Self Assessment of Performance of Educational and Treatment Hospitals Affiliated to “Kerman University of Medical Sciences and Health Services” Through EFQM Model 2011-12

Hamid Taboli¹, Mahbobeh Ganjipoor², Maryam Mesbali¹

¹Department of Management studies, Payam-E Noor University, I.R. Iran & Payam-E Noor University Kerman.
²Department of Management, Kerman Branch, Islamic Azad University, Kerman, Iran
htaboli@yahoo.com

Abstract: Excellence model is a pattern accompanied by basic conceptions of total quality management and self-assessment system which provides integrated and disciplined background to evaluate activities, processes and subsequent results with organizational prospects and criteria, while identifying the potent and improvement-needed fields. Following the importance of programming and administrating the performance/efficacy evaluation system in the current study, it is used Excellence Model of European Performance (EFQM) to evaluate the performance of educational-treatment hospitals affiliated by Kerman University of medical Sciences. Review Method: the present study is a descriptive, functional and procedural Type. The investigated community was the randomly selected people as; hospital managers, nursing managers, clinical supervisors and institutional managers and employees of education and remedial centers managed by Kerman University of medical Sciences in 2010. The data were collected through EFQM-based questionnaires and the gained scores were analyses with SPSS software. Findings: The average scores for self-assessment of the studied centers are as follows; leadership position: 73.8 out of 100 points, policies and strategies: 60.1 out of 80 points, employees: 60.8 out of 90, partnership and resources: 60.6 out of 90, processes: 94.9 out of 140, customers result: 100.7 out of 200 points, employees results: 60.1 out of 90 points, society's results: 37.1 out of 60 points and the operations key results: 90.9 out of 150 points. The average of self-evaluation performance of the hospitals was 622.7 out of 1000 points (62% out of 100%). Discussion and conclusions: The findings of this study showed that the majority of scores are related to policy criteria and leadership. The partnership criteria, resources and society's results were found to be the most improvement needed fields. The maximum scores recently attained pertain to the global one achieved by the “Jiling center of addiction abandonment in Amsterdam-Holland” and the national ones achieved by “15th Khordad and Alborz hospitals of Tehran.”


Keywords: Performance Evaluation, EFQM Excellence Model, educational-remedial centers

1. Introduction

Those who are active lose sometimes, those are inactive lose always (1)

Complexity is the nature of instable and turbulent environment; business organizations and bureaus are influenced by environmental changes. In such conditions, Business Excellence Models is an answer to these questions: how is a pioneer organization? What aims and concepts are followed? What are the criteria governing its behaviors?

Several studies implemented to identify and spread the key factors in organizational success to evaluate and improve their performance, which led to achievements as national quality awards and Business Excellence of Deming, Baldrige, EFQM (European Foundation for Quality Management) and other organizational models. These models are the most applicable in organizational performance evaluation (2).

Hospital centers are known as the basics of health system in any country and most of governmental distresses of health system arise in such centers. Therefore, reforming health system is not possible without considering such centers and improving their performance. Organizational performance evaluation means: “studying the weak and potent points of the performance of an organization in accordance with indices, criteria and special standards in a specific period of time in order to identify deviations and corrective acts.” Continuous improvement of performance is not achieved without studying and awareness acquisition of improvement and goal achievement rate, identifying challenges ahead of hospital, receiving feedbacks and identifying the cases which need serious improvement. Thus, organizational performance evaluation provides achievement of stable quality improvement (3). The Efficacy of the mentioned models has lead to their spread in health and medication session (4). The EFQM excellence model is based on 9 criteria which 5 ones of them are about enablers, expressing the components of an
organization and their interactions; whilst the other 4 criteria are results of the organization performance and introduces optimal results of implementing the enablers. In the above model, total scores of criterion information is 2000 in which 1500 scores are for enablers and the other 500 score are for results (5). Regarding the need for programming and implementing an updated and permanent evaluation system in health and medication session especially in centers presenting medical services (hospitals), as well as the emphasis on implementation of the mentioned model in administrational evolution plan of organizations, while considering some hospitals applying the model, the performance of educational-medical hospitals under the supervision of “Kerman University of medical sciences and hygiene services” was evaluated through EFQM excellence business model in 9 scopes (leadership, strategy and policy, employees, resources and cooperation, processes, customers’ results, employees’ results, society results and key results of performance) by means of questionnaire approach, based on strong points results and improvable points. The questionnaire approach is the most available and accessible method which is done economically and quickly. The questions were prepared in accordance with the 9-scopes criteria. However, this method is one of the most appropriate methods of data collection about employees’ perceptions and conceptions in an organization (5, 6). Regarding the role and importance of educational-medical centers and the advantages of self-assessment process in an organization, this research was done through EFQM questionnaire approach to follow organizational results and capacity enrichment factors in educational-medical centers managed by Kerman University of Medical Sciences.

