A Rede de Atenção às Urgências e Emergências no Brasil: revisão integrativa da literatura
Urgent and emergency care networks in Brazil: an integrative review

Abstract

The Urgent and Emergency Care Network (RUE) was proposed in Brazil as a public policy to articulate and integrate the health services of the Brazilian National Health System (SUS), expanding and qualifying the access of users in emergency health situations in an efficient and timely manner. This study analyzes the scientific production on the RUE in Brazil and elaborates summaries showing the limits and challenges of this health policy. An integrative literature review was used as a method, based on the search for articles in the LILACS, SciELO, and MEDLINE databases and for dissertations and theses on the virtual platform of the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES). The investigation enabled the analysis of 34 studies in the field of collective health, focused on the different emergency services and the integration between them, including possible changes in the health care process and different evaluation strategies, by using different approaches, mainly qualitative. Weaknesses are observed in the network articulation, maintaining the centrality of hospital services and the power of its symbolic capital, with primary care being relegated to the discursive field.

Keywords: Health Care; Health Services; Emergency; Health Policy.
Resumo

A Rede de Atenção às Urgências e Emergências (RUE) foi proposta enquanto política pública com a finalidade de articular e integrar os serviços assistenciais do Sistema Único de Saúde (SUS), ampliando e qualificando o acesso dos usuários em situação de urgência e emergência em saúde de forma ágil e oportuna. Este estudo tem como objetivo analisar a produção científica sobre a política da RUE no Brasil e elaborar sínteses demonstrando seus limites e desafios. Utilizou-se como método a revisão integrativa de literatura, a partir da busca de artigos nas bases de dados LILACS, SciELO e MEDLINE e de dissertações e teses na plataforma virtual da Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (Capes). A pesquisa possibilitou a análise de 34 estudos do campo da saúde coletiva, com enfoque nos diferentes serviços de urgência e a integração entre eles, incluindo possíveis transformações no processo de cuidado em saúde e distintas estratégias de avaliação, por meio de diferentes abordagens, principalmente qualitativas. São observadas fragilidades na articulação em rede, com enfoque nos diferentes serviços de urgência e a integração entre eles, incluindo possíveis transformações no processo de cuidado em saúde e distintas estratégias de avaliação, por meio de diferentes abordagens, principalmente qualitativas. São observadas fragilidades na articulação em rede, com enfase nos diferentes serviços de urgência e a integração entre eles, incluindo possíveis transformações no processo de cuidado em saúde e distintas estratégias de avaliação, por meio de diferentes abordagens, principalmente qualitativas. São observadas fragilidades na articulação em rede, com enfase nos diferentes serviços de urgência e a integração entre eles, incluindo possíveis transformações no processo de cuidado em saúde e distintas estratégias de avaliação, por meio de diferentes abordagens, principalmente qualitativas. São observadas fragilidades na articulação em rede, com enfase nos diferentes serviços de urgência e a integração entre eles, incluindo possíveis transformações no processo de cuidado em saúde e distintas estratégias de avaliação, por meio de diferentes abordagens, principalmente qualitativas. São observadas fragilidades na articulação em rede, com enfase nos diferentes serviços de urgência e a integração entre eles, incluindo possíveis transformações no processo de cuidado em saúde e distintas estratégias de avaliação, por meio de diferentes abordagens, principalmente qualitativas. São observadas fragilidades na articulação em rede, com enfase nos diferentes serviços de urgência e a integração entre eles, incluindo possíveis transformações no processo de cuidado em saúde e distintas estratégias de avaliação, por meio de diferentes abordagens, principalmente qualitativas. São observadas fragilidades na articulação em rede, com enfase nos diferentes serviços de urgência e a integração entre eles, incluindo possíveis transformações no processo de cuidado em saúde e distintas estratégias de avaliação, por meio de diferentes abordagens, principalmente qualitativas. São observadas fragilidades na articulação em rede, com enfase nos diferentes serviços de urgência e a integração entre eles, incluindo possíveis transformações no processo de cuidado em saúde e distintas estratégias de avaliação, por meio de diferentes abordagens, principalmente qualitativas. São observadas fragilidades na articulação em rede, com enfase nos diferentes serviços de urgência e a integração entre eles, incluindo possíveis transformações no processo de cuidado em saúde e distintas estratégias de avaliação, por meio de diferentes abordagens, principalmente qualitativas.

Palavras-chave: Atenção à Saúde; Serviços de Saúde; Emergência; Política de Saúde.

Introduction

The organization of the Brazilian Unified Health System (SUS) started, in 2010, to use the Health Care Networks (Redes de Atenção à Saúde – RAS) as its model. This proposal was recommended by the Pan American Health Organization (PAHO), based on the framework of the Integrated Health Services Networks (Redes Integradas de Serviços de Saúde – RISS), and it has been implemented as an alternative to the fragmentation of health systems (PAHO, 2010), especially in countries in the process of demographic and epidemiological transition where chronic conditions and injuries are prevalent (Mendes, 2010). Established as a public policy in the country, the RAS is defined as a polyarchic system model consisting of different points of health care and the links that communicate them, with the objective of obtaining better epidemiological and comprehensive results of health care (Brasil, 2017).

Thus, the induction made by the Ministry of Health to implement the RAS as a public policy represented a new phase for the structuring of the SUS. The objectives expressed in the policy included the guarantee of integrality and the performance of changes to health care provision using thematic networks of priority, such as the “Stork Network” Program (Rede Cegonha), Emergency Care Network (Rede de Atenção às Urgências e Emergências – RUE), Psychosocial Care Network (Rede de Atenção Psicossocial), Care Network for People with Disability (Rede de Atenção à Pessoa com Deficiência), and Care Network for People with Chronic Diseases (Rede de Atenção às Doenças Crônicas) (Brasil, 2014).

