PERFORMANCE MANAGEMENT IN HEALTH

PERFORMANCE BASED SUPPLEMENTORY PAYMENT SYSTEM

Transformation in Health Series 8

Prepared by
Prof. Dr. Sabahattin AYDIN
Dr. Mehmet DEMİR

Contributors
Hasan GÜLER, MD
M. Vasfi YÜCEL, MD
Bayram DEMİR, Msc of Soc.
Süleyman H. KAPAN
Erdoğan YILMAZ

Translated by
School of Public Health
Ministry of Health, Turkey

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Adress:
T.C. Sağlık Bakanlığı Ek Hizmet Binası
Performans Yönetimi ve Kalite Geliştirme Daire Başkanlığı
Mahmut Esat Bozkurt Cad. Umut Sk. No: 19
4. Kat Kurtuluş – ANKARA
e-mail: performanskalite@saglik.gov.tr

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1. PREFACE

Performance is a concept which identifies an output obtained as a result of an activity as quantitative or qualitative. Individual performance of all actors who take part in this activity is reflected upon the outputs obtained by the institution and/or agency, which undertake the responsibility of the activity, as a whole. Thus, performance of an institution and /or agency, at the end of a particular period, is an indicator, which refers to the institutional success of achieving a goal or performing a task. Evaluating performance of the individuals, who are assigned with responsibility in the organization, is a means to identify to what extent they have made contribution to the organization's goals.

In parallel with pre-determined goals, methods such as measurement, comparison or assessment is used to find out the level of success made. Health-sector based assessments should be made multilaterally since, in addition to the complicated structure of institutions, unlimited number of procedures made by thousands of people in treatment and diagnosis level is closely related to each other and the output of health sector is directly related to human being happiness and well-being. Concepts such as efficiency, profitability and cost ratio, which traditional measurement systems are based on, are far from being satisfactory in this field and they even do not meet the goals of health system either. So innovative and different concepts, measurement methods and indicators must be developed. We can analyze health care services well and identify realistic goals based on the needs and conditions within our country and develop such indicators, as we already have been doing. What we need to do at this point is to consider if the indicators that we use are proper, comprehensive, qualified, consistent, reliable and valid.

We should enhance and improve our performance in order to get more close to our aim. So, we need to evaluate and measure performance. The key to success is to make progress by drawing a well-defined and measurable framework. However, assessment and measurement of employees' performance should be based on scientific

criteria and principles rather than subjective ones such as observation, initiative and judgment of their supervisors. In order to evaluate and measure, objective and measurable criteria should be identified beforehand. Without performance criteria, improvement could not be considered as achievable in performance.

Indicators of individual performance, which were developed by the Ministry of Health and have been improved with feedback received from performers for three years are primarily based on the measurement of services, which are directly based on labor and provided by practitioners who act as team leaders. In addition to these, control of hospital infections, in-clinic trainings and scientific studies are accepted as performance indicators, as well. In primary health care facilities, some preventive health criteria are especially emphasized. These criteria consist of the follow-up number of infants and pregnant, vaccination ratio, new-born scanning tests and the ratio of using modern family planning methods.

Measurable actions of the individuals become more important as their efficiency get closer to the goals of institutions. As mentioned above, this is the ultimate goal of the performance. As for the performance evaluating system developed by the Ministry of Health, success level of the staff to achieve goals of their institutions have a big share in making comparisons separately within every other institution or reflecting quantitative individual performance values upon salary / wage of the personnel. Thus, what is needed first is to certify institutional services by keeping records produce sources of award, seek the ways for satisfactory productivity and economy in procurement and use of supplies that is to achieve rational management. Besides, success level of the Ministerial goals with definition of "institutional performance" is also a very important factor to determine the result.

Briefly, patients should be granted the right to choose practitioner, and environment, infrastructure and physical conditions at hospitals should be improved to meet certain criteria; international quality standards should be set and met in health care services and patient satisfaction should

be provided to decide on the higher performance of health care professionals.

