

# Regulation of access in the urgency and emergency ophthalmological in university hospital

## Regulação de acesso da urgência e emergência oftalmológica em um hospital universitário

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### Abstract

**INTRODUCTION:** The regulation of access to ophthalmic services, when structured with well-established processes, protocols and flows, it guarantees the organization of access, supply and demand for services, which offers quality and resolution in timely care to the population. **AIMS:** To identify the regulation of access to ophthalmic Urgency and Emergency department care according to professionals in the sector at a University Hospital in Belém, PA. **MATERIALS AND METHODS:** A questionnaire was used with fifteen open and closed questions about knowledge of access regulation for professionals in the ophthalmology sector. Quantitative analysis was performed based on descriptive statistics. **RESULTS:** A total of 29 professionals were evaluated, most of whom had been working for 1 to 5 years in ophthalmology (65.5%), in the hospital (72.4%) and in the ophthalmology sector of the hospital (75%). Of those interviewed, 58.6% believe that there is an adequate space for the care of the patient in a situation of U/E (Urgency-Emergency department), 61.5% said they did not know the assistance protocol for the care of the patient in a situation of U/E. As for the prioritization of U/E care, 82.7% said it happened. And 71.4% stated that the ophthalmology service has immediate access to the Surgical Center. 68.9% believe they have the capacity to assist U/E within 24 hours, 82.7% are unaware of the number of U/E patients in ophthalmology attended, and 51.7% are aware of the external flow of demand for care. **CONCLUSIONS:** Most professionals recognize the importance of ophthalmic U/E for the community, and are unaware of the protocols, but highlight the need for improvements in work processes.

**Keywords:** universal access to health care services; unified health system; health policy word.

### Resumo

**INTRODUÇÃO:** A regulação de acesso nos serviços oftalmológicos, quando estruturada com processos, protocolos e fluxos bem estabelecidos garante a organização do acesso, da oferta e da demanda dos serviços, o que oferece qualidade e resolutividade na assistência em tempo hábil a população. **OBJETIVOS:** Identificar a Regulação do acesso à assistência das Urgências e Emergências (U/E) oftalmológicas segundo os profissionais do setor em um Hospital Universitário em Belém, PA. **MATERIAIS E MÉTODOS:** Utilizou-se um questionário com quinze perguntas abertas e fechadas sobre conhecimento da regulação de acesso para os profissionais do setor de oftalmologia. A análise quantitativa foi realizada com base na estatística descritiva. **RESULTADOS:** Foram avaliados 29 profissionais, sendo em sua maioria

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com tempo de atuação de 1 a 5 anos na Oftalmologia (65,5%), no Hospital (72,4 %) e no setor de Oftalmologia do Hospital (75%). Dos entrevistados, 58,6% acredita que exista um espaço adequado para o atendimento do paciente em situação de U/E, 61,5% disseram desconhecer protocolo assistencial para o atendimento do paciente em situação de U/E. Quanto a priorização do atendimento de U/E, 82,7% afirmou acontecer. E 71,4% afirmaram que o serviço de Oftalmologia tem acesso imediato ao Centro Cirúrgico. 68,9% acreditam que tem capacidade de atender U/E nas 24 horas, 82,7% desconhecem o número de U/E em Oftalmologia atendidos e 51,7% tem conhecimento do fluxo externo de demanda do atendimento. **CONCLUSÕES:** A maioria dos profissionais reconhecem a importância das U/E Oftalmológicas para comunidade, desconhecem os protocolos, porém destacam a necessidade de melhorias nos processos de trabalho.

