

VALIDATION OF AN INSTRUMENT TO REGISTER THE SYSTEMATIZATION OF PERIOPERATIVE NURSING CARE

Validação de instrumento para registro da sistematização da assistência de enfermagem perioperatória

Validación de un instrumento para registrar la sistematización de la atención de enfermería perioperatoria

Francielle Regina dos Santos Luciano^{1*} , Luciana Martins da Rosa² , Ana Graziela Alvarez³ , Elisa Borges Kuze⁴ 

ABSTRACT: Objectives: To construct and validate the contents of an instrument to register the systematization of perioperative nursing care. **Method:** Methodological study conducted in a teaching hospital in Southern Brazil, which included literature review, cross-mapping between unstructured observation and North American Nursing Diagnosis Association taxonomies for instrument construction and application of the Delphi technique for validation, performed between November and December 2018. An electronic form was made available to ten experts to evaluate the objectivity, clarity/understanding, appearance and feasibility of the instrument contents, registered on a Likert scale. The answers obtained were submitted to the content validity index (CVI), and scores ≥ 0.8 confirmed the content validation. **Results:** The nine information groups of the instrument were evaluated by expert nurses. The average CVI obtained among all contents was 0.92 in the first round of validation. The results showed that the methodological strategy allowed the construction of contents that represent the clinical need for perioperative nursing records. **Conclusion:** The implementation of a validated instrument contributes to a safer and more qualified nursing practice.

Keywords: Surgical centers. Nursing care. Checklist. Nursing process. Patient safety.

RESUMO: Objetivos: Construir e validar conteúdos de um instrumento para registro da sistematização da assistência de enfermagem perioperatória. **Método:** Estudo metodológico realizado em um hospital-escola do sul do Brasil que incluiu revisão de literatura, mapeamento cruzado entre observação não estruturada e taxonomias da North American Nursing Diagnosis Association para construção do instrumento e aplicação da técnica Delphi para validação, realizada entre novembro e dezembro de 2018. Disponibilizou-se formulário eletrônico a dez expertos para avaliação da objetividade, clareza/compreensão, aparência e exequibilidade dos conteúdos do instrumento, registrada em escala Likert. As respostas obtidas foram submetidas ao índice de validade de conteúdo (IVC), e scores $\geq 0,8$ confirmaram a validação do conteúdo. **Resultados:** Os nove grupos de informações do instrumento foram avaliados por enfermeiros expertos. A média do IVC obtido entre todos os conteúdos foi de 0,92 na primeira rodada de validação. Os resultados demonstraram que a estratégia metodológica permitiu a construção de conteúdos que representam a necessidade clínica para os registros de enfermagem no período perioperatório. **Conclusão:** A implementação de instrumento validado contribui para uma prática de enfermagem mais segura e qualificada. **Palavras-chave:** Centros cirúrgicos. Cuidados de enfermagem. Lista de checagem. Processo de enfermagem. Segurança do paciente.

RESUMEN: Objetivos: Construir y validar los contenidos de un instrumento para registrar la sistematización de la atención de enfermería perioperatoria. **Método:** Estudio metodológico, realizado en un hospital universitario en el sur de Brasil, que incluyó revisión de literatura, mapeo cruzado entre observación no estructurada y taxonomías de la Asociación Norteamericana de Diagnóstico de Enfermería para la construcción de instrumentos y la aplicación de la técnica Delphi para validación, realizada entre noviembre y diciembre de 2018, con la disponibilidad de un formulario electrónico para diez expertos

¹Nurse by Universidade Federal de Santa Catarina (UFSC). Resident in Multidisciplinary Health Nursing with Emphasis on High Complexity at the University Hospital of UFSC – Florianópolis (SC), Brazil.

²Nurse; doctor in Nursing. Professor at the Nursing Department and the Graduate Program in Nursing Care Management of UFSC – Florianópolis (SC), Brazil.

³Nurse, doctor in Nursing. Professor at the Nursing Department of the Graduate Program of UFSC – Florianópolis (SC), Brazil.

⁴Nurse, master's in Nursing. Nurse at the University Hospital of UFSC – Florianópolis (SC), Brazil.

*Corresponding author: francielle.luciano@gmail.com

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para evaluar la objetividad, claridad/comprensión, apariencia y viabilidad del contenido del instrumento, registrado en la escala Likert. Las respuestas obtenidas se enviaron al índice de validez de contenido (IVC), y las puntuaciones $\geq 0,8$ confirmaron la validación de contenido. **Resultados:** Los nueve grupos de información del instrumento fueron evaluados por enfermeras expertas. El IVC promedio obtenido entre todos los contenidos fue de 0.92 en la primera ronda de validación. Los resultados mostraron que la estrategia metodológica permitió la construcción de contenidos que representan la necesidad clínica de registros de enfermería perioperatoria. **Conclusión:** la implementación de un instrumento validado contribuye a una práctica de enfermería más segura y más calificada.

Palabras clave: Centros quirúrgicos. Atención de enfermería. Lista de verificación. Proceso de enfermería. Seguridad del paciente.

