

# IMPLEMENTATION OF THE RISK CLASSIFICATION **PROTOCOL IN A HOSPITAL IN CEARÁ**

IMPLANTAÇÃO DO PROTOCOLO DE CLASSIFICAÇÃO DE RISCO EM UM HOSPITAL CEARENSE

IMPLEMENTACIÓN DEL PROTOCOLO DE CLASIFICACIÓN DE RIESGOS EN UN HOSPITAL DE CEARÁ

☉ Francisca Fernanda Alves Pinheiro¹, ☉ Allysson Henrique de Sousa², ☉ Ana Karine Girão Lima³, ☉ Társia Vitória de Araújo Joaquim Gadelha<sup>4</sup>, O Selma Furtado Magalhães<sup>5</sup>, O Fernanda Gadelha Severino<sup>6</sup> e Iamille Soares Moreira Alves

#### ABSTRACT

To describe the experience in implementing an institutional Reception with Risk Classification (ACCR) protocol at a hospital in Ceará. This is an experience report, developed in 3 stages, the first being research on protocols used in Brazil for risk classification in emergencies, the second involving team training, with these CLT nurses assigned to the emergency and the third audit application of the protocol. Professionals demonstrated satisfactory understanding of the choice of flowchart with 100% assertiveness. There was a reduction in discriminating indicators with 74% and clinical priorities with 77% compared to the results of the knowledge acquired by professionals. Analysis of indicators, such as flowchart, discriminators, clinical priorities, provided insights into professionals' knowledge and practical application during risk classification. An in-depth assessment of the reasons underlying the variation in indicators after training is suggested, enabling a more precise understanding.

Keywords: Risk Rating; Reception; Clinical Protocols; Emergency Identification; Emergency Hospital Service.

#### **RESUMO**

Descrever a experiência na implementação de um protocolo institucional de Acolhimento com Classificação de Risco (ACCR) de um hospital cearense. Trata-se de um relato de experiência, desenvolvido em 3 etapas, sendo a primeira de pesquisa de protocolos utilizados no Brasil para classificação de risco em emergências; a segunda de treinamento da equipe, sendo estes enfermeiros celetistas escalados na emergência; e a terceira, auditoria da aplicação do protocolo. Os profissionais demonstraram compreensão satisfatória sobre a escolha do fluxograma com assertividade de 100%. Observou-se redução nos indicadores discriminadores com 74% e prioridades clínicas com 77%, em comparação aos resultados do conhecimento adquirido pelos profissionais. A análise dos indicadores, como fluxograma, discriminadores e prioridades clínicas, proporcionou percepções sobre o conhecimento e a aplicação prática dos profissionais durante a classificação de risco. Sugere-se avaliação aprofundada das razões subjacentes à variação nos indicadores após o treinamento, possibilitando uma compreensão mais precisa.

Descritores: Classificação de Risco; Acolhimento; Protocolos Clínicos; Identificação da Emergência; Serviço Hospitalar de Emergência.

#### RESUMEN

Describir la capacitación y evaluar los primeros resultados encontrados en la implementación de un protocolo institucional ACCR. Estudio observacional, descriptivo, cuantitativo, desarrollado en 3 etapas, siendo la primera investigación de los protocolos utilizados en Brasil para la clasificación de riesgos en emergencias, la segunda capacitación de equipos y la tercera auditoría de la aplicación del protocolo. Los profesionales demostraron comprensión satisfactoria en la elección del diagrama de flujo con 100% de asertividad. Hubo una reducción de los indicadores discriminantes con un 74% y de las prioridades clínicas con un 77% respecto a los resultados de los conocimientos adquiridos por los profesionales después de la formación. Se ha logrado la implementación de un protocolo institucional de ACCR. El análisis de

<sup>1</sup> Instituto de Saúde e Gestão Hospitalar, Fortaleza/CE - Brasil. 💿

² Instituto de Saúde e Gestão Hospitalar, Fortaleza/CE - Brasil. 💿

<sup>&</sup>lt;sup>3</sup> Instituto de Saúde e Gestão Hospitalar, Fortaleza/CE - Brasil. 💿

<sup>4</sup> Instituto de Saúde e Gestão Hospitalar, Fortaleza/CE - Brasil. 💿

<sup>&</sup>lt;sup>5</sup> Instituto de Saúde e Gestão Hospitalar, Fortaleza/CE - Brasil. 💿

<sup>&</sup>lt;sup>6</sup> Instituto de Saúde e Gestão Hospitalar, Fortaleza/CE - Brasil. 回

<sup>7</sup> Instituto de Saúde e Gestão Hospitalar, Fortaleza/CE - Brasil. 💿

indicadores, como diagramas de flujo, discriminadores y prioridades clínicas, proporcionó información sobre el conocimiento y la aplicación práctica de los profesionales de enfermería durante la clasificación de riesgos. Se sugiere una evaluación en profundidad de las razones que subyacen a la variación de los indicadores después de la formación, lo que permitirá una comprensión más precisa de las brechas identificadas.

**Descriptores:** Calificación de Riesgo; Recepción; Protocolos Clínicos; Identificación de Emergencia; Servicio Hospitalario de Urgencias.

#### **INTRODUCTION**

Access to urgent and emergency health institutions that provide open-door care has high demands and the vast majority of patients are overcrowded<sup>1</sup>. The high number of people who seek these services in situations of traffic accidents, victims of urban violence, trauma in general, diseases of the cardiovascular and respiratory systems, among other causes, has strengthened the relevance of the urgency and emergency network in the health of the population<sup>1,2</sup>.

In Brazil, the Emergency Regulation Centers (CRU) answered more than 20.2 million telephone calls in 2017, leading to an approximate outcome of 7.4 million procedures performed, including referrals and transportation of patients to Emergency Care Units (UPA) and hospitals<sup>3</sup>.

In order to organize the care of these services and minimize possible damage to them, the National Humanization Policy (NHP) recommended the reception with risk classification (ACCR). The purpose of this system is to promote dynamic care, prioritizing patients at higher risk in urgent/emergency situations<sup>4</sup>.

The ACCR of patients should be based on a protocol that provides coordinates regarding the conducts applied, in order to identify and classify the urgent in a careful manner, promoting qualified listening, observing the needs and analyzing the vulnerabilities reported by the patient. Thus, the first patient care in the urgency and emergency unit takes place at this moment with the nurse<sup>4</sup>.

Cofen Resolution No. 661/2021 establishes the risk classification as a private activity of nurses. The professional should receive specific training on the protocol designated by the health institution. The procedure should be performed in the context of the nursing care process, considering the premises of Cofen Resolution No. 358/2009 and the principles of the National Humanization Policy of the SUS<sup>5</sup>.

The ACCR is a tool used in the organization and systematization of humanized care in urgency/emergency services, with the following objectives: a qualified listening to the citizen; classify, by means of an institutional protocol, the complaints of users who arrive at the services, aiming to detect those who need immediate or immediate medical care; construct care flows considering all services of the health care network; function as an instrument for ordering and guiding care, being a system for regulating the demand for services<sup>6</sup>.

The ACCR implementation strategy enables institutional reflection and learning, in order to restructure care practices and build new meanings and values, advancing in humanized and shared actions, as it is necessarily a collective and cooperative work. Among the main technologies applied to improve the organization of care processes, risk classification has been shown to be a powerful device with responses of greater user satisfaction, leading to an increase in problem-solving capacity by incorporating risk assessment criteria that consider all the complexity of health/disease phenomena, the degree of suffering of users and their families<sup>6</sup>.

Healthcare institutions use some protocols in order to classify the patient's risk. For example, the Manchester protocol and the protocol for Reception and Risk Classification in Emergency Services of the Ministry of Health<sup>7</sup>. The construction of a risk classification protocol as a care tool is understood as of paramount importance for adequate reception and for the performance of assertive conducts for the patient, providing humanized and timely care<sup>7,8</sup>.

Based on the above, the present study aims to describe the experience in the implementation of an institutional protocol of Reception with Risk Classification (ACCR) of a hospital in Ceará.

# METHODS

This is an experience report that describes a work developed in 3 stages, the first being the research of protocols used in Brazil for risk classification in emergencies <sup>9,10,11,12,13</sup>; the second was team training; and the third, the audit of the application of the protocol.

In the first stage, databases and official websites of the Ministry of Health and health secretariats of several Brazilian states were visited. After this documentary survey, studies that best suited the profile of an emergency unit were selected, highlighting the classification method of the Manchester protocol9, which served as the basis for the next moment, described below.

In the second stage, the training was developed on August 9 and 10, 2023, when 11 participants were included, these being CLT nurses who were scheduled in the emergency room at the Vale do Jaguaribe Regional Hospital (HRVJ). No nurse was excluded from the study due to absence during the training stage.

In this training stage, three moments were organized for the participating nurses. The first activity was theoretical and consisted of lectures on the concept of reception and risk classification, objectives and methodology of risk classification, classifier profile and exercises with clinical cases with discussion.

The second activity was practical and consisted of carrying out a realistic simulation in the emergency department of the hospital, to analyze the acquisition of skills of the target audience, based on their previous knowledge and the previous theoretical part, as well as to acclimate them in the place of service. For this activity, a specific skills checklist was used, based on the protocol methodology, and individual feedback was given to each participant after their participation in the simulation.

The third activity of the training consisted of the application of an objective assessment through 5 multiple-choice questions, with the objective of verifying the consolidation of the knowledge acquired by each participant. The three training activities mentioned were preparatory to the opening of the risk classification service in the Emergency Care Unit.

In the third stage, audits were carried out on 113 risk classification forms carried out by previously trained nurses, according to the previous stage, using the electronic classification system, and risk classification forms filled out by a nurse who had not undergone training were excluded. This sample of 113 forms was calculated based on a population of 206 risk classification forms completed in the period between 08/16/23 and 08/31/23, considering a confidence level of 95%, a margin of error of 5% and the homogeneous distribution of the population.

Data collection during the audit stage was based on an electronic checklist that maintained confidentiality in the identification of the nurse evaluated and was applied by two nurses trained in the protocol. The auditors analyzed the proper completion of the complaint presented by the patient, the flowchart, the discriminator and the clinical priority defined by the color chosen by the classifier.

The results of this stage were consolidated in tables that showed the percentage of compliance and non-compliance of the risk classification records in comparison with the institutional protocol.

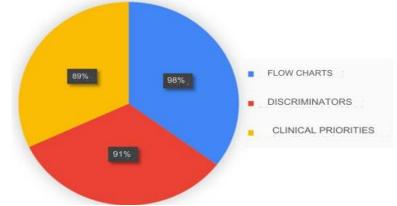
Throughout the study in question, the guidelines based on the General Data Protection Law (LGPD), Law No. 13,853, of 2019, and Resolution No. 510/16 MS/CNS were followed, with the aim of theoretical deepening of situations that emerge spontaneously and contingenciously in professional practice, with no identification of the participants at any stage and not even during the audit of the nurses who were being evaluated. ensuring that the institutional flow of patient care did not change as a result of the present research.

It is important to highlight that there was no need to submit this study to the Research Ethics Committee (REC), considering that this article is an experience report that describes the in-service training process and data related to the audits that emerged from the management processes, with no field research, interviews, transcription of questionnaires or others.

### RESULTS

In the first stage, models of risk classification protocols that could provide subsidies for the development of the material necessary for the application of the training were investigated in the literature. Protocols<sup>7,10,12</sup> were consulted, providing an improved understanding of the guidelines and best practices for the trainings in question. These references contributed to the definition of content based on and aligned with practices in urgent and emergency situations, providing a solid basis for the development of an effective training program.

The second stage was characterized by the training of nursing professionals who would develop the risk classification activity in the unit. The evaluation of teaching and learning after this moment enabled the findings found, at which time it was found that the professionals demonstrated significant percentages in the three indicators: flowchart, discriminators and clinical priorities, as shown in Graph 1.

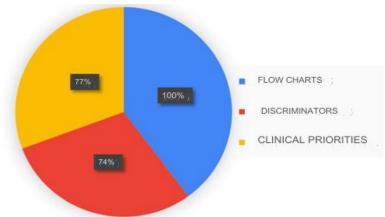


Graph 1 – Post-training learning indicators, related to assertiveness in the main stages of the risk classification process.

Source: Authored by the authors, 2023.

These results indicated that the professionals demonstrated a satisfactory understanding of and adherence to the information contained in the training, as well as an adequate ability to identify flowcharts, discriminators, and establish clinical priorities. The effectiveness of these indicators suggests a successful implementation of training strategies and highlights the importance of these elements in guiding professionals during urgent and emergency situations, contributing to a more efficient and assertive approach to patient care.

# Graph 2 – Audit indicators related to assertiveness in the main stages of the risk classification process, after implementation of the protocol.



Source: Authored by the authors, 2023.

In the third stage, an audit of the medical records was developed to evaluate the knowledge index in relation to the same indicators: flowchart, discriminators and clinical priorities, as shown in Graph 2.

### DISCUSSION

In the risk classification process, three stages stand out as relevant to the effectiveness of the action, namely: choice of the flowchart; discriminators and clinical priorities.

The results show in general that, during the implementation, there was a significant increase in the practice related to the skill on the flowchart, reaching the mark of 100%.

As mentioned in step 2 of the method, there was a creative and innovative stepby-step in the teaching and learning process, which successfully collaborated to achieve the goals. Educators and learners must cultivate curiosity, restlessness, persistence and the creation of new conceptions so that the content or the journey of the production of certain knowledge is not simply transferred<sup>14</sup>.

The correct risk classification depends on the training and experience of the nursing team in the application of the triage service, based on consensuses established jointly with the medical team to assess the potential for worsening of the case. Classification occurs through protocols, instruments that systematize the evaluation and offer legal support for nurses' safe performance<sup>15</sup>.

The protocol is a methodology that confers risk classification for patients who seek care in the urgent and emergency network, and is structured by flowcharts that represent the signs and symptoms related to the main complaint presented by the patient, who is classified into different levels of priority with the target time of medical care established and reassessment by the professional who performed the classification. because the clinical picture may worsen or improve<sup>16</sup>.

It is important to highlight that the practical guidelines provide important recommendations and adherence can be improved through shared decision-making between the team and patients<sup>17</sup>.

However, there was a reduction in comparison with the results of the knowledge acquired by the post-training professionals, as evidenced in Graph 1, the discriminator indicators with 74% and clinical priorities with 77% of assertiveness. The result can be associated with the absence of an outsourced professional during the training, as it was directed only to CLT professionals, not contemplating the other bonds.

It is important to emphasize the importance of constant improvement of the work process of nurses who work in urgent/emergency services, based on the promotion of continuing education in health. This approach recognizes the need for health services to offer collective environments conducive to reflection, analysis, and evaluation of the frameworks that guide technical and scientific knowledge in health. The implementation of continuous learning processes aims to meet the personal and professional needs of each worker, contributing not only to individual development, but also to the delivery of more qualified care to users<sup>18</sup>.

In this context, continuing education for the nursing team is an important action in health services, as it enables the updating of professionals' knowledge and the improvement of care, helping in the articulation between theory and practice performed by workers, mediated by institutional policies that support these actions<sup>19</sup>.

Actions in health education can be important tools for the dissemination of knowledge, and, therefore, allies of management for the dissemination of good health practices, favoring the formation and alignment of institutional protocols<sup>20</sup>.

Finally, the relevance of the constant improvement of the work process of nurses in urgent/emergency services is highlighted. Continuing education in health is revealed as a

fundamental element for the efficiency of these professionals, providing collective environments conducive to reflection, analysis and evaluation of the references that guide their technical and scientific knowledge.

## CONCLUSION

The objective of this research was to describe the experience in the implementation of an institutional protocol of Reception with Risk Classification (ACCR) of a hospital in Ceará, which was successfully achieved. The analysis of indicators, such as flowchart, discriminators and clinical priorities, provided insights into the knowledge and practical application of nursing professionals during risk classification.

The training showed the effectiveness in increasing knowledge about assertiveness in the choice of the flowchart, despite the variation in the indicators of discriminators and clinical priorities. The results suggest the need for more comprehensive and uniform approaches during training, ensuring the full participation of the professionals involved.

The variation in indicators after training highlights the continued importance of periodic monitoring and review of training protocols and strategies. Proposals for improvements may include more interactive training, constant review of care processes as new evidence and practices emerge, and systematic inclusion of all professionals during training processes.

The main limitations of the study are related to the data because they correspond only to a single period, as mentioned in the methodology, making greater comparability unfeasible. This opportunity for improvement is related to the lack of defined periodicity for monitoring the risk classification process.

As a future study, a more in-depth evaluation of the underlying reasons for the variation in indicators after training is suggested, enabling a more accurate understanding of the identified gaps.

In addition, further investigations may explore specific strategies to improve consistency in the application of protocols and assess the long-term impact of these initiatives on the quality of care on risk classification. These statements point to the continuity of the improvement of institutional protocols and practices, seeking excellence in care and management of critical situations in the health area.

### REFERENCES

1. Lima APS, Nangino GO, Soares FFR, Xavier JC, Martins MC, Leite AS. Risk classification and doorto-antibiotic time in patients with suspected sepsis. Rev. Latino-Am. Enfermagem. 2023;31:e4065. https://doi.org/10.1590/1518-8345.6635.4065

2. Paula A, Lima S, Fernandes F, Soares R, De Carvalho Xavier J, Martins M, et al. Classificação de risco e tempo porta-antibiótico no paciente com suspeita de sepse [Internet]. 2023 [citado 2024-01-24]. Disponível em: https://www.scielo.br/j/rlae/a/FMsqpfJWPwW5F4Zxyqfz37c/?format=pdf&lang=pt

3. Malvestio MAA, Sousa RMC de. Produção de procedimentos pelo SAMU 192 no Brasil: performance, benchmarking e desafios. Ciência & Saúde Coletiva [Internet]. 2024 [citado 2024-01-24]; 29(1). Disponível em: https://www.scielo.br/j/csc/a/wt949PLvFV97mQrt3gLnw6C/?format=pdf&lang=pt 4. Ministério da Saúde (BR). Secretaria de Atenção à Saúde. Política Nacional de Humanização da

Atenção e Gestão do SUS. Acolhimento e classificação de risco nos serviços de urgência [Internet]. Brasília: Ministério da Saúde; 2009 [citado 2024-01-24]. Disponível em: https:// bvsms.saude.gov.br/bvs/publicacoes/acolhimento\_ classificaao\_risco\_servico\_urgencia.pdf

5. Conselho Federal de Enfermagem. Resolução COFEN No 661/2021. Atualiza e normatiza, no âmbito do Sistema Cofen/Conselhos Regionais de Enfermagem, a participação da Equipe de Enfermagem na atividade de Classificação de Risco. [Internet]. Cofen. 2021 [citado 2024-01-24]. Disponível em: https://www.cofen.gov.br/resolucao-cofen-no-661-2021/

6. Castelo J, Gonçalves R, De P, Luís S, Fernandes De Araújo G, Gomes M, et al. Protocolo de acolhimento com classificação de risco sistema único de saúde (SUS) hospitais municipais/São Luís/MA [Internet]. [citado 2024-01-24]. Disponível em:

https://bvsms.saude.gov.br/bvs/publicacoes/protocolo\_acolhimento\_classificacao\_risco.pdf 7. Ministério da Saúde (BR). Acolhimento e Classificação de Risco nos serviços de urgência. Brasília (DF): Ministério da Saúde [Internet]. 2009 [citado 2024-01-24]. Disponível em:

https://bvsms.saude.gov.br/bvs/publicacoes/acolhimento\_classificaao\_risco\_servico\_urgencia.pdf 8. Sampaio RA, Rodrigues AM, Nunes FC, Naghettini AV. Desafios no acolhimento com classificação de risco sob a ótica dos enfermeiros. Cogitare Enferm. [Internet]. 2022 [citado 2024-01-24]; v27:e80194. Disponível em:

https://www.scielo.br/j/cenf/a/bnNhWnMjpHvfRmF5PmWggTL/?format=pdf

9. Ministério da Saúde B. Biblioteca Virtual em Saúde MS [Internet]. Política Nacional da Humanização da Atenção e Gestão dos SUS. Acolhimento e classificação de riscos no serviço de urgência; 2009 [citado 2024-01-22]. Disponível em:

http://bvsms.saude.gov.br/bvs/publicacoes/acolhimento\_classificaao\_risco\_servico\_urgencia.pdf 10. Pires PD. Tradução para o português e validação de instrumento para triagem de pacientes em serviço de emergência: Canadian Triage and Acuity Scale (CTAS) [Internet]. [local desconhecido]: Universidade de São Paulo; 2004 [citado 2024-01-22]. Disponível em:

http://www.teses.usp.br/teses/disponiveis/7/7136/tde-16102006-162026/.

