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EMERGENCY DEPARTMENT OCCUPANCY ASSESSMENT IN LITHUANIA

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Emergency department (ED) occupancy can cause many negative consequences for the quality of patient care. The purpose was to find out the reasons for the increased occupancy of the ED, to determine the appropriate criteria for the assessment of ED occupancy and the limits of waiting queues or waiting time. The heads and managers of Lithuanian in-patient health care institutions and ambulance services, in-patient reanimation and intensive care units and emergency departments were interviewed. The reasons for the increased waiting time of the ED and the appropriate criteria for the assessment of ED occupancy were determined: "the number of patients waiting in the queue" and "the estimated waiting time before doctor examination".

Key words: Emergency Department, Emergency Medical Service, Emergency Department occupancy, Emergency Department overcrowding.

JEL Codes: 111, 112, 118, R49.

1. Introduction

Public representatives, media and politicians have recently expressed dissatisfaction with the fact that patients arriving in emergency departments (EDs) are waiting too long to receive emergency medical service (EMS). As a result of healthcare reform, patients' flows from district hospitals are diverted to regional or republican hospitals. The increase in patient flows in these hospitals may affect the quality of personal health care services, including the prolongation of the services provision time.

Data from a poll of the members of The Council of Lithuanian Patients collected by Health Consumer Powerhouse revealed an increase in waiting times in Lithuania: in 2013, patients experienced waiting times of less than 1 hour, while in 2014, waiting times were 2.5 hours (Gurevičius, 2015; Björnberg, 2015).

In Lithuania, necessary medical assistance is defined by the order of the Minister of Health Care (Lietuvos Respublikos sveikatos apsaugos ..., 2004), and the law (Lietuvos Respublikos sveikatos priežiūros ..., 2016) confirms permitted waiting time limits at ASPĮ. However, the law does not define acceptable queue or waiting times for emergency services or in which cases waiting times can be defined "long".

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In studies in other countries, the problem of queues and increased waiting times is analysed in the context of ED overcrowding or high occupancy levels. ED overcrowding is recognized as a widespread problem occurring throughout the world, bringing challenges to all sectors of the health care system (Kocher, 2012; Hoot, 2008). Taking into account current tendencies, population growth, ageing and the decreasing number of EDs, which reflects their availability, the problem of ED overcrowding is predicted to worsen in the future (Fisher, 2009).

Researchers have identified various reasons for increased patient visits and ED overcrowding (Lowthian, 2012). The number of visits in United States EDs increased by 41% (from 96.5 million to 136.1 million) from 1995 to 2009, while at the same time, the number of EDs decreased by 27% (from 2446 to 1779), in addition to a decreased number of hospital beds (Kellermann, 2006; Sayah, 2014). Visits in Sweden EDs increased 21% in 4 years, exceeding population growth, which was 4.5% during the same period (Andersson, 2001). The number of visits in France stably grew by 4.3% every year from 1996 to 2008 (Durand, 2012; Lowthian, 2012). Overcrowding in Austria was noticed in 84% of EDs, which have more than 20 000 visits per year and increased by 17% in the period from 2006 to 2013 (Sanchez, 2013). Different authors suggest that the volume of services by EDs increases from 3% to 6% per year (Puig-Junoy, 1998; Sinclair, 2007; Ovens, 2011; Lowthian, 2012).

According to data from the Lithuanian Health Center (Gaidelytė, 2015), the total number of patients (identified individuals) visiting EDs in 2001–2014 increased gradually from 278 401 patients in 2001 to 1 637 465 patients in 2014. The number of visits in 2014 compared to 2001 increased 5.9-fold. It should be noted that there are certain types of patients who visit the ED multiple times; consequently, the total number of services does not match the number of patients. The amount of medical services (professional consultations, monitoring) provided in EDs increased each year as well, from 453 273 services provided in 2001 to 1 654 236 services in 2014. These data are consistent with a 5.94-fold increase in services (Gaidelytė, 2015). There were growing tendencies in providing emergency aid in EDs as well. From 2001 to 2014, the amount of emergency aid in EDs increased 4-fold (from 279 179 to 1 114 650 services). The percentage of emergency aid of the total number of services provided during the same period in EDs changed slightly, from 61.6% to 67.4% of the total amount provided in EDs. Tendencies in services provided in EDs from 2001 to 2014 are shown in Figure 1.

