





Evaluating and ranking e-service desks managed by treatment affairs at medical sciences universities: A cross-sectional study in a developing country

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Article Info	ABSTRACT
<p>Article type: Research</p>	<p>Introduction: As a key custodian of public health, the Vice-Chancellor for Treatment Affairs in medical sciences universities plays a pivotal role in delivering healthcare services to the citizens through electronic service desk. In this study, we conducted an evaluation and ranking of the e-service desks managed by the Vice-Chancellor of Treatment Affairs at Iranian medical sciences universities.</p>
<p>Article History: Received: 2023-11-07 Accepted: 2023-12-26 Published: 2024-02-06</p>	<p>Material and Methods: A cross-sectional study conducted in Iran between 2022 and 2023 assessed e-service desks in medical sciences universities. The study included 51 desks categorized by their electronic service methods. Subsequently, e-services were evaluated and scored based on components, which are provided by the national administrative organization for employment. The evaluation components encompassed a) use of an e-service desk to provide services; b) provision of an information package; c) availability of a flowchart outlining the service; d) clarity of the service recipient; and e) electronic collection of user opinions. The total points and the average of each desk were calculated to rank them.</p>
<p>* Corresponding author: Ehsan Nabovati</p> <p>Department of Health Information Management and Technology, Faculty of Allied Medical Sciences, Kashan University of Medical Sciences, Kashan, Iran</p> <p>Email: Nabovati@kaums.ac.ir</p>	<p>Results: The assessed e-service desks were categorized into three groups based on the method of providing electronic services: service provider, service recipient, and not categorized. After evaluating each e-service desk, the highest and lowest points of e-service desks were 708 and 2. The result indicated that only 31 e-service desks achieved an average score of 50% or above.</p>
<p>Keywords: e-Government e-Service Desk Electronic Service Delivery Vice-Chancellor of Treatment Affairs Electronic Government Development Index</p>	<p>Conclusion: It could be concluded that electronic government (e-government) has been partially implemented in the field of treatment throughout a developing country. However, the absence of a unified model to serve as a guideline for designing e-service desks has resulted in an undesirable diversity in the services offered and their delivery methods. It is recommended that medical sciences universities adopt and adhere to a unified model when designing e-service desks for the provision of healthcare services electronically.</p>

Cite this paper as:

Nasiri Z, Sharif R, Nikmaram A, Farzandipour M, Nabovati E. Evaluating and ranking e-service desks managed by treatment affairs at medical sciences universities: A cross-sectional study in a developing country. *Front Health Inform.* 2024; 13: 185. DOI: [10.30699/fhi.v13i0.540](https://doi.org/10.30699/fhi.v13i0.540)

INTRODUCTION

Advancements in information and communications technology (ICT) have enabled a diverse array of electronic service delivery methods. These technological developments have influenced not only the daily routines of organizations and individuals,

but also the dynamics of government-citizen interactions. This impact has led to heightened efficiency and enhanced accessibility to services. Additionally, electronic services often referred to as e-services, have streamlined transactions, ensuring secure and timely access to vital information. This evolution led to substantial structural

transformations within governments, giving birth to the concept of "Electronic Government" (e-government). Furthermore, e-government initiatives help cost reduction and bolster citizen engagement and satisfaction. These systems are fundamentally designed to empower citizens, promote service quality, fortify accountability, augment transparency, and refine the overall functioning of government institutions [1-3].

e-government, encompasses the provision of government services to both citizens and private businesses via the internet, ensuring accessibility regardless of location and time. In contemporary times, e-government has emerged as a prominent focal point on national and international agendas, closely intertwined with the rapid evolution of information technology [4]. Its primary objectives include enhancing citizens access to government services, simplifying bureaucratic processes, optimizing government efficiency, and curtailing expenses. e-government boasts numerous advantages, including cost savings in service provision, service integration, operational cost reduction, creation of an integrated view of government. The potential inherent in e-government lies in its capacity to establish a government that is more transparent, efficient, and inclusive, fostering greater citizen participation [4-6].

The electronic government development index (EGDI) is a crucial tool for assessing the performance of governments in digitalization. It categorizes United Nations member states into high, medium and low EGDI scores [7]. In 2020, the percentage of countries with high EGDI scores increased by 29%, with the largest share at 36%. The EGDI reveals the positive impact of e-government development on countries progress [7, 8].

