PURPOSE OF PATIENT SATISFACTION FOR EFFICIENT MANAGEMENT OF HEALTHCARE PROVISION

Gavurova B., Kovac V., Khouri S.*

Abstract: The management of the healthcare facilities is closely related to their evaluation. A very crucial point of this process is assigned to the patients who are the most important persons to assess the offered healthcare service. The aim of the paper is to evaluate the selected quality criteria of the healthcare provision in the healthcare facilities in the Slovak Republic. A territorial view is employed too in order to carry out the analytical process. The case mix index, the intensive care unit transfer ratio, the long-term rehospitalisation ratio, the mortality rate, and the operation mortality rate serve as the input dimensions for the processing the regression analysis for the sake of the construction of the regression models explaining the satisfaction of the patients whose evaluation comes from the public database altogether with the other explored dimension. The analysis outcome demonstrate that all these variables influence significantly the patient satisfaction and the ten districts of the Slovak Republic possess also statistical significance.

Key words: evaluation; healthcare facility; patient; health status; regression analysis; Slovak Republic.

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Introduction

The quality of healthcare is an important part of many activities and programmes of the health systems at the national and international levels. To ensure and to improve the quality of healthcare is important not only for patients, but also for healthcare facilities and other healthcare providers, health insurance companies, regulatory bodies, as well as for society as a whole. A system of the quality indicators is applied in order to measure the quality of a healthcare provision.

From an international point of view, the process of quality assessment is comprehensive in the terms of a challenging comparability of the monitored indicators. Each country applies the indicators that are linked to its health system

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POLISH JOURNAL OF MANAGEMENT STUDIES Gavurova B., Kovac V., Khouri S.

and to national data registers. The method of collection, processing and evaluation of the individual indicators is also linked to the needs of the individual healthcare providers, as well as to the other subjects of the health system (van Baal et al. 2020). Although the high variability of the indicators restricts international comparability, there are several methodological procedures from a national point of view that healthcare facilities apply in order to improve the management of health processes (Sopko and Kočišová, 2019). Even though, their unification and standardisation supports the creation of an international comparison platform. On the other hand, it limits the detection of weak points in the processes of the healthcare facilities, not only medical and diagnostic, but also economic.

Healthcare quality management is a part of the management of the healthcare facilities and thus, it affects their overall efficiency (Briestenský and Ključnikov, 2019). The low quality of a healthcare provision in the healthcare facility is an issue for patients who suffer from errors in the healthcare system, but also for a society that incurs higher costs than would be necessary. From the procedural point of view, the quality of health care can be considered a complex problem that has an overlap into several dimensions. It is influenced not only by the external environment, which the political situation in the country, the economic environment, the legislative environment, the model of financing of the healthcare services are assigned to, but also internal environment plays an important role, whilst it covers the management of the healthcare facilities, expertise and professionalism of medical staff, the specifics of individual patients, the individual treatment procedure, and so forth (Reed et al. 2021). These aspects affect the healthcare outcomes that may vary from one patient to another patient considerably (Neves et al. 2020; Ranucci and Berry, 2021).

The low quality of healthcare is not an issue for patients who suffer from healthcare errors, nor for a society that deserves more expenditures than it would be necessary. The quality of healthcare is a comprehensive problem that can be perceived from the various points of view. In general, the health system as well as in the dimension of the quality of healthcare provision is sensitive to political events, economic conditions, and expertise and professionalism of staff. It has to take into account the citizen right to a healthcare access, the ethical duty of the physician to treat, the level of the economic conditions of the country, the model of financing healthcare services, the specifics of the particular patients, and the individual treatment procedure. The quality of healthcare is an important indicator of patient satisfaction, which also affects a loyalty. Also, patient satisfaction is an important indicator of measurement systems influencing the dimension of finances, processes and employees. It is also a means of national benchmarking rankings that are also supported by the national and international institutions.