The RUE was proposed to articulate and integrate health facilities, aiming to expand and qualify the access of users to urgent and emergency health care in an efficient and timely manner. Their components are defined as: health promotion, prevention, and surveillance; Primary Health Care; Mobile Emergency Care Service (SAMU 192) and its Emergency Medical Care Regulation Centers (Centrais de Regulação Médica das Urgências); stabilization rooms; National Health Force of the SUS; Emergency Care Units (UPA 24h) and all its 24-hour emergency services; Hospitals; and Home
Care (Brasil, 2011). In recent years, advances have been made in the implementation of RUE, with some relevant results. Nevertheless, there is much to be improved, and a series of difficulties need to be overcome to create new management and governance arrangements for networks and new care practices that may lead to a new institutional culture in health (Jorge et al., 2014).

Considering the relevance of RUE policy, there is need for studies that seek to organize, synthesize, and disseminate research on the subject, enabling new investigations to be subsidized and motivated, promoting more visibility to scientific production on RUE, and supporting the processes of formulation, implementation, and evaluation of SUS health policies. This study aims to analyze the scientific production on RUE policy in Brazil and to elaborate summaries about its limits and challenges.

**Methodology**

This is an integrative review of the literature and part of a documentary analysis related to the production of knowledge on RUE’s public policy. The integrative literature review is a method composed of six phases, strictly followed in the development of this research: (1) establishment of the central problem of the review and elaboration of the main driving question; (2) selection of studies; (3) categorization of studies and definition of information to be extracted from the reviewed studies; (4) analysis of the selected material; (5) interpretation of the results; and (6) synthesis of the attested knowledge (Mendes; Scott; Galvão, 2008).

For the preparation of this literature review, the central question of the research was initially defined: what did the studies find regarding RUE since its implementation?

To identify the studies to comprise the review, an online search of articles was performed in the LILACS, SCiELO, and MEDLINE databases. Dissertations and theses were also researched in the virtual platform of the Coordination for the Improvement of Higher Education Personnel (CAPES) of the Ministry of Education. The Descriptors of Health Sciences (DeCS) “Redes de Urgência e Emergência” (Urgent and Emergency Networks) and “Redes + Serviços de Urgência” (Networks + Emergency Services) were used.

The universe of the study consists of 16 scientific articles, 18 master’s theses, and 6 PhD dissertations related to the investigated theme; of these, 34 constitutes the sample. The study selection process (Figure 1) was carried out in three stages: (1) elimination of duplicates; (2) reading of titles and abstracts; and (3) reading the texts in full. The following inclusion criteria were considered: publications available in full, published or produced from 2011 to 2020 as scientific article, dissertation, or thesis. Exclusion criteria were duplicity and studies that do not directly address the subject of RUE.

**Figure 1 — Flowchart of the selection of studies on the Emergency Care Network**
From the reading of the studies, the different components of the RUE were categorized to perform the analysis of the results and discussion. In order to systematize data collection, a matrix was elaborated, and the results were organized in tables for better visualization of the material included in the research.

Results and discussion

The research enabled the analysis of 34 studies in the field of collective health on the subject of RUE. Nine studies addressed general aspects of RUE. Among the components addressed, most studies were on hospitals (11 studies), UPA 24h (8), and SAMU 192 (5). Only one research was identified for Primary Health Care and for Home Care. No studies were found on health promotion, prevention, and surveillance, on RUE’s Stabilization Room, and on the National Health Force of the SUS. Regarding the type of document, the subject was mostly discussed in master’s theses (17); while 6 PhD dissertation, and 11 articles published in scientific journals were also identified. Regarding the type of study, we identified 9 evaluative studies, 6 case studies, and 13 investigations with diverse qualitative approaches, including documentary analysis, cartography, action research, and intervention project, among others. We also identified 4 studies with mixed approach (quali-quantitative) and 2 studies that were developed with quantitative methods.

The approaches of the studies on the RUE are presented below and discussed by component, according to the defined categorization.

The Emergency Care Network policy

Nine studies were identified, including articles, theses, and dissertations, with a general approach to RUE, as described in Chart 1.

**Chart 1 — Distribution of general studies on the Emergency Care Network according to title, type of document/year of publication, and objectives**

<table>
<thead>
<tr>
<th>Title</th>
<th>Type of document/Year</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entendendo os desafios para a implementação da Rede de Atenção às Urgências e Emergências no Brasil: uma análise crítica.</td>
<td>Article, 2014</td>
<td>This article describes and analyzes the implementation process of the Emergency Care Network (RUE) in Brazilian health regions, seeking to identify factors that facilitate or hinder its implementation, in order to contribute to the evaluation of this policy.</td>
</tr>
<tr>
<td>Análise do Processo de Implantação da Rede de Atenção às Urgências e Emergências na Região Metropolitana de Fortaleza Ampliada.</td>
<td>Thesis, 2014</td>
<td>The research analyzes the implementation process of the Emergency Care Network in the Metropolitan Region of Fortaleza, seeking to identify the practices developed, correlating them with the State Action Plan and delimiting the factors that facilitated or compromised its implementation.</td>
</tr>
<tr>
<td>Análise da Governança na Saúde: Rede de Atenção às Urgências e Emergências da Região do Médio Paraíba-RJ</td>
<td>Thesis, 2015</td>
<td>The study aimed to: identify the actors involved, their interactions and their influences in the decision-making process of RUE, analyze the legal framework that guides the decision-making process of RUE, analyze the dynamics of the spaces of decision-making process of RUE (the State’s RUE Management Group and Regional Interagency Committee of the Middle Paraiba Region — CIR-MP); and identify the facilitating and limiting devices for the organization of RUE.</td>
</tr>
<tr>
<td>Rede de Urgência e Emergência: um Estudo de Caso na Região Coração do Estado de São Paulo (Urgency and Emergency Network (RUE) health system in the region of Coração, state of São Paulo)</td>
<td>Thesis, 2017</td>
<td>The study analyzes the transformations of the implementation of the Emergency Care Network (RUE) in the Coração Region, in the state of São Paulo, as well as the challenges and achievements of RUE in that region, according to the guidelines expressed in the official documents that guide the implementation of the RUE.</td>
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Chart 1 – Continuation