An essential part of e-government services is the e-service desk. This information technology-based service aims to fulfill the needs of both service recipients and providers. When these services are delivered online through government organization portals, they are referred to as e-service desks. e-service desks offer a range of benefits, including increased efficiency among organizational staff, optimized utilization of the organization's resources, reduced service waiting times, minimized rework, standardization of procedures, and enhanced availability of services and information to various organizations, including medical sciences universities [9].

Medical universities, as institutions providing diverse health, treatment, educational, and research services to society, must effectively meet the needs of various segments of society, including patients. The Vice President for Treatment in the Ministry of Health, Treatment, and Medical Education, and by extension, the medical sciences universities, holds the

responsibility for delivering medical services to the public and patients in Iran. This role is pivotal in ensuring the provision of the optimal possible services to patients and medical service providers. One of the most suitable approaches to meeting the needs of patients, medical staff, and physicians is through the implementation of e-service desks.

It is worth noting that no evidence has been found to measure and compare the current state of e-service desks in the medical universities across the country, which is one of the objectives of this research. The format and standards outlined in the provincial-level general performance evaluation indicators for the year 2022 (drawn from administrative laws, regulations, and the administrative system reform program) in the axis of e-government development has been declared by the presidential institution. According to this, government agencies that fail to meet any of these indicators may experience point deductions in this section. This, in turn, signifies the non-realization of electronic government in the country's medical universities [10]. Additionally, no previous studies have investigated the e-service desks of the Vice-Chancellor for Treatment Affairs in these universities [10-12].

The organization responsible for evaluating e-government conducts comparisons between medical universities and other government institutions in the country (country's employment administrative organization). However, such comparisons may not be suitable for the field of healthcare. Therefore, the aim of this study is to evaluate and compare the e-service desks of the Vice President for Treatment in the country's universities of medical sciences using criteria established by the Administrative organization for employment.

MATERIAL AND METHODS

This cross-sectional study was conducted in two phases in 2023. In the initial phase, we selected e-service desks from universities of medical sciences in Iran. Subsequently, we assigned scores to these e-service desks based on their measured components within the country's employment administrative organization. Based on the average scores obtained, we then ranked the e-service desks under the purview of the Vice-Chancellor for Treatment Affairs of Medical Sciences Universities in the second phase.

The first phase: Reviewing and rating of the e-service desks

The first phase encompassed the review and assessment of e-service desks affiliated with the Vice-Chancellor for Treatment Affairs in the universities of medical sciences throughout the country. The research population at this stage consisted of the e-service desks available on the websites of all medical

science universities in the country. This entailed a study involving 53 medical science universities and 8 faculties. We obtained the website addresses from the official website of the Ministry of Health, Treatment, and Medical Education. The exclusion criteria included the absence of an e-service desk on the portal and the failure to offer electronic services related to the Vice-Chancellor for Treatment Affairs via the e-service desk. To using a census approach for sampling, and considering the exclusion criteria, we included 51 university portals in our study. We categorized these portals based on the types of services provided by their e-service desks in the treatment department.

Next, following the guidelines of the country's employment administrative organization, we identified and assessed the critical components within the e-service desks and assigned scores to them. Table 1 provides a list of these components and their respective scales. In accordance with these components, one of our researchers evaluated all the e-service desks. Each service listed on the e-service desks was assessed based on the components it incorporated. A maximum score of 15 points was awarded for each component present, while a score of zero was assigned for any missing component. We evaluated the e-service desks administered by the Vice-Chancellor for Treatment Affairs and calculated their overall scores.