The data collection to assess the quality of healthcare provision is procedurally and methodologically demanding, as data is collected not only qualitatively but also quantitatively and the collection of this data often depends on the willingness of respondents – patients and their financial literacy. This changes with the patient age as well as the influence of various socio-economic factors. Supporting national institutions to create databases to assess patient satisfaction enables many research teams to develop methodological platforms for measurement systems and to create benchmarking indicator systems. They also represent the basement for the development of the standards in healthcare for healthcare providers as well as regulatory bodies in the healthcare system. These consistent facts create a motivation to carry out our research, whose aim is to evaluate the selected quality criteria of the healthcare provision in the healthcare facilities in the Slovak Republic. The results of the analysis support the improvement of healthcare management and the creation of a platform for national as well as regional strategic healthcare plans.

Literature Review

The patient satisfaction is a very wide topic in a field of a healthcare service provision. Hence, there are many areas where it can be under investigation. Besides this, a variety of the different aspects are found in this subject matter.

Ahmad et al. (2013) examine the impact of the marketing mix on patient satisfaction in their study. Their research was carried out in the private hospitals and the research sample consists of the 34 private hospitals localised in the city of Jeddah in the Kingdom of Saudi Arabia and their 272 hospital managers. The results point to the differences in the strategies of the marketing mix in the various hospitals. The authors point out the importance of the impact of the marketing mix on patient satisfaction and they emphasise the need to examine the marketing mix related to the other performance criteria of a healthcare facility.

Gutysz-Wojnicka et al. (2012) evaluate an issue of measuring patient satisfaction in the healthcare providers localised in the Republic of Poland. It points to the absence of the Polish scales to assess patient satisfaction with nursing care. The authors assess patient contentment with surgical and nonsurgical wards in the country through an application of the Newcastle Satisfaction with Nursing Scale. The results show that the most satisfied patients lie in the district hospitals, followed by the provincial hospitals and the university hospitals. This means that the structure and type of hospital significantly affects the level of patient satisfaction.

Berhane and Enquselassie (2016) examine the relationship between patients' expectations and their satisfaction in the consultation of patients in the outpatient healthcare service. There are the nine state hospitals in the research sample and the method of interviewing is applied to a set of the 776 patients. The analysis of the obtained data confirms a significant difference between the preconsultation expectation and the postconsultation expectation. The postconsultation one, which is perceived by a health status, is constructed by the factors identified as the increasing patient satisfaction. Any disappointments or negative experiences with

the consultations in the past also have a negative impact on the current patient satisfaction.

Githemo Grace et al. (2018) points to the need to improve the patient satisfaction measurement processes and to evaluate the current measurement processes as insufficient considerably. For this reason, they conducted the experimental study to assess the degree of patient satisfaction with the quality of nursing in the two public hospitals in the Republic of Kenya. The questionnaire is applied in order to collect the data. The results of the study demonstrate that a level of perception of the individualised quality healthcare by the patients depends on a level of education, so it is important to help the patients to understand the healthcare processes with the intention of a sufficient appreciation of the quality of healthcare, which is not given enough attention.

Many research studies examine patient satisfaction with the implementation of treatment processes. Schreiter et al. (2020) explore the effects of the surgical transitional care programmes and the subsequent impact of these programmes on the patient satisfaction and the fiscal metrics. The study also points to the importance of the patient education that also has an impact on the evaluation of the healthcare by the patients.

Bekelis et al. (2020) scrutinise the patient satisfaction with the treatment processes associated with the neurosurgical operations. The aim of the study is to determine whether publicly the reported benchmarks correlate with the quality of physicians and institutions. The research sample consists of the 166,365 patients and the propensity adjusted regression analysis is applied in order to process the data.

Howard et al. (2020) points out that the form and process of measuring patient satisfaction is currently changing in the present time and that great attention is paid to monitoring the clinical outcomes for the sake of measuring the patient satisfaction. The authors describe the process, which the orthopaedic surgeons examine changes in the patient satisfaction through postoperative satisfaction monitoring by. The research material is in a form of questionnaire. The outcome of the study makes it possible to improve the measurement process and thus, to identify the factors that patients consider to be the key ones for assessing the positive satisfaction with the treatment processes.