ED overcrowding is caused by a number of negative consequences that can be divided into several groups: undesirable outcomes, lower quality service, loss of provider and disturbance of provided services (Wai, 2009; Pines, 2011). All these factors lead to patient dissatisfaction due to the long waiting times for medical examination, medical tests, hospitalization or consultations with further recommendations for ambulatory treatment.

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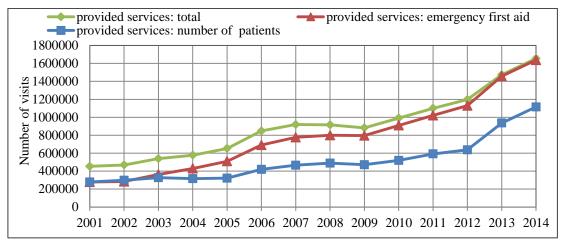


Fig. 1. Services provided in Emergency Departments in Lithuania 2001–2014

Universal terminology for this subject is needed in order to analyse, in detail, possible ED overcrowding, occupancy and queue problems, as well as the appropriate solutions. Previous articles specify the following definitions for ED overcrowding and occupancy (Table 1).

Table 1. Concepts of ED overcrowding and occupancy

Term	Definition	Source
Overcrowding	Situation in which ED function is distracted because the number of patients waiting for examination, tests, treatment or discharge exceeds the physical capabili- ties of the department or staff.	(Australasian, 2002)
Overcrowding	Situation in which needs for emergency treatment exceed present resources for patient care at the ED, hospital or both.	(American, 2006)
Overcrowding	Absence of reliable and widely used methods and criteria that could help categorize patients regarding their acuity or severity.	(Durand, 2012)
Overcrowding	Rating of ED occupancy with patients receiving treatment expressed as an absolute number.	(Hwang, 2004)
Overcrowding	Standardized criteria that are easily understood and validated by factors connected only to ED: waiting time, treatment time and hospitalization time.	(Hwang, 2011)
Overcrowding	Ambulance car diversion to another hospital as a consequence of occupancy, other subjective factors. (feeling of emergency department overcrowding)	(Richardson, 2009)
Occupancy	Measure describing overcrowding regarding the number of patients waiting for treatment.	(Richardson, 2006)
ED waiting time	Period from arriving at hospital until seen by physician (receiving treatment).	(Björnberg, 2015)

Epitomizing the concepts presented above, it can be stated that ED overcrowding is considered any situation that exceeds the comfort or regular ED workload and availability of momentarily provided services. Since patients who come to the ED are

not expected beforehand, the patient flow may be (mostly) variable and the workload of staff working for the ED is thus variable as well. This suggests that if the workload of an ED is too large or is more than can be handled in a reasonable amount of time by scheduled staff working in the ED, this should not be called booting. Therefore, we propose the term "employment" in Lithuania: the ED is "busy" when the number of patients waiting in the queue or waiting time to see a doctor is more than the acceptable (smart) standby time. Since this criterion is not approved at the national level in Lithuania, it is recommended that each institution (hospital) define its own acceptable queue and/or time limits. From a scientific point of view, the problem of long queues and long waiting times in EDs in Lithuania has not yet been researched in detail. Because the ED is the place where primary care and hospital flow of the patients intersect, the ED includes differentiation of the patients in addition to providing services. Waiting times vary with different stages of services and thus the authors suggest specific waiting time definitions presented in Table 2.

Table 2. Time concepts in EDs

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Beginning of ED visit	Patient appeal registration time (fact) in hospital informational sys-	
	tem (registration journal).	
ED waiting time	Time from registration to physician (or nurse evaluating condition)	
ED waiting time	examination of the patient.	
ED visit time	Time from patient arrival (registration) at the ED to the end of primary consultation appointment (ambulatory medical record card closing or beginning hospital medical record card). Visiting time can be divided into several stages: time waiting in ED, physician examination (initial condition assessment), time waiting until medical tests are performed, time for tests to be performed, recurrent physician examination and assignment of treatment, treatment (assigned procedures), documentation (extract) recording (or beginning medical	
Designing of	record for treatment at the hospital).	
Beginning of	Time for beginning (registration) medical record (fact) in the infor-	
hospitalization	mational system of the hospital (registration journal).	
Hospitalization time	Time from deciding to hospitalize patient (beginning medical rec-	
1103pitanzation time	ord) until warded (assigning bed) at hospital department.	
	Time from arrival of the patient (registration) at ED until moment of	
Total time in ED	assigning a bed at hospital department (visiting time at ED and hos-	
	pitalization time).	

The **aim** of this study – to explore and assess the opinions of hospital and emergency medical service organization managers and doctors for the purpose of employment, to determine appropriate criteria for emergency department occupancy and universal acceptance of patients and to quantify medical staff queues and waiting time limits in Lithuania.

Methods and materials. This study used a systematic analysis of the scientific literature in which statistical reports on the health care systems of Lithuania and other countries were analysed, synthesized and generalized. We also quantified a survey carried out by questionnaire and statistically analysed the data to make theoretical generalizations. Questionnaires were made by one of the authors (G. Virketis). Questionnaires were made regarding various previous publications (Pines, 2011; Hwang,

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2004; Pines, 2015; Arplin, 2003). Respondents were Lithuanian (republic-, regionand district-level) hospital administrators, hospital intensive care unit managers, ED managers, and Lithuanian EMS institution managers. We determined that a sample of 117 respondents or more was needed to reach statically significant conclusions. A total of 118 respondents answered the questionnaires properly.

Questionnaire data were analysed using SPSS 21 software. The relationship between signs in statistical analysis was evaluated using the Chi-square (χ^2) test with 95% intervals as the significant level for comparing means. Statistically, differences were considered significant at p<0.05 and strongly significant at p<0.01. The response option number 6, corresponding to the value "I do not know", was interpreted as not answering the question; the average score was calculated on a 5-point system where a score of 1 corresponded to the opposite of score 5.

2. Results

The results showed that 73.7% (n=87) of the respondents believed that the ED is often very occupied, whereas 13.6% (n=16) of the respondent disagreed with this statement. A total of 12.7% (n=15) of the respondents had no opinion on the ED. This study aimed to determine whether respondents felt that there is a shortage of doctors in the ED, which could impact occupancy and longer waiting times. The dominant responses were: "Sufficient, but there is a need on holidays" and "Sufficient, because other physicians being directed to ED if needed". Replies are shown as percentages in Figure 2.

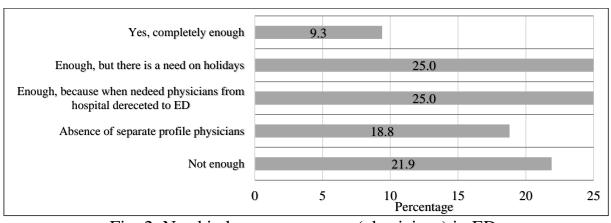


Fig. 2. Need in human resources (physicians) in EDs

The results did not differ significantly according to the sociodemographic characteristics of the respondents: age, gender, experience, founder **of** health care organization, level of hospital and type of hospital professional (χ^2 criteria, p< 0.05). Most of the respondents (59.4%) indicated that there are enough doctors in the ED, or enough but with reservations. More than one-fifth of the respondents (21.9%) indicated that there are not enough doctors in the ED constantly. Most recognized a shortage of physicians in ED in republic (26.7%), region (23.5%), and district

(20.7%) hospitals. In this research, we tried to determine common factors that prolong waiting times and possibly increase occupancy in the ED. Average scores are shown in Figure 3.

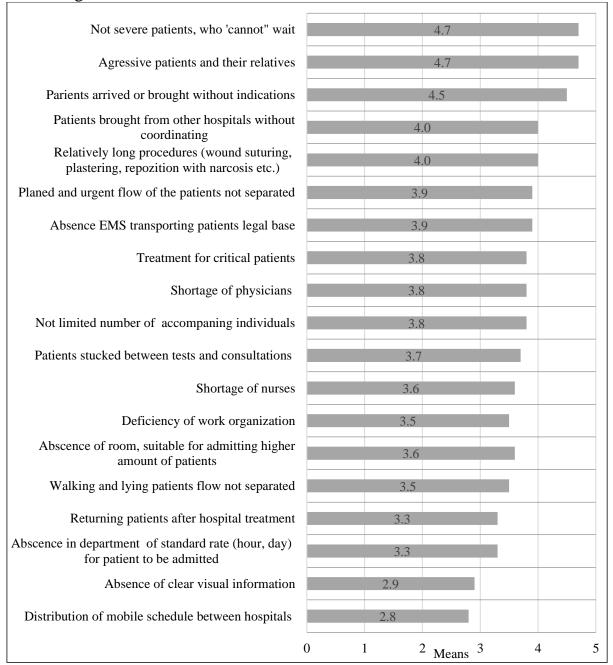


Fig. 3. Evaluation (1 – almost never, 5 – very often) of the answers to the question: "In your opinion, how often do the listed ED factors increase waiting time until treatment is provided? "

After evaluation of respondents' opinions, the highest ratings corresponded to "not severe patients, who cannot wait" $(4.7\pm0.61~\text{SD})$, the "aggressive patients and their relatives" $(4.7\pm0.73~\text{SD})$ and "patients who arrived without indications" $(4.5\pm0.88~\text{SD})$. The average mean of these responses did not differ statistically from each other (t-test for dependent samples, p>0.05) but were significantly higher compared to all other remaining responses (t-test for dependent samples, p<0.01). The results did not differ significantly according to the respondents' age, gender, experi-

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ence, or the level of the hospital or health care centre, but the difference was statistically significant (χ^2 , p<0.05 criterion) after taking into account the founder of the health care organization and very significant after taking into account the type of specialist (χ^2 , p<0.01). More than half (51.1%) of municipal representatives of health care believed that patients brought to the ED without a previous arrangement with the accepting hospital prolong waiting time for other patients. More than one third of the Health Care Ministry institution representatives approved of this view. These results are strongly significant (χ^2 criteria, p<0.01). Most of the municipal representatives of health care (80.9%) approved the view that aggressive patients increase waiting times. A bit less, but still more than half (60%), of Health Care Ministry institution representatives agreed with this opinion. Forty percent of representatives of Health Care Ministry institutions felt that the absence of time when patients are admitted (hour, day) in the ED increases waiting time. Municipal representatives agreed much less frequently (8.5%). These results were significantly different (χ^2 criteria, p<0.05).

Most ED managers (90.3%) agreed with the view that the presence of patients without indications for treatment in the ED increased waiting times. This view was shared by half of the hospital managers. These results were highly significantly different (χ^2 , criteria p<0.01). Most managers of EDs (87.1%) and managers of hospitals (62.5%) believed that non-urgent patients increase waiting times. These results differed significantly (χ^2 criteria, p<0.05).

Other important and common factors identified by the respondents were: the "low level of availability and quality of the services"; "drunk and non-urgent patients brought by EMS"; "absence of the legal bases"; and "the main problem is the lack of EMS patient rules, brings all and without restrictions".

This study aimed to determine whether there are qualitative indicators of the time taken until the patient is examined by a physician. These indicators, which could be the basis for further improvement of the services provided, include the time from arrival to physician examination of the patient for the first time at the ED, admitted and finished consulting in primary care? The results for these questions did not differ significantly according to the sociodemographic characteristics of the respondents (χ^2 criteria, p>0.05). A total of 90.5% of respondents replied that there is an approved inspection time during which the patient should be examined for the first time by the doctor in the ED. This time is regulated by a Ministry of Health order (Lietuvos Respublikos..., 2016). However, almost a tenth of the participants offering the necessary health care assistance failed to comply with this order. Many (13.3%) of the respondents who responded negatively were representatives of the republic-level hospitals.

A total of 67.7% of respondents replied that there is an approved time during which the patient should be hospitalized. It should be noted that this time is not mandated by law, but hospitals may adopt this rule. The remaining 30.6% of the respondents replied negatively, whereas the other 1.7% were unable to answer this question. Most of the positive responses of the representatives were from district-level hospitals (75.9%) and the fewest were from republic-level hospitals (57.1%).

Responses on the consultation time for the outpatient basis were distributed as follows: nearly a third of respondents (29%) reported that there is a confirmed period during which the patient must be consulted in the hospital to advise on an outpatient basis. More than two-thirds of those polled (66.1%) indicated that this time is not approved by the council of the hospital (also not by the legislation).

The following two questions were used to assess at what point the waiting queue to access a doctor is considered "long" in the ED and also what queue structure (waiting time in minutes or the number of patients in the queue) is more acceptable and understood. Respondents answered the question: "what waiting time to enter the doctor room in the ED is considered long?" Variability of the answers is shown in Figure 4.