**Figure 1:** General view of EFQM Organizational excellence model

2. Method

Considering the subject and the goal, the research is of applied type and it was done by descriptive method during 2010 in educational-medical centers of the university of medical science such as; “Shahid Bahonar”, “Afzalipour”, “Shafa” and “Shahid Beheshti” hospitals. The research community includes all hospital managers, nursing managers, clinical supervisor, manager’s representative in quality improvement office, director of administrative affairs, service in-charge, financial affairs in-charge, personnel of support, administration & financial units and supervisors of the mentioned hospitals. In this research, 50% of supervisors, 3% of personnel of support and administrational-financial units who had B.A degree with 5 years of experience, were randomly selected from employed list and the census method was used for the other personnel. Totally 104 of personnel shared in the research. 73.7 of the distributed questionnaires were returned. Data collection was done through standard questionnaires in two scopes of enablers and results with 9 criteria, 32 sub-criteria and 155 EFQM based questions. Reliability coefficient of the performance assessment questionnaire obtained 4.33 by means of Cronbach’s formula. After preliminary training about the model and the method of filling the standard performance evaluation questionnaire in accordance to business
excellence model, data were collected and analyzed by SPSS software inline with the research goals.

### 3. Results

The chart-1, illustrates research results in the educational-medical centers of Kerman University based on the questionnaire method. As it is shown, the average acquired score from enablers and results criteria are 223.9 and 378.2 respectively. It should be noted that the total score of enablers is 360 and total score of results criteria is 640.

![Chart 1: Bar chart of obtained average score from results](image)

As it is shown in Table 1, the most strong points of educational-medical centers of Kerman University of Medical Sciences is related to leadership and policy criteria with the value about 0.75 score.

The most improvement-needed area is related to resources and cooperation criterion which obtained “0.35” score in criterion “1” and in society results sub-criterion “2” questionnaire obtained “0.48” score.

While comparing the performance of studied hospitals in accordance with Table 2, it is found that Shahid Bahonar, Shafa, Afzalipour and Shahid Beheshti hospitals has obtained the highest score, respectively. It is comprehended from Table 2 that “Shahid Bahonar educational-medical center” has obtained the highest score of enablers’ criterion in leadership, employers, resources and cooperation, and processes, whilst “Shafa” educational-medical center has obtained the highest score in policy criterion. The “Shafa” center obtained the highest score in customers’ result criterion and “Shahid Bahonar” center obtained the highest score in employees’ results, society results and performance key results criteria. According to chart 2, “Shahid Bahonar” Center has obtained the highest grade in self-assessment by EFQM model.

### Table 1: Average and percentage scores obtained from related criteria and sub-criteria

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Scores Average</th>
<th>Max. Score</th>
<th>Gained Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>69.535</td>
<td>100</td>
<td>70</td>
</tr>
<tr>
<td>Policy &amp; Strategy</td>
<td>56.189</td>
<td>80</td>
<td>71</td>
</tr>
<tr>
<td>Human Resources</td>
<td>57.3321</td>
<td>90</td>
<td>64</td>
</tr>
<tr>
<td>Cooperation &amp; Resources</td>
<td>40.6246</td>
<td>90</td>
<td>45</td>
</tr>
<tr>
<td>Processes</td>
<td>89.1100</td>
<td>140</td>
<td>64</td>
</tr>
<tr>
<td>Customer Results</td>
<td>116.8717</td>
<td>200</td>
<td>58</td>
</tr>
<tr>
<td>Personnel Results</td>
<td>56.2036</td>
<td>90</td>
<td>62</td>
</tr>
<tr>
<td>Society Results</td>
<td>30.9115</td>
<td>60</td>
<td>52</td>
</tr>
<tr>
<td>Performance Key results</td>
<td>85.1272</td>
<td>150</td>
<td>57</td>
</tr>
<tr>
<td>Total</td>
<td>602.1530</td>
<td>1000</td>
<td>60</td>
</tr>
</tbody>
</table>

