 mean and 8.12 standard deviation). There was a predominance of females, and PhD holders with experience in teaching participated. The training time was over 10 years, and the highest qualification was in oncology (Table 1).

**Table 1.** Characterization of judges participating in Delphi I and Delphi II phases

Characterization of judges	Delphi I (n=12) n(%)	Delphi II (n=9) n(%)
Sex		
Female	11(91.6)	8(88.8)
Male	1(8.3)	1(11.1)
Area currently working		
Care and teaching	2(12.5)	2(22.2)
Teaching and research	5(41.6)	4(44.4)
Care, teaching and research	2(12.5)	1(11.1)
Teaching and management	2(12.5)	2(22.2)
Teaching	1(8.3)	0(0)
Time since graduation in nursing, years		
10-20	2(12.5)	1(11.1)
21-30	6(50.0)	5(55.5)
30 and older	4(33.3)	3(33.3)
Time working in the field of oncology, years		
Up to 10	1(8.3)	0(0)
11-20	2(12.5)	2(22.2)
21-30	6(50.0)	4(44.4)
30 and older	3(25.0)	3(33.3)
Higher qualification		
PhD in oncology	8(66.6)	7(77.7)
PhD in other areas	3(25.0)	2(22.2)
Post-Doctorate in other areas	1(8.3)	0(0)

Results expressed as n(%)

In the first version, one hundred empirical indicators were presented referring to identification data, household conditions, clinical history, physiological mode (oxygenation; nutrition; elimination; activity and rest; skin integrity; senses, fluids and electrolytes; neurological function and palliative care), self-concept mode, role function mode, interdependence mode and complementary data. Of these, 100.0% of indicators reached CVC above 0.80, but it was suggested by judges to insert 22 questions. Thus, the instrument in the version after validity by nurse judges was left with 122 empirical indicators (Appendix 1).

Among the readjustments suggested in the instrument, in addition to the standardization of data to be investigated in the affirmative form, items related to household conditions, aspects of access to the place of residence, type of housing for providing care at home and sanitation were included. In clinical history, records of former smokers and former alcoholics were included, in addition to the time related to this aspect, the question about disease staging and information about previous interventions or surgeries. In the physiological mode, the sequence was altered: neurological assessment was inserted before oxygenation assessment. Circulation and oxygenation assessment were in the same item and were separated. Venous assessment was included in the circulation, and food recall was added to nutrition assessment. In the physiological mode, neurological function, inserted before oxygenation, and the type of food and liquids consumed in feeding were included. In circulation, it was recommended to separate from oxygenation and include recording, temperature and venous assessment. In the role function mode, it was recommended to record patients being independent for self-care or if they needed a caregiver. In the self-concept mode, which specifically involved the human system's psychological and spiritual aspects, the physical self, which involved the body image, and the personal self, which included moral and spiritual self-awareness, the self-ideal or the expectation were discriminated against.

In the instrument construction, changes made consisted essentially of variety (language was adequate and allowed content interactivity), modality (vocabulary was appropriate, without generating misunderstandings) and typicality (vocabulary was consistent with the theme, with adequate concepts).

Table 2 describes the final agreement among judges regarding the analyzed items of instrument content ("adequate" and "totally adequate").

Regarding the instrument appearance, in the first round, it was possible to reach an agreement index for all the analyzed items, in which illustrations, content, language, illustration number, layout in relation to colors used and culture were the best assessed (1.00 CVC). Regarding the general

**Table 2.** Agreement among judges in Delphi I and II stages for the assessed instrument content items for data collection in nursing consultation during home care of patients with cancer