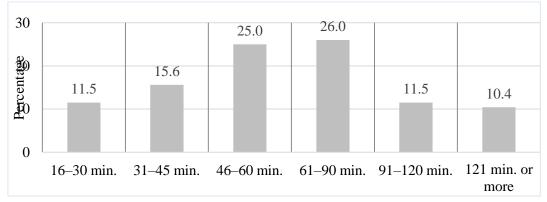


Fig. 4. Answers to the question: "In your opinion, what waiting time for seeing a physician in ED would you consider as long?"

As shown in the figure, the dominating opinion was that more than 46–90 minutes prior to seeing the doctor in the ED is regarded as "long". The results did not differ significantly according to the sociodemographic characteristics of the respondents: age, gender, length of service, level of hospital, founder of hospital and type of respondent profession (χ^2 criteria, p> 0.05). According to the hospital level, a waiting time of 46 to 60 minutes was considered "long" by many respondents from regional-level hospitals (33.3%) while representatives of the republic-level hospitals (33.3%) identified a "long" waiting time as 61–90 minutes. The respondents of district-level hospitals answered equally (25% of cases) for both periods: from 46 to 60 minutes and 61-90 minutes. Responses to the question "what is the standby queue (the number of patients in the queue) in the ED that is considered to be long?" are shown in Figure 5.

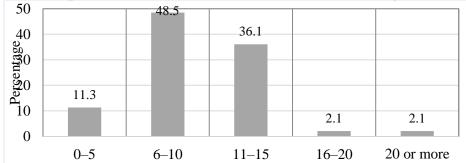


Fig. 5. Answers to the question: "In your opinion, what queue (number of patient in the queue) to see a physician in ED would you consider as long?".

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The dominant opinion (48.4%) was that 6–10 patients in the queue to access the doctor is considered a long waiting queue. Some argued that the waiting queue should be considered long when the queue is 11–15 patients (36.1%). The results did not differ significantly according to the sociodemographic characteristics of the respondents: age, gender, length of service, level of hospital, founder of hospital and type of respondent profession (χ^2 criteria, p>0.05). The percentage of respondents who considered a waiting queue from 6–10 patients to be long was almost equal among the hospital types: 52.4% of respondents from district-level hospitals, 49.5% from republic-level hospitals, and 45.2% from regional hospitals. This study identified criteria that could be appropriate to describe the employment of EDs. The answers are shown in Figure 6.

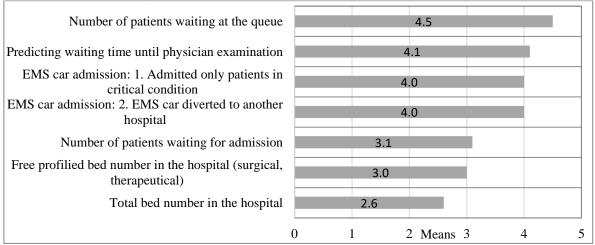


Fig. 6. Evaluation (1 - completely disagree, 5 - completely agree) of the answers to the question: "Which criteria would apply the best to characterize the occupancy in ED?"

Analysis of the results revealed that the main criterion for a large level of employment in EDs is considered to be "the number of patients waiting in the queue" (an average of 4.5±1.00 SD). This response significantly differs from the average when compared to the average of all of the remaining responses (t-test for dependent samples, p<0.01). Other relevant criteria that could be used as important guiding criteria for the employment of EDs could be: "the expected waiting time before a doctor's examination" (mean 4.1), "the adoption of Ambulance crews only to patients in critical condition" or "redirecting Ambulance teams (because of crowded ED) to another hospital" (average 4). Partially suitable criteria (mean 3.1) are "the number of patients waiting to be hospitalized" and "the number of vacant profiled inpatient beds". The most improper criterion (an average of 2.6) was considered to be "the total number of inpatient beds".

3. Discussion

Increasing employment of EDs is a complex phenomenon that is part of a growing economy, an ageing population and rising life expectancy (Sprivulis, 2006). A survey found that more than two-thirds of all respondents believed that EDs in Lithuania

are busy and overcrowded very often. However, there are currently no nationally approved criteria for high ED employment. Notably, this opinion formed in the last ten years, during which the number of visits to EDs has increased significantly.

Regardless of the variety of cases and the workload of EDs, waiting times and the durations of various processes are becoming longer, increasing the need for staff (Wai, 2009; Pines, 2011). However, the present study found that there is no shortage of doctors in most hospitals except during summer vacation time. This problem is solved by recruiting doctors from other hospitals units to EDs, since all doctors who have a medical license can work in an ED.