Lucadamo et al. (2020) examine the factors influencing the patient satisfaction in the particular hospitals. The study employs a research questionnaire that was distributed in the hospitals in the city of Naples in the Italian Republic. The analysis is performed in a form of the four regression models. The findings show that the most important parameters for the increasing patient satisfaction are the policy aimed at developing the competencies and abilities of the healthcare facility staff and at maintaining the high standards of hygiene and cleanliness.

Also Zawisza et al. (2020) report that the importance of measuring and evaluating the patient satisfaction has changed recently. This is due to the growing number of

2020 Vol.22 No.1

the chronic conditions and the functional limitations resulting from the demographic changes and the aging of the population. The authors evaluate the overall satisfaction of the patients with the healthcare system in the Republic of Poland. They focus on the evaluation of the relationship between patient and physician, the evaluation of access to healthcare and the other socioeconomic and demographic characteristics. The study points out the importance of the psychosocial dimension in evaluating the relationship between patient and physician. The participation of patients in the decision-making process or access to outpatient healthcare represent the important determinants of satisfaction with the healthcare system of the country.

Winter et al. (2020) emphasise the close link between the patient satisfaction and the staff shortage. The authors state in their study that the patient satisfaction depends on an enough availability of the staff and thus, the hospitals are able to influence the patient satisfaction to the extent that they can regulate the staff shortages. They underline that the hospitals in the Federal Republic of Germany are affected by the shortage of healthcare staff in the labour market. According to them, there are few studies on how the environmental and organisational factors explain the variations in the staff shortages and how such a shortage measure relates to the explored dimensions with a potential relevance of the shortages linked to the patient satisfaction.

Mobolaji-Olajide et al. (2020) evaluate a level of the satisfaction of the hospitalised patients and they examine the factors that most influence this satisfaction, especially related to nursing care. The research sample consists of the 131 patients from the randomly selected university hospital in the city of Lagos in the Federal Republic of Nigeria. The questionnaire is a way of the data collection. The authors define that there are the ten factors that affect the patient satisfaction with nursing care – the individualised care, the patient feeling accepted by nurses, the nurses' reassurance, the early discharge plan, the quick response to patient needs, the good knowledge of conditions, the good nurse to patient relationship, the improved confidence, the timely medications, the relative involvement in patient care with nurses cheerful and gentle approach to such care.

Data and Methodology

The origin of the explored data lies in the public online database Kde sa liečiť – in the English language called Where to Heal (Ineko – Inštitút pre ekonomické a sociálne reformy, 2020). It is available through the website of the Institute for Economic and Social Reforms (Ineko – Inštitút pre ekonomické a sociálne reformy). It is created by this institution with a collaboration of the Transparency International Slovakia and the health insurance companies Dôvera zdravotná poisťovňa and Union zdravotná poisťovňa. The covered time span begins in the year 2014 and ends in the year 2018.

The explored healthcare facilities are localised in the following districts numbered according to the promulgation of the Statistical Office of the Slovak Republic: the Bratislava II District – 102, the Dunajská Streda District – 201, the Galanta District -202, the Piešťany District -204, the Skalica District -206, the Trnava District -207, the Myjava District - 303, the Partizánske District - 305, the Považská Bystrica District - 306, the Prievidza District - 307, the Trenčín District - 309, the Komárno District – 401, the Levice District – 402, the Nitra District – 403, the Nové Zámky District – 404, the Topol'čany District – 406, the Čadca District – 502, the Dolný Kubín District – 503, the Liptovský Mikuláš District – 505, the Martin District – 506, the Ružomberok District – 508, the Žilina District – 511, the Banská Bystrica District - 601, the Brezno District - 603, the Lučenec District -606, the Revúca District -608, the Rimavská Sobota District -609, the Zvolen District – 611, the Žiar nad Hronom District – 613, the Bardejov District – 701, the Humenné District – 702, the Levoča District – 704, the Poprad District – 706, the Prešov District – 707, the Snina District – 709, the Stará Ľubovňa District – 710, the Svidník District – 712, the Vranov nad Topľou District – 713, the Košice II District -803, the Košice IV District -805, the Michalovce District -807, the Rožňava District – 808, the Spišská Nová Ves District – 810, the Trebišov District - 811 (The Statistical Office of the Slovak Republic, 2011).