Table 1: Evaluated components in e-service desks

Component	Scale
Use of an E-service desk to provide services	5
Provision of an information package	4
Availability of a flowchart outlining the service	3
Clarity of the service recipient	2
Electronic collection of user opinions	1
Total	15

The Second Phase: Ranking the e-service desks

Due to variations in the number of services offered by each e-service desk, we calculated the average total points earned by each e-service desk for the services provided, following (1). To facilitate categorization of our findings, the resulting figure was divided by the maximum possible score (i.e. 15) and presented as an average percentage (2). Subsequently, the e-service desks were ranked based on their average percentages.

$$\text{Average Total Score} = (\text{Total Score Earned}) / (\text{Number of Services Provided}) \quad (1)$$

$$\text{Average Percentage} = (\text{Average Total Score}) / 15 \times 100 \quad (2)$$

We also computed percentage of scores earned for each component (3) to gain deeper insights into the extent to which universities adhered to each of the research components when delivering their services. For each service, we determined the score to comply each of the research components 1 to 5. Then, we

calculated the total score for each component, divided by the number of services offered, revealing the level of compliance with each component for service delivery.

$$\text{Scores Earned for Each Component (Percentage)} = (\text{Total Score of Each Component for Each Service}) / (\text{Number of Services}) \times 100 \quad (3)$$

To report the degree of attention given by e-service desk providers to each research component for every service, we calculated the scores obtained for each component. These scores, along with their total, average, minimum, and maximum values, are presented in tabular form for clarity.

RESULTS

Based on the analysis, all 51 portals included in this study featured e-service desks and offered services related to the Vice-Chancellor of Treatment Affairs. The analyzed service desks were categorized into three groups and presented in separate tables (Tables 2 to 4). These tables provide information on how services were delivered, the number of services offered, the research components scores, and the scores attained by each e-service desk. To maintain confidentiality, detailed scores by university were assigned ID numbers and can be found in the appendices.

Table 2 shows the portals that offered services through their e-service desks, categorized by the service provider (19 portals). In Table 3, services are organized based on the service recipient (12 portals), while Table 4 lists portals that presented services in an unclassified format (20 portals).

As shown in Table 2, we observe that the university #1 provided the highest number of services (79 services) among all the universities in this study. Conversely, the university #43 offered the fewest services (2 services). Notably, universities #12 and #43 achieved a 100% compliance rating for all components, while the university #44 had the lowest assent rate (33%). Component 5 received the lowest average score (10.26). Out of the 19 service desks assessed in this category, 12 scored above 50% on average. The average number of services offered by these service desks was 13.36 services, and the average score per service desk was 10.09.

Table 3 displays universities that have categorized their provided services based on the recipient (12 universities). Among these universities, the one identified as 'Component 4' stands out for providing 19 services, which is the highest number of services within this category. This university achieved a total score of 285, with an average score of 100% per service. In other words, all 5 components were consistently observed in all the services they offered, resulting in an average score of 100% per service.

In contrast, University #51 provided only one service

and had observed only the 4th research component in the services provided, marking the lowest number of services offered in this category. Hence, they earned a total score of two with an average score of 13.33, which is the lowest average score in this group. Component 5 had the lowest average score at 4.91.

Out of the 12 service desks examined in this table, seven achieved an average score above 50%. On average, these 12 service desks offered 7.08 services, with an average score of 9.28 per service.

Table 4 features the service desks that did not

categorize the services they provided and presented them as a list, with 20 universities falling into this category. Among these universities, the highest number of services offered within this category was 24 services, which were provided by universities #2 and #3. University #2 achieved the highest total score of 360.

University #2, #24, and #25 fully complied with all 5 research components in delivering their services, resulting in scores of 100% for each component and an average score of 100% for each service.

Table 2: Privileges of universities that have separated the services based on Vice-Chancellor for Treatment Affairs in the e-service desks

Number of services		Maximum (University ID#)	Minimum (University ID#)	Average
		79 (1)	2 (43)	13.36
Component 1	Score (ID#)	210 (1)	0 (33, 36, 44)	39.73
	Compliance with the components	100% (12, 18, 34, 38, 39, 43)	0% (33, 36, 44)	-
Component 2	Score (ID#)	120 (1)	0 (36, 37, 38, 39, 44, 45)	30.73
	Compliance with the components	100% (5, 9, 11, 12, 18, 34, 35, 43)	0% (36, 37, 38, 39, 44, 45)	-
Component 3	Score (ID#)	141(1)	0 (35, 37, 38, 39, 44, 45)	26.52
	Compliance with the components	100% (5, 9, 12, 36, 43)	0% (35, 37, 38, 39, 44, 45)	-
Component 4	Score (ID#)	138 (1)	0 (45)	25.68
	Compliance with the components	100% (5, 8, 9, 11, 12, 13, 18, 31, 33, 34, 35, 36, 37, 38, 39, 43, 44)	0% (45)	-
Component 5	Score (ID#)	79 (1)	0 (11, 33, 36, 38, 39, 44)	10.26
	Compliance with the components	100% (1, 5, 9, 12, 13, 18, 31, 35, 37, 43, 44, 45)	0% (11, 33, 36, 38, 39)	-
Total score (ID#)		708 (1)	25 (45)	214
Average score per service (percentage)		15 (100 %) (43, 12)	3 (20 %) (44)	10.09