INTRODUCTION

The systematization of nursing care (SNC) aims to identify health-disease situations and nursing care needs, as well as assist in the development of interventions, promotion, prevention, recovery and rehabilitation of the health of individuals, their families and communities¹.

In Brazil, the application of the nursing process (NP) in the care of surgical patients in the pre, trans and immediate postoperative (IPO) periods was proposed² in 1990. The preoperative period is divided into intermediate and immediate, and the preoperative is intermediate from the moment the surgery is decided until the day before the procedure². The immediate preoperative happens within 24 hours before the anesthetic-surgical act, the moment of physical and emotional preparation of the patient and their family². The transoperative period ranges from the patient's admission into the surgical center (SC) until leaving it after the anesthetic-surgical procedure is completed². The immediate postoperative period covers the first 24 hours after surgery and includes the time the patient remains in the post-anesthetic care unit (PACU)².

With a focus on patient care in the perioperative period the systematization of perioperative nursing care (SPNC) aims to reduce the risks of both the SC and PACU environments and promote the quantity and quality of materials, equipment and human resources. This process comprises five steps: preoperative nursing evaluation, planning of preoperative care, implementation of care, evaluation of care with the postoperative nursing visit, and reformulation of care according to the results obtained³. Using nursing diagnostics and interventions in the SPNC is essential to the practice, because it qualifies care and facilitates nursing care provided in the IPO in a dynamic, organized and systematic way, which requires a critical evaluation and decision making by nurses^{4,5}.

Seeking to guide the SPNC to prevent adverse events, the World Health Organization (WHO) has, since 2004, mobilized actions for patient safety during care processes. The global challenge Safe Surgery Saves Lives, launched by the WHO in 2008, is highlighted. The campaign consists of a proposal for a safe surgery check, carried out with an objective checklist instrument, developed after revisions of the evidence-based practices that identified the most common causes of injury to patients in the perioperative period^{6,7}.

Even recognizing the effectiveness of the safety checklist in the operating room (adopted by the study setting presented here), it is also of paramount importance to carefully observe the patient in the pre and postoperative phases for the success of the procedure and patient safety. Thus, surgical patients must receive care throughout this process to restore physiological balance, relieve pain and discomfort caused by surgery, and prevent and detect possible complications^{6,7}.

In observations made at a teaching hospital in Southern Brazil, in 2017, the need to create a new SPNC register model, seen that the model used was outdated, incomplete and fragmented and prolonged the time required for the registration filling, a fact that caused a feeling of worthlessness for the other sectors of the hospital.

An instrument for surgical safety systematically used in the surgical unit, the preoperative phase, the SC and induction of anesthesia, during surgery, the PACU and the surgical unit within the first 24 hours of the postoperative period may contribute for a greater safety of patients submitted to the surgical process. Moreover, it will value the work of the nursing team in an organized and sequential manner. It is also worth noting that the study setting did not adopt in its practices and registrations the stage of nursing diagnoses in the SC nursing process.

The motivation for the present study emerged due to the compulsory application of the SNC⁸ and its development in a fragmented manner in the professional practice of the study setting.

OBJECTIVES

To construct and validate contents of an instrument for the registration of the SPNC in a teaching hospital in Southern Brazil.

METHOD

Methodological study conducted in a teaching hospital in Southern Brazil, which included literature review, cross-mapping between unstructured observation and North American Nursing Diagnosis Association taxonomies for instrument construction and further application of the Delphi technique to validate such contents. Initially, unstructured observation was performed. Therefore, the main author of this study, a nursing resident of high complexity in the study setting, observed and recorded the nursing needs seen in the daily clinical practice, difficulties of registration, complaints of the nursing staff related to the instruments already used, problems and/or health needs and more frequent surgical procedures. This observation was made in the second half of 2017 and recorded in a field diary. Sequentially, the findings were grouped, when relevant themes were identified to construct the instrument.

After this stage, a literature review was performed, through which publications were selected on the following themes: SC, nursing care, SNC, nursing process, patient safety, surgical patient, PACU and nursing diagnosis. The following databases and virtual libraries were used: Coordination for the Improvement of Higher Education Personnel (CAPES), Scientific Electronic Library Online (SciELO) and Virtual Health Library (VHL).

The literature review also included NANDA International taxonomies for the definition of nursing diagnoses, results and interventions^{8,9}, that should compose the instrument. These taxonomies were defined because they are adopted in the study setting.

For the selection of nursing diagnoses, the health problems/needs identified and grouped in the unstructured observation were cross-mapped¹⁰ between these data and the NANDA-I⁸ taxonomy diagnostic titles. During cross-mapping, the titles of the diagnoses made available by NANDA, related to the needs of nursing practice, were registered. Based on these diagnoses, the interventions recommended by the NANDA taxonomis/Nursing Interventions Classification (NIC)⁹ were elected to compose the contents of the instrument.

The search data were grouped and recorded in tables prepared with the aid of Microsoft® Word software.

The results/contents obtained in the first methodological steps, added to the SPNC registration instruments adopted in the study setting (three instruments), were organized and adapted together with a creative process and clinical experience of the study researchers, who elaborated the instrument contents presented in the present article. The instrument construction phase took place in the first half of 2018.