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<tr>
<th>Title</th>
<th>Type of document/Year</th>
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<tr>
<td>Redes de Urgência e Emergência na Grande Oeste de Santa Catarina e a Educação (Emergency Care Network in the Greater West of Santa Catarina State and Education)</td>
<td>Thesis, 2017</td>
<td>This study analyzes the role of education in the implementation of the Emergency Care Network (RUE) policy in the Macro-region of the Greater West of Santa Catarina.</td>
</tr>
<tr>
<td>Fragilidade na governança regional durante implementação da Rede de Urgência e Emergência em Região Metropolitana. (Fragility in regional governance during implementation of the Urgency and Emergency Network in the Metropolitan Region)</td>
<td>Article, 2018</td>
<td>This article analyzes the implementation of the Emergency Care Network, its regional inter-federative arrangements for agreement and policy management, in the Metropolitan Region of São Paulo, from 2011 to 2016.</td>
</tr>
<tr>
<td>Análise do processo de implementação da Rede de Atenção às Urgências e Emergências na Região de Saúde Fortaleza (Analysis of the process of implantation of the network of attention to emergencies and emergencies in the metropolitan region of Fortaleza expanded – Ceará)</td>
<td>Dissertation, 2018</td>
<td>The research analyzes the implementation process of the Emergency Care Network within the Fortaleza Health Region.</td>
</tr>
<tr>
<td>Representações Sociais de Gestores e Trabalhadores sobre a Rede de Atenção às Urgências (Social representations of public administrators and workers on the Emergency Care Network)</td>
<td>Thesis, 2018</td>
<td>This research analyzes the social representations of public administrators and workers of health services in the expanded health center region of Minas Gerais regarding the Emergency Care Network.</td>
</tr>
<tr>
<td>A Construção e Governança da Rede de Atenção às Urgências na Região Oeste do Paraná: um Estudo de Caso (The construction and governance of the Emergency Care Network in the Western Region of Paraná: a case study)</td>
<td>Dissertation, 2018</td>
<td>Analyze the role of the Regional Interagency Committees of the 10th and 20th Health Regions of Paraná (CIR 10th and 20th RS-PR) in the construction and governance of the Emergency Care Network (RUE) for the territory.</td>
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</table>

Jorge et al. (2014), in an article published by the team responsible for formulating RUE within the Ministry of Health, carried out the evaluation of its implementation at the national level under the management and governance approach. For the authors, the critical obstacles to be faced are: the subdued role of the state health departments in coordinating the planning and implementation process of the RUE; the fragility of the regulatory component; the low capacity of federal entities in managing financial resources; insufficient monitoring and evaluation processes; the inadequacy of information systems; and the lack of permanent education plans for the implementation of clinical qualification and management devices in regional action plans.

Other studies analyze the planning and implementation of RUE according to different approaches within health regions of the states of Ceará, Minas Gerais, Paraná, Rio de Janeiro, Santa Catarina, and São Paulo, considering the different regional characteristics. For Teixeira (2014), despite the political and financial investment for the implementation of RUE, this strategy did not solve the serious problems of integration between health units in the Metropolitan Region of Fortaleza (in the state of Ceará). Moreover, the study exposed the low capacity of Primary Health Care as a care management entity, the critical difficulty in funding, and the fragility in the articulation between the management bodies of the system and the management of the services.

Some studies focused on the regional governance for the planning and implementation of RUE. Padilha et al. (2018) revealed the insufficiency of the political instruments and coordination arrangements developed by the implementation of RUE in the Metropolitan Region of São Paulo. For Costa (2015), the inter-management spaces of the State’s RUE Management Group and the Regional Interagency Committee (CIR) in the Middle Paraíba Region performs far below of what was proposed, needing...
to advance in the culture of elaboration of regional projects that can truly consider local specificities.

In the Western Health Region of Paraná, Griep (2018) observed that, despite the advances, CIR’s performance took place during the implementation phase of RUE, in which a normative planning with strong central induction prevailed, triggered by the edition of legal norms that promote wave reactions with the Bipartite Interagency Committee (CIB) and CIR. When conducting a case study in the Health Region in the countryside of the state of São Paulo, Pereira (2017) emphasized, as some of the driving elements of RUE, the importance of systematic meetings between the representatives of the constituent facilities and the public administrators of the municipalities of the region, the creation of the regulatory forum, and the management tools that contribute to the organization of care at the entry points of health care.

In the Fortaleza Health Region, Morais (2018) observed that the implementation of a set of RUE components was not equally accompanied by the process of modifying the care model towards a comprehensive, resolutive, qualified, and user-centered care, especially due to the emphasis on structuring via physical resources in detriment to conditioning aspects of network functionalities. Panzera (2014), when conducting interviews with workers, public administrators, and users of the RUE in the Greater Western Region of Santa Catarina, identified the discontinuity, fragmentation, and fragility within the coordination of care toward users and proposed permanent health education actions that may strengthen the network.

