

Performance Based Supplementary Payment Systems in Istanbul Public Hospitals

İstanbul'da Kamu Hastanelerinde Performans Esaslı Geri Ödeme Sistemleri

Ayşegül YILDIRIM KAPTANOĞLU

ABSTRACT

Since 2003 new healthcare reforms have been implemented in Turkey. Although, the healthcare system has gone through modifications for the past several years; there is insufficient research to demonstrate the effects of these changes. This paper aims to address the issues in the supplementary payment systems, which are one of the recent changes of the healthcare system in the country. This study is mainly based on a review of the relevant professional literature, a research and interpretation of supplementary payment in the public hospitals. This is a research as well as an assessment work done in secondary and tertiary care hospitals. Performance based supplementary payment system in public hospitals aims to provide bonuses to health care employees like physicians, nurses, etc. The bonus is given to professionals, who produce the qualified health services based on records by the evaluation of the whole institution. Financing of supplementary payment system in Turkey is mainly based on social security premiums. Consequently, balance of income and expenditures at hospitals is needed to be followed sensitively. According to this study, physicians' productivity has increased but number of patients per physician has decreased. Also, the amount of performance paid to the physician for their specialty has decreased. Physicians like cardiologists can benefit more from the pay for performance system as their work contributions are paid more compared to internist work. Also secondary care hospital staffs were better paid compared to tertiary care hospitals because more critical cases are sent to tertiary care and treatment of such cases are of high cost. The reforms resulted satisfactory and very successful improvement in healthcare performance. The main health indicators are now better than at the beginning of the transition period. The sustainability of the reform processes will cause further improvement in the near future. The number of treatments per patient is increased not the number of patient and this may cause an escalated demand. Some precaution such as to control referral of a patient to a tertiary care when the care is possible in the secondary care units is needed to be taken. Complicated or critical patients mean great cost to hospital's revolving funds which means less money to the health staff via pay for performance system in secondary and especially tertiary care.

Keywords: Healthcare transition in Turkey, Current supplementary payment, Public hospitals

ÖZ

Türkiye'de 2003 yılından itibaren yeni sağlık reformları yürürlüğe konmuştur. Geçtiğimiz yıllarda, sağlık sistemi birçok değişime uğramasına rağmen bu değişimin etkilerini gösterecek şekilde yapılmış araştırmalar kısıtlıdır. Bu çalışma, Türkiye'deki sağlık sisteminin son değişikliklerinden biri olan performansa dayalı ek ödeme sistemleri üzerinde yapılmıştır. Ek ödeme sistemlerinde performans esaslı konusundaki literatür bilgileri eşliğinde ikinci ve üçüncü basamak hastanelerde ek ödeme sistemleri üzerine bir araştırma dizaynı yapılmış ve sonuçlar değerlendirilmiştir. Kamu hastanesinde performansa dayalı ek ödeme sistemi hekimler, hemşireler vb. gibi sağlık çalışanlarına mükâfat tarzı ikramiye vermeyi amaçlayan bir ödeme sistemidir. Mükâfat tarzı ek ödeme sağlık kurumunun bütünün değerlendirmesi esasına dayanır. Kayıtlar gözden geçirilir. Nitelikli ve nicelikli sağlık hizmeti üreten profesyonellere verilir. Türkiye'de genel sağlık sigortasının hastanelere ödediği ücretlerden performans sistemi ödemeleri karşlanır. Bu nedenle, hastanenin gelirleri son derece hassas bir şekilde takip edilmelidir. Bu çalışmaya göre hekimin sağlık hizmeti üretimi artmış, fakat hekim başına düşen hasta sayısı azalmıştır. Ayrıca, uzmanlık alanına göre hekime verilen performans ek ödemesi dengesi azalmıştır. Kardiyologlar ek ödeme esaslı performans sisteminden iç hastalıkları uzmanına göre daha yüksek ücret almaktadır, çünkü kardiyologların ek ödeme katsayısı yüksektir. Uzmanlığa göre ek ödeme düşüktür. İkinci basamak hastanelerin hekimleri, üçüncü basamağa göre daha fazla ek ücret almaktadır çünkü komplike hastalar üçüncü basamağa gönderilmektedir. Reformlar ile sağlık performansı üzerinde tatmin edici ve çok başarılı bir düzelme sağlanmıştır. Temel sağlık