Items	Delphi I (p-value)*† n(%)	Delphi II (p-value)*† n(%)
Behavior	100.0(0.00)	100.0(0.00)
Objectivity	100.0(0.00)	100.0(0.00)
Simplicity	100.0(0.00)	100.0(0.00)
Clarity	100.0(0.00)	100.0(0.00)
Relevance/pertinence	100.0(0.00)	100.0(0.00)
Accuracy	100.0(0.00)	100.0(0.00)
Variety	92.3(0.003)	100.0(0.00)
Modality	92.3(0.003)	100.0(0.00)
Typicality	92.3(0.003)	100.0(0.00)
Credibility	100.0(0.00)	100.0(0.00)
Breadth	100.0(0.00)	100.0(0.00)
Balance	100.0(0.00)	100.0(0.00)

\*Binomial test; †p ≤0.05

estimate, the instrument appearance had 0.95 CVC at this stage. In the second round, the overall estimate of the instrument appearance had 0.99 CVC, described in Table 3.

**Table 3.** Agreement among judges in Delphi I and II stages for items to assess the graphic protocol appearance (structure, process and result)

Assessed Items	Delphi I (p-value)*† n(%)	Delphi II (p-value)*† n(%)
Content: division	100.0(0.00)	100.0(0.00)
Content: logic	100.0(0.00)	100.0(0.00)
Language: clarity and objectivity	100.0(0.00)	100.0(0.00)
Language: phrases	92.3(0.003)	100.0(0.00)
Illustrations: consistent with content	100.0(0.00)	100.0(0.00)
Illustrations: number	92.3(0.003)	100.0(0.00)
Layout: size and font	88.8(0.009)	92.3(0.003)
Layout: colors used	100.0(0.00)	100.0(0.00)
Layout: arrangement	92.3(0.003)	100.0(0.00)
Layout: number of pages/size	88.8(0.009)	92.3(0.003)
Culture: adequate	100.0(0.00)	100.0(0.00)
Culture: meets oncology nurses	92.3(0.003)	100.0(0.00)
Culture: target audience's language/experience	92.3(0.003)	100.0(0.00)

\* Binomial test; †p ≤0.05

All judges pointed out that the instrument met the objectives to which it was proposed, and recommended its use/application for data collection in nursing consultation during home care of patients with cancer.

## Discussion

The instrument content and appearance construction and validity for data collection in nursing consultation, during home care for patients with

cancer, were developed with methodological rigor, to make scientific knowledge accessible to nursing professionals who work in these spaces.

By elaborating and validating this data collection instrument, it contributes to Primary Health Care practice, in addition to scientificity, since it is a tool to be used in the care of the population with malignant neoplasm. This population is often neglected in this health care area, and the instrument proposed here serves as a guide in nursing consultation for the target audience.<sup>(21)</sup>

Most of the instrument indicators have scientific evidence as to its use. For the identification of empirical indicators, a scoping review was carried out. Validated empirical indicators were analyzed, which portray the scientific vocabulary, as regulated by COFEN Resolution 358/2009.<sup>(10)</sup>

The use of an instrument for recording and data collection in the first stage of NP aimed to comprehensively collect data on the person with malignant neoplasm at home, with a view to making it possible to identify vulnerabilities, problems that add harm to patients and potential in the search for health maintenance, allowing easy access to relevant data for nurses.<sup>(9)</sup>

Thus, these organized data will support the construction of a care plan, in order to meet needs, prevent diseases and promote interventions that strengthen well-being and health-seeking behavior.<sup>(22,23)</sup> It is necessary to take into account that nursing consultation is an effective strategy, since it favors the approximation and construction of an interpersonal welcoming relationship, in which nursing care management implies recognizing and meeting the care needs of the user-family dyad.<sup>(8)</sup> It is, therefore, evident that an instrument for data collection must be easy to understand and complete, like the one in this study; otherwise, errors or omissions in filling may occur.<sup>(22,23)</sup>

In this perspective, this study sought to contribute, through the proposition of a significant instrument for nursing care, with indicators that support nurses' clinical decisions and contribute to the implementation of changes in their performance. The validity by nurse judges showed excellent value of global CVC (0.99) and items (ranging from 0.89 to 1.00). Thus, the instrument includes information necessary for home care of patients with cancer.