**Palavras-chave:** acesso universal aos serviços de saúde; sistema único de saúde; política de saúde.

## Introdução

The morbidity and mortality profile of the population has shown an increase in chronic diseases and external causes. This is clearly reflected in health services, especially urgent and emergency services, as the number of visits, assistance and rehabilitation costs increase.<sup>1</sup> The WHO (2000) estimates that around 55 million eye accidents occur per year, of which 200,000 cause open injuries to the eyeball. Visual loss has an impact on society at different levels and the economic costs of blindness are enormous for both the public power and the community.<sup>2</sup>

Just as epidemiological patterns change, the supply of health services must also be adjusted in equal proportion, so that emerging needs are assisted; and the Unified Health System (SUS), is inserted as a mechanism for the preservation of society.<sup>3</sup>

The Regulation of Health Actions, which based on previous agreements between municipal managers, health institutions linked to the SUS and community representatives; aims to facilitate adequate access in a responsible and agile manner to the assistance resources necessary for each demand, with agreed and transparent regulatory criteria.<sup>4</sup>

However, there are constant reports of long waiting lines, lack of trained professionals, scrapped hospital structures, and people suffering without these services, which reveals the deficiency of the ophthalmic emergency system in Brazil and

the need to stimulate the improvement of this service.<sup>5</sup>

In the context of SUS, care for urgent and emergency cases is part of the process of regulating health services. It is an experience that articulates two new practices: the use of Technology of Information in the management of SUS and in serving citizens, and the implementation of the regulatory process.<sup>6</sup>

Currently, adequate ophthalmic care has been negatively impacted by (I) deficiency of health services for ophthalmic urgencies and emergencies, (II) their regulation process and (III) lack of knowledge on the part of health professionals. In this context, this study aims to analyze the regulation of access to urgent and emergency care in ophthalmology in a University Hospital according to professionals in the sector.

## Materiais e Métodos

### Materials and Methods

#### Sample and study type

This is an observational, descriptive study with a quantitative approach carried out in the ophthalmology sector at a University Hospital in Belém, PA. The study population consisted of 29 professionals who work in the ophthalmology sector of the hospital, being 3 nurses, 14 doctors, 6 nursing technicians, 2 nursing assistants and 4 administrative technicians.

This study was approved by the Ethics Committee of the Federal University of Pará with CAAE: 37752920.3.0000.0017. Prior to data collection, the Free and Informed Consent Term was signed.

### Research design

For data collection, the Assessment Questionnaire of Regulation of Ophthalmological Urgencies and Emergencies was used. The questions were elaborated from the ordinances nº 957 (05/15/2008) and nº 288 (05/19/2008) that institutes the National Policy of Attention in Ophthalmology to be implemented in all the federated units and defines the Attention Networks in Ophthalmology – functioning of networks, professional teams, equipment and physical structure – respectively. The research instrument developed by the researchers is a semi-open questionnaire with 15 open and closed questions, applied between January and May 2021. The questionnaire addressed issues such as identification of participants, knowledge of professionals about Ophthalmic Urgency/Emergency department and installed capacity of the sector, and determining factors for performing 24-hour Urgent/Emergency care in ophthalmology.

Regarding the capacity of the hospital to assist U/E department within 24 hours, it aims to identify whether with the current structure the hospital can fulfill these emergencies in the expected time. Regarding the importance of the hospital serving U/E department within 24 hours, it aims to understand whether professionals consider the population's need to be attended in the shortest possible time, which leads to a decrease in the prognosis of preventable blindness. About the existing equipment at the UH (University Hospital), it aims to assess whether, during care, professionals are able to perform the necessary tests for the user with these instruments.

Knowledge about the number of people seen at the U/E department by

professionals is an important mechanism for measuring the need to keep the service functioning. In addition, knowledge of the external flow of demand in care aims to assess whether the professional knows the patient's journey to the hospital, the waiting time for care, as well as the need for improvements in the ophthalmology care network.

When questioning about the existence of an adequate space for care, the objective is to understand the view of professionals in relation to the space destined for this care, as well as the need for improvements. About evaluating the knowledge of the existence of care protocols, it is known the importance in the quality of the service provided, since they direct the professional to perform a safe and standardized treatment to the user. As for the priority in care and the existence of immediate access to the surgical center, it is intended to identify if the professional understands the need to immediately assist the user and if this happens in the hospital.

Regarding the changes to be carried out according to the professionals of the sector for service improvements, we sought to find out what changes they understood to be necessary to adapt the hospital to the service of excellence to the user.