The performance assessment system, which is based on the priorities of our health care system and the universal norms, as well, is entirely a national project and also specific to our country.

The concept of modern management foresees awarding employees depending on their rate of success. The most common method at this point is the reflection of success upon wage that is performance-based wage system. In other words, performance-based wage systems are the instruments which are used to award and appreciate employees in parallel with the success to fulfill their individual performance goals or the goals of their institutions. The hard core of these systems is to determine either some part of employees' wages or additional payments based on the employees' performance. Though some opposite ideas on this issue, it is widely accepted by the management experts and scientists that performance-based payment both plays a significant role in the motivation of employees and achievement of the organizations.

Performance-based payments vary in quantity and they are usually reflections of the rate of performance which became true. Such payments depend on the performance of employees achieved in a specific period and they might have variations based on the performance of the institution, department, and employees themselves or all together.

In this context, the Ministry of Health put "performance-based contribution from revolving funds" into implementation in 2004, which is designed as a payment and rewarding system to encourage health workers to perform efficient and qualified health care services. As mentioned above, the system is far from subjective assessments; it is primarily based on evidence, objective measurement and meanwhile it is also specific to our practice.

Contrary to the common belief, the award in this system is not given to professionals, who have the highest number of patients but is given to professionals, who best utilize time, energy, sources and place efficiently and produce the

qualified services based on records. In other words, besides individual's work and effort, the assessment of the whole department and institution that the individual works at is the fundamental principle.

In order to facilitate practitioners to look after their hospitals and to have them primarily concentrate on the institutional success, the ones who work at hospitals on full-time basis are being paid more incentive. Our implementations as performance assessment and performance-based contribution payment from revolving funds are significant instruments to equip health care facilities which will prepare the institutions for their future role as administrative and financial autonomy. They have been started to be managed as if they are owned by the employees, since this system integrates institutional and individual goals and steers them to common objectives.

The system that we are trying to establish is a systemic tool of management, which will motivate health care professionals in a way to recognize their inside potential, who wants to seek for more effective results and therefore consists of stages, simple but well-defined goals, performance standards, measurement tools, feedback and awarding. The system is considered as a continuous learning and improving process and has been initiated as a simple and easily applicable form, and is being improved future based by drawing conclusions of the current practices. Better improvements will be made by the time and it will become a model, which many other countries may get interested in.

Performance management in health will be improved and will become an example for other sectors as the outputs are evaluated. These practices have also changed the understanding of service delivery at our hospitals.

Recently, a great many specialists in our country have closed down their private offices and preferred to work at hospitals on a full-time basis. The percentage of specialists working full-time basis in public sector which was 11 % in the year 2002, increased to 62 % in the year 2007. Providing that the confidence in the system is enhanced and made sustainable, the percentage will certainly rise.

As a result of this implementation, work hours at many hospitals have been extended and much more time has been invested in operating rooms. If necessary most laboratories and imaging centers give services even after the work hours. Except for the limited number of hospitals at metropolis, people do not suffer from many waiting days to have operation any more.

Transfer of hospitals and amendments to the practices of SSI and the Green Card have facilitated access to health care services and naturally given a rise in demand. Increase in the active work hours of practitioners, in spite of the increase in the number of patients, has met people's demand, and time invested for treatment has been extended. Besides, most hospitals have put the "patient's right to choose practitioner" into practice.

Today patients have been given a better status and longer time for treatment. In order to be able to provide better service for patients, duration of average stay at hospitals been shortened and thus patient costs per unit have declined.

Performance-based contribution payments have given rise in the job motivation of health care professionals, as well. Hospital managers and employees control procurement of hospital supplies and services more carefully. Thus, detailed control on tenders has paved the way for the purchase of supplies and equipment at a lower cost. In the meanwhile, public hospitals have recognized that they are expected to give more efficient and qualified services.

Hospital information systems have been quickly set up and so all procedures at hospitals have been kept under regular records. This is the first time that all defined health-specific procedures are recorded in such a detailed way.