Among the aspects imperative to the language of a good instrument, its clarity and objectivity are evidenced. To avoid the lack of clarity and objectivity, one of the aspects prioritized in this study was the use of clear and direct language.<sup>(8)</sup>

Adaptation Theory has applicability in multiple contexts, since it understands the person as an adaptive and holistic system, including the notion of stimuli that interact with people and trigger responses, improving health outcomes and, therefore, persons' well-being and quality of life.<sup>(12,13)</sup>

Thus, identification, clinical history, physiological mode, self-concept mode, role-function mode and interdependence mode should help in the elaboration of nursing diagnoses and interventions related to the teaching of care for the active participation of people with malignant neoplasm and their family – especially those involving lifestyle changes and recognition of signs and symptoms that evidence health vulnerabilities.<sup>(13)</sup>

Scientific literature points out that, in so that the content analyzed by health instruments is contemporary and relevant, it is essential for researchers to insert themselves in the context of the target population, knowing their specialties and needs.<sup>(8)</sup>

As a limitation, the low number of responses of experts stands out. However, it is emphasized that the sample of judges was constituted by a number considered adequate, according to the methodological framework used. The subjectivity of the instrument content assessment options (inadequate, partially adequate, not sure, adequate and fully adequate) is also emphasized as a limiting aspect of this study.

It is believed that studies in the context of home care of patients with cancer meet national and international efforts to improve nurses' activities. The development of a nursing investigation instrument, based on Adaptation Theory to a specific clientele (in this case, people with malignant neoplasms), is the first step in planning and implementing individualized and context-appropriate actions.

It should be noted that the instrument external validity has not yet been carried out, since this was the instrument preparation, and only after its implementation, necessary adjustments must be established, and it will need to be reassessed. Its imple-

mentation requires the training of nurses who will use it, followed by periodic assessments about its use.

## Conclusion

An instrument for data collection was presented in the Nursing Consultation during home care of patients with cancer, which proved reliable and valid in terms of content and appearance, to be submitted to clinical validity in Primary Health Care practice, since it pointed out psychometric properties acceptable to its use. Agreement among judges provided evidence for the instrument reliability, with alterations of items recommended by them. The instrument assessment was measured with a significant outcome, following the Delphi technique methodological rigor. Thus, this study should substantially contribute to raise nursing consultations during home care of patients with cancer and allow assessing the needs of this type of patient, enabling the planning of individualized interventions. However, it is possible that, in the course of the application in nursing consultations, other demands for adjustments may appear. In this sense, it is suggested that studies of application of this instrument be carried out to improve it.

## Collaborations

Oliveira PF, Oliveira PP, Silveira EAA, Fonseca DF, Schlosser TCM and Martins QCS contributed to the project design, data analysis and interpretation, article writing, relevant critical review of intellectual content and approval of the final version to be published.

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**Appendix 1. Data collection instrument for home nursing consultation with cancer patient, based on Callista Roy's adaptation model**