The research participants were approached, in a reserved place, about the research and then for those who agreed to participate, the printed questionnaire was presented to be self-answered. The subjects of the research had their dignity and autonomy preserved and they could withdraw from participating at any time, being guaranteed their freedom to contribute to the study, through an express, free and clarified manifestation.

### Inclusion and Exclusion Criteria

The following inclusion criteria were considered: professionals working in the hospital's ophthalmic care; regardless of employment relationship, but who are in the field and over 18 years of age. For the

exclusion criteria, professionals who do not work in ophthalmic care at the hospital and are on vacation or leave at the time of the research.

#### Data analysis

Quantitative analysis was performed based on descriptive statistics, whose numerical data captured were stored in Microsoft Office Excel® numerical databases, and later interpreted and presented in tables and charts.

## Resultados

### Results

A total of 29 professionals were evaluated, most of whom had been working for 1 to 5 years in ophthalmology (65.5%), in the hospital (72.4%) and in the ophthalmology sector of the hospital (75%). Of these 29 respondents, 68.9% work in the Ophthalmic Urgency / Emergency Department (Table 1).

**Table 1.** Profile of professionals in the Ophthalmology sector at a University Hospital in Belém, PA, 2021.

Variables	n (%)
<b>Gender (F/M)</b>	20/9
<b>Age (years)</b>	35,7 ± 8,4
<b>Working time at the hospital (years)</b>	
1-5	21 (72,4%)
6-10	4 (13,7%)
> 10	4 (13,7%)
<b>Working time in Ophthalmology (years)</b>	
1-5	19 (65,5%)
6-10	7 (24,1%)
> 10	3 (10,3%)
<b>Working time in Ophthalmology Urgency/Emergency care</b>	
Yes	20 (68,9%)
No	9 (31%)
<b>Working time in the Ophthalmology sector of the Hospital</b>	
1-5	15 (75%)
6-10	3 (15%)
> 10	2 (10%)

As for the knowledge of professionals about Urgent Care/Emergencies in the Ophthalmology sector at HUBFS (Hospital Universitário Bettina Ferro de Souza/Bettina Ferro de Souza University Hospital), 68.9% believe that HUBFS is capable of serving U/E 24 hours a day,

53.5% said that the existing equipment at HUBFS adequately serves a patient in a situation of U/E, 82.7% are unaware of the number of U/E in ophthalmology seen monthly at the HUBFS and 51.7% are aware of the external flow of demand for U/E Ophthalmology care (Table 2).

**Table 2.** Knowledge of professionals about Urgent/Emergency care in the Ophthalmology sector at a University Hospital in Belém, PA, 2021.

Variables	Yes	No
	n (%)	n (%)
Ability to service U/E within 24 hours?	20 (68,9%)	9 (31%)
Is it important that the Hospital attends U/E within 24 hours?	26 (96,2%)	1 (3,7%)

Does the existing equipment at the Hospital adequately serve a patient in a U/E situation?	15 (53,5%)	13 (46,4%)
Are you aware of the number of U/E in Ophthalmology seen monthly at the Hospital?	5 (17,2%)	24 (82,7%)
Are you aware of the external flow of demand for the Ophthalmological U/E care?	15 (51,7%)	14 (48,2%)

\*U/E: Urgency/Emergency

Table 3 shows the knowledge about the installed capacity of the Ophthalmological Urgency and Emergency by professionals in the HUBFS sector. According to the interviewees, 58.6% believe that there is an adequate space for the care of a patient in a situation of U/E at the HUBFS, 61.5% said they did not know the care protocol for the

care of a patient in a situation of U/E at the HUBFS. Regarding the prioritization of the care of U/E in relation to outpatients, 82.7% said it happened. And 71.4% stated that the Ophthalmology service has immediate access to the Surgical Center in situations that require U/E surgical intervention.

**Table 3.** Knowledge of the installed capacity of Ophthalmological Urgency and Emergency according to professionals in the sector at a University Hospital in Belém, PA, 2021.

Variables	Yes n (%)	No n (%)
Is there an adequate space for the care of the patient in a situation of U/E in the Hospital?	17 (58,6%)	12 (41,3%)
Is there an assistance protocol for the care of a patient in a U/E situation at the Hospital?	11 (42,3%)	16 (61,5%)
Is the patient who comes for U/E care prioritized over outpatients?	24 (82,7%)	5 (17,2%)
Does the Ophthalmology service have immediate access to the Surgical Center in situations that require U/E surgical intervention?	20 (71,4%)	8 (28,5%)

\*U/E: Urgency/Emergency

When questioning about the suggestions for changes to improve the care of Ophthalmic Urgency/Emergencies by

professionals in the sector at HUBFS, aspects of Personal and Physical Structure were observed, as can be seen in frame 1.

**Frame 1.** Necessary changes according to professionals in the sector to improve the care of Ophthalmological Urgencies/Emergencies at a University Hospital in Belém, PA, 2021.

Staff Structure	Physical Structure
Reset workload	Reception, rest and cafeteria for professionals
Hire professionals	Bed separation
On-call schedule for preceptors and residents	Campus security
Commitment to service	Continuous maintenance of equipment
Trainings	Transport for staff and patients
Improved service protocols	Ambulances, supplies and specific equipment for U/E*

\*U/E: Urgency/Emergency

## Discussão

### Discussion

Ophthalmic emergencies continue to be one of the main causes of morbidity and preventable blindness, being one of the major public health problems in the world, due to the

limited supply of specialized services for this purpose. Access regulation is one of the great challenges for the Brazilian health system, especially for ophthalmic services, because when structured with well-established processes, protocols and flows, it guarantees the organization of access, supply and demand for services and offers quality and resolution in timely assistance to the population.

In this research, we evaluate the regulation of ophthalmic urgency and emergency care from the perspective of health professionals in the sector itself. It was observed that the time of work of these professionals in the ophthalmology sector remains the same in the last 5 years. Therefore, we can assume that the lack of professional turnover represents a positive point for the quality of the service provided, it is believed that the longer the employee's permanence in the sector, the greater the possibilities that he has knowledge of the work processes.<sup>7</sup>

It is understood that it is important to have hospitals that meet ophthalmological emergencies and with experienced and trained professionals for such care, as stability creates guarantees of quality in work processes, due to these professionals already knowing the flows, standards, protocols and structure, as well as the pathologies treated in the services.<sup>8</sup> On the other hand, staff turnover is necessary in the hospital environment, as it favors professionals to develop new knowledge and technical capacity to work in various sectors, in addition to promoting skills, motivation, improving interpersonal relationships and helping to reduce conflicts.<sup>9</sup>

When analyzing the knowledge of professionals about the ophthalmology sector, it was found that the majority considers that the hospital has the capacity to attend 24-hour ophthalmic U/E department, and it was unanimous among professionals to mention the importance of 24-hour care. However, some authors have observed that patients who seek care have diseases and/or eye disorders that are easily resolved and that do not require emergency care.<sup>10</sup> This reinforces the need for professionals, in addition to understanding the importance of the 24-hour service, to know ophthalmological diseases and apply education and prevention measures to avoid the inappropriate use of specialized services in the unit.<sup>11,12</sup>

The professionals interviewed consider that the ophthalmology service has sufficient structure to provide adequate care in situations of ophthalmic U/E department. The professionals' view shows that they recognize the importance of the service. The structure for urgent and emergency care has a strong influence on the quality of the service provided; health institutions must ensure an adequate structure for user assistance, providing for human resources, physical space, inputs and technological resources.<sup>13</sup>

Most professionals are unaware of the number of visits performed by the outpatient clinic. Knowledge of this information by professionals is extremely important for planning actions that are essential for improving the care provided. The dissemination of quantitative data on patients in a hospital is very important to assess the quality of care provided. These indicators are measurement instruments that help professionals understand the type of service being offered to the user, which contributes to improving care.<sup>14</sup>

Regarding the flow of external service, more than half of the workers are aware of the flow of service processes. This fact can be attributed to the length of stay of professionals in the service, where it was verified the absence of turnover of professionals who already work in this sector for a period of at least 5 years. It is known that knowledge of the flow of a service is extremely important to facilitate the user's access to health care, especially eye care, a specialty rarely offered in the state of Pará, in which the only reference for SUS in the State is the service of ophthalmology at the University Hospital. The flow of care established in an institution is of fundamental importance for the articulation in the different levels of health care, considering that it promotes change in work processes.<sup>15</sup>

According to the professionals, it is observed that the hospital has adequate space for the care of ophthalmic U/E in the sector. This fact is of fundamental importance for the quality

of care. The hospital environment for a service to the user in an emergency and eye emergency situation needs to have a specific space for this purpose, which facilitates the agile access of patients, with adequate equipment, a trained, respectful and welcoming multidisciplinary team.<sup>16</sup>

When evaluating the degree of knowledge of professionals in relation to the U/E care protocol, most professionals in the sector said they were unaware of the existence of a protocol for care. The lack of knowledge suggests that the service does not have protocols in place. The daily application of the protocols leads to safe and standardized care based on scientific evidence. However, it is essential for the implementation of the protocols, the permanent education of professionals to increase the provision of care.<sup>17</sup>

Regarding the priority factor in care, most professionals consider that it happens in the service, although they reported the lack of priority protocols described; these professionals already follow a defined priority routine that is carried out after medical evaluation and which, despite not being written, is known to the entire team. However, it is important to implement protocols and training with professionals in the sector with a view to prioritizing the patient and based on the principles of integrality and equity. Thus, there is a better reception of the user and organization of the service.<sup>18</sup>

Regarding the suggestions for changes to improve ophthalmological urgency and emergency department at the Hospital, changes related to personal structure and physical structure were described. However, the quality of an ophthalmic emergency service is measured not only by the facilities and technical performance of the team; quality also has as parameters the issue of the safety of the team in the exercise of its activities, as stated in Ordinance 288/2008<sup>19</sup> of the Ministry of Health in its Annex I, which defines the minimum requirements of physical structure that an institution must have to meet emergencies and 24-hour ophthalmic emergencies.

They also ensure, among others, that the equipment must have preventive and corrective maintenance; it highlights the need for supplies for user care, in addition to highlighting the structural obligation of cafeterias and rest rooms for the teams according to RDC 50 of February 21, 2002.<sup>20</sup>

The workers also highlight the necessary changes related to the physical structure, which must have a specific space for emergency care, in addition to supplies and equipment that are factors that contribute to ensuring rapid care and adequate treatment, with early diagnosis of emergencies and improvement in the patient's prognosis.<sup>16</sup>

The knowledge of professionals about the flow, protocols, installed capacity, physical structure and personnel are important factors that directly interfere in the care of patients in urgent and emergency ophthalmic situations, as they contribute to improve the dialogue with managers and help to reduce the high morbidity and preventable blindness related to eye disorders. According to the results found in the research, there were weaknesses linked to the qualification of the ophthalmology sector, whether of the professionals, the physical structure and the regulation of access that can be remedied through improvements in the structure of the Hospital and the organization of networks of eye care, ensuring full user access from primary care to specialized care.

The research presented some limitations, such as the number of professionals interviewed, but these limitations did not diminish the importance of the study, which made it possible to know the reality of urgent and emergency care provided by a university hospital, from the point of view of the multiprofessional team, thus encouraging discussion on enabling the ophthalmic U/E service.

## Conclusion

This study proposed to identify the regulation of access to ophthalmic U/E care from the point of view of professionals in the sector, and found that most of them: recognize the importance of the service to the community, are unaware of the

protocols, but highlight the need for improvements in the work processes.

Therefore, it is necessary a strengthened access regulation and with the services enabled according to the ordinances in order to obtain an increasingly qualified assistance in search of equity in access and efficiency in services.

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