Revolving fund commission, a participatory management sample on the issues of personnel, investment and enlarging of the service areas have been constituted in the hospitals. The hospital employees have gained the consciousness of almost feeling themselves as the business associates of their institution; and they have started to question the work done, to consider and support the steps taken to promote the

capacity and quality improvement at hospitals. They have also started to take active roles in these areas voluntarily.

In order to provide institutional performance, provincial health directorates have begun regular inspections, which are even requested by hospital managers. In parallel with these, hospitals have made efforts to improve their physical conditions. Once again in order to be able to provide performance measurement, questionnaires are conducted to find out patient satisfaction, quality assurance units have been founded and relevant authorities have been appointed for the execution and follow-up of quality standards at hospitals.

As seen obviously, performance management not only measures the results but also steers the organization in direction of pre-identified goals, as well as facilitating to achieve these goals. That's why a new understanding of health care services has been put into practice. A chance is given to award people, who carry the burden of health care services on their shoulders. In Public Health Services the understanding of, demand being met rather than the supply appointed has been stood out. Patient-specific approach encouraged by the system has made patients more significant and brought seeking for service quality to the agenda.

Better results will be obtained once health care management by means of performance management and change in the paradigms of service delivery are better considered and implemented by all financial and political actors, health managers and employees. We know that it will take time, however, the rate of transformation we have made and goals we have achieved in the last few years clearly indicate that we have been making an outstanding progress towards the future that we have always desired.

Prof. Dr. Recep AKDAĞ
Ministry of Health

◆ *Prof. Dr. Sabahattin AYDIN*
Ministry of Health Deputy Undersecretary

2. INTRODUCTION

Unlike other services, health service can not be defined as a simple relation depending on the mutual interest between the server and the patient demanding the service. It is a complex mixture of relations which is set on helplessness of the patient and the relation based on the information asymmetry as well as the positive and negative effects of the server's being equipped in different levels, the information and infrastructure it possesses. Therefore, there have always debates on quoting prices simply for health services and repayment and the payment methods which will increase the efficiency and the quality of the service have long been studied.

Because of this reason, it is not a recent idea that the money for the health service should be paid to the server according to the quality they add to the service. It has long been a criticized subject that services produced are paid by the insurances and the governments with a fixed price and without any consideration of whether they are high quality or not.

We face the problem of measurement of the health service quality while attempting to eliminate these critical approaches. Let alone this, it is obvious that, although it is possible to make a precise definition and measurement of the quality in health services it will be difficult to take it into consideration while expanding the service among the whole society. The high quality health service should be made widespread among the society in high quantity under the illumination of the prior aims of the health services such as making it easier to achieve these services, and to make all of the citizens get benefit from the services equally. Rather than market economy, the priority of social policies makes it more obligatory especially in health.

In order to make the health services keep up with such a quantity and high quality that every individual in the society can obtain their demands properly, performance assessment

and payment systems in accordance with the performance is proposed. Because of this reason, different methods have been tried to be developed. Although it seems quite easy to reward the performance in a way that is increasing the quality and efficiency, we confronted many difficulties in the practice.

3. ASSESSMENT OF HEALTH SYSTEM PERFORMANCE

Some basic features give us information about an overall assessment of a health service. First, the percentage of the people in a country who have health insurance, in other words, the rate of their protection against the financial risk in the event of any illness give us very important information about the inclusion of the health service.

Next, infant martality ratio mother morttality ratio, and expected life standard which are used by World Health Organization in comparison of the countries are other basic health indicators that tell us about the health conditions of a society. These are the health outputs achieved with not only the effect of the health system but also many features such as the economical, cultural and social conditions in the country.

The common goal of the services that are among the main missions of the government organization and offered to the society such as security, education, justice, health is to provide people's happiness. From this aspect, the contentment people get from the health services is another significant indicator that is judging the system. We can assess the health system executed by measuring all these indicators altogether.