The explored healthcare facilities are as follows – sorted according to their location in the districts with the district code: University Hospital Bratislava - 102, Hospital with Clinic Dunajská Streda - 201, Saint Luke Hospital with Clinic Galanta – 202, Alexander Winter Hospital – 204, Teaching Hospital with Clinic Skalica – 206, Teaching Hospital Trnava – 207, Hospital with Clinic Myjava – 303, Hospital Partizánske - 305, Hospital with Clinic Považská Bystrica - 306, Hospital with Clinic Prievidza Based in Bojnice – 307, Teaching Hospital Trenčín – 309, Hospital Komárno – 401, Hospital Levice – 402, Teaching hospital Nitra – 403, Teaching Hospital with Clinic Nové Zámky – 404, World of Health Hospital Topoľčany – 406, Kysuce Hospital with Clinic Čadca – 502, Hospital with Clinic Dolný Kubín – 503, Liptov Hospital with Clinic Liptovský Mikuláš – 505, University Hospital Martin - 506, Central Military Hospital of the Slovak National Uprising Ružomberok – Teaching Hospital – 508, Teaching Hospital with Clinic Žilina – 511, Franklin Delano Roosevelt Teaching Hospital with Clinic Banská Bystrica - 601, Hospital with Clinic Brezno - 603, General Hospital with Clinic Lučenec – 606, Hospital with Clinic Revúca – 608, General Hospital Rimavská Sobota – 609, Hospital Zvolen – 611, General Hospital in Žiar nad Hronom – 613, Saint James Hospital with Clinic Bardejov - 701, Andrej Leňo Hospital Humenné - 702, General Hospital with Clinic Levoča - 704, Hospital Poprad - 706, Ján Adam Reiman Teaching Hospital with Clinic Prešov – 707, Hospital Snina – 709, Ľubovňa Hospital – 710, Army General Ludvík Svoboda Hospital Svidník – 712, Vranov Hospital – 713, Louis Pasteur University Hospital Košice – 803, Hospital Košice-Šaca, 1st Private Hospital - 805, Štefan Kukura Hospital with Clinic

Michalovce – 807, Saint Barbara Hospital with Clinic Rožňava – 808, Hospital with Clinic Spišská Nová Ves – 810, and Hospital with Clinic Trebišov – 811.

The main analytical approach is the regression analysis. The linear regression analysis and the panel regression analysis are employed. The linear regression is applied in a form of ordinary least squares, whilst the panel regression in a form of the fixed effects approach.

The model formula contains the variables which the case mix index, the intensive care unit transfer ratio, the mortality rate, and the operation mortality rate belong among. The linear regression models possess the additional factor variable expressing the district in form of a geographical perspective of territory. It represents the fourth tier of the Nomenclature of Territorial Units for Statistics (European Commission, 2003). The explained variable is for all the models the satisfaction ratio.

In order to ensure the statistical significance of the created regression models, the potential common issues of such models are tested. On the one hand, the Jarque–Bera test is employed with the purpose of testing the normal probability distribution of the regression model residuals. On the other hand, the Chow test in order to find out poolability of the panel regression model with a potential application of the Durbin–Wu–Hausman test. The outcome of each test is evaluated at a five-per-cent level of statistical significance.

The following abbreviations assigned to the variable are applied: the case mix index as CMI, the intensive care unit transfer ratio as ICUTR, the long-term rehospitalisation ratio as LTHR, the mortality rate as MR, and the operation mortality rate as OMR.

Analysis and Discussion

The whole analytical part is divided into the two sections. The first one is devoted to the panel regression, whilst the second one to the linear regression. The both sections are assigned by the same model formulas.

The panel regression model expresses the fitted values of the satisfaction ratio according to the fixed effects approach. This application of this regression model is confirmed by the c investigating poolability with the test statistic at a level of 4.2913 and p-value standing at $3.4608 \cdot 10^{-3}$ resulting in a rejection of the null hypothesis. The Durbin–Wu–Hausman test cannot be carried out because of impossibility of a construction of the random effects regression model due to a potential unobserved heterogeneity. Hence, a fixed effects approach is selected in order to demonstrate the regression coefficients. Also, the Jarque–Bera test statistic reaches a value of 0.1154 with p-value at a level of 0.9439 meaning a nonrejection of the null hypothesis. The following table offers their estimated values.

CMI -0.0736 0.0338 3.2657.10 ICUTR 0.0563 0.0216 1.1086.10 MR -1.2628 0.4043 2.4986.10 OMR -3.7154 1.5811 2.1278.10	Regressor	Regression coefficient	Standard error	P-value
ICUTR 0.0563 0.0216 1.1086.10 MR -1.2628 0.4043 2.4986.10 OMR -3.7154 1.5811 2.1278.10	CMI	-0.0736	0.0338	$3.2657 \cdot 10^{-2}$
MR -1.2628 0.4043 2.4986.10 OMR -3.7154 1.5811 2.1278.10	ICUTR	0.0563	0.0216	$1.1086 \cdot 10^{-2}$
OMR	MR	-1.2628	0.4043	2.4986 . 10 ⁻³
OMA 5.7154 1.5011 2.1270 .10	OMR	-3.7154	1.5811	$2.1278.10^{-2}$

Table 1. Panel Regression Model

Source: own elaboration by the authors

The coefficient of determination of the model reaches a level of 0.4027 meaning that a share of the 40.27 % of variability of the input data set is explained by this regression model. It is a quite good value as a range of the data can be considered as comprehensive for such a territory that is explored by this analysis.

All the explaining variables are statistically significant at a five-per-cent significance level, whilst the mortality rate is significant also at a one-per-cent significance level. Hence, all the regression coefficients are able to be interpreted.

The case mix index is represented by a value of -0.0736 showing an indirect proportion in a relation to the explained variable. If the case mix index is arisen by one unit expressing one percentage point, the satisfaction ratio is decreased by 0.07 percentage points. On the other hand, the intensive care unit transfer ratio regression coefficient possesses a positive sign as an only regressor involved in the model. Each increase of this ratio by one percentage point brings an increase of the satisfaction ratio by 0.06 percentage points. The mortality rate influences the explained variable in a negative way. One more percentage point of the mortality rate causes a decrease of 1.26 percentage points of the satisfaction ratio. The operation mortality rate behaves in a similar way, but its regression coefficient is much more strong, as it decreases the explained variable by 3.72 percentage points through its one percentage point increase.

The linear regression model explains also the fitted values of the satisfaction ratio. Its appropriateness is confirmed by the tests investigating the potential errors. The Jarque-Bera test statistic reaches a value of 3.7544 with p-value at 0.153 that results in a nonrejection of the null hypothesis stating the residuals of the regression model come from the normal probability distribution.

The following table demonstrates all the regression coefficients with their standard errors and p-values.

Regressor	Regression coefficient	Standard error	P-value
CMI	0.2803	0.2819	3.2638 . 10 ⁻¹
ICUTR	0.8934	0.3184	$7.9500 \cdot 10^{-3}$
MR	-9.9454	3.0013	$2.0668 \cdot 10^{-3}$
OMR	1.3567	7.6446	8.6011 . 10 ⁻¹
district 102	0.4516	0.3513	$2.0647.10^{-1}$
district 201	0.6378	0.3219	$5.5025 \cdot 10^{-2}$
district 202	0.6641	0.3124	$4.0286.10^{-2}$

Table 2. Linear Regression Model

2020 Vol.22 No.1

POLISH JOURNAL OF MANAGEMENT STUDIES Gavurova B., Kovac V., Khouri S.

district 204	0.6850	0.2613	1.2632.10-2
district 206	0.7914	0.3015	$1.2552.10^{-2}$
district 207	0.4562	0.3407	$1.8877.10^{-1}$
district 303	0.6065	0.3008	5.1086 . 10 ⁻²
district 305	0.6437	0.2878	3.1410.10-2
district 306	0.5479	0.3540	$1.3020.10^{-1}$
district 307	0.3384	0.3475	3.3651.10-1
district 309	0.1573	0.3683	6.7169 . 10 ⁻¹
district 401	0.6427	0.3291	$5.8480.10^{-2}$
district 402	0.7283	0.2802	$1.3353.10^{-2}$
district 403	0.6369	0.3065	4.4732.10-2
district 404	0.6727	0.3242	4.5016.10-2
district 406	0.0882	0.4000	8.2670 . 10 ⁻¹
district 502	0.3313	0.3679	3.7376 . 10 ⁻¹
district 503	0.4998	0.2961	9.9869 . 10 ⁻²
district 505	0.5326	0.2874	7.1807.10 ⁻²
district 506	0.0046	0.4515	9.9196 . 10 ⁻¹
district 508	0.0963	0.4013	8.1172.10-1
district 511	-0.0443	0.4429	9.2078 . 10 ⁻¹
district 601	0.1060	0.4369	$8.0968.10^{-1}$
district 603	0.6214	0.2949	4.1091.10-2
district 606	0.1998	0.3805	$6.0262.10^{-1}$
district 608	0.5733	0.3059	$6.8833.10^{-2}$
district 609	0.8027	0.2822	7.2112 . 10 ⁻³
district 611	0.4609	0.3248	1.6424 . 10 ⁻¹
district 613	0.5512	0.2921	6.7074 . 10 ⁻²
district 701	0.4546	0.2982	1.3594 . 10-1
district 702	0.6346	0.3350	6.6045 . 10 ⁻²
district 704	0.3924	0.2900	1.8420.10-1
district 706	0.3686	0.3055	2.3524 . 10 ⁻¹
district 707	0.4115	0.3504	2.4776.10-1
district 709	0.2439	0.3552	4.9654 . 10 ⁻¹
district 710	0.6366	0.2440	1.3028.10-2
district 712	0.8782	0.2895	4.4085.10-3
district 713	0.5334	0.2998	8.3375.10-2
district 803	0.1726	0.3882	6.5923 . 10 ⁻¹
district 805	0.1349	0.3735	7.2005 . 10 ⁻¹
district 807	0.5459	0.3067	8.3260 . 10 ⁻²
district 808	0.5087	0.3023	$1.0087.10^{-1}$
district 810	0.3913	0.2951	1.9297.10-1
district 811	0.6537	0.2755	$2.2947.10^{-2}$

Source: own elaboration by the authors

POLISH JOURNAL OF MANAGEMENT STUDIES Gavurova B., Kovac V., Khouri S.

2020 Vol.22 No.1

The regression model is not interesting from a precise scientific view itself. It is created in order to give a view at statistical significance of a territorial perspective. As it is seen, the case mix index and the operation mortality rate are missing statistical significance in this case. The intensive care unit transfer ratio and the mortality rate have remained their statistical significance status. The two districts possess a one-per-cent statistical significance level – namely, the Rimavská Sobota District and the Svidník District. A five-per-cent statistical significance level is fulfilled by the 10 districts – the Galanta District, the Piešťany District, the Skalica District, the Partizánske District, the Levice District, the Nitra District, the Nové Zámky District, the Brezno District, the Stará Ľubovňa District, and the Trebišov District. Another 10 districts achieve a ten-per-cent statistical significance level the Dunajská Streda District, the Myjava District, the Komárno District, the Dolný Kubín District, the Liptovský Mikuláš District, the Žiar nad Hronom District, the Humenné District, the Vranov nad Topl'ou District, and the Michalovce District. These lists are sorted in a district code order. The absolutely highest value of regression coefficient is assigned to the Svidník District peaking at 0.8782, followed by the Rimavská Sobota District with a level of 0.8027, whilst the lowest value is related to the Brezno District lowering at 0.6214. It is quite interesting that the both districts with the highest level of statistical significance of the regression coefficients possess their highest values in an absolute way. This makes them very strong in the whole linear regression model. The only district with a negative influence on the patient satisfaction is the Žilina District, but it is not statistically significant. Another attention-grabbing fact is that all the regression coefficients of the statistically significant districts lie within a not wide interval ranging from 0.6214 to 0.8782. For a curiosity, the remaining districts possess the lower values generally.