The Delphi technique was applied to validate the instrument contents, a tool that provides the systematic judgment of information, seeking the consensus of experts (judges evaluators or specialists) on a certain subject for validation¹¹. The technique aims to investigate methods for data collection and organization, such as: development, validation and evaluation of research tools and methods, which favors the conduct of investigations with great rigor¹². It is usually developed in validation rounds, and the number of rounds is defined according to the range of validation indices established for the study¹³.

Delphi studies allow us to identify the missing and/or unnecessary presence of items to better measure the objective, and these aspects can only be perceived with content validation by experts in the area in question. Therefore, an objective questionnaire must be elaborated and applied, structured or not, in which pertinent questions are presented, seeking the expert's feedback, in subsequent rounds of evaluation. In its original proposal, Delphi is, therefore, a technique for seeking consensus among the opinions of a group of experts on a given event/phenomenon^{13,14}.

The study complied with the ethical principles in force in Brazil and was approved by the Research Ethics Committee, according to Opinion No. 2.985.962, Certificate of Presentation for Ethical Appreciation (CAAE) No. 92148218.3.0000.0121, via *Plataforma Brasil*.

Validation contents were associated to Likert's scaling method¹⁴. To confirm the content validation by judges, the percentage of total and partial agreement and the content validity index (CVI) were calculated, considering a CVI ≥ 0.80 as the minimum value for the content validation (average obtained among all experts). In case of results below this value, the contents would be revised or eliminated, as suggested by the experts.

The CVI calculation consists of dividing the total number of experts who assigned scores 3 (partially agree) and 4 (agree) by the total number of experts who participated in the validation round.

The study participants were expert nurses working in the field of surgical nursing and linked to the study setting, having as inclusion criteria: minimum experience of two years in clinical and/or nursing teaching in surgical clinic, SC and intensive care unit; minimum degree of a master; and clinical performance in the study setting. Prior face-to-face contact was made to clarify the purpose and method of development of the study and to know the interest of expert nurses in participating in it. After expressing their interest, the Free and Informed Consent Form was applied and the participants' signature was requested, confirming their inclusion in the study.

The exclusion criteria established were nurses who did not return the online form, emphasizing that the partial returns of experts would not be excluded. That is, if in the first phase the expert returned and in the second stage did not do so, each evaluation would be considered as a result of this study for statistical analysis.

In validation studies, one of the controversial points refers to the number and qualification of judges, with a minimum of five and a maximum of ten recommended¹⁵. In the present study, the minimum inclusion of ten evaluating judges in all validation rounds was estimated. If this number was not reached, new experts would be invited for inclusion in the study.

For data collection, an electronic form was prepared in Google Drive® storage service, containing the topics that make up the instrument developed. For each content presented, the four-point Likert scale was inserted (1 for disagree, 2 for partially disagree, 3 for partially agree, and 4 for agree). The form also provides a space to register suggestions and/or comments by the evaluators.

Validating the items covered issues related to content (appropriate, relevant, achievable, semantic content), appearance (layout, distribution graphic elements), clarity/understanding (intuitive content, easy to understand) and objectivity (unbiased, direct, practical and clear content).

The form was sent to the experts after previous contact by email, complementing the clarification for the content validation procedure, agreeing with the maximum delivery deadline (15 days) and providing the access link to the evaluation instrument. The validation rounds took place in November and December 2018.

The results were submitted to CVI calculation and presented in a descriptive form in table and chart. The discussion of data was supported by updated scientific literature linked to the theme.

RESULTS

Twelve nurses were invited for inclusion in the study, and ten accepted. Of these, five were working as professors in the Nursing Department of a university in Southern Brazil, three in the SC and two in the surgical inpatient unit of the study setting.

The age of experts ranged from 27 to 58 (average 41); time since graduation ranged from six to 37 years (average 17.5 years); five were masters (50%) and five, doctors (50%); and the experience time of the perioperative experts ranged from two to 20 years (average 11 years).

The results obtained from unstructured observation, literature review, cross-mapping and selection and adaptation of contents to the composition of the instrument allowed the elaboration of contents and the instrument's appearance, entitled "Nursing process: surgical patient".

The contents of the instrument were grouped into the following topics (T):

- T1: Preoperative general data;
- T2: Preoperative inpatient unit;
- T3: Preoperative SC;
- T4: Intraoperative;
- T5: Immediate postoperative, PACU;
- T6: Discharge report, PACU;
- T7: Nursing diagnosis, IPO, PACU, ward;
- T8: Nursing interventions in the immediate postoperative period;
- T9: IPO, ward.

Regarding nursing diagnoses, 18 were chosen from the NANDA International taxonomy⁸, interrelated to 22 nursing interventions withdrawn and adapted from NANDA/NIC⁹. Besides that, a space was reserved in the instrument for new inclusions, as evaluated by the nurse.

As to the instrument's appearance, we chose Calibri Light and Calibri fonts, size 12 for titles and 11 for other information, for separating the topics into tables from the titles of each topic and using the figure. The contents were distributed in two sheets (four pages — front and back) in a booklet format. This format was designed so that the instrument's sheets were not separate, considering that the study setting still uses printed medical records.