Actually, health systems are complex structures with multiple variables. Primarily people's habits and beliefs, there are many internal and external effects such as economical and social facts, climate and culture which may affect the performance of the health system. Nevertheless, even if it is a rough approach to regard the forgoing indicators as the basic indicators of health services, it will not be wrong, however.

What make these performance indicators develop positively are the organizations, communities and individuals that establish the system and their practices. Therefore, the details take place throughout the action period will make a significant effect on the system performance. Efficiency in the practice, accessibility of the health service and service offer with high quality appear to us as the significant instruments

to obtain a good system performance. These are the facts that form the aims of the Transformation in Health Program that has been put into practice since 2003. The aims of Transformation in Health Program have been expressed as "to organize the health services *effectively, efficiently and fairly*, to supply finance and to provide service offer" (1). Another main component of the Transformation in Health Program is quality in health services and accreditation.

Efficiency means to produce sufficient and proper service with the lowest cost making use of our resources in the most appropriate way. It can be possible to remove the imbalance between supply and demand only through efficiency. Although developing policies as to keep the demand increase at the optimum degree by the man-power that will raise the demand and encouraging the institutional enterprises give successful results for the long-term solutions, these results cannot be achieved with independence of the efficiency. In any case, efficiency is one of the prerequisite for increasing the health service.

Achievement of the health services is defined as "fairness" in "Transformation in Health" Program. From this aspect, the aim is to decrease the differences among various social groups and health indicators between country and urban or between east and west and achieving the health services. Achieving the health services in accordance with justice criteria requires the service areas to contribute to the system as much as their power let. Thus, both every individual in the country are provided to reach the services as much as their needs and continuity can be obtained. Since making accessibility limitless through the populist and short term policies not only would not get along with fairness but also would prevent the system against being continuous, the system performance will soon break down with the precautions taken immediately. Therefore, for the sake of protecting the health service, common but fair achievement must be provided. Here, it will not be understood that accessibility means that the patient can physically reach the doctor or the nurse who will give the service or buy the medicine. To provide the living environment that will help the health service efficient, nutrition facilities and

appropriate knowledge levels should be assessed with inclusion of accessibility to the health services well. That is, the genuine accessibility is to get the result of the service offered.

The service expected to be performed efficiently and achieved by everybody is consequently a service with high quality corresponding to the modern conditions and scientific facts. In fact, this is the target aimed to be reached at the beginning. Expected improvement in the outputs can only be observed as long as the high quality health service is offered. As for the quality in the health services, while the professionals make a judgment rather looking at clinical practices and their outputs, the patients get an opinion according to the service quality offered them (2).

Clinical service quality should be understood as taking right decisions based on proof for the diagnosis and treatment, making usage of the appropriate medicine and treating materials, employment of well-informed and skillful personnel and an existence of a system, that's an organization, which is transforming all inputs taking roles throughout the process as well as the infrastructure into an effective service. In case of an assessment made from the point of view of the patients, cleanliness and prettiness of the food, environments and the goods having roles throughout the process, in other words hotel management, should come to the minds as well as the transportation which the patients involved in and the suitability of the processes such as appointment, treatment, and meeting the expectations of the patients. In addition to that, giving importance to the personality of the patient and respecting them is a significant quality indicator. Giving information to the patient during the period of receiving health service, applying to his idea before taking every step, in examinations and treatments are the behaviors that will make the patients so much pleased. Therefore, the information and reception asymmetry about the subject of quality become clear. Because the subject of quality in health is the main factor of the performance management, it will be studied in detail below.

A high quality health service offered efficiently, in the frame that we tried to explain will be reflected on the

health indicators of the society as much as it is accessible in accordance with fairness. The inclusion and quality of the health insurance umbrella constitute the important, economical motive to achieve this result. In a society where the main health indicators are high under the widespread health insurance, we can talk about a good performance of health system if the contentment of the patients is obtained as well as regarding their reception. However these are rather theoretical approaches. As entering the activity areas, it will be seen that there are details that will be discussed and achieving the absolute truths is not always possible.