Table 3: Privileges of universities that have separated the services based on the service recipient in the e-service desks

Number of services		Maximum (University ID#)	Minimum (University ID#)	Average
		19 (4)	1 (49, 50, 51)	7.08
Component 1	Score (ID#)	95 (4)	0	33.33
	Compliance with the components	100% (4, 15, 22, 26, 32, 46, 47, 48, 50)	0%	-
Component 2	Score (ID#)	76 (4)	0 (32, 47, 49, 50, 51)	16.66
	Compliance with the components	100% (4)	0% (32, 47, 49, 50, 51)	-
Component 3	Score (ID#)	57 (4)	0 (21, 26, 32, 47, 48, 50, 51)	9.75
	Compliance with the components	100% (4, 22, 49)	0% (21, 26, 32, 47, 48, 50, 51)	-
Component 4	Score (ID#)	38 (4)	-	14.16
	Compliance with the components	100% (4, 15, 21, 22, 26, 32, 46, 47, 48, 49, 50, 51)	-	-
Component 5	Score (ID#)	19 (4)	0 (32, 46, 47, 49, 50, 51)	4.91
	Compliance with the components	100% (4, 15, 22, 48)	0% (32, 46, 47, 49, 50, 51)	-
Total score (ID#)		285 (4)	2 (51)	79.33
Average score per service (percentage)		15 (100 %) (4)	2 (33.13%) (51)	9.28

Table 4: Privileges of universities that have not separated services

Number of services		Maximum (University ID#)	Minimum (University ID#)	Average
			24 (2,3)	5 (40,41)
Component 1	Score (ID#)	120 (2)	0 (42)	54
	Compliance with the components	100% (2, 6, 20, 24, 25, 28, 29, 40, 41)	0% (42)	-
Component 2	Score (ID#)	96 (2, 3)	0	37
	Compliance with the components	100% (6, 14, 20, 23, 24, 25, 42)	0% (16, 28, 40, 41)	-
Component 3	Score (ID#)	72 (2)	0 (14, 16, 19, 23, 28, 30, 40, 41, 42)	18.15
	Compliance with the components	100% (2, 6, 20, 24, 25)	0% (14, 16, 19, 23, 28, 30, 40, 41, 42)	-
Component 4	Score (ID#)	48 (2, 3)	-	28.5
	Compliance with the components	100% (2, 3, 6, 7, 10, 14, 16, 17, 19, 20, 23, 24, 25, 27, 28, 29, 30, 40, 41, 42)	-	-
Component 5	Score (ID#)	24 (2, 3)	0 (6, 14, 16, 19, 20, 28, 30, 40, 41, 42)	6.55
	Compliance with the components	100% (2, 3, 10, 23, 24, 25)	0% (6, 14, 16, 19, 20, 28, 30, 40, 41, 42)	-
Total score (ID#)		360 (2)	35 (40, 41)	143.1
Average score per service (percentage)		15 (100 %) (2, 24, 25)	9.5 (33.39%) (16)	10.19

In contrast, university #40 and university #41 provided the lowest number of services, which was five. These two service desks fully complied with only components 2 and 5 and did not meet the criteria for components 1, 3, and 4, resulting in the lowest total score of 35 points.

However, University #16 had the lowest average score per service at 5.9. The lowest average score was attributed to component 5, with a score of 6.55.

In summary, among the 20 service desks reviewed in this table, 13 achieved an average score above 50%. These service desks provided an average of 13.7 services, with an average score of 10.19 per service.