In the first validation round, all topics assessed reached the CVI percentage ≥ 0.80 , ranging from 0.80 to 1.00. The item that obtained the CVI closest to the 0.80 limit was the *content*. The item with the highest CVI of agreement was that of *appearance*,

obtaining eight times the assessment 1.00. The final CVI of the instrument, taking all evaluations into account, reached an overall average of 0.92. The percentages of partial and total agreement of T1-T9 as to *content, appearance, clarity/comprehension* and *objectivity*, and all CVI are presented in Table 1.

Based on these results, all contents were validated in the first validation round. However, some expert recommendations were considered relevant and, therefore, grouped, analyzed and inserted in the instrument. Expert recommendations are presented in Chart 1.

All the contents and instrument's appearance (two sheets with front and back contents) can be seen in full in Appendix 1.

DISCUSSION

The results obtained in the validation of the instrument, object of the present study, show that the proposed methodological strategy allowed the construction of contents that represent the clinical needs for SPNC records. For this reason, the minimum CVI required for validation was achieved in the first evaluation round, which indicates that the contents represent the need for clinical practice in the perception of experts and that the construction met the scientific rigors for knowledge production and praxis.

Thus, associating theory, practice and articulation among professionals clearly strengthens the praxis, facilitates the use of scientific knowledge and the science of clinical care,

contributing to improvements in the dialogical relationship¹⁶ between nurses/nursing, patients and the health team, transforming and improving nursing care and its registration.

The contributions by experts were also the result of their clinical experience in the study setting, the surgical context and related scientific knowledge, essential factors for the conclusion of this validation study. Improvements in the contents by expert recommendations were mostly related to grammar and layout, perfecting layout and making the instrument more visually pleasing and better to fill out, making it easier for nurses to use. The study states that these changes are relevant in validation studies, because, even in the case of subjective evaluations, such changes allow better presentation, understanding of contents, instrument's clarity and objectivity, as well as facilitate reading, interpretation of contents and the objectivity of the instrument¹⁷.

Regarding nursing diagnoses and interventions, expert recommendations were considered pertinent to the care of surgical patients. With the inclusion, the total was 22 diagnoses and 24 nursing interventions. The diagnoses included are based on real and/or potential problems, facilitating the train of thought to develop interventions related to them, so that nursing outcomes can be the best answers. The use of diagnoses and interventions proposed by NANDA optimizes the time to elaborate nursing diagnoses and contributes to the decision of the best care to be provided, besides standardizing the practice and reducing the time spent by nurses with nursing diagnoses¹⁸.

Table 1. Content validity index (CVI) of the instrument to register the systematization of perioperative nursing care. Florianópolis City, Santa Catarina State, 2018 (n=10).

Evaluated topics	% - Partial Agreement - CVI		% - Total Agreement - CVI		CVI
	Content	Appearance	Clarity/Understanding	Objectivity	
T1	40% - 40% - 0.8	50% - 50% - 1.0	40% - 60% - 1.0	30% - 70% - 1.0	0.92
T2	40% - 40% - 0.8	20% - 80% - 1.0	20% - 70% - 0.9	20% - 80% - 1.0	0.92
T3	0% - 80% - 0.8	30% - 60% - 0.9	20% - 80% - 1.0	20% - 80% - 1.0	0.92
T4	20% - 60% - 0.8	0% - 100% - 1.0	0% - 80% - 0.8	20% - 70% - 0.9	0.87
T5	20% - 60% - 0.8	20% - 80% - 1.0	20% - 70% - 0.9	10% - 80% - 0.9	0.90
T6	40% - 50% - 0.9	10% - 90% - 1.0	10% - 80% - 0.9	10% - 80% - 0.9	0.92
T7	30% - 60% - 0.9	0% - 100% - 1.0	0% - 100% - 1.0	0% - 100% - 1.0	0.97
T8	20% - 70% - 0.9	10% - 90% - 1.0	20% - 80% - 1.0	10% - 80% - 0.9	0.95
T9	40% - 40% - 0.8	10% - 90% - 1.0	30% - 60% - 0.9	30% - 70% - 1.0	0.92
Average	0.83	0.98	0.93	0.95	0.92

T1: preoperative general data; T2: preoperative inpatient unit; T3: preoperative surgical center (SC); T4: intraoperative; T5: immediate postoperative, post-anesthetic care unit (PACU); T6: discharge report, PACU; T7: nursing diagnosis, pre, trans and immediate postoperative (IPO) periods, PACU and ward; T8: nursing interventions in the IPO; T9: IPO, ward.

It should be noted that the study setting did not count on a taxonomy for the use of nursing diagnoses in the SC. With the implementation of this new instrument, there will be standardization of language and communication between nurses and the nursing staff.

It is pointed out that one of the difficulties found to construct the instrument was the grouping of the needed content and the most relevant items in the smallest possible space for the execution of SPNC and the proper registration of nursing actions. Divided into nine parts, the instrument is considered easy to use and includes comprehensive and meaningful contents to the clinical practice in the surgical context, given that each professional is responsible for completing information pertinent to their respective patient care

Chart 1. Recommendations by experts for changes in the instrument. Florianópolis City, Santa Catarina State, 2018.