By studying the social representation of RUE to public administrators and workers in a municipality in the state of Minas Gerais, Resende (2018) reported the perception that RUE guarantees an optimization of care, and, in this sense, when done in a participatory way, the professionals who are part of the process feel satisfied when they recognize themselves as participating members of the decisions.

Thus, investments in the processes of integration, regional governance, and qualification of health care are presented as requirements for its effective implementation in the RUE and the guarantee of its objectives.

**Primary and Home Care in the Emergency Care Network**

The Primary Care component in RUE aims to expand access, strengthen the bond, and be the first contacts of care in emergencies until transfer/referral to other points of care, when necessary (Brasil, 2011). The Home Care component is understood as the set of integrated and articulated actions of health promotion, prevention, and treatment of diseases and rehabilitation that occur at home, constituting a new modality of health care that reorganizes the work process of teams in primary, outpatient, and hospital care (Brasil, 2011).

The research found few scientific productions on these components of RUE, and only one study was identified for each of them (Chart 2).

**Chart 2 — Distribution of studies on Primary Care and Home Care according to title, type of document/year of publication, and objectives**

<table>
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<tr>
<th>Title</th>
<th>Type of document/Year</th>
<th>Objectives</th>
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<tbody>
<tr>
<td>Conhecimento Teórico de Profissionais Atuantes na Estratégia de Saúde da Família sobre Condutas em Urgência e Emergência (Theoretical knowledge of Professionals working in the Family Health Strategy regarding conduct in Emergency)</td>
<td>Thesis 2016</td>
<td>This research was carried out with the objective of evaluating the theoretical knowledge of professionals working in the Family Health Strategy of Campo Grande, in the state of Mato Grosso do Sul, about urgent and emergency conduct.</td>
</tr>
</tbody>
</table>
Notably, both studies focused on the health care practices, indicating in their results and conclusions the need to further the articulation of the network. In the case of Primary Care, the author evaluated the theoretical knowledge of professionals working in the Family Health Strategy of a municipality regarding urgent and emergency conducts, showing the differences between professional categories and lines of care, indicating that training processes can minimize morbidity and mortality and contribute to the reduction of excessive demand at the entry points of other levels of care, making RUE more effective and Primary Care more resolutive (Crispim, 2016).

Pozzoli (2017), when studying the care process within a Home Care service, observed that it is an innovative care model if embraced by the health system with sufficient human resources, materials, equipment, transportation, and an efficient and flexible information system, suggesting for patient care to be integrated among professionals from other points of the network.

### Pre-hospital care: Mobile Emergency Care Service and Emergency Care Unit

Pre-hospital care in RUE consists of two components: SAMU 192 and UPA 24h. In this research, 12 studies on pre-hospital care within RUE were identified: 4 on Mobile Emergency Care Service (SAMU 192), 7 on 24-hour Emergency Care Unit (UPA 24h), and 1 that addressed both components (Chart 3).

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**Chart 2 – Continuation**

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<th>Title</th>
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<th>Objectives</th>
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<tbody>
<tr>
<td>Cartografia do Processo de Cuidado num Serviço De Atenção Domiciliar (Cartography of the care process in a Home Care Service)</td>
<td>Dissertation, 2017</td>
<td>The main objective of this research was to understand the care process in the Home Care Service (Serviço de Atenção Domiciliar – SAD) of a medium-sized municipality in the State of São Paulo as a component of the Emergency Care Network (RUE).</td>
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**Chart 3 – Distribution of studies on pre-hospital care according to title, type of document/year of publication, and objectives**