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göstergeleri dönüşüm periyodunun başına göre şu anda daha iyi durumdadır. Reform süreçlerinin sürdürülebilirliği, yakın gelecekte performansa dayalı ek ödemelerin daha da geliştirilmesi ile olacaktır. Hasta sayısı değil, hasta başına yapılan işlem artmıştır. Bu durum sağlık hizmetlerinde kısırlanmış talebe yol açabilir. İkinci basamak hizmet hastanelerinde rahatlıkla takip edilebilecek komplikasyon durumlarında bile üçüncü basamak hastanelere hasta sevki yapılmasını önlemek için denetim yapılması esastır. Komplike hasta demek, hastanelerde çalışan hekimin döner sermaye havuzunda biriken performans ek ödemelerinin harcanması ve bu hastanelerdeki sağlık personelinin daha az ücret alması demektir.

Anahtar Sözcükler: Türkiye’de sağlıkta dönüşüm, Güncel ek ödeme sistemi, Kamu hastaneleri

INTRODUCTION

The Turkish Health Care System has undergone several reforms during health care transition period (2003-2012). Minister of Health has pursued the cost control policies with radical reforms of the overall management and organization of the health care system since 2003-2004. Therefore, health care professionals (principally physicians, nurses) tensions have long been characterized the political economic evolution of Turkish national health services (Yildirim Kaptanoğlu, 2011).

Some Examples of Reforms: Family physician with family health care centre practice application and the hospital union belonging to Turkish Public Hospital Trust Union (PHTU) have settled down by Ministry of Health (MoH). Turkish social health insurance system (SGK) has undergone significant reforms. The three insurance funds, namely SSK, Emekli Sandığı and Bağ-Kur, were merged under a sole body called the Social Security Institution (SSI) in 2007. The three insurance funds together cover around 81% of the population as of 2012 (<http://www.invest.gov.tr>). The system started to be fully operational at the beginning of 2008. Universal health insurance system was also introduced (Yildirim Kaptanoğlu, 2011). The Turkish healthcare system is mostly financed by general taxes (41%), insurance premiums (31%), and out-of-pocket payments (28%). If the wage of a person is lower than the 1/3 of the minimum wage that is currently 803,68TL-321.798€ he/she could benefit from resources of the SSI without paying premiums (<http://www.csbg.gov.tr>).

Use of Health Services in Turkey Currently: After 2011, the mandatory Turkish Public Health Insurance Systems cover all public hospital and ambulatory care. Health care expenditures, as a share of gross domestic product (GDP) are 6,7% in our country. But out of pocket payment is 5,4% of GDP (Yardımcı, Cilingiroğlu, & Yardımcı, 2013).

In 2000, roughly half of Turkish SSI expenditures were financed by employer payroll taxes (67,2%) and a “general social contribution” (36,5%) levied by the Turkish treasury on all earnings, including investment income (<http://www.kalite.saglik.gov.tr>).

The health system in Turkey is dominated by family practice centre for ambulatory care and public hospitals for acute and chronic institutional care. All residents are automatically enrolled with an insurance fund based on their occupational status. In addition, 3-4% of the population subscribes to supplementary private health insurance. Nowadays, another supplementary private insurance has been adopted by government to cover other benefits not covered under social security

systems like an example of co-payment method (<http://www.kalite.saglik.gov.tr>).

Another distinguishing feature of the Turkish health system is the attainability to all insured resident whether or not he or she is ill. Family physician does not have gatekeepers regulating access to refer specialists and hospitals (Yildirim Kaptanoğlu, 2011). Primary care is dominated by family health care office-based solo or group practices. Primary care physician deals with program for maternal and child health cares mostly (MoH, 2011).

Hospital care is dominated mostly by public hospitals, including research and teaching institutions with a monopoly on post graduate medical education and research. There are, nevertheless, opportunities for physicians in public hospital who wish to have part-time private hospital staff. The private hospital sector in Turkey (both non-profit and proprietary hospitals) has 14% of beds (Yenimahalleli Yasar, 2011). Proprietary hospitals, typically smaller than public hospitals, have traditionally emphasized elective surgery and obstetrics, leaving more complex cases to the public sector. Over the past 5 years, some chain private hospitals have developed a strong capacity for cardiac surgery, chemotherapy, oncology, and transplantation therapy (Yildirim Kaptanoğlu, 2011).