Evaluated topics	Recommendations by experts
T1	<ul style="list-style-type: none"> • Add "Lack of medical staff" in the reasons for suspending surgeries; • Include the item "Infections" in comorbidities; • Add "() Yes () No" in the item "Suspended surgery"; • Change "No room in the ICU" for "Lack of beds in the ICU".
T2	<ul style="list-style-type: none"> • Add item "Blood supply"; • Add item "Oral hygiene performed".
T3	<ul style="list-style-type: none"> • Add line for writing "Other invasive devices".
T4	<ul style="list-style-type: none"> • Change "Heating system available" for "Heating system installed"; • Change "Balance" for "Total volume"; • In the item "Anesthesia", add a line for notes on the anesthesia and the word "Intubation"; • Add in the checking table the item "N/A".
T5	<ul style="list-style-type: none"> • No changes.
T6	<ul style="list-style-type: none"> • Change the word "Secretions" for "Drainage".
T7	<ul style="list-style-type: none"> • Add "Nursing diagnosis", "Risk for pressure injury", "Risk for acute confusion", "Risk for infection in the surgical site" and "Risk for perioperative hypothermia"; • Add extra lines in case further diagnoses are needed.
T8	<ul style="list-style-type: none"> • Add the word "Register" in the care referring to bleeding; • Add "Perform care with fluid therapy" and "Look out for signs of hypothermia".
T9	<ul style="list-style-type: none"> • No changes.

T1: preoperative general data; T2: preoperative inpatient unit; T3: preoperative surgical center (SC); T4: intraoperative; T5: immediate postoperative, post-anesthetic care unit (PACU); T6: discharge report, PACU; T7: nursing diagnosis, pre, trans and immediate postoperative (IPO) periods, PACU and ward; T8: nursing interventions in the IPO; T9: IPO, ward; ICU: intensive care unit; N/A: none of the alternatives.

sector and can fill them quickly, because the instrument is arranged simply and objectively.

The use of care instruments by nurses should be combined with the systematized technical and scientific knowledge of the actions to be performed during the perioperative period. In addition, the definition of actions to be performed contribute to greater synchronism and effectiveness among the various professionals and, therefore, greater probability of success in interventions is expected¹⁹.

The study limitations include the non-inclusion of experts outside the study setting, the non-application of analytical procedures and the non-inclusion of all contents of the safe surgery checklist. This last aspect is justified because it was a decision of the professionals in the study setting, because, in this context, a proper instrument for this purpose is applied.

The instrument produced and validated in the present study will contribute to safer nursing care, as well as to the appreciation of the work performed by nurses in the perioperative period.

Finally, the relevance of the study is due to the construction and validation of an instrument, proposing safer care for surgical patients and promoting greater visibility of the work of nurses and nursing staff in this process. In addition, it allows a continuum in the study setting by suggesting a single instrument for all stages of SPNC, organizing and standardizing nursing records.

Another paper, similar to the present one, points to the importance of studies that associate the academy and the needs of the clinic, i.e., theory and practice. Moreover, it emphasizes that the relevance of investigations of this size lies in the fact that they meet the real needs of the service, enabling the valuation of the nursing profession and patient safety⁴.

CONCLUSION

The final version of the instrument was validated by 10 experts to implement the registration of SPNC phases in the study setting - a teaching hospital in Southern Brazil - and the average CVI obtained from all contents was 0.92. in the first validation round. It is noteworthy that the experts' contributions were essential, because they provided the construction of an appropriate instrument to the daily routine of the surgical nurse, using more coherent, updated and easily completed terms, facilitating their adherence.

Content validation with the application of analytical procedures and experts outside the study setting is recommended.

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Appendix 1. Validated instrument to register the systematization of perioperative nursing care. Florianópolis City, Santa Catarina State, 2018.



HOSPITAL POLYDORO HERNANI DE SÃO THIAGO
UNIVERSIDADE FEDERAL DE SANTA CATARINA

PROCESSO DE ENFERMAGEM
PACIENTE CIRÚRGICO

Nome: _____ Quarto/Leito _____ Registro: _____

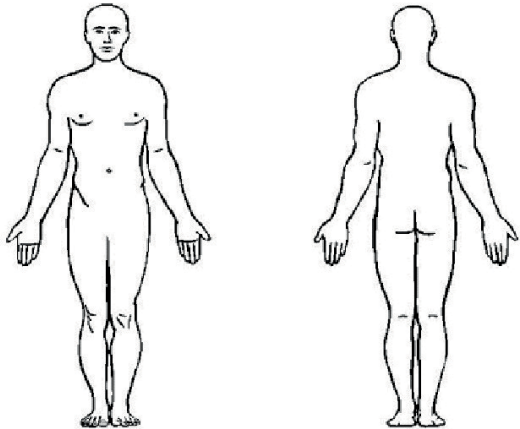
DN: / / Idade: _____ Raça: _____ Sexo: _____ Altura: _____ Peso: _____ Cond. UTI: Sim Não