### Table 2: comparing hospitals performance in enablers and results scopes

<table>
<thead>
<tr>
<th>Criteria related to enablers</th>
<th>Afzalipour Hospital</th>
<th>Shafa Hospital</th>
<th>Bahonar Hospital</th>
<th>Beheshti Hospital</th>
<th>Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>71.3191</td>
<td>72.84.8</td>
<td>73.2242</td>
<td>53.0473</td>
<td>100</td>
</tr>
<tr>
<td>Policy &amp; Strategy</td>
<td>55.8044</td>
<td>62.3300</td>
<td>56.4095</td>
<td>46.1582</td>
<td>80</td>
</tr>
<tr>
<td>Employees</td>
<td>57.2972</td>
<td>60.7207</td>
<td>61.5563</td>
<td>42.4716</td>
<td>90</td>
</tr>
<tr>
<td>Resources &amp; Cooperation</td>
<td>42.8083</td>
<td>40.4771</td>
<td>43.4782</td>
<td>31.6255</td>
<td>90</td>
</tr>
<tr>
<td>Processes</td>
<td>91.6054</td>
<td>92.5610</td>
<td>94.9777</td>
<td>66.7029</td>
<td>140</td>
</tr>
</tbody>
</table>
Discussion & Conclusion

The results of self-assessment illustrate that the most obtained scores are related to policy fields. As it is seen in Table 2, the policy criterion obtained 71 scores (75%) out of 80 and the leadership criterion obtained 70 scores (71%) out of 100 in questionnaire approach. So, it is found that the management of educational-medicinal centers of Kerman University of Medical Sciences has significantly developed in this field. Therefore, the following proceedings are necessary to achieve perfect development:

As it is seen in Table 2, the resources and cooperation criterion area is the most improvement-needed area which obtained the lowest score, 45% out of 90 and 0.35 score in sub-criterion 1 that is first; due to the lack of effective management in exterior cooperation of the organization and the second; the mismanagement in interior resources such as; financial, Construction, facilities and materials, technology, information and knowledge.

Hospital performance comparison

In performance evaluation of Social Security Hospitals in Tehran province based on organizational excellence model in 2005, “Alborz” hospital obtained 466.5 scores in enablers and results that are equal to 46.65% of total scores in organizational excellence pattern. The “15th of Khordad” hospital obtained 471.6 scores in enablers and results that are equal to 47.2% of total scores in organizational excellence pattern (9). The average score of self-assessment in centers of this research was 602.2 out of 1000 (52% out of 100%). It should be noted that the highest obtained score among the European medical/hygienic centers is the value of “500”, pertain to “Jiling center of addiction abandonment” in Amsterdam- Holland, while the winners of European quality awards (mostly industrials) usually obtain 650-750 score (10). In 1995, 31 hospitals under the supervision of Basque medical services in Spain and Colombia began applying the EFQM model. 83% of the hospitals had ISO certification. Two hospitals, based on external assessment, acquired more than 500 scores and 10 hospitals achieved more than 400 scores (10). The German Medication and hygiene organization applied EFQM method in 1996 for the first time. Nowadays, statistics show the improvement and high level of encouragement and motivation among the Medical personnel through creation of self-assessment teams in hospitals of this country (8). To follow the aim of Quality improvement in psychiatry hospitals inline with EFQM model, the self-assessment methods and combination of two other approaches as (a) prize simulation and (b) questionnaire approach were used.

- The self-assessment results were showing “209” scores in 2003 and “311” for next 2 years (48.8% more than the first score).
- Applying EFQM model in psychiatry unit of “Gregorio Maranon” hospital shows quality improvement in directorial decision-making, leads to improvement of performance and organizational communications (11).
- Another descriptive-periodical study was done in emergency ward of “Hazrat-e-Rasul” hospital in 2007, which the studied organization was in level 3 of Excellency (12). Since, the final goal of performance self-assessment based on organizational excellence model is to provide an opportunity for an organization to eliminate its defects and stimulate its potent points through identifying its real situation, and moving in excellence and improvement path, while assessing such goals in honest and accurate manners, so it is necessary to provide appropriate

Chart 2: Average score of general evaluation of performance based on EFQM hospital excellence model
cultural field for such self-assessments and the inspection or ranking attitude should reformed in such assessments. This research was done to establish such a mentioned field with the aim of performance self-assessment based on organizational excellence model. One of the important aspects of this study is to determine the potent points and improvable areas in the studied centers, all of which can be used as guidelines for future decision-makings and managerial policy-making to stimulate potent points, defects removal, as well as improving the organizational situation.

- More Communication and interaction with customers and society representatives through hospital leaders
- Playing encouraging, supportive and responsive role about employees by hospital leaders
- Compiling policy and strategy based on information obtained from performance measurements, researches and developments, and creativity-related activities
- Identifying the opportunities for strategic and key cooperation and supporting mutual development in work progress and creative thought and innovation
- Compiling and implementing financial processes and strategies
- Making indices and determining financial parameters to insure about the efficiency and effectiveness of resources structure
- Optimal accessibility of information and knowledge for interior/exterior users of hospital and its concern with creative thinking.

- **Corresponding Author:**
  Hamid Taboli
  Department of Management studies, Payam-E Noor University, I.R. Iran & Payam-E Noor University Kerman.
  E-mail: htaboli@yahoo.com

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