DATA COLLECTION INSTRUMENT FOR HOME NURSING CONSULTATION TO CANCER PATIENTS, BASED ON CALLISTA ROY'S ADAPTATION MODEL					
IDENTIFICATION					
Interview date: ___/___/___ Interview informant: ( ) Patient ( ) Family/other _____					
Patient name: _____ Birth date: ___/___/___ Age: _____					
Sex: ( ) Female ( ) Male Sexual orientation: ( ) Heterosexual ( ) Homosexual ( ) Bisexual Marital status: _____ Education: _____ Profession/occupation: _____ If retired, what profession did you practice before retirement? _____					
Your income is suitable for your maintenance: ( ) Yes ( ) No					
Address: _____ State: _____ Country of birth: _____					
HOUSING CONDITIONS					
<ul style="list-style-type: none"> <li>Residence physical structure:                             <ul style="list-style-type: none"> <li>Type: ( ) house ( ) apartment ( ) shack ( ) other _____</li> <li>House: ( ) own ( ) rented ( ) leased ( ) other _____</li> <li>Hygiene conditions: ( ) optimal ( ) regular ( ) bad</li> <li>Ventilation: ( ) adequate ( ) inadequate</li> <li>Power grid: ( ) yes ( ) no</li> <li>Sewage network: ( ) yes ( ) no</li> <li>Water: ( ) filtered ( ) tap ( ) boiled</li> <li>Architectural barriers in the household: ( ) no ( ) yes, which one(s): _____</li> </ul> </li> <li>Physical structure to reach the residence:                             <ul style="list-style-type: none"> <li>Zone: ( ) urban ( ) rural Has paved street: ( ) yes ( ) no Near streams: ( ) yes ( ) no</li> <li>Difficulty in accessing the home: ( ) no ( ) yes. Which one(s): _____</li> </ul> </li> </ul>					
CLINICAL HISTORY					
Clinical diagnosis: _____ Diagnosis date: ___/___/___ Current treatment type: _____					
Disease staging (if available), register: _____					
Have laboratory tests: ( ) no ( ) yes, register them: _____					
Have imaging tests: ( ) no ( ) yes, register them: _____					
Current complaint(s): _____					
Current clinical condition/summary: _____					
Clinical history: ( ) hypertension ( ) diabetes mellitus ( ) heart disease ( ) nephropathy ( ) other: _____					
Surgical history: previous surgeries or interventions ( ) no ( ) yes, which one(s): _____ How long ago: _____					
Smoking: ( ) no ( ) yes, Number of cigarettes/day _____ ( ) former smoker, how long ago: _____					
Alcohol consumption: ( ) no ( ) yes, frequency: _____ ( ) former alcoholic, how long ago: _____					
Use some medication/tea or medicinal plant: ( ) no ( ) yes, which one(s), register them:					
MEDICATION	DOSE	ADM. ROUTE	TIME	USE TIME	WHO RECOMMENDED
Have side effects of medications: ( ) no ( ) yes, which one(s): _____					
Medication allergies: ( ) no ( ) yes, which one(s): _____					
Medication intolerance: ( ) no ( ) yes, which one(s): _____					
PHYSIOLOGICAL MODE					
NEUROLOGICAL FUNCTION					
Level of consciousness: ( ) conscious ( ) lethargic ( ) torporous ( ) comatose					
Glasgow: Eye opening: ___ Verbal response: ___ Motor response: ___ Pupillary reflex: ___ Total: ___					
Emotional state: ( ) depressed ( ) sad ( ) angry ( ) anxious ( ) cheerful ( ) calm ( ) euphoric ( ) impatient ( ) quiet ( ) Other _____					
Behavior: ( ) aggressive ( ) passive ( ) cooperative					
OXYGENATION					
Breathing: ( ) ambient air ( ) oxygen therapy. Which type _____ at _____ liters/minute.					
Respiratory rate: _____ breathing movements/minute. Oxygen saturation: _____ %.					
Respiratory change: ( ) no ( ) yes, identify: _____					
CIRCULATION					
Blood pressure: _____ mmHg Heart rate: _____ bpm					
Pulse: ( ) regular ( ) irregular ( ) filiform ( ) full ( ) impalpable					
Capillary filling time: _____					
Cardiac change: ( ) no ( ) yes, identify: _____					
Edema: ( ) no edema ( ) generalized/anasarca ( ) +1 mild lock ( ) +2 moderate lock ( ) +3 severe lock ( ) +4 very severe lock ( ) site: _____					
Presence of lymphedema: ( ) no ( ) yes. Site: _____ Size: _____ cm					

Continue..

Continuation.