Diagnóstico Médico: _____ Cirurgia Proposta: _____ Data Cirurgia: / /

Comorbidades / Vícios / Informações importantes			Cirurgia:	Unidade de Internação:		
<input type="checkbox"/> HAS	<input type="checkbox"/> Gravidez	<input type="checkbox"/> D. pulmonar	<input type="checkbox"/> Eletiva	<input type="checkbox"/> CMI	<input type="checkbox"/> UTI	
<input type="checkbox"/> DM	<input type="checkbox"/> Sepsis	<input type="checkbox"/> D. hematológica	<input type="checkbox"/> Urgência	<input type="checkbox"/> CMII	<input type="checkbox"/> Gineco	
<input type="checkbox"/> Tabagismo	<input type="checkbox"/> D. coronariana	<input type="checkbox"/> D. tireoide	<input type="checkbox"/> Emergência	<input type="checkbox"/> UICI	<input type="checkbox"/> Emergência	
<input type="checkbox"/> Etilismo	<input type="checkbox"/> Disritmia	<input type="checkbox"/> Alergias _____		<input type="checkbox"/> UICII	<input type="checkbox"/> Externo	
<input type="checkbox"/> Substância Ilícita	<input type="checkbox"/> D. Renal	<input type="checkbox"/> Infecções _____	Cirurgia suspensa: <input type="checkbox"/> Sim <input type="checkbox"/> Não			
			<input type="checkbox"/> Falta de leito de UTI			
			<input type="checkbox"/> Decisão da equipe médica			
			<input type="checkbox"/> Falta de equipe: enfermagem/médica			
			<input type="checkbox"/> Erro na estimativa do tempo de cirurgia			
			<input type="checkbox"/> Falta de material			
			<input type="checkbox"/> Paciente sem condições clínicas			
PRÉ-OPERATÓRIO - UNIDADE DE INTERNAÇÃO						
<input type="checkbox"/> Jejum pré-operatório - desde: _____ hs <input type="checkbox"/> Preparo especial: _____ <input type="checkbox"/> Exames de pré-operatórios disponíveis (impressos ou no sistema HU) <input type="checkbox"/> Termo de consentimento preenchido e assinado: <input type="checkbox"/> Cirúrgico <input type="checkbox"/> Anestésico <input type="checkbox"/> Reserva de sangue <input type="checkbox"/> Realizado banho pré-cirúrgico com: _____ <input type="checkbox"/> Realizada higiene oral <input type="checkbox"/> Realizada tricotomia às _____ hs (Máx. 2 hs antes da cirurgia) <input type="checkbox"/> Unidade Internação <input type="checkbox"/> Centro cirúrgico <input type="checkbox"/> Remoção de adereços/pertences pessoais <input type="checkbox"/> Remoção de próteses <input type="checkbox"/> Demarcação de sítio cirúrgico – Lateralidade: <input type="checkbox"/> Direito(a) <input type="checkbox"/> Esquerdo(a) <input type="checkbox"/> N/A <input type="checkbox"/> Orientado sobre cirurgia/cuidados perioperatórios <input type="checkbox"/> Prontuário acompanha o paciente					 	
Avaliação de enfermagem:						
_____ _____ _____						
Sinais Vitais: PA: _____ mmHg FC: _____ bpm FR: _____ mrpm T: _____ °C SatO2: _____ %						
Enfermeiro responsável / COREN:						
PRÉ-OPERATÓRIO CENTRO CIRÚRGICO						
Paciente e equipe confirmam as informações:						
Identidade (nome completo, data de nascimento e prontuário):				<input type="checkbox"/> Sim	<input type="checkbox"/> Não	<input type="checkbox"/> N/A
Confirmação/demarcação de sítio cirúrgico – Lateralidade (se houver):				<input type="checkbox"/> Direito(a)	<input type="checkbox"/> Esquerdo(a)	<input type="checkbox"/> N/A
Termo de Consentimento da cirurgia assinado				<input type="checkbox"/> Sim	<input type="checkbox"/> Não	<input type="checkbox"/> N/A
Fluidoterapia:		<input type="checkbox"/> Acesso venoso adequado	<input type="checkbox"/> Acesso venoso inadequado	<input type="checkbox"/> Não		
Outros dispositivos invasivos: _____						
Alergias: <input type="checkbox"/> Nega/desconhece <input type="checkbox"/> Sim – Qual(is) _____						

Continue...

Appendix 1. Continuation.