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<tr>
<th>Title</th>
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<tr>
<td>Regulação Médica de Urgências na Região do Médio Paraíba: uma Proposta para Avaliação da Implantação do Serviço (Urgent medical regulation in the Medio Paraíba region: a proposal to the evaluation of the implementation of service)</td>
<td>Thesis 2012</td>
<td>this study proposes an evaluation of the implementation of the Emergency Medical Care Regulation Center (Central de Regulação Médica de Urgência – CRMU) linked to the Mobile Emergency Care Service of the Middle Paraiba Region (SAMU 192 – MP).</td>
</tr>
<tr>
<td>Diretriz de Integração do Samu com os Componentes APS e UPA na Rede de Urgência e Emergência: Pesquisa-Ação (Guideline for the integration of SAMU with PHC and UPA components in the Emergency Care Network: action research)</td>
<td>Thesis 2017</td>
<td>The overall goal is to build a guideline that incorporates viable strategies to strengthen the integration of SAMU with Primary Health Care and UPA components within RUE.</td>
</tr>
<tr>
<td>O processo de implantação do Serviço de Atendimento Móvel de Urgência no Brasil: estratégias de ação e dimensões estruturais (Implementation of the Mobile Emergency Medical Service in Brazil: action strategies and structural dimension)</td>
<td>Article, 2017</td>
<td>This article analyzes the process of implementation of pre-hospital mobile emergency care in Brazil, identifying the rules and resources that facilitated the implementation; the hindering and facilitating elements of the process; the influence of the agents of the different federative entities in the implementation of these services; the proposal to expand the SAMU.</td>
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<tr>
<th>Title</th>
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<th>Objectives</th>
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<tbody>
<tr>
<td><strong>SAMU 192</strong></td>
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<tr>
<td>Governança do Componente Pré-Hospitalar Móvel da Rede de Atenção às Urgências e Emergências (RUE) em uma Região de Saúde no Estado do Paraná (The Governance of the Mobile Prehospital Component in the Network of Attention to Urgencies and Emergencies (RUE) in a Healthcare Region.)</td>
<td>Thesis 2018</td>
<td>This study focuses on the SAMU-192 Regulatory Center and evaluated the governance of the mobile pre-hospital component of RUE.</td>
</tr>
<tr>
<td><strong>SAMU 192 and UPA 24h</strong></td>
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<tr>
<td>Certificação em ACLS na Rede de Atenção Pré-Hospitalar de Urgência e Emergência - Proposta de Intervenção no Samu e UPA CIC em Curitiba (ACLS certification in Pre-Hospital Emergency Care Network – intervention proposal for SAMU and UPA CIC in Curitiba)</td>
<td>Thesis 2017</td>
<td>This master’s thesis focuses on an intervention project, within the scope of the Unified Health System (SUS), which aims to certify Advanced Cardiovascular Life Support (ACLS), in a Health District (DS) in the city of Curitiba, state of Parana.</td>
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<tr>
<td><strong>UPA 24h</strong></td>
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<tr>
<td>Redes de atenção às urgências e emergências: pré-evaluation das Unidades de Pronto Atendimento (UPAs) em uma região metropolitana do Brasil. (Urgent and Emergency Care Networks: a pre-evaluation of the First Aid Units (UPAs) in a metropolitan region of Brazil)</td>
<td>Article, 2012</td>
<td>This article presents the results of a pre-evaluation of emergency care units in the metropolitan region of Recife, considering the following questions: What are the fundamental components for the operation of these units? What criteria and indicators are considered important by those interested in the intervention of carrying out a future evaluation? What areas of intervention need to be evaluated?</td>
</tr>
<tr>
<td>Atenção às Urgências: a Integração das Unidades de Pronto Atendimento 24 Horas (UPA 24h) com a Rede Assistencial no Município do Rio de Janeiro (Attention to the Emergencies: the integration of the 24-hour Emergency Care Units (UPA 24h) with the healthcare services in the city of Rio de Janeiro)</td>
<td>Thesis 2013</td>
<td>This work analyzes the integration process of the 24-hour UPA in the care network of the city of Rio de Janeiro, discussing the implications of this strategy in the reorientation of the care model within the Unified Health System.</td>
</tr>
<tr>
<td>Práticas Gerenciais em Unidades de Pronto Atendimento no Contexto das Redes de Atenção à Saúde (Management practices in Emergency Care Units in the context of Health Care Networks)</td>
<td>Article, 2014</td>
<td>This study analyzes management practices in the Emergency Care Unit in the context of the Health Care Network.</td>
</tr>
<tr>
<td>As Unidades de Pronto Atendimento na Política Nacional de Atenção às Urgências (The Emergency Care Units in the National Policy for Emergency)</td>
<td>Article, 2015</td>
<td>This study analyzes the ministerial ordinances that regulated the creation of the UPAs, trying to understand their implementation pattern.</td>
</tr>
<tr>
<td>Unidade de Pronto Atendimento: o Cuidado ao Usuário (Emergency Care Unit: user care)</td>
<td>Thesis 2016</td>
<td>This study analyzes the care received in the UPA according to the users’ perception, in order to seek a comprehensive understanding of their desire dynamics and the constitution of the RUE.</td>
</tr>
<tr>
<td>Cuidado centrado na família em unidade emergenciais: percepção de enfermeiros e médicos brasileiros (Family centered care in emergency departments: perception of Brazilian nurses and doctors)</td>
<td>Article, 2017</td>
<td>To understand the perception of physicians and nurses working in Emergency Care Units (UPA) on Family-Centered Care (FCC).</td>
</tr>
<tr>
<td>Atendimentos por Condições Sensíveis à Atenção Primária à Saúde em uma Unidade De Pronto-Atendimento: Proposta de Comunicação para Coordenação do Cuidado (Ambulatory Care Sensitive Conditions in an emergency department: Communication proposal for care coordination.)</td>
<td>Thesis 2018</td>
<td>To identify the points of weakness and potential in the communication between Emergency Care Services and Primary Health Care from the analysis of conditions sensitive to Primary Care.</td>
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</tbody>
</table>
SAMU 192 aims to reach the victim soon after a health incident that can lead to suffering, sequelae, or even death, thus requiring adequate care and/or transportation to a health service properly hierarchical and integrated with the SUS (Brasil, 2011).

In a study conducted at SAMU 192 in the city of Rio de Janeiro, Dias (2012) evaluated the performance of the Regulatory Center as an important strategy to mitigate unnecessary demands at health care entry points and also as a tool for defending citizens, ensuring their access to environments appropriate to their needs. Assis (2018) notes that, although the SAMU 192 Regulatory Center in a Health Region of the state of Paraná meets the standardization, its operationalization does not always occur as established, presenting weaknesses and potentialities in its governance system, such as the ineffectiveness of the local and regional administrative committees; absence of a computerized system for locating available beds, transport vehicles, and system of hospital reference agreements; non-existent interinstitutional ordering with the Military Police and the Fire Department; and lack of medical professionals. As potentialities, the study points out the employment relationship of the team by means of a single legal regime with low turnover of professionals and the designation of a health authority to the regulatory physician.

Regarding identified intervention proposals, Nagai (2017) builds guidelines for the integration of SAMU 192 with Primary Care and UPA 24h using an action research, and Luz (2017) proposes Advanced Cardiovascular Support (ACLS) certification for professionals working in SAMU 192 and UPA 24h as an intervention project, both in the city of Curitiba (state of Parana). For Nagai (2017), one of the expectations of SAMU 192 is the integration that this service can provide to RUE, ensuring access to all levels of complexity at the most opportune time for user service. For Luz (2017), the certification of the teams in ACLS may improve the work processes in the emergency rooms where this knowledge is needed.

In a study conducted with the objective of analyzing the process of implementation of mobile pre-hospital urgency in Brazil, O’Dwyer et al. (2017), using Giddens’ structuration theory, reported an unequal implementation of SAMU 192 between states and regions, in addition to structural problems, such as the difficulty in maintaining physicians, poorly equipped regulatory centers, and scarcity of ambulances, with the North and Northeast Regions being the most affected.

The 24-hour UPA are health facilities of intermediate complexity, between primary care services and the hospital network, part of an organized network of emergency care that should provide resolutive and qualified care to patients affected by acute clinical or surgical conditions by stabilizing the patients and performing the initial diagnostic investigation, and defining, for every cases, if a referral to hospital services of greater complexity is required or not (Brasil, 2011).

Silva et al. (2012) proposed an instrument for evaluating the 24-hour UPA of the Metropolitan Region of Recife by using a logical model and with the formulation of consensus. They structured a matrix of criteria and indicators composed of three levels of analysis: health care (emergency care and diagnostic procedures), interinstitutional integration (complementary to Primary Care, SAMU 192, diagnostic-therapeutic support units, and hospital units), and management (administrative, financial, and quality).

In the dimension of health care, Araújo (2016), when interviewing users of 24-hour UPA in the region of Araraquara (SP), observed that the participants were satisfied with the care received, but highlights that access is disorganized in health services and there is no coordination of care, which compromises the longitudinality and comprehensiveness of care. The study also reported that the participants made their own paths or therapeutic itineraries at their convenience, often facing barriers upon access, perpetuating a hegemonic doctor-centered model of health service based on “treat and street.”

Barreto et al. (2017), when studying the perception of professionals working in two emergency units in Southern Brazil on Family-Centered Care (FCC), identified that, for Brazilian physicians and nurses working in 24-hour UPA, the FCC is still little known formally, which led to deductive and
superficial perceptions about the theme. In general, the interviewees believed that the FCC was related to involving the presence of the family in the patient care space. Notably, the professionals considered it difficult to implement the FCC in the 24-hour UPA, however, some reports mention the importance of maintaining contact between patients and family members in these contexts, presenting suggestions regarding the expansion of visiting times and opportunities.

Regarding the dimension of integration with other points of attention, Konder (2013) – when studying the 24-hour UPA of the municipality of Rio de Janeiro (RJ) – observed little integration between them and the other components of the RUE, despite the strong political and financial investment for the implementation and expansion of these units. The strategy failed to circumvent the serious problems of integration into the care network, and may even generate further fragmentation.

In a documentary research of national scope regarding the implementation of the 24-hour UPA, Konder and O’Dwyer (2015) observed that the significant support of the federation units explains their broad legitimacy as a structuring modality achieved by this policy, allowing rapid expansion and a significant allocation of resources. The UPA 24h implementation pattern was of accelerated expansion, without effective network organization, casting suspicion on being a reproduction of the traditional emergency room model. In a study conducted in a region in the city of São Paulo (state of São Paulo), which focused on the care provided by UPA 24h to users affected by conditions sensitive to primary care, Lima (2017) identified the strategy of referencing users with chronic diseases for continuity in Primary Care as an important strategy for service integration.

Regarding management practices in the UPA 24h, Von Randown et al. (2014) identified singularities in the city of Belo Horizonte (state of Minas Gerais) that contribute to the implementation of the structured care model from the RAS. Regarding the actions performed by the public administrators of the UPA 24h, they highlight the articulation with health care networks in the micro and macro-organizational contexts, the management of people, conflicts, flow of served individuals, in addition to the planning, evaluation, and management of health services, constituting a dense and complex activity.

The structuring of pre-hospital care in RUE is invested in the possibility of reducing the overcrowding of health care entry points and the integration of the care network. Both the UPA 24h and the SAMU 192 can contribute to these results depending on the arrangements and devices of regulation and coordination of care implemented in the territories and services, since only building a new service can maintain the fragmentation of the network and the care model centered on “treat and street” without important impact on the quality and integrality of care.

The hospital component in the Emergency Care Network

The hospital component in RUE consists of emergency entry point, stepdown units, intensive care beds, imaging and laboratory diagnostic services, and priority care lines (Brasil, 2011). In this review, 11 studies on the hospital component were identified (Chart 4).

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### Chart 4 – Distribution of studies on the hospital component of the Emergency Care Network according to title, type of document/year of publication, and objectives

<table>
<thead>
<tr>
<th>Hospital Component</th>
<th>Type of document/Year</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rede de Infarto com Supradesnivelamento de ST: Sistematização em 205 casos Diminui Eventos Clínicos na Rede Pública</strong> (ST-Elevation myocardial infarction network: systematization in 205 cases reduced clinical events in the public health care system)</td>
<td>Article, 2012</td>
<td>Describe the in-hospital mortality of ST Elevation Myocardial Infarction (STEMI) of patients admitted via ambulance or peripheral hospitals, as a result of the organization of a structured training network.</td>
</tr>
</tbody>
</table>

continues...
**Hospital Component**

<table>
<thead>
<tr>
<th>Title</th>
<th>Type of document/Year</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Regionalização da Assistência às Urgências e Emergências em Hospitais de Referência Regional de Pernambuco: uma Avaliação sobre a Vertente do Acesso aos Serviços de Saúde (The regionalization of urgency and emergency care in regional referral hospitals in Pernambuco: an evaluation of the access to health care services)</td>
<td>Dissertation, 2012</td>
<td>This study evaluates the access to emergency services in regional reference hospitals of Pernambuco.</td>
</tr>
<tr>
<td>Inserção de um Hospital de Grande Porte na Rede de Urgências e Emergências da Região Centro-Oeste (Inclusion of a large size hospital in the Urgency and Emergency Network of the Center-West region)</td>
<td>Article, 2015</td>
<td>This article analyzes the insertion of a large hospital in RUE in the Midwest region.</td>
</tr>
<tr>
<td>Redes de Atenção à Saúde: a Percepção dos Médicos Trabalhando em Serviços de Urgência (Health Care Networks: the perception of physicians working in emergency services)</td>
<td>Article, 2015</td>
<td>The objective was to understand the perception of physicians in emergency services regarding Health Care Networks.</td>
</tr>
<tr>
<td>Estratégias de Famílias de Crianças Atendidas em Pronto Socorro Pediátrico: a Busca pela Construção da Integralidade. (Strategies for families of children served in pediatric first aid: the search for the construction of integrality)</td>
<td>Article, 2015</td>
<td>This is a qualitative research that sought to understand the strategies of families in the search for health care services for children assisted in pediatric emergency room.</td>
</tr>
<tr>
<td>Análise de Implantação do Kanban em Hospitais do Programa SOS Emergências (Analysis of Kanban Implementation in Hospitals of the SOS Emergencies Program)</td>
<td>Thesis 2016</td>
<td>This study analyzes the implementation of Kanban, estimating the degree of implementation, describing its effects, and identifying favorable and unfavorable contextual factors.</td>
</tr>
<tr>
<td>Análise de Implantação do Componente Hospitalar da Rede de Urgências e Emergências – RUE (Analysis of implementation of the hospital component of the urgency and emergency network – RUE)</td>
<td>Thesis 2017</td>
<td>Analyzes the implementation of the Hospital Component of the Emergency Care Network – RUE in the region of Ribeirão Preto, in the state of São Paulo, and proposed an evaluative matrix.</td>
</tr>
<tr>
<td>Modelo de Avaliabilidade do Componente Hospitalar da Rede de Urgência e Emergência (Availability model of the hospital component of the Emergency Care Network)</td>
<td>Thesis 2017</td>
<td>This study proposed a model of evaluation of the hospital component of RUE, regarding the quality of services offered to users.</td>
</tr>
<tr>
<td>Regulação Assistencial e Atenção Hospitalar na Rede de Atenção às Urgências e Emergências (Regulation of care and hospital care in the Network of Emergency and Attention Care)</td>
<td>Dissertation, 2018</td>
<td>This study analyzes the organization and functioning of care regulation in the emergency care network of the city of Rio de Janeiro, focusing on access to the hospital bed and conformation of health care networks.</td>
</tr>
<tr>
<td>Hiperutilizadores de Baixo Risco Clínico em Pronto Socorro de um Hospital Universitário: Usuários Produzidos ou Produtores de Cuidado? (Low clinic risk frequent users at an emergency department of a university hospital: users produced or care producers)</td>
<td>Thesis 2019</td>
<td>Describes the pattern of use and understand the reasons and strategies developed by low-risk clinical super-users assisted in the Hospital Emergency Service.</td>
</tr>
<tr>
<td>Hospitais em Municípios De Pequeno Porte: sua Inserção no SUS (Hospitals in small municipalities: their insertion in SUS)</td>
<td>Dissertation, 2019</td>
<td>This study sought to reflect on the role of small hospitals in municipalities within the region of Londrina, as well as to deepen the understanding of their relationship with the regulations of the Unified Health System (SUS) regarding care programs in health care networks (RAS), such as the Emergency Care Network (RUE), the Paranaense Mother Network (Rede Mãe Paranaense), and also analyze the challenges faced by public administrators, the factors that interfere in the management, and the symbolic power of hospitals in small municipalities.</td>
</tr>
</tbody>
</table>
When analyzing the implementation of the hospital component of RUE in the country, Oliveira (2017) observed that the axis of entry points reached satisfactory level (between 70.8% and 83.8%) and the axes of stepdown units and intensive care beds reached full level of implantation (>90%). It highlights that the risk levels have not been satisfactorily implemented and that some concepts and attributions need to be better presented and promoted, such as the Internal Regulatory Nucleus, the Hospital Quality Access Nucleus, and kanban. Among the factors that limit the implementation of the RUE are the difficulties of care regulation and the insufficiency of stepdown beds and long hospitalizations. It highlights as the main progresses the implementation of multi-professional care and inter-hospital communication via the Internal Regulatory Center, which contributed to the integration in the network and in the integrity of care, despite the limitations.

Marcolino (2017), when building an evaluative matrix based on the guidelines present in the regulations for RUE hospitals, proposed an evaluation in two dimensions: administration – management of services/governance of networks – and hospital – the care provided. As for the results, Caluza et al. (2012), in a study that evaluated the line of care of acute myocardial infarction in a reference hospital in the city of São Paulo (state of São Paulo), observed that the organization of public establishments in a care network resulted in immediate improvement of the results, reducing mortality rates.

Regarding hospital access within RUE, Dubeux (2012), when studying the regional reference hospitals in Pernambuco, observed the inadequacy of the supply and implementation in the face of the state regional model and the guidelines regarding the care necessary for urgent and emergency cases. Despite the fragility observed, most users use the hospital as a main health service, demonstrating confidence in the care received.

Soares, Scherer, and O’Dwyer (2015), when studying a teaching hospital of regional reference and large size in the Midwest region of the country, observed that their insertion within the RUE happened slowly, depending on the articulation of the various levels of management of the SUS, and that the definition of agreements and care flows is still incipient: there are problems in the functioning of other health services, which, in general, do not promote the selection of clinically less severe cases; access regulation is in its initial phase; Primary Health Care in the region is little resolutive; public administrators are active in the network deployment process; the workers have a little agency in the implementation of the RUE; and there is little investment in continuing health education.

The small hospitals, according to Souza (2019), perform below the recommended in health care for the population to which they are intended, as well as incipient insertion in the RUE. Even so, the symbolic and political capital invested in the idea of a hospital helps to understand why, even with low productivity and high costs, political agents do not “give up” on funding, expanding, and maintaining them with the means at their disposal.

As for the strategies and arrangements of hospital management recommended by the policy, Konder (2018) highlights the fundamental role played by regulatory centers, internal regulatory centers, and medical professionals for consolidation and quality of the regulatory process in the state of Rio de Janeiro. They observes as a phenomenon an institutionalization of regulation, capable of promoting greater integration of the network, especially in the municipal sphere. However, the difficult access to an insufficient and low-skilled stepdown hospital ward, which culminates in the phenomenon of “hospitalization” in the UPA 24h, and the conflicting dynamics of relations between the governmental spheres, which maintains a segmented governance of the network, persist as obstacles to a more efficient organization of the RUE.

When analyzing the implementation of the Kanban instrument in seven hospitals participating in the SOS Emergencies program, Petry (2016) observed the actions of the Internal Regulatory Center, the Hospital Access and Quality Center, the floor team, and the hospital management as contextual factors that contributed to its implementation, in addition to the performance of the program’s supporters. The main factors that impaired its implementation include the
low interest of hospital management, the lack of personnel in Kanban’s driving teams, the fluctuating and/or under-skilled teams, manual control systems, the lack of understanding of the tool, in addition to the resistance of physicians and other professionals.

On the participation of workers in the implementation process of RUE, Lima, Leite, and Caldeira (2015), when studying the perception of physicians working in three emergency hospitals, identified a professional profile of insufficient training for network care that points to the need for a research agenda in the field of human resources to delineate the general profile of physicians working in the services, subsidizing changes in undergraduate and graduate studies to meet the work demands within emergency care.

Regarding the relationship of users with hospitals in RUE, Sacoman (2019), when studying the profile of frequent users in emergency rooms of a university hospital in the city of São Paulo (SP), identified that 3% can be considered super-users of low clinical risk, with their care corresponding to 10% of the service’s care production. In interviews with public administrators and service workers, the author realized that the reasons for super-use are: loyalty of the user due to an institutional linkage to specialized outpatient clinics; ineffective access to the service network; professional regulation performed by the hospital’s own workers; and low capacity of Primary Care to produce reception and bonding.

In a study conducted in a pediatric emergency room of a teaching hospital, Buboltz, Silveira, and Neves (2015) identified that family members seek the emergency unit as their first choice of care, weaving alternative networks as a strategy to ensure quality care for their children, pointing to questions about the low resolution of Primary Care.

Thus, we can observe the centrality that hospitals still maintain in the RUE, when assessing sufficiency, network integration, access, and implementation of management tools, as well as the particularities regarding size and regional relations. The perceptions of users and workers also reinforce the symbolic capital of the hospital as the “main point of attention,” despite the frequent discourse demanding for integration and articulation within a network, as well as on the importance and limits of Primary Care. The implementation of arrangements and devices – such as Internal Regulatory Centers, Hospital Access and Quality Center, Risk Classification at emergency entry point, and Kanban – shows potential for transformation in the network care process, but relies on the action of local management and on processes involving multidisciplinary teams.

Final considerations

When observing the research developed in the last decade on RUE, we can see a production of dissertations, theses, and articles focused on its different components and on the integration between them, as well as perceptions and possible transformations in the health care process, working with different evaluation strategies and different approaches, mainly qualitative. This study showed a consistent production on the subject, despite presenting limitation on use of descriptors for the search strategies, whose expansion could result in the selection of other publications.

The RUE, as a thematic network in the context of the RAS, emerges as a proposal to overcome the fragmentation of care, promote network articulation and transform the care model, but also presents itself as an option to reduce the overcrowding on the entry points of health care. However, weaknesses are observed in this network articulation, maintaining the centrality of the hospital component and the power of its symbolic capital.

Among the components of RUE, most studies were on hospitals, UPA 24h, and SAMU 192. The studies on pre-hospital components mostly focused on regulation as a way to reduce hospital demand. Both UPA 24h and SAMU 192 can contribute to these results, depending on the arrangements and devices implemented in the regulation and coordination of care in services and territories. Nevertheless, fragmentation and the care model centered on “treat and street” has a tendency of being maintained if other strategies for coordinating care and networking are not implemented. Also in hospitals, the implementation of arrangements and qualification devices for care and management
has potential for transformation in the care process, but depends on local management and processes involving the multidisciplinary team. Furthermore, such arrangements and devices could be strengthened if they were implemented from the perspective of networks.

Despite the recurrent discourse in the texts and statements of public administrators, workers, and users of the system regarding the relevance of Primary Care in RUE, this importance does not translate into reality. We observed few academic productions on the components for Primary Care and Home Care, most were focused on the care process at the point of care itself, even if the need for network articulations is indicated. This perception of Primary Care in the RUE is often contradictory within discourses: while its relevance, the need for investments, and even its centrality to the networks is recognized, the understanding of its limits and insufficiencies leads to the reinforcement of hospital-centered model.

In addition to structuring, investments in active and decentralized processes of integration, in management, in regional governance, and in health care are required for an effective implementation of RUE, thus guaranteeing its objectives. Giving thus rise to the perception that just introducing new services and formal devices into the network is not enough for the qualification and expansion of its integrality; whereas the focal point ought to be the implementation of articulation processes on the points of care and the qualification of care in emergency, encouraging and supporting the protagonism of local workers and public administrators.

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Author’s contribution
Tofani, Chioro, and Furtado participated in the conception of the research and all stages of preparation of the manuscript. Bigal, Feliciano, and Silva participated in the collection, analysis, and discussion of the data. Andreazza participated in the analysis and critical review of the article. All authors approved the final version to be published.

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