Physicians in private practice and in proprietary hospitals are paid directly out of pocket by patients. Following an overview of the system and an assessment of its achievements, problems and reform, this article point’s current situation at Performance based Supplementary Payment Systems (PBSP) in Public Hospitals in Turkey.

PBSP system main objective is to encourage job motivation and productivity among public hospital health staff especially physicians in order to improve performance of the public hospitals belonging to Ministry of Health (MoH, 2008; OECD-WB, 2008).

The PBSP system in Turkey can be categorized into less than six phases:

1. Before 2004: Performance-based contribution payment system, which was first a pilot implementation at 10 hospitals in 2003, has been implemented across all over Turkey from 2004 on.
2. The supervisor of the staff makes performance evaluation subjectively and it has no relation with the amount of output produced by the staff. (Tengilimoglu, Pay, & Kisa, 2008).

3. PBSP after 2004: In order to make smooth transition to PBSP system, it was aimed to motivate health care staff working in hospital to provide high quality health care. (MoH, 2008).
4. 2004-2007: Quality Improvement and Performance Evaluation System was developed until 2007.
5. After 2007 up till 2011: At public hospitals scores were given to physicians providing the work that they had done (outpatient or inpatient follow up, minor or major surgical operation, medical intervention). In the public training and research hospitals, teaching staffs were also given additional scores to provide theoretical and practical training, scientific publications and specialty training (MoH, 2008).
6. 2012 onwards: On performance management, national standards and targets were introduced according to the criteria of Clinical Excellence.

Current Situation: In public hospital Pay-for-performance (P4P) programs are designed to offer financial incentives to physicians and nurses to meet defined quality, efficiency. The Agency for Healthcare Research and Quality mentions that this may be defined as “a strategy to improve health care delivery. P4P systems in our country are trying to improve quality and patient safety.”(MoH, 2010).

The aim of the study in this aspect is to measure hospital performance in Istanbul, which may be a reflection of all over Turkey.

MATERIAL and METHODS

Hospitals were grouped according to the number of their beds and in every homogeneous group 10% of the total number of secondary and tertiary care hospital was selected. So, six secondary care hospitals and six of tertiary care public hospital in Istanbul using a P4P system were randomly selected.

Index of Hospital Quality (IHQ) scale is used to collect data. In the statistical analyses, the IHQ total score is used. IHQ is a more exact and objective measure of performance in hospitals settings (Vogeli, Hasnain-Wynia, Kang, Landrum, & Weissman, 2008). This scale describes hospital eligibility criteria and the procedures used to measure P4P.

In these hospitals internal medicine speciality and surgical speciality P4P mean the amount money when the physicians’ specialties were compared.

In the statistical analyses, the IHQ score is used; it is a more exact and objective measure in performance scoring. P4P mean amount delivered to oncologist, cardiologist, general surgery and internal subspecialty separately were compared. The average amount of the P4P in between oncologist, cardiologist, general surgery and internal subspecialty in randomly selected six tertiary care hospitals were compared. IHQ scores follow a normal distribution.

Hypotheses are as follows:

H0: There is not a statistically significant relationship according to P4P money amount by using IHQ scale between secondary and tertiary hospitals.

H1: There is a statistically significant relationship according to P4P money amount by using IHQ scale between secondary and tertiary hospitals.

H0: There is not a statistically significant relationship between average amount of the P4P money between oncologist, cardiologist, general surgery and internal subspecialty compared to tertiary care hospitals.

H1: There is a statistically significant relationship between average amount of the P4P money between oncologist, cardiologist, general surgery and internal subspecialty compared to tertiary care hospitals.