PERÍODO INTRAOPERATÓRIO			
Posição do paciente: <input type="checkbox"/> DD <input type="checkbox"/> DV <input type="checkbox"/> DLD <input type="checkbox"/> DLE <input type="checkbox"/> Litotômica <input type="checkbox"/> Ginecológica <input type="checkbox"/> Outros _____			
Risco de lesão por pressão devido ao posicionamento do paciente (Escala de BRADEN): <input type="checkbox"/> Risco brando (15 a 16) <input type="checkbox"/> Risco moderado (12 a 14) <input type="checkbox"/> Risco severo (abaixo de 11)			
Medidas implementadas para prevenção de lesão por pressão: <input type="checkbox"/> Coxins <input type="checkbox"/> Almofadas <input type="checkbox"/> Travesseiro(s) <input type="checkbox"/> Perneiras <input type="checkbox"/> Braçadeiras <input type="checkbox"/> Não <input type="checkbox"/> N/A			
Sistema de aquecimento instalado: <input type="checkbox"/> Bota de algodão <input type="checkbox"/> Manta térmica <input type="checkbox"/> Fluídos aquecidos <input type="checkbox"/> Cobertores <input type="checkbox"/> Não <input type="checkbox"/> N/A			
Antissepsia: <input type="checkbox"/> Clorexidina alcoólica <input type="checkbox"/> PVPI tópico <input type="checkbox"/> Clorexidina aquosa 2% <input type="checkbox"/> Outros: _____			
Anestesia: <input type="checkbox"/> Geral _____ Intubação - <input type="checkbox"/> Oral <input type="checkbox"/> Nasal <input type="checkbox"/> Bloqueio Tipo: _____ <input type="checkbox"/> Cateter peridural <input type="checkbox"/> Local <input type="checkbox"/> Sedação			
<p>♥ Punção Arterial ● Punção Venosa ▲ A.V. profundo Incisão (Desenhar) ■ Placa Bisturi</p> 		<p>Drenos: <input type="checkbox"/> Tórax _____ <input type="checkbox"/> Sucção _____ <input type="checkbox"/> Penrose _____ <input type="checkbox"/> Tubular _____ <input type="checkbox"/> Tubulaminar _____ <input type="checkbox"/> Outro(s) _____</p> <p>Cateteres/Sondas: <input type="checkbox"/> Vesical _____ <input type="checkbox"/> Nasogástrica _____ <input type="checkbox"/> Enteral _____ <input type="checkbox"/> Cistostomia _____ <input type="checkbox"/> Nefrostomia _____ <input type="checkbox"/> Outro(s) _____</p>	
Volume total		Conferências	
Diurese		Amostras para anatomia patológica identificadas	<input type="checkbox"/> SIM <input type="checkbox"/> NÃO <input type="checkbox"/> N/A
Cristalóides		Requisições para anatomia patológica preenchidas	<input type="checkbox"/> SIM <input type="checkbox"/> NÃO <input type="checkbox"/> N/A
Sangue		Requisição de material consignado assinado e preenchido	<input type="checkbox"/> SIM <input type="checkbox"/> NÃO <input type="checkbox"/> N/A
Colóide		Realizado prescrição dos fármacos utilizados em sala	<input type="checkbox"/> SIM <input type="checkbox"/> NÃO <input type="checkbox"/> N/A
Sangramento		Pertences do paciente identificados	<input type="checkbox"/> SIM <input type="checkbox"/> NÃO <input type="checkbox"/> N/A
Avaliação de enfermagem:			

Enfermeiro responsável / COREN:			

Continue...

Appendix 1. Continuation.

PÓS-OPERATÓRIO IMEDIATO – SALA DE RECUPERAÇÃO											
Admissão SRPA	Hora:					Aldrette:					
Nível consciência	<input type="checkbox"/> Acordado	<input type="checkbox"/> Sonolento	<input type="checkbox"/> Acorda quando chama			<input type="checkbox"/> Dormindo					
Oxigenação	<input type="checkbox"/> Máscara	<input type="checkbox"/> Catéter _____L/min	<input type="checkbox"/> Ar ambiente			<input type="checkbox"/> Outro _____					
Drenos/Cateteres	<input type="checkbox"/> Funcionante		<input type="checkbox"/> Não funcionante								
Curativo cirúrgico	Local: _____					Condições: _____					
Sinais vitais da chegada na SRPA	PA: _____ mmHg		FC: _____ bpm		FR: _____ mrpm		T: _____ °C		SatO2: _____ %		
Escala da dor (Circule o número)	0	1	2	3	4	5	6	7	8	9	10
	LEVE			MODERADA				INTENSA			
RELATÓRIO DE ALTA – SALA DE RECUPERAÇÃO											
Encaminhado alta: <input type="checkbox"/> Acordado <input type="checkbox"/> Sonolento <input type="checkbox"/> Dormindo					Queixas durante RPA: <input type="checkbox"/> Não <input type="checkbox"/> Sim - <input type="checkbox"/> Dor <input type="checkbox"/> Vômitos <input type="checkbox"/> Outro _____						
Trocado curativo: <input type="checkbox"/> Sim _____/Vezes <input type="checkbox"/> Não Motivo: _____					Desprezado drenagem sonda e/ou dreno: <input type="checkbox"/> Sim <input type="checkbox"/> Não Volume: _____						
Diurese desprezada: <input type="checkbox"/> Sim <input type="checkbox"/> S Não Volume: _____ mL. Cor: _____					Pertences do paciente, prontuário e receita dos psicotrópicos encaminhadas para unidade: <input type="checkbox"/> Sim <input type="checkbox"/> Não						
Avaliação de enfermagem:											