The effectiveness of the provision and the quality of EMS in EDs in many cases depends on the provision of the service provided in a timely manner. The scientific literature indicates that a large proportion of ED visitors do not need emergency assistance; therefore, the presence of these patients in the ED makes the waiting time longer for others (Wilper, 2008; Durand, 2012). In a previous study, to identify the factors prolonging the waiting time, the three categories of patients who met the highest average of the evaluation were as follows: "Easy-to-patient patients who cannot wait", "Aggressive patients and their relatives" and "Patients without indications". Assumptions can be made that aggressive and demanding patients who come to the ED by themselves or by ambulance without medical indications, in order to avoid conflict situations, are served first, and those patients in need of emergency assistance have to wait longer. This means that, despite management measures ensuring a sufficient number of employees, layout of premises and equipment, waiting times in EDs are significantly prolonged by other factors; the unfavourable situation of patient triage, patient flow regulation and legal framework remains.

Patients, in rating the quality of service, often complain that the service was not provided in a timely manner or was not provided as quickly as hoped. As part of the solution to the problem, the Australian healthcare reform principals have reached the National Health Service, established in 2001, entitled "4 hour rule". This rule stipulates that 98% of ED patients should be hospitalized or released within 4 hours of their arrival (Jones, 2010). In the UK as well, the rule was introduced in 2000 after it was found that patients of EDs spend more than 72 hours in the ED, but since 2010, other assessment criteria reflecting the timeliness, quality and security of service have been adopted (Heyworth, 2011). The long presence of the patient in the ED can be seen as inefficient work by the ED. Even if the patient is waiting to be hospitalized or receive the doctor's statement after the examination and medical assistance, his satisfaction with services provided may be impaired, and the patient's health condition may deteriorate (Sayah, 2014).

The present study revealed that the majority of the respondents (90.5%) answered that there is a time during which the patient should be examined for the first time by the doctor in the ED, and this time is approved by the Ministry of Health of Lithuania. More than two-thirds of the respondents noted that there is an approved time during which the patient should be hospitalized, and almost a third of respondents (29%) reported that there is a confirmed period during which the patient must be advised in the ED on an outpatient basis. This allows us to make assumptions that these institutions have greater attention to emergency medical assistance services

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than is currently governed by legislation. Based on researcher data, the average hospitalization time lasts approximately 3.7 hours (the longest average waiting time was 8.3 hours). However, this time may vary on different days of the week and the average time may be up to 13.1 hours (Felton, 2011). This study did not aim to determine how much time individual institutions required for ED visits and hospitalization.

A long queue of patients psychologically indisposes negatively on the patient, and even more on accompanying persons. Sometimes the queue is not known exactly if the patients are sorted by severity of their condition and priority of medical assistance. The queue is known, of course, only if the management of the rows regulation system is running. Otherwise, the doctor's cabinet followed the principle of "live" queue. The data of the authors reveals that the average waiting time before the doctor examination was 46.5 min., and the total time of the visit in the ED was at 3.2 hours (McCaig, 2005). Other studies have shown that the visit time in the ED can reach 96 minutes, and hospitalization of patients can reach 183 minutes (Locker, 2005). Visit time in the ED varies and may be from 180 minutes, of which only 5 minutes was assigned to assessment and 6 minutes to the doctor examination, with the remaining time allocated to medical examination and tests (Amina, 2016). In larger centres, the average visit time in EDs can reach 305 minutes (Movahednia, 2012). More than two-thirds (79.7%) of patients are examined by doctors in EDs in up to 30 minutes (Janušonis, 2016). Survey data indicate that the levels of the hospitals most acceptable waiting time in the queue to access a doctor is up to 46 to 90 minutes, according to the number of patients in the queue when there are no more than 6-10 patients. In medical practice, the consultation of one patient with the evaluation of the minimum procedure, research, and service documentation takes mostly 15 minutes, and it is consistent with the outcome of the study. However, this time does not fall within the patient's time spent to take the laboratory or radiologic tests and results. Therefore, if the patient treatment is carried out with the higher volume procedures (wound stitching, plastering, etc.) and other specialist consultations are provided, the visit in the ED can continue to 120 minutes or more. Sadly, there are no Lithuanian scientists or researchers working on the patient's wish for understanding or suggestions, or how much time they should spend in the ED. Additionally, it is not known how long the EMS actually takes in Lithuanian EDs, with the exception of Health Consumer Powerhouse data from 2015.