**NUTRITION**  
 Weight: \_\_\_\_\_ kg: \_\_\_\_\_ cm BMI: \_\_\_\_\_ kg/m<sup>2</sup>  
 Nutritional status: ( ) low weight - BMI <18.5 ( ) normal - BMI 18.5 - 24.9 ( ) overweight - BMI 25 to 29.9 ( ) obese I - BMI 30.0 to 34.9 ( ) obese II - BMI 35.0 to 39.9 ( ) obese III - BMI ≥40.0  
 Diet: ( ) zero ( ) enteral oral: ( ) NGT ( ) NET ( ) gastrostomy ( ) jejunostomy ( ) parenteral  
 Oral mucosa: ( ) Full ( ) With injuries  
 Chewing: ( ) complete dental arch ( ) Dental prosthesis: ( ) Yes ( ) No  
 Abdomen: ( ) flat ( ) globose ( ) distended ( ) flaccid ( ) tympanic ( ) painful on palpation  
 Appetite: ( ) preserved ( ) decreased ( ) increased  
 Nº meals /day: \_\_\_\_\_ Water intake/day: \_\_\_\_\_  
 Food allergies: ( ) no ( ) yes, which one(s): \_\_\_\_\_  
 Food recall (last 24 hours): \_\_\_\_\_

**ELIMINATIONS**  
 Nausea: ( ) no ( ) yes, frequency: \_\_\_\_\_ within 24 hours. Vomit: ( ) no ( ) yes, frequency: \_\_\_\_\_ within 24 hours  
 Urinary elimination: ( ) spontaneous ( ) retention ( ) incontinence ( ) intermittent catheterization ( ) IUC \_\_\_\_\_ mL/24hours.  
 Urination frequency: \_\_\_\_\_ within 24 hours.  
 Changes: ( ) dysuria ( ) hematuria ( ) anuria ( ) oliguria ( ) polyuria ( ) frequent urination  
 Intestinal elimination: ( ) spontaneous ( ) colostomy  
 Evacuation frequency \_\_\_\_\_ /day Stool characteristic: \_\_\_\_\_  
 Alterations: Diarrhea ( ) no ( ) yes, frequency: \_\_\_\_\_ within 24 hours. Constipation ( ) no ( ) yes, frequency: \_\_\_\_\_ Flatos (gases) ( ) no ( ) yes, frequency: \_\_\_\_\_ within 24 hours.

**ACTIVITY AND REST**  
 Walking: ( ) Walks ( ) Does not walk ( ) Claudicates ( ) Walks with assistance: ( ) walker ( ) cane  
 Practices physical activity: ( ) no ( ) yes, which one(s) \_\_\_\_\_ frequency \_\_\_\_\_ /weekly  
 Limitation for daily activities: ( ) no ( ) yes, which one(s) \_\_\_\_\_  
 Sleep: ( ) preserved ( ) decreased ( ) increased hours of sleep \_\_\_\_\_ Period \_\_\_\_\_

**PROTECTION**  
 Skin: ( ) intact ( ) not intact  
 Coloring: ( ) normal ( ) cyanose ( ) jaundice ( ) pallor  
 Moisture: ( ) hydrated ( ) dehydrated ( ) diaphoresis  
 Body temperature: \_\_\_\_\_ °C  
 Body hygiene: ( ) adequate ( ) regular ( ) precarious  
 Oral hygiene: ( ) adequate ( ) regular ( ) precarious  
 Injury/wound: ( ) no ( ) yes Site: \_\_\_\_\_ Dimensions: \_\_\_\_\_  
 Wound classification: ( ) closed ( ) open ( ) chronic ( ) acute  
 Tissue: ( ) necrosis ( ) crumbled ( ) granulation ( ) epithelialization  
 Exudat: ( ) serosum ( ) bloody ( ) purulent ( ) fibrinous  
 Amount of exudat: ( ) small ( ) moderate ( ) intense ( ) abundant  
 Odor: ( ) odorless ( ) fetid  
 Recommended therapy for wound treatment: \_\_\_\_\_