4. PURSUIT OF HIGH QUALITY HEALTH SERVICE

4.1. What do we expect and get from the health service?

The financiers who distribute the domestic resources among the service sectors in order to offer more efficient and higher quality service are required to comprehend the importance of health. The importance countries give to health is assessed with the resource saved for the health services according to the rate of the service to the national income. However, this should not cause expectation that the problem will be solved with surplus resources reserved for the health.

According to the study of Fisher and his companions, increase in the health expenditures is not always in harmony with patients' accessibility to the health service, health outputs or patient satisfaction (3). On the contrary, in another study, it is argued that there is a negative relation between health expenditure per individual and the quality of the health service process (4). According to these researchers, managing the health services at the first grade in the service fields of medical profession with high cost play an important role in this contradiction. Thus, as the cost is increasing, a first grade service which is not high quality is offered. Because of this fact, there must be a total combination among the expectations from the health service and the reserves saved, planning and management of the health services.

Up to the century we are in, an extraordinary power has been attributed to the doctors almost for ages and it has not been necessary for their opinion to be ratified by other doctors. It has long been accepted implicitly that the health servers, especially the doctors, behave absolutely in direction of scientific facts and it has been believed that all servers have done their best as to a better service. However, either the researches conducted by the doctors personally or the cases referred to the judge has prevented the masses related to the health services maintain this comfort of them recently. Some of them accuse the health servers exaggeratingly and

give harm to the people who are receiving the health service with insecurity they cause, however, people have developed a common opinion that the health service should not be left to the mercy and justice of the doctors and the other servers just as the war can not be left to the mercy and justice of the generals (5). This subject seems to become a current issue with the execution of the innovated Turkish Penalty Law.

According to the research of Mc Glynn and his companions, the Americans, who are spending on health services almost the most, can receive only 55% out of the amount presumed from the services such as protective services, acute treatment and chronic patient care services. It is clear that there are big differences between what we learned as a science and our practices. According to the National Health Care Quality Report current in the USA, there is a difference of seventeen years between the proof and the practice (what is known and what is practiced) at the moment. It is argued that 44,000 – 98,000 people die of medical faults which can be prevented in the USA the report of the Medicine Institution which tells about shocking data (8). This number reflects a calamity equal to a plane accident.

Unfortunately, it does not seem possible to make a proper assessment since we cannot meet such researches in neither our country nor neighboring and European countries. Yet, we cannot deny that the health services are at a level appropriate to be questioned.

4.2. Quality in Health

The issue of quality in health is a popular term nowadays; however, what is understood by health should be discussed. In fact, it is not possible to talk about a practical science of quality assessment which determines the quality of a whole health system. Because of this reason, rewarding the quality in health and studies on payment based on performance with this aim could not go beyond experimental levels. Definition of quality in health and assessment of it can not be something that will be forced on the servers directly.

Willingness and participation are the basics of quality development. Quality can only be improved with the participation and support of the servers. Moreover, participation of the patients who are the consumers requires to be considered in quality development for patient contentment and experience is the important aspects of the quality.

It should be regarded that there appear differences between the judgments of quality assessment from the point of view of the foregoing health professionals and those which are from the aspect of patients. The problem can only be overwhelmed with a model that is following the knowledge and perception asymmetry in the server and the served.

Pursuits of reformation that have been arisen in order to reinforce health services almost in every country are focused around a specific base. According to these, an environment made sufficiently widespread to achieve primarily an easily accessible and high quality health service, where there is a balance between the service load and ones who are offered the service, at least the efficient service is produced with the right motivation that will attain this balance, should be provided. It should not be forgotten that high quality goes through a system which is making easy to do good things and difficult to do bad things. It is required to construct a structure that will raise the quality of health care and observe this increase continuously. The health professionals should be made to gain responsibility of giving high quality health service. To provide this responsibility, it is necessary to keep a systematic collection of information that will record the health service offer with details ant to share these information with the health service servers and the public.