Enfermeiro responsável / COREN:											
DIAGNÓSTICO DE ENFERMAGEM - PÓS-OPERATÓRIO IMEDIATO - SRPA E ENFERMARIA											
<input type="checkbox"/> Ansiedade			<input type="checkbox"/> Dor aguda			<input type="checkbox"/> Integridade da pele prejudicada					
<input type="checkbox"/> Mobilidade no leito prejudicada			<input type="checkbox"/> Náusea			<input type="checkbox"/> Padrão respiratório ineficaz					
<input type="checkbox"/> Risco de desequilíbrio de volume de líquidos			<input type="checkbox"/> Risco de perfusão tissular cardíaca diminuída			<input type="checkbox"/> Risco de motilidade gastrointestinal disfuncional					
<input type="checkbox"/> Risco de constipação			<input type="checkbox"/> Retenção urinária			<input type="checkbox"/> Risco de glicemia instável					
<input type="checkbox"/> Risco de infecção			<input type="checkbox"/> Risco de desequilíbrio eletrolítico			<input type="checkbox"/> Risco de resposta alérgica					
<input type="checkbox"/> Risco de sangramento			<input type="checkbox"/> Risco de aspiração			<input type="checkbox"/> Risco de perfusão tissular periférica ineficaz					
<input type="checkbox"/> Risco de lesão por pressão			<input type="checkbox"/> Risco de confusão aguda			<input type="checkbox"/> Risco de infecção no sítio cirúrgico					
<input type="checkbox"/> Risco de hipotermia perioperatória			<input type="checkbox"/>			<input type="checkbox"/>					
<input type="checkbox"/>			<input type="checkbox"/>			<input type="checkbox"/>					
<input type="checkbox"/>			<input type="checkbox"/>			<input type="checkbox"/>					
<input type="checkbox"/>			<input type="checkbox"/>			<input type="checkbox"/>					
<input type="checkbox"/>			<input type="checkbox"/>			<input type="checkbox"/>					
INTERVENÇÕES DE ENFERMAGEM NO PÓS-OPERATÓRIO IMEDIATO					APRAZAMENTO/EXECUÇÃO						
<input type="checkbox"/> Verificar sinais vitais.											
<input type="checkbox"/> Atentar para alergia a:											
<input type="checkbox"/> Avaliar padrão respiratório e verificar saturação de O2.											
<input type="checkbox"/> Estimular exercícios respiratórios, orientar paciente a realizar inspiração profunda.											
<input type="checkbox"/> Realizar aspiração traqueal/oral.											
<input type="checkbox"/> Manter o paciente com a cabeça elevada em 45°.											

Continue...

Appendix 1. Continuation.

<input type="checkbox"/> Manter o paciente com a cabeceira elevada em 0°	
<input type="checkbox"/> Atentar para sinais e sintomas de hiperglicemia e de hipoglicemia.	
<input type="checkbox"/> Realizar rodízio para medicação subcutânea.	
<input type="checkbox"/> Atentar para sinais de hipotensão e hipertensão.	
<input type="checkbox"/> Atentar para sinais de dor ou desconforto, avaliando local, frequência e duração, intensidade (0-10).	
<input type="checkbox"/> Realizar curativo em incisão cirúrgica com:	
<input type="checkbox"/> Observar e registrar sangramento incisional/vaginal.	
<input type="checkbox"/> Observar turgor, perfusão periférica e coloração da pele.	
<input type="checkbox"/> Monitorar sinais e sintomas de infecção em acessos centrais, periféricos, sondas, drenos e incisões cirúrgicas.	
<input type="checkbox"/> Realizar cuidados com fluidoterapia.	
<input type="checkbox"/> Estimular movimentação ativa no leito e deambulação precoce.	
<input type="checkbox"/> Auxiliar/estimular higiene oral.	
<input type="checkbox"/> Banho: auxiliar / no leito / chuveiro em cadeira / aspersão.	
<input type="checkbox"/> Realizar cuidados e registrar débito e características do (os) dreno (os).	
<input type="checkbox"/> Realizar cuidados com: sonda vesical de demora / nefrostomia / cistostomia.	
<input type="checkbox"/> Observar e registrar características das eliminações intestinais e vesicais quanto a: frequência, consistência (fezes), coloração e débito (diurese).	
<input type="checkbox"/> Atentar para irrigação vesical, contabilizar o volume de entrada e de saída de líquidos na sonda e verificar coloração.	
<input type="checkbox"/> Atentar para a presença de ruídos hidroaéreos, flatos e distensão abdominal.	
<input type="checkbox"/> Atentar para sinais de sintomas de hipotermia.	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

PÓS-OPERATÓRIO IMEDIATO - ENFERMARIA

Sinais Vitais: PA: _____ mmHg FC: _____ bpm FR: _____ mrpm T: _____ °C SatO2: _____ %

Nível consciência Acordado Sonolento Acorda quando chama DormindoQueixas: Dor Êmese Náusea Frio Dispneia Tonturas Retenção Urinária Outro _____Oxigenação: Máscara Catéter _____ L/min Ar ambiente Outro _____Drenos/Cateteres: Funcionante Não funcionanteLocal curativo cirúrgico: _____
Condições: _____**Anotações de enfermagem**

Enfermeiro responsável / COREN:

Horário de chegada: