

EDUCATIONAL TECHNOLOGIES ON RESPIRATORY SIGNS AND SYMPTOMS IN CHILDREN: SCOPE
REVIEW PROTOCOL

 TECNOLOGIAS EDUCACIONAIS SOBRE SINAIS E SINTOMAS RESPIRATÓRIOS EM CRIANÇAS: PROTOCOLO
DE REVISÃO DE ESCOPO

 TECNOLOGÍAS EDUCATIVAS SOBRE SIGNOS Y SÍNTOMAS RESPIRATORIOS EN NIÑOS: PROTOCOLO DE
REVISIÓN DEL ALCANCE

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ABSTRACT

Objective: To map the scientific evidence regarding educational technologies for respiratory signs and symptoms in children. **Methodology:** This is a scoping review protocol, adopting the recommendations of the Joanna Briggs Institute (JBI) manual and the Preferred Reporting Items for Systematic Reviews and Meta-Analyses - Scoping Review (PRISMA-ScR) extension. The research question was formulated using the acronym PCC: Population (children), Concept (educational technology), and Context (respiratory signs and symptoms). Searches will be conducted in a double-blind manner in five databases: CINAHL, Embase, Lilacs, Pubmed/Medline, and Web of Science, as well as two gray literature collections: the Digital Library of Theses and Dissertations and Google Scholar. Studies with different methodological designs, published in peer-reviewed journals, and available in full text, without time or language restrictions, will be included. Letters, expert opinions, and editorials will not be included. Data will be collected and compiled using Rayyan® software. Eligibility will be verified by two independent reviewers and, if necessary, a third reviewer to resolve any disagreements. Data quality will be assessed according to the JBI classification. The summary of results will be descriptive. **Expected results:** The mapping of studies on educational technologies for respiratory signs and symptoms in children is expected to elucidate the overall state of scientific evidence and identify gaps that need to be addressed to contribute to the production of new research.

Keywords: Child; Educational Technology; Respiratory Signs and Symptoms.

RESUMO

Objetivo: mapear as evidências científicas acerca das tecnologias educacionais sobre sinais e sintomas respiratórios em crianças. **Metodologia:** trata-se de protocolo de revisão de escopo, com adoção das recomendações do manual do Joanna Briggs Institute (JBI) e da extensão *Preferred Reporting Items for Systematic Reviews and Meta-Analyses - Scoping Review* (PRISMA-ScR). Para formulação da questão de pesquisa utilizou-se o acrônimo PCC: População (crianças), Conceito (tecnologia educacional) e Contexto (sinais e sintomas respiratórios). As buscas serão realizadas de forma duplo-cega, em cinco bases de dados: CINAHL, Embase, Lilacs, Pubmed/Medline e *Web of Science* e dois acervos de literatura cinzenta: Biblioteca Digital de Teses e Dissertações e o *Google Scholar*. Serão incluídos estudos com diferentes delineamentos metodológicos, publicados em periódicos revisados por pares e disponíveis em texto completo, sem restrição temporal e de idioma de publicação. Não serão incluídas cartas, opiniões de especialistas e editoriais. Os dados serão coletados e compilados, utilizando o software Rayyan®, a verificação da elegibilidade será realizada por dois revisores independentes e caso necessário, um terceiro revisor para resolver possíveis discordâncias. A qualidade dos dados será avaliada conforme a classificação da JBI. A síntese dos resultados será descritiva. **Resultados esperados:** Espera-se que o mapeamento dos estudos acerca das tecnologias educacionais sobre os sinais e sintomas respiratórios em crianças, elucide o estado geral das evidências científicas, bem como identifique as lacunas que precisam ser investigadas sobre o tema para contribuir com a produção de novas pesquisas.

Palavras-chave: Criança; Tecnologia Educacional; Sinais e sintomas respiratórios.

RESUMEN

Objetivo: Mapear la evidencia científica respecto a tecnologías educativas para signos y síntomas respiratorios en niños. **Metodología:** Este es un protocolo de revisión de alcance, adoptando las recomendaciones del manual del Joanna Briggs Institute (JBI) y la extensión PRISMA-ScR (Preferred Reporting Items for Systematic Reviews and Meta-Analyses - Scoping Review). La pregunta de investigación fue formulada usando el acrónimo PCC: Población (niños), Concepto (tecnología educativa) y Contexto (signos y síntomas respiratorios). Las búsquedas se realizarán de manera doble ciego en cinco bases de datos: CINAHL, Embase, Lilacs, Pubmed/Medline y Web of Science, así como en dos colecciones de literatura gris: la Biblioteca Digital de Tesis y Disertaciones y Google Académico. Se incluirán estudios con diferentes diseños metodológicos, publicados en revistas arbitradas y disponibles en texto completo, sin restricciones de tiempo o idioma. No se incluirán cartas, opiniones de expertos ni editoriales. Los datos serán recolectados y compilados usando el software Rayyan®. La elegibilidad será verificada por dos revisores independientes y, de ser necesario, por un tercer revisor para resolver cualquier desacuerdo. La calidad de los datos se evaluará según la clasificación del JBI. El resumen de los resultados será descriptivo. **Resultados esperados:** Se espera que el mapeo de estudios sobre tecnologías educativas para signos y síntomas respiratorios en niños dilucide el estado general de la evidencia científica e identifique las lagunas que deben abordarse para contribuir a la producción de nuevas investigaciones.

Palabras clave: Niño; Tecnología Educativa; Signos y Síntomas Respiratorios.

INTRODUCTION

Respiratory diseases constitute a significant public health problem, representing the leading cause of hospitalization and mortality in children in Brazil, especially those under five years of age ⁽¹⁾. Although the country has shown improvement in pediatric mortality and hospitalization indicators, most infant deaths are still considered preventable ⁽²⁾.

Regarding the causes of hospitalization in children due to respiratory problems, Hospitalizations for Primary Care Sensitive Conditions (HCPC) stand out. These include health problems that could be reduced or avoided with the implementation of timely and quality outpatient care, in order to minimize the worsening of clinical conditions ⁽³⁾. Among the problems cited in the list of the main causes of HCPC are acute respiratory infections, such as bacterial pneumonia, and chronic respiratory diseases, such as asthma ⁽⁴⁾.

Early identification of signs of respiratory distress is essential for effective and timely support measures to prevent worsening of the clinical picture ^(5,6). Studies indicate that children who need to be admitted to Intensive Care Units (ICUs) for bronchiolitis, for example, have a greater chance of developing asthma in the preschool years and require outpatient respiratory monitoring, when compared to children admitted to general pediatric wards, which are less complex ^(7,8).

It is necessary for those responsible for the care of children to know how to identify signs of respiratory distress, in order to facilitate

appropriate referral to health services, both in cases of acute infections and in the exacerbation of chronic respiratory diseases, since a lack of knowledge in identifying these signs and symptoms can lead to worsening of the condition and late and inappropriate seeking of services, which predisposes to hospitalizations for more serious cases ⁽⁵⁾.

The inclusion of health education practices regarding respiratory signs and symptoms in children is important to minimize the consequences of delayed care seeking and the resulting mortality in this age group.^{5,6} The use of educational technologies can contribute to transmitting information to caregivers of children regarding signs of respiratory distress, since they are multiple strategies that can be applied to health education in various types of populations ^(9,10,11).

Health education actions are generally carried out through verbal guidance, with the aim of instructing family members and/or caregivers for the comprehensive care of the child ⁽¹²⁾. It should be recognized, however, that this form of communication limits access to information to the presence of a professional and may restrict people's access to knowledge of health actions when the professional is not present, which makes it necessary to incorporate more flexible health education tools, such as the implementation of educational technologies, which can be useful tools in this process ^(13,14). This reinforces the importance of new studies aimed at investigating the use of technologies as a strategy for health education, in order to

contribute to improving the quality of care provided.

Therefore, it is expected that this protocol will contribute to the systematization and elucidation of scientific evidence on educational technologies regarding the signs and symptoms of respiratory distress in children, as well as the identification of gaps that need to be investigated on the subject to contribute to the production of new research.

OBJECTIVE

To map the scientific evidence regarding educational technologies for respiratory signs and symptoms in children.

METHODS

Study Type

This is a scoping review protocol, based on the methodology of the Joanna Briggs Institute (JBI) and the PRISMA extension for scoping reviews - Preferred Reporting Items for Systematic Reviews and Meta-Analyses -

Scoping Review (PRISMA-ScR). The review protocol will be registered in the Open Science Framework (OSF), with Digital Object: 10.17605/OSF.IO/XYGV8. In case of any methodological changes made during the development of the protocol, these will be documented in the final version of the scoping review.

Research Question

For the elaboration of the research question, the mnemonic PCC (Population, Concept, Context) will be used, in which the population will consist of children, the concept will consist of educational technology, and the context will consist of respiratory signs and symptoms. Thus, the following guiding question of the study was formulated: what educational technologies regarding respiratory signs and symptoms in children are available in the literature?

Eligibility criteria

Chart 1 - Eligibility criteria for studies, according to the PCC strategy. João Pessoa, PB, Brazil, 2025.

PCC	Inclusion	Exclusion
Population	Studies focusing on children will be considered. The definition of children will be based on the international definition by the World Health Organization (WHO), which considers a "child" to be a	Studies involving newborns, adolescents, adults, and the elderly.



	person in the age range of zero to 10 years old (not yet 10 years old).	
Concept	Studies that mention the use of educational technologies designed from the perspective of respiratory diseases, regardless of the cause.	Studies related to tools that do not constitute educational technologies.
Context	Studies that address respiratory signs and symptoms, which, according to the Health Sciences Descriptors (DeCS) of the Virtual Health Library, are "manifestations of the respiratory system of diseases of the respiratory tract or other organs."	Studies that address clinical signs of pathologies not related to the respiratory system.
Types of Sources of Evidence	Studies with different methodological designs, published in peer-reviewed journals, articles available in full text, and without language or time restrictions.	Articles resulting from letters, expert opinions, and editorials.

Source: Prepared by the authors, 2025.

Research Strategy

Initially, with the aim of expanding search results and obtaining a more sensitive strategy, a preliminary search was carried out in the Virtual Health Library to identify the terms and synonyms that best suited the study. For the search, terms related to the acronym PCC were

adapted for each database, according to their variations and using the Boolean operators AND and OR. The controlled terms were selected from Medical Subject Headings (MeSH), Health Sciences Descriptors (DeCS) and Emtree, as well as synonyms. For better understanding, a five-step model follows: extraction, conversion,



combination, construction and use, as adapted from Araújo ⁽¹⁵⁾, as shown in Chart 2.

Chart 2 - PCC Strategy. João Pessoa, PB, Brazil, 2025.

Objective/ Problem	What scientific evidence is available in the literature regarding educational technologies concerning the signs and symptoms of respiratory distress in children?		
	P	C	C
Extraction	Children	Educational Technology	Signs and Symptoms, Respiratory
Conversion	"Child"[Mesh]	"Educational Technology"[Mesh]	"Signs and Symptoms, Respiratory"[Mesh]
Combination	Children	Technology, Educational Educational Technologies Technologies, Educational Instructional Technology Technology, Instructional Instructional Technologies Technologies, Instructional	
Construction	"Child"[Mesh] OR (Children)	"Educational Technology"[Mesh] OR (Technology, Educational) OR (Educational Technologies) OR (Technologies, Educational) OR (Instructional Technology) OR (Technology, Instructional) OR (Instructional Technologies) OR (Technologies, Instructional)	"Signs and Symptoms, Respiratory"[Mesh]
Use	(("Child"[Mesh] OR (Children)) AND ("Educational Technology"[Mesh] OR (Technology, Educational) OR (Educational Technologies) OR (Technologies, Educational) OR (Instructional Technology) OR (Technology, Instructional) OR (Instructional Technologies) OR (Technologies, Instructional))) AND ("Signs and Symptoms, Respiratory"[Mesh])		

Source: Adapted from Araújo, 2020.