DISCUSSION

The present study was conducted with the aim of evaluating the electronic service desk of the Vice Chancellor of Treatment of the country's universities and faculties of medical sciences and scoring and ranking the electronic services provided by them. In other words, the scores obtained by each electronic service desk indicated the quality of electronic services provided. According to the findings of this research, 21.39% of the portals that provide electronic service desks have not categorized the services provided and have provided them in a list. The highest score obtained by the electronic service desk of the Deputy of Medicines was equal to 708 (university #1) and 31 electronic service desks in this study obtained an average score of 50% and above. In all three categories, component 1 had a higher average score (respectively, the average score of

component 1 in tables 2 to 4 was 39.73, 33.33, and 54), which means more compliance with this component in electronic services. Component 5 also received a lower average score (respectively, the average score of component number 5 in tables 2 to 4 was equal to 10.26, 4.91, and 6.55).

The results of the classification of the service delivery method in the electronic service desk showed that most of the service desks (39.21%) did not categorize their services and only provided a list of services. Considering the basic principles of designing a portal, providing services without categorization and sorting causes problems in users use. The guidelines and standards announced by the country's employment administrative organization on how to provide portals and electronic service desk services have been notified to the information technology center of government organizations including universities. According to these guidelines, the service loading should be in such a way that users have minimal searching and confusion. They can access it, which is called the three-click principle. This 'three-click principle' means users should be able to access the desired service within three clicks maximum [13, 14]. Therefore, compliance with the grouping of service provision in the form of service provider or service recipient brings the electronic service desk closer to its main goal, which is to facilitate the provision of services to users [14].

The results of the current research showed that six universities have obtained the highest percentage of the average score, i.e. 100%. This means that in all the services they have provided, the important components for the realization of electronic

government have been fully observed. Compliance with the mentioned components will not only allow the university to get a higher score in the annual evaluation, but will also make these services more accessible and avoid confusion for users.

In this study, compliance with each research component was also checked for each service. In this way, it can be understood that in general, the studied electronic service desks consider which component is more in providing services. The findings indicate that among the 5 components measured in the study, the designers of the electronic service desk of the Vice-Chancellor for Treatment Affairs paid more attention to compliance with component 1 (access to service through the electronic service desk) and least attention to compliance with component 5 (receive users' comments electronically). It should be kept in mind that ignoring the users' point of view towards the electronic services provided, the electronic service desk is far from its goals [9].

It is obvious that other universities of medical sciences can improve the way they provide services and take a step towards the realization of e-government by following the example of a leading portal in this field. The lack of a unified model for designing the e-service desks of the Vice Chancellor of treatment, leads to inconsistencies among the portals. This confusion among users,—prevents medical sciences universities, as custodians of societal health and wellbeing, from fully achieving their mission. The non-realization of electronic government in universities of medical sciences leads to complications such as dissatisfaction of patients, doctors and personnel in using electronic services, rework and lack of transparency of processes, as well as time-consuming provision of services related to the treatment field [10, 12].

The studies conducted by other researchers in the field of electronic government clearly show the importance of realizing electronic government in universities [15]. A study in 2013 stated that Iranian universities of medical sciences have passed the maturity stages of e-government, i.e. information and interaction, but they have not entered the transaction and integration stages. Most universities of medical sciences have performed poorly in the transaction phase, and this shows the lack of realization of electronic government in universities [12]. That study was aligned with the present study in terms of the fact that the electronic services available in the electronic service desks of medical sciences universities were measured. The difference between that study and the current study was in measuring the level of maturity of e-government in universities. In addition, the importance of providing electronic educational services in universities was stated in a study in Malaysia (2014). The results of the study determined that there is a significant relationship

between the quality of electronic services and the amount of use of this type of service. The similarity of that study with the current research was in measuring the quality of electronic services [11].

As an applied study, the current research garnered cooperation from various departments of Kashan University of Medical Sciences, underscoring its positive and direct impact on current trends. This collaboration has raised awareness among relevant sectors regarding the significance of realizing electronic government. Various departments, including the Vice-Chancellor of Treatment Affairs, have revisited their current strategies and processes to expand electronic service offerings to the public. Nevertheless, this study has some limitations. One limitation is the inability to access the portals of certain faculties and universities due to technical issues. Additionally, some samples had to be excluded from the research due to the absence of e-service desks or the failure to provide services related to the treatment department.

The outcomes of this study can serve as valuable guidance for the designers and policymakers of e-service desks in universities of medical sciences. It offers a categorized approach to selecting how to deliver electronic services and suggests potential adjustments to organizational processes. By maximizing the electronic delivery of services, institutions can progressively move closer to the realization and advancement of electronic government.

