A Method for Founding of Lab Examination in Online Medical Care Systems (www.hooshdar.com)

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Abstract

Introduction: Online Medicare is a method in which parts of a medical process—whether its diagnostics, monitoring or the treatment itself will be done by using online services. At the first step the students registered for using the system. They participated in estimating depression scale, anxiety scale and clinical interview by online medical care system. Then the lab examination tests were performed on persons specified by the system. The lab examinations include: serum level of vitamin D3&4, serum level of vitamin B125&6, fasting blood sugar7&8, HbA1c7&8, thyroid function tests9&10 and CBC. All of the students were solely treated by vitamins or minerals therapy and/or treatment of medical problem (such as hypothyroidism).

Methodology: To find a method for founding of lab examination, we implemented the system in a high school in deprived area, a lower middle class state high school, and in two above average state high schools and in an above average private high school. The ones who needed lab examination and who could pay for it were compared in societies with deferent socioeconomic situations. Both the ability of paying for operating this system (7$) and for performing lab examination (17$) were compared in different societies.

Results: According to Spearman’s test there is no significant difference between the lab examination among groups in relation to total participants (students) in different socioeconomic situation (Need test 0.2<2). Despite socioeconomic differences Thus government budget can be same in any neighborhood for operating this system (7$), According to mean differences (m=129.74500) it’s observed there is a huge meaningful differences between (lower middle class neighborhoods&deprived area) and above average neighborhoods in pay for lab examination. Thus government budget (17$) must be different in any region and it’s based on their Richmond characteristics.

Conclusion: According to results, the government can allocate equal budget for operating this system in societies with different socioeconomic situation, but payment for lab examination must be different. In the high school in deprived area founding for lab examination is absolutely necessary, in the high school in lower middle class neighborhood founding for lab examination is partially necessary, and the students who should be credited for lab examination can be introduced by the principals of high schools. In the state or private high schools in above average neighborhoods the ones that could pay for lab examination were more than the participants who were chosen by the system, thus founding for lab examination in this area is not necessary.
A Method for Founding of Lab Examination in online Medical Care Systems

Online Medicare is a method in which parts of a medical process whether its diagnostics, monitoring or the treatment itself will be done by using online services.1 To find a method for founding of lab examination, we implemented the system in a high school in a deprived area, a lower middle class state high school, and in two above average state high schools and in a above average private high school. At the first step the students registered for using the system. It was not mandatory and not free. They participated in estimating depression scale, anxiety scale and clinical interview by online medical care system. During this estimation, we could find the existence and severity of depression and anxiety in each one of the participants, also we could find the consequent needs of each one, such as supportive therapy in mild depression or anxiety, need to be visited by psychologist in moderate cases, need to be visited by psychiatrist in moderate-severe cases, need to be visited by psychiatrist and psychologist in severe cases and need to perform medical lab examination tests.2 The lab examination tests were performed on persons specified by the system. The lab examinations include: serum level of vitamin D3&4, serum level of vitamin B12&6, fasting blood sugar 7&8, HbA1c7&8, thyroid function tests 9&10 and CBC. All of the students were solely treated by vitamins or minerals therapy and/ or treatment of medical problem (such as hypothyroidism).

The payment method used by participants for lab examination (17$) is examined in the following neighborhoods:

- A state high school in deprived area.
- A state high school in Fardis Karaj (Lower middle class neighborhood).
- Two state high schools in Gohardasht Karaj (above average neighborhood).
- A private high school in Gohardasht Karaj (above average neighborhood).

**Statistical Results:**

According to Spearman’s rho test there is no significant difference between the ones who need lab examination in relation to total participants in students in different socioeconomic situation (Need test 0.2 <2). Thus government budget for operating this system (7$) can be same in any neighborhood, despite socioeconomic differences. According to mean differences (m=129.74500) it’s observed that there is a huge meaningful differences between (lower middle class neighborhood & deprived areas) and above average neighborhoods in payment for lab examination. Thus government budget (17$) must be different in any region and it’s based on their Richmond characteristics.

**Discussion**

In the high school in deprived area only % 15.55 of the participants who were chosen by the system for lab examinations could pay the price of it (17$). Thus founding for lab examination in this area is necessary. In the high school in Lower middle class neighborhood only % 58.46 of the participants who were chosen by the system for lab examinations could pay the price of it (17$). Thus founding for lab examination in this area is necessary, and the students who should be credited for lab examination can be introduced by the principals of high schools. In the state or private high schools in above average neighborhoods more than the participants who were chosen by the system for lab examinations, wanted to pay for it (17$). Thus founding for lab examination in this area is not necessary.

**Acknowledgments**

Thanks to everyone who help us and lead us for operating this project, included:

- Dr Hosaain Ziaodiny, General Director of health, Ministry of education.
- Reza Taremy, Head of Health department of education, Alborz province.
- Drs Tahery, Expert in adolescent Health department in ministry of health.
- Fatemeh aghazadeh, expert in health and prevention of social problems, Ministry of education, Alborz province, third district
- Majid Gholami, Head of health and prevention of social problems, Ministry of education, Alborz province, third district.

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The costs of Development and Operation of an Online Medical Care System Includes the following

**Payments of operating the online medical care system include**

- Producing the system.
- Presenting the system to the students & their parents.
- Payment for lab examinations.
- Payment to physicians.
- Payment for laptop and internet availability.

**Earnings of operating the online medical care system include**

**The payment for operating the system & lab examinations paid by the participants**

To estimate the costs of operating the system, we must consider all previous results of operating online medical care system in different neighborhoods.

In this study, a method for founding of lab examination in different neighborhoods is considered:

- How much money the participants can pay for lab examinations in each neighborhood?
- How much money the government must pay for lab examinations in each neighborhood?
Table 1 The difference between the number of needed lab exams and actual numbers paid for in different areas.

<table>
<thead>
<tr>
<th></th>
<th>Need for Lab exam</th>
<th>Need for Lab exam/participants</th>
<th>Paid for exam</th>
<th>Need for lab exam/paid for lab exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>high school in deprived area</td>
<td>45</td>
<td>45/71 %63.38</td>
<td>7</td>
<td>7/45 %15.55</td>
</tr>
<tr>
<td>high school in Lower middle class neighborhood</td>
<td>65</td>
<td>65/109 %59.63</td>
<td>38</td>
<td>38/65 %58.46</td>
</tr>
<tr>
<td>high school in Above average neighborhood</td>
<td>61</td>
<td>61/178 %34.26</td>
<td>124</td>
<td>124/61 %203.27</td>
</tr>
<tr>
<td>A private high school</td>
<td>43</td>
<td>43/94 %45.75</td>
<td>56</td>
<td>56/43 %130.23</td>
</tr>
</tbody>
</table>

Chart 1 The difference between the number of participants needing lab exams and actual numbers who paid for it in different areas. 

- **Series1**: Need for lab examination/ participants.
- **Series2**: Need for lab examination/ paid for lab examination.
- **Category1**: high school in deprived area.
- **Category2**: high school in Lower middle class neighborhood.
- **Category3**: high school in above average neighborhood.
- **Category4**: A private high school.
References