As it is seen, the signs of the regression coefficients are changed for the case mix index and the operation mortality rate. It is a very interesting point that the mortality rate and the operation mortality rate possess the opposite signs. Probably, it could be explained through the fact that a very high absolute value of the mortality rate regression coefficient compensates the other case.

Conclusion

The health system is a very comprehensive structure itself. Although patient satisfaction has many dimensions, they can be generally grouped into the two basic lines – related to patient and related to processes. The both dimensions have to be an integral part of the process of quality assessment and management in the healthcare provision. The quality of healthcare is the basis of the management of the healthcare provider and its importance will continue to grow. This is also due to demographic processes, which the number of people of postproductive age with the numerous comorbidities and the chronic noncommunicable diseases is increasing in. The issue of the sustainability of the health and social systems receives more

attention, which further emphasises the need to manage the patient satisfaction and to increase the quality of health care. The results of the study are beneficial for the management of the healthcare facilities, as well as for experts involved in the creation of concepts of the national and regional health plans that can be also useful in the process of creating the national and international benchmarking indicators necessary for the implementation of the comparative studies outcomes.

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CEL ZADOWOLENIA PACJENTA DLA SKUTECZNEGO ZARZĄDZANIA ŚWIADCZENIEM OCHRONY ZDROWIA

Streszczenie: Zarządzanie placówkami służby zdrowia jest ściśle związane z ich oceną. Bardzo ważny punkt tego procesu przypisuje się pacjentom, którzy są najważniejszymi osobami w ocenie oferowanej opieki zdrowotnej. Celem artykułu jest ocena wybranych kryteriów jakości świadczenia opieki zdrowotnej w placówkach służby zdrowia na Słowacji. W celu przeprowadzenia procesu analitycznego stosuje się również perspektywę terytorialną. Wskaźnik mieszany przypadków, wskaźnik przeniesienia na oddział

intensywnej terapii, wskaźnik rehospitalizacji długoterminowej, współczynnik umieralności i śmiertelność operacyjna służą jako wymiary wejściowe do przetwarzania analizy regresji na potrzeby konstrukcji modeli regresji wyjaśniających satysfakcja pacjentów, których ocena pochodzi z publicznej bazy danych wraz z innym badanym wymiarem. Wyniki analizy pokazują, że wszystkie te zmienne mają istotny wpływ na satysfakcję pacjentów, a dziesięć okręgów Republiki Słowackiej ma również znaczenie statystyczne.

Słowa kluczowe: ewaluacja; Zakład Opieki Zdrowotnej; cierpliwy; stan zdrowia; analiza regresji; Republika Słowacji.

患者满意度对卫生保健规定的有效管理的目的

摘要:医疗机构的管理与其评价息息相关。此过程的一个非常关键的点是分配给最重要的人,以评估所提供的医疗服务。本文的目的是评估斯洛伐克共和国医疗机构中医疗服务的选定质量标准。为了执行分析过程,也采用了区域视图。病例混合指数,重症监护病房转移率,长期再住院率,死亡率和手术死亡率是处理回归分析的输入维度,以构建回归模型来解释评估的患者满意度来自公共数据库以及其他已探究的维度。分析结果表明,所有这些变量都极大地影响了患者的满意度,斯洛伐克共和国的十个地区也具有统计学意义。

关键词:评价医疗机构;患者;健康状况;回归分析;斯洛伐克共和国。