**SENSES**  
 Vision: ( ) adequate visual acuity ( ) decreased visual acuity. Wears glasses: ( ) no ( ) yes, myopia ( ) squint ( ) astigmatism ( ) Other \_\_\_\_\_  
 Smell: ( ) preserved ( ) decreased ( ) absent  
 Taste: ( ) preserved ( ) decreased ( ) absent  
 Pain complaints: ( ) no ( ) yes, site(s): \_\_\_\_\_  
 Type: ( ) tightness ( ) strain ( ) other (s): \_\_\_\_\_ Pain intensity (VAS): \_\_\_\_\_



**PALLIATIVE CARE**  
 In palliative care: ( ) No ( ) Yes Karnofsky Performance Scale Index \_\_\_\_\_ %

100%	No signs or complaints, no evidence of disease
90%	Able to perform their usual activities, few signs and symptoms of the disease
80%	Performs usual activities with effort. Some signs and symptoms of the disease
70%	Take care of themselves, they are still able to work.
60%	Requires occasional assistance, is not able to perform usual activities or work
50%	Needs frequent care and health care
40%	Unable to perform any activity, requires special care and health care
30%	Extremely incapacitated, requires hospitalization, but no imminent death
20%	Very sick, needs supportive measures, hospitalization required
10%	Dying, imminent death.
0%	Death

Source: adapted and translated from Yates, Chalmer and McKegney (1980).

**SELF-CONCEPT MODE**

**PHYSICAL SELF**  
 Satisfied with appearance: ( ) yes ( ) no  
 Would like to change something: ( ) no ( ) yes, specify: \_\_\_\_\_  
 Feels embarrassed, different from the other: ( ) no ( ) yes  
 Have active sex life: ( ) no ( ) yes  
 There was change(s) in lifestyle after the appearance of a health problem: ( ) no ( ) yes Which one(s): \_\_\_\_\_

Continue...

Instrument for home nursing consultation with patients with cancer: construction and validity

Continuation.

<p><b>PERSONAL SELF</b></p> <p>What is the feeling at the moment in relation to the clinical condition: ( ) optimism ( ) fear ( ) anger ( ) sadness ( ) anguish ( ) impotence ( ) anxiety ( ) euphoria ( ) frustration ( ) suicidal thoughts ( ) loneliness ( ) other: _____</p> <p>Have knowledge about their clinical condition and treatment: ( ) yes ( ) no ( ) prefer not to talk about it ( ) prefer family members to report it.</p> <p>When in doubt about the clinical condition, where to seek information: ( ) health professionals ( ) friends ( ) family members ( ) social networks ( ) others _____</p> <p>Have religious belief ( ) no ( ) yes Which one(s): _____</p> <p>Faith contributes to coping with problems ( ) no ( ) yes How: _____</p>
<b>ROLE FUNCTION MODE</b>
<p>Who is the main generator of financial income for the family _____</p> <p>Financial support: ( ) have resources for their treatment ( ) have a health insurance plan ( ) have the help of family members/others _____ ( ) exclusively use SUS.</p> <p>Have self-care deficit ( ) no ( ) yes Need help for: _____</p>
<b>INTERDEPENDENCE MODE</b>
<p>With whom they live ( ) spouse ( ) children ( ) parents ( ) siblings ( ) other _____</p> <p>Have difficulties in family interaction ( ) no ( ) yes: _____</p> <p>Have difficulties in social interaction ( ) no ( ) yes: _____</p> <p>Have help from a family member/caregiver ( ) no ( ) yes: _____</p> <p>Who else helps with treatment right now? _____</p> <p>Activities to spend the time: ( ) reading ( ) watching TV ( ) radio ( ) hands-on activities ( ) other: ____</p> <p>Participate in some cancer patient support group: ( ) no ( ) yes _____</p> <p>Have the desire to participate in some support group: ( ) yes ( ) no _____</p>
<b>Complementary data</b>
<p>Interviewer impressions: _____</p>
<p>Nurse: _____ COREN: _____ Date: ____/____/____</p>