11. GDF SD. Manual de acolhimento e classificação de risco [Internet]. 2021. Localizado em: Brasília; 2ª Edição. Disponível em:

https://www.saude.df.gov.br/documents/37101/87400/Manual+de+Acolhimento+e+Classificação+de+Ris co+da+Rede+SES-DF+-+2<sup>a</sup>+Edição.pdf/e0fad4af-49c5-eb7f-e599-cd201e4f5b22?t=1648646213456 12. Mackway-Jones K, Marsden J, Windle J. Sistema Manchester de Classificação de Risco. 2a ed. Cordeiro Júnior W, Paixão Rausch MD, tradutores. Belo Horizonte: Folium; 2017. 216 p.

13. Antunes de Moraes P, Leão Cordeiro JA. Manual de Orientação para o acolhimento com avaliação e classificação de risco [Internet]. Goiânia: FMS; 2015[citado 2024-01-23]. 38 p. Disponível em: https://saude.goiania.go.gov.br/wp-uploads/sites/3/2020/12/Cartilha-Departamento-de-Urgencias16-12.pdf

14. Freire P. Pedagogia da autonomia: saberes necessários à prática educativa. São Paulo: Paz e Terra; 1996. 144p.

15. Ferreira EB, Melo LBD; Bezerra ALD; Assis EV, Feitosa ANA, Sousa MNA. Acolhimento com classificação de risco em serviços de urgência e emergência hospitalar. Revista Interdisciplinar em Saúde [Internet]. 2016 [citado 2024-01-28]; 3 (1): 148-178. Disponível em:

https://www.google.com.br/search?q=FERREIRA%2C+Edinete.

16. Nunes BX, Câmara DV; Renovato L; Montefusco SRA; Amaral MS. Atuação do enfermeiro no acolhimento com classificação de risco: caracterização do atendimento mediante protocolos: uma revisão da literatura. Revista Científica FacMais [Internet], 2017 [citado 2024-01-28]. Disponível em: http://revista.universo.edu.br/index.php?journal=3GOIANIA4&page=article&op=view&path%5B%5D= 6462

17. Whelton PK, Carey RM, Aronow WS, CaseyJr DE, Collins KJ, Himmelfarb CD, et al.

ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA Guideline for the prevention, detection, evaluation, and management of high blood pressure in adults: a report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. Hypertension [Internet], 2018 [citado 2024-03-31]; 71(6) Disponível em: https://

https://www.ahajournals.org/doi/10.1161/HYP.0000000000000065

18. Alves PMB, Oliveira CR, Sampaio SDPAF, Oliveira KR. Identificação do tratamento mais eficaz na Síndrome Coronariana Aguda na Unidade de Terapia Intensiva-revisão bibliográfica. Revista Amazônia:

Science & Health [Internet], 2017 [citado 2024-01-28]; 5(3), 37-41. Disponível em: http://ojs.unirg.edu.br/index.php/2/article/view/1580

19. Cavalcante EFO, Macêdo MLAF, Oliveira JSA, Martini JG, Backes VMS. Prática da educação permanente pela enfermagem nos serviços de saúde. Rev Enferm UFPE [Internet], 2013 [citado 2024-01-28];7(2):598-607. Disponível em:

https://periodicos.ufpe.br/revistas/index.php/revistaenfermagem/article/view/10272/10907

20. Pereira SS, Portácio SR, Araújo FAC. A educação em saúde e suas aplicações na vigilância sanitária. Cadernos ESP [Internet]. 2023 [citado 2024-01-28]; 17(1):e1725. Disponível em: https://cadernos.esp.ce.gov.br/index.php/cadernos/article/view/1725