ED employment in different countries is assisted by national or separate institution (hospital) approved criteria. Scientists separate ED employment factors into several groups: access factors (input), capacity factors (throughput), output factors (output), multidimensional scaling, and the subjective opinions of doctors. However, in the absence of a single criterion characterizing ED employment, the time interval and the number of patients are considered to be the most appropriate specific instruments (Hwang, 2011). In Lithuania, such criteria have not been approved to compare employment in EDs, and treatment in different hospitals with data from other countries is not possible. In Lithuania, ED employment is seen only as the subjective opinion of hospital staff or the executive of the ED. The present study evaluated mostly

identified criteria which could describe the ED. The results of the study are in accordance with the criteria proposed by authors from other countries; the most suitable criteria for employment in Lithuanian EDs are "the number of patients waiting in the queue" and "the estimated waiting time before doctor examination".

4. Conclusions

- 1. EDs in Lithuania are busy very often, though there are no employment criteria approved at the national level. Such opinions have increased in the last ten years because of a significantly increased number of visits in the EDs, although there is no lack of doctors to work in EDs.
- 2. Waiting time is extended by "easy-to-patient", "cannot wait" patients, aggressive patients and their loved ones, and those who have no medical indications for urgent medical aid. To avoid conflicts, such patients are served before others.
- 3. The majority of hospitals are running on hospitalization time and not established waiting time in the ED. This allows us to make assumptions that these institutions pay greater attention to EMS than is currently governed by legislation.
- 4. The establishment of quality indicators is an important step in ensuring the provision of services and the attention of the ED by bringing them as a priority for the further improvement of the service. The most suitable criteria for ED employment in Lithuania are to evaluate the number of patients waiting in the queue and to provide a waiting time before a doctor examination. The most acceptable waiting time in the queue prior to entering a doctor examination room is up to 45 minutes, according to the number of patients in the queue up to 6.
- 5. Capitalized key ED employment characteristics and the waiting times of services are seen as an appropriate tool for patient flow management. At the same time, these criteria could be continuously available for patients.

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PRIĖMIMO SKUBIOS PAGALBOS SKYRIŲ UŽIMTUMO VERTINIMAS LIETUVOJE

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Santrauka

Ilgėjanti gyvenimo trukmė didina ligų dažnumą ir paplitimą, tai padidina pacientų srautus į priėmimo skubios pagalbos skyrius (PSPS) ir ilgina eiles. PSPS užimtumas gali sukelti daug neigiamų padarinių sveikatos priežiūros kokybei, padidinti pacientų nepasitenkinimą. Tai tampa ypač aktuali problema atokesniuose Lietuvos regionuose, kur dėl stacionarinių paslaugų centralizavimo pacientai nukreipiami į kitas ligonines. Šio tyrimo tikslas – nustatyti tinkamus vertinimo PSPS užimtumo kriterijus ir visuotinai pacientams ir medikams priimtinus laukimo eilės ir/ar laukimo laiko ribas Lietuvoje. Išnagrinėta mokslinė literatūra ir statistinės ataskaitos apie PSPS teikiamas paslaugas Lietuvoje ir kitose šalyse, apklausti Lietuvos stacionarinių asmens sveikatos priežiūros įstaigų ir greitosios medicinos pagalbos įstaigų vadovai, reanimacijos ir intensyvios terapijos skyrių vadovai bei PSPS vedėjai. Nustatytos pagrindinės laukimo laiką PSPS ilginančios priežastys ir tinkami vertinimo PSPS užimtumo kriterijai: "laukiančių eilėje pacientų skaičius" ir "numatoma laukimo trukmė iki gydytojo apžiūros". Tyrimo metu nustatyta, kad toleruotina laukimo trukmė eilėje iki patekimo pas gydytoją PSPS yra nuo 46 iki 90 min., pagal pacientų skaičių eilėje nuo 6 iki 10 pacientų.

Raktiniai žodžiai: priėmimo skubios pagalbos skyrius, skubi medicinos pagalba, priėmimo skubios pagalbos skyriaus užimtumas ir perpildymas.

JEL kodai: 111, 112, 118, R49.