CONCLUSION

This study highlights the challenges stemming from the lack of a suitable model to guide e-government development in the Vice-Chancellor of Treatment Affairs. The diversity and multiplicity of services offered, along with the lack of uniformity in e-service desks delivery, have prevented medical universities from realizing the full potential of e-government. Adopting a unified model or standardized guidelines could facilitate e-government implementation for universities of medical sciences. Furthermore, self-evaluations by Vice-Chancellors of Treatment prior to the government's e-government evaluation deadline could help resolve issues and ensure full points are earned for e-service desk development.

Future research endeavors could contribute significantly to the enhancement and expansion of e-government by evaluating e-service desks in other deputy departments of medical sciences universities or by assessing the electronic services offered by the Ministry of Health, Treatment, and Medical Education.

ACKNOWLEDGMENT

Special thanks to health information management

research center and Vice Chancellor for research and technology of Kashan university of medical sciences for their supports.

AUTHOR'S CONTRIBUTION

ZN: conceptualization, methodology, project administration, data curation, investigation, resources, writing-original draft. RS: data curation, investigation, resources, writing-review and editing. AN: data curation, investigation, resources. MF: validation, writing-review and editing. EN: conceptualization, methodology, supervision, validation, writing-review and editing. All authors read and approved the final manuscript.

REFERENCES

1. Alshehri M, Drew S. E-government fundamentals. International Conference ICT, Society and Human Beings. International Association for Development of the Information Society; 2010.
2. Ihmouda R, Alwi NHM, Abdullah I. A systematic review on e-government security aspects. International Journal of Enhanced Research in Management and Computer Applications. 2014; 3(6): 60-7.
3. Sarpoulaki M, Rad AE, Saleknia A. E-government concept and spatial information: A case study in Islamic republic of Iran. The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences. 2008; 37(4): 19-23.
4. Khan HA. Globalization and the challenges of public administration: Governance, human resources management, leadership, ethics, e-governance and sustainability in the 21st century. Springer; 2018.
5. Rana NP, Dwivedi YK, Lal B, Williams MD, Clement M. Citizens' adoption of an electronic government system: Towards a unified view. Information Systems Frontiers. 2017; 19: 549-68.
6. Roodsaz H, Zargar MR, Aslipour H. Designing a model of e-government citizen services innovation in Iran. Iranian Journal of Public Policy. 2017; 3(3): 35-60.
7. United Nation. UN e-government survey 2020 [Internet]. 2020 [cited: 7 Aug 2023]. Available from: <https://publicadministration.un.org/egovkb/en-us/Reports/UN-E-Government-Survey-2020>
8. Lněnička M. E-government development index and its comparison in the EU member states. University of Pardubice; 2015.
9. Tang X, Todo Y. A study of service desk setup in implementing IT service management in enterprises. Technology and Investment. 2013; 4(3): 190-6.
10. Farzandipour M, Meidani Z, Gilasi H. Evaluation Of healthcare services of medical universities' websites in line with e-government. Payavard Salamat. 2014; 8(2): 143-53.
11. Kim-Soon N, Rahman A, Ahmed M. E-service quality in higher education and frequency of use of the service. International Education Studies. 2014; 7(3): 1-10.
12. Farzandipour M, Meidani Z, Gilasi H. Electronic educational and research services as infrastructure for the e-government: Role of. Iranian Journal of Medical Education. 2013; 13(1): 18-28.
13. Bertot JC, Jaeger PT, McClure CR. Citizen-centered e-government services: Benefits, costs, and research needs. International Conference on Digital Government Research. ACM; 2008.
14. Manhas J. Initial framework for website design and development. International Journal of Information Technology. 2017; 9: 363-75.
15. Haydari S, Montazer G. Assessing e-government readiness in Iranian universities, case study: Tarbiat Modares University. Journal of Information and Communication Technology. 2020 ;43(43): 1-26.

CONFLICTS OF INTEREST

The authors declare no conflicts of interest regarding the publication of this study.

FINANCIAL DISCLOSURE

No financial interests related to the material of this manuscript have been declared.

ETHICS APPROVAL

Not Applicable.