The searches will be conducted in five electronic databases through the CAPES Periodicals Portal: Medical Literature Analysis and Retrieval System Online (MEDLINE), Latin American and Caribbean Health Sciences Literature (LILACS) via the Virtual Health Library (BVS), Cumulative Index to Nursing and Allied Health Literature (CINAHL), Embase, and Web of Science. The bibliographic search

will be complemented by a search in two grey literature databases: the Digital Library of Theses and Dissertations (BDTD) and Google Scholar, according to JBI recommendations for scoping reviews, in order to comprehensively map the available evidence on the topic. After analyzing the results, the need for a search for additional reference lists will be evaluated. The final search results are shown in Chart 3 below:

Chart 3 - Search strategy performed in each database. João Pessoa, PB, Brazil, 2025.

Database	Search strategy used *	Results obtained (n)
PubMed/ Medline	((("Child"[Mesh] OR (Children)) AND ("Educational Technology"[Mesh] OR (Technology, Educational) OR (Educational Technologies) OR (Technologies, Educational) OR (Instructional Technology) OR (Technology, Instructional) OR (Instructional Technologies) OR (Technologies, Instructional))) AND ("Signs and Symptoms, Respiratory"[Mesh])	110 artigos
LILACS	MH:"Child" OR (Child) OR (Criança) OR (Niño) OR (Crianças) OR MH:M01.060.406\$ AND MH:"Educational Technology" OR (Educational Technology) OR (Tecnologia Educacional) OR (Tecnología Educacional) OR (Tecnologias Educacionais) OR (Tecnologia Instrucional) OR MH:J01.897.280\$ AND MH:"Signs and Symptoms, Respiratory" OR (Signs and Symptoms, Respiratory) OR (Sinais e Sintomas Respiratórios) OR (Signos y Síntomas Respiratorios) OR (MH:C23.888.852\$)	01 artigo
CINAHL	((MH "Child+" OR (Children)) AND ((MH "Educational Technology" OR (Instructional Technology) OR (Technology, Educational)) AND ((MH "Signs and Symptoms, Respiratory+"))	01 artigo
EMBASE	('child'/exp OR children OR child) AND ('educational technology'/exp OR (technology, AND educational) OR (educational AND technology)) AND ('physical disease by body function'/exp OR (body AND function AND disorder) OR (digestive AND signs AND symptoms) OR	1069 artigos



	(pathologic AND processes) OR (pathological AND conditions, AND signs AND symptoms) OR (respiratory AND signs AND symptoms) OR (signs AND symptoms) OR (signs AND symptoms, AND digestive) OR (signs AND symptoms, AND respiratory) OR (symptoms AND general AND pathology) OR (physical AND disease AND by AND body AND function))	
WEB of Science	((ALL=(Children)) AND ALL=((Technology, Educational) OR (Educational Technologies) OR (Technologies, Educational) OR (Instructional Technology) OR (Technology, Instructional) OR (Instructional Technologies) OR (Technologies, Instructional))) AND ALL=((respiratory signs and symptoms) OR (signs and symptoms, respiratory) OR (Sinais e Sintomas Respiratórios) OR (Signos y Síntomas Respiratorios))	6 artigos
BDTD	Children AND Educational Technology AND Signs and Symptoms, Respiratory	01 artigo
Google scholar	(Children) AND (Educational Technology) AND (Signs and Symptoms, Respiratory)	116.000 artigos **

*Search performed on May 14, 2025

** Only the first 100 results will be considered.

Source: Prepared by the authors, 2025.

Study Selection

The research results will be exported to Rayyan software, where studies will be screened to remove duplicates. Following this, the title and abstract of the text will be read independently by at least two reviewers to answer the study's guiding question, following the PRISMA-ScR eligibility criteria. Articles not available through open access will be accessed by researchers through the paid access of the Federated Academic Community System of the Coordination for the Improvement of Higher Education Personnel (CAFe/CAPES) of the Federal University of Paraíba (UFPB). In case of

disagreements among researchers, the abstracts will be read by a third reviewer. Those considered eligible will be read in full, and the process will be represented by the PRISMA-ScR flowchart.