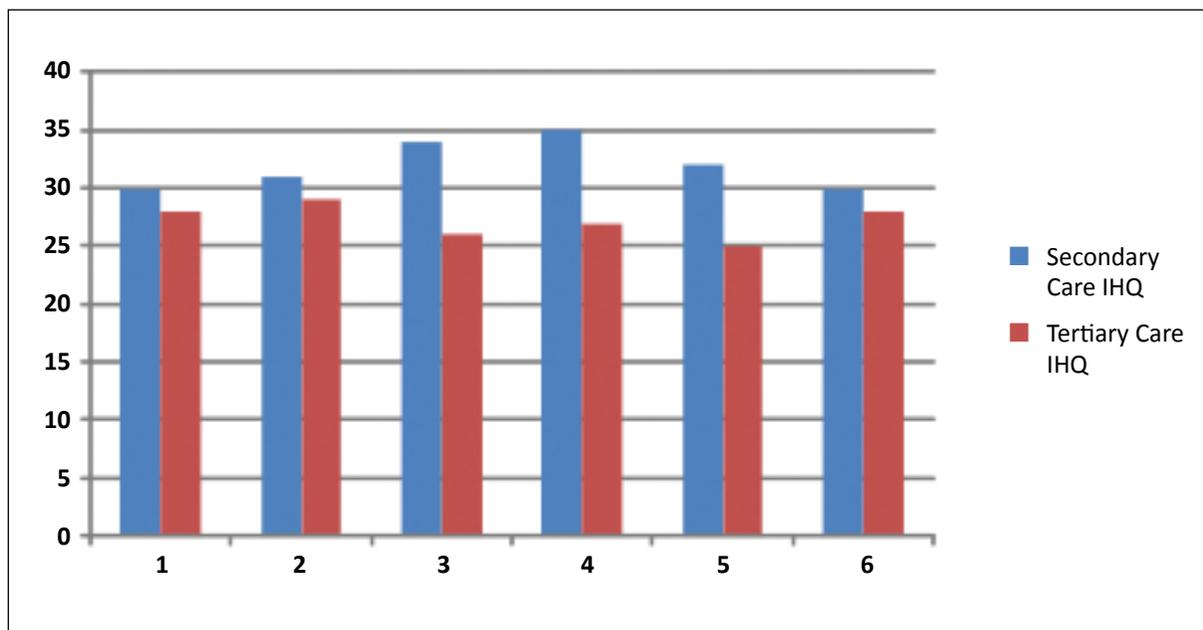


Figure 1: IHQ mean score of six secondary and tertiary care hospital according to P4P money obtained monthly by physicians.

RESULTS

The mean performance score of Index of Hospital Quality (IHQ) for secondary care hospitals is 30.63 (SD = 11.31) and for tertiary care hospitals is 26.42 (SD = 10.02). For the control variable of hospital size -- represented by number of beds -- the mean number of beds for secondary care is 452 (SD = 191) and for tertiary care is 681 (SD=186).

The key result is that secondary care hospitals give better P4P. The finding is presented in a graphical form in Figure 1.

There is a statistically significant difference between IHQ score of physician in secondary care compare to tertiary care according to P4P money [$t=15,62$; $p<0,001$].

Relationship between average amount of the P4P money between oncologist, cardiologist, general surgery and internal subspecialty compared to tertiary care hospitals. P4P mean money amount per month were compared with IHQ score of oncologist, cardiologist, general surgery and internal subspecialty.

Physician like cardiologist mean P4P per month contributions are compared with different subspecialty work and statistically differences were found ($F= 8,91$; $p<0,005$).

The regression equations reveal that for tertiary care hospitals, the R-squared is 0.12.

The regression equation is $IHQ\ Score = 3.10 + 0.12 \times Subspecialty$. A variable for the size of hospital, the number of beds, was checked as one possible confounding factor. The mean number of beds per hospital is 410 (SD = 95).

DISCUSSION and CONCLUSION

This article-reviewed change in the issues associated with P4P in the Turkish health insurance system, and envisioned a picture of effective P4P. Turkish health care P4P system has been

made a principle that the Turkish Social Security System pays the hospitals according to the diagnosis related group (DRG) and Health Implementation Application (HIA called SUT in Turkish literature). This payment method is under discussion whether to pay the medical group or institution, or its individual health care workers. Some authors have stressed the enabling role at an institutional level to control the rewards to individual workers. Rewards could be financial or non-financial or a combination of both. The insurer can pay to the institution, which in turn pays to individual workers according to its own standards (Scott, Sivey, Ait Ouakrim, Willenberg, Naccarella, Furler, & Young, 2011).

This study offers the evidence-based way of the current situation of P4P system according to medical specialty in secondary and tertiary cares hospitals. Based on these analyses, physicians benefit more from P4P system in secondary care hospital compare to tertiary care. Physicians are making much more procedures in order to get money by P4P system. Because of this situation hospital cost increase over time with the use of more unnecessary care and drugs. Hospital and productivity were slowing down, performance-related pay system as designed by Turkish public hospitals. Physician like cardiologist (invasive treatment) can benefit P4P system because their work contributions are more paid compared to internal subspecialty work (patient follow up). The study found that the Turkish hospitals experience difficulties involving physicians in P4P systems. This was partly because physicians of public hospitals, which belong to MoH, did not want to lose their control over hospital resource allocation. The low-level future orientation dimension of hospital staff culture seems to cause weak future orientation at hospitals. Up today, Turkish experiences show the increase of public hospital autonomy. Government monitor hospitals closely with strict regulations that limit opportunistic behaviour of physician and hospital manager. In tertiary care hospital physician productivity increased, number of patients

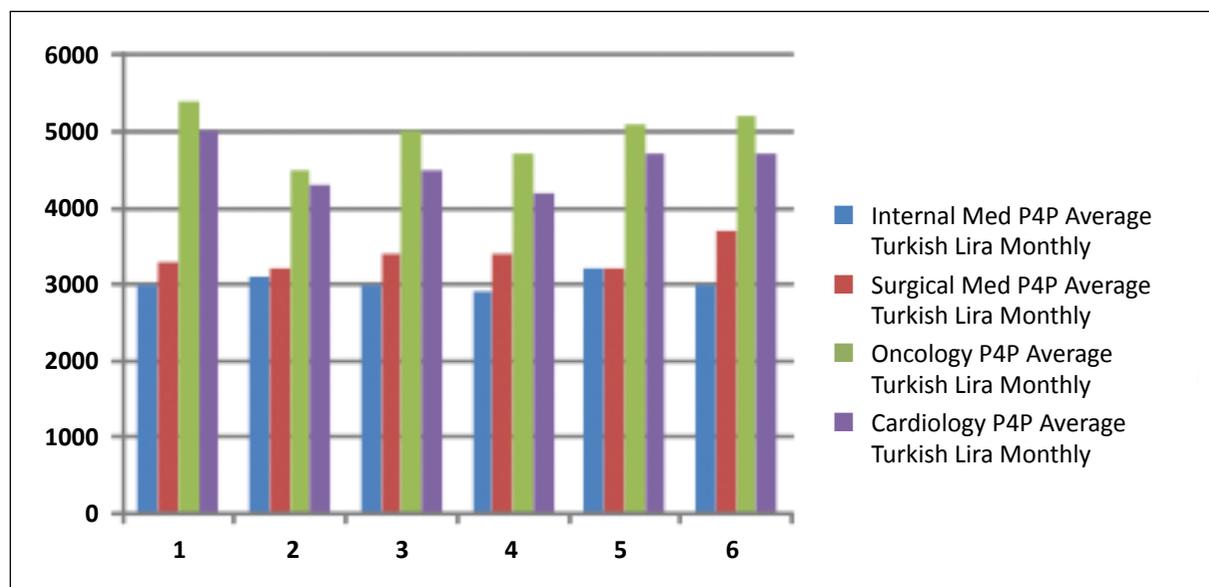


Figure 2: The average amount of the P4P of four specialties (oncology, cardiology, general surgery and internal subspecialty) in tertiary care hospitals.

per physician has increased by 30%. But, tertiary care hospitals spend much more to their patients. SIS of Turkey pays money according to diagnostic packages only. In this case, some of the expenses like extra diagnostic procedures not covered in the package are paid by revolving funds. But, it seems that current situation of the P4P could result in an increase in health costs by the provision of unnecessary care. At the end of undesirable situation of P4P, a huge waste in social resources of Turkey will take place (Aktaş, Yildirim Kaptanoğlu, Ozkan, Kaysın, & Silte, 2013).

Performance indicators need to be monitored on a continuous basis. It is important to allocate sufficient time and resources to ongoing management of the program (Werner 2008). Most importantly, high-quality quality indicators for clinical care should be mapped out by combining claims information and information available in registries (Damberg, Sorbero, Mehrotra, Teleki, Lovejoy, & Bradley; 2009). When such a basis has been provided to some degree, national health system performance reports should be published periodically by combining such quality indicators and data on inputs of the health system as well as medical expenditures. This in turn will function as a strong catalyst for the progress (Nahra, Reiter, Hirth, Shermer, & Wheeler 2006).

P4P system could only improve hospital financial sustainability if hospital bonus distribution should be based on doctor performance measured by health indicators that are in line with the desired overall performance of the health care system in the country (Xingzhu, & Mills, 2005).

Future research is needed to expand the findings of this study that sidestep results based management practices.

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