Health Care Standards the USA since the beginning of the twentieth century, showed that determination of the standards is not sufficient by itself as to the matter of taking the quality under guarantee. The quality can be assessed; and then it is necessary to observe these assessed indicators. A series of different indicators are being published by different international institutions to assess the quality. Whereas the measurements of quality indicators that are

attempt to be developed are quantitative measurements that are useful for collecting and arranging data about the performance of the patient care processes, treatment, and their consequences.

4.3. Ways of encouraging quality in the health care

A successful health system should include the ways to keep the motivation high in the servers and should have the ability of utilize the instruments that will provide an efficient and high quality health service environment. To instill the responsibility of offering a high quality into the health workers is a prerequisite but it is not enough. There is need of models that will maintain this responsibility and direct the people towards this responsibility area. Efforts of observation of the health services from outside by independent observers and encouragement of the servers with financial or non-financial motives directing them to a higher quality service have been becoming more common recently. Many health politicians are directed to assessment of the quality and establishment of a payment infrastructure that will reward this.

The people who get benefit from the health service or those who pay the price of the service received can utilize different instruments to encourage the offer of a higher quality health service. One of them is professional trust and prestige achievement of the owner of high quality service, the other is the financial motives that will be used in return for this service. Both of these instruments require recording and information systems that will provide a good observation of the quality and the quantity of the service offered (5).

Those who defend the opinion that efficiency of the professional trust and prestige support that performance based payment is nothing but transforming the transactions in the information systems into the income and a genuine performance and quality development strategy can only be obtained not with economical encouragements but through an approach focusing on professional responsibilities. On

the other side, according to the common view that is for performance based payment, professional norms are effective in quality control; however, professional trust and prestige with these norms form the spine of the economical power for the health servers. Thus, the payment systems based on performance has an effect inclusive for all these motives.

4.4. The Link Between Payment and Its Outcomes

First of all these effective methods proposed as it is told above, comes building a payment and costing system that will encourage and encourage the servers. On the other hand, health service is not a service of which borders can be drawn precisely unlike other services such as purchasing a stable property or food and cleanliness. Knowledge, skill and especially the ideas of the servers, primarily the doctors, determine the style of the health service. Medicine science is full of discussions. Medical information can be changed fast. This makes it difficult to assess the correctness, aptness and quality of the health service.

In this assessment trouble environment, it is not rare that the doctor who believes that there is no accordance between the performance and the payment presents unpleasant behavior alternation. As a general rule, unreasonable payments in return for the health services may cause the servers develop an unreasonable behavior. For example, keeping the inspection fee low bring about more patient inspection in a shorter time, consequently, the time left for the patient begins to be less and much more tests are required to be held. To make many investigations exist not only with the expectation of high income but with the fear of skipping the diagnosis of the patient (5).

Therefore, directing the health service, encouraging, developing control mechanisms, and especially the motivational factors that should be developed with the aim of maintaining the health services can never be disregarded. As we stated before, connecting the finance with performance is one of the methods of this. We must

always encourage the best. As long as an organization do not have a reason to do better, the expected changes will be slower or none.

4.5. Is it possible that the market sustains the quality?

The comprehension that the personal attitudes of the patients demanding the service and the conditions of the liberal market will provide high quality in the health service is named as "the Health Service in Consumer Management". On the other hand, this opinion is far beyond giving the expected result.

Although the patient spend too much money from his pocket, it is not possible that can control of the service offered with the money they paid since they do not have concrete information about the price and the quality of the health service offered in the competition environment. Unfortunately, the information gab in the assessment of the matter of price and quality is nearly a norm almost in every country.

The patients' perception of health service quality shows differences as compared to the health servers. In addition to the patients' being provided their needs such, cleanliness and prettiness of the food, environments and the goods having roles throughout the process, in other words hotel management, as well as the transportation the patients involved in and the suitability of the processes such as appointment, treatment, and applying to their opinion during the process, giving importance to the personality of the patient and respect them appear as the quality indicators. Clinical quality which is understood as taking right decisions based on proof for the diagnosis and treatment, utilizing the appropriate medicine