Data Extraction

The data obtained will be presented using an instrument adapted from the JBI model to characterize the productions, as shown in Chart 4. The extraction table will include authorship, publication journal, country of origin, year of publication, objectives, design, and main results regarding the identification of educational



technologies concerning respiratory signs and symptoms in children. This form may be refined and adjusted as needed during the research. The

changes made will be detailed later in the scoping review.

Chart 4 – Data extraction instrument. João Pessoa, PB, Brazil, 2025.

Author/Year/Country	Design/Type of study	Research objectives	Type of educational technology	Level of evidence	Main results and conclusions
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Source: Prepared by the authors, 2025.

Data Analysis and Presentation

The research results will be analyzed and published in full, through a scoping review, presented according to the flowchart recommended by the JBI and PRISMA-ScR manuals. The results will be presented using charts and tables, and their main ideas will be transcribed and organized into text that can be analyzed manually by the researchers or with the aid of content analysis software. This will be accompanied by a discussion of the mapped findings, their relationship to the research objective and question, based on the adopted theoretical/methodological framework.

REFERENCES

1. Quirino AL, Costa KT, Ferreira AG, Melo EB, Andrade FB. Internações na infância por doenças do aparelho respiratório no Brasil de 2013 a 2022. Rev Cienc Plur [Internet]. 29 abr 2024 [citado 2025 Ago 21];10(1):1-15. Disponível em: <https://doi.org/10.21680/2446-7286.2024v10n1id31414>
2. Souza AC, Ferreira H, Contiero AP, Silva RM, Zilly A, Furtado MC, Ferrari RP.

Morbidade hospitalar de crianças menores de cinco anos em um município brasileiro de fronteira. REME Rev Min Enferm [Internet]. 8 abr 2022 [citado 2025 Ago 21];26:1-8. Disponível em: <https://doi.org/10.35699/2316-9389.2022.38662>

3. Freitas BC, Durão LG, Queluz DD. Principais causas de internação de crianças menores de cinco anos no Brasil: uma revisão sistemática. Rev APS [Internet]. 25 jul 2022 [citado 2025 Ago 21];25(1). Disponível em: <https://doi.org/10.34019/1809-8363.2022.v25.35816>
4. Santos FM, Macieira C, Machado AT, Borde EM, Santos AF. Internações por condições sensíveis à atenção primária (ICSAP): uma análise segundo características sociodemográficas, Brasil e regiões, 2010 a 2019. Rev Bras Epidemiol [Internet]. 2022 [citado 2025 Ago 21];25. Disponível em: <https://doi.org/10.1590/1980-549720220012.2>
5. Cassemira Alves T, Gomes Teixeira de Sousa A, Helou Aly Abreu SL, de Almeida Cavalcanti Sabatini M, Batista Borges JA, Leão Pereira G, Machado Borges D, Carvalho Valverde JL, Aparecida Ribeiro C, Russely de Vasconcelos Lima D, Silva LF, Souza Pádua ME, Bezerra HT. Sinais de alerta:



- identificando doenças respiratórias como pneumonia e bronquiolite em crianças e a importância de diagnóstico precoce. *Braz J Implantol Health Sci* [Internet]. 13 jan 2025 [citado 2025 Ago 21];7(1):660-6. Disponível em: <https://doi.org/10.36557/2674-8169.2025v7n1p660-666>
6. Chong Neto HJ, Solé D, Camargos P, Rosário NA, Sarinho EC, Chong-Silva DC, Kiertsman B, Pastorino AC, Sano F, Urrutia-Pereira M, Wandalsen GF, Melo AC, Barreto BA, Kuschnir FC, Cunha J, Silva LR, Franco MC, Alonso ML, Britto M, Wandalsen NF, Rubini NM, Ferreira S. Diretrizes da Associação Brasileira de Alergia e Imunologia e Sociedade Brasileira de Pediatria para sibilância e asma no pré-escolar. *Arq Asma Alerg Immunol* [Internet]. 2018 [citado 2025 Ago 21];2(2). Disponível em: <https://doi.org/10.5935/2526-5393.20180020>
 7. Be'er M, Bushmitz S, Cahal M, Sadot E, Yochpaz S, Besor O, Amirav I, Lavie M. Asthma risk after a pediatric intensive care unit admission for respiratory syncytial virus bronchiolitis. *Pediatr Pulmonol* [Internet]. 17 maio 2022 [citado 2025 Ago 21]. Disponível em: <https://doi.org/10.1002/ppul.25953>
 8. Verwey C, Ramocha L, Laubscher M, Baillie V, Nunes M, Gray D, Hantos Z, Dangor Z, Madhi S. Pulmonary sequelae in 2-year-old children after hospitalisation for respiratory syncytial virus lower respiratory tract infection during infancy: an observational study. *BMJ Open Respir Res* [Internet]. Maio 2023 [citado 2025 Ago 21];10(1):e001618. Disponível em: <https://doi.org/10.1136/bmjresp-2023-001618>
 9. Barbosa RF, Gonzaga AK, Jardim FA, Mendes KD, Sawada NO. Methodologies used by Nursing professionals in the production of educational videos: An integrative review. *Rev Lat Am Enferm* [Internet]. Dez 2023 [citado 2025 Ago 21];31. Disponível em: <https://doi.org/10.1590/1518-8345.6690.3951>
 10. Oliveira PA, Pereira RA, Martins ID, Rigotti AR, Varallo FR, Zanetti MO, Gimenes FR. Desenvolvimento e validação de tecnologia audiovisual para preparo e administração de medicamentos via sonda enteral. *Texto Amp Enferm* [Internet]. 2024 [citado 2025 Ago 21];33. Disponível em: <https://doi.org/10.1590/1980-265x-tce-2023-0215pt>
 11. Lima da Silva TM, Leite Meirelles Monteiro EM, Tavares Souza GK, Dos Santos Braga A. Validação de vídeo educativo sobre as medidas de prevenção e controle da covid-19 e outras síndromes respiratórias agudas graves para escolares. *Rev Enferm Cent Min* [Internet]. 17 set 2024 [citado 2025 Ago 21];14. Disponível em: <https://doi.org/10.19175/recom.v14i0.5105>
 12. Alcantara AB, Lima LD, Duarte MT, Parada CM, Tonete VL. Promoção da saúde infantil na perspectiva de enfermeiros da estratégia saúde da família. *Rev Gauch Enferm* [Internet]. 2022 [citado 2025 Ago 21];43. Disponível em: <https://doi.org/10.1590/1983-1447.2022.20200475.pt>
 13. Lima KF, Gomes AL, Melo ES, Vasconcelos FX, Sousa JL, Martins MC, Barbosa LP. Content validation of an educational booklet for asthma control and management in children. *Rev Bras Enferm* [Internet]. 2021 [citado 2025 Ago 21];74(suppl 5). Disponível em: <https://doi.org/10.1590/0034-7167-2020-0353>
 14. Sá GG, Santos AM, Galindo Neto NM, Carvalho KM, Feitosa CD, Mendes PN.



Building and validating an educational video for elderly individuals about fall risks. Rev Bras Enferm [Internet]. 2020 [citado 2025 Ago 21];73(suppl 3). Disponível em: <https://doi.org/10.1590/0034-7167-2020-0010>

15. Oliveira Araújo WC. Recuperação da informação em saúde. Converg Em Cienc Inf [Internet]. 10 jul 2020 [citado 2025 Ago 21];3(2):100-34. Disponível em: <https://doi.org/10.33467/conci.v3i2.13447>

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Authorship Criteria (Author Contributions)

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Contributed significantly to the conception and/or planning of the study, data acquisition, analysis and/or interpretation, as well as to the writing, critical review and final approval of the published version.

2. Guilherme Guarino de Moura Sá

Contributed significantly to the writing, critical review and final approval of the published version.

3. Nelson Miguel Galindo Neto

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Data availability statement

No databases were generated in this study. The information presented is described in the body of the article.

Conflict of interest statement

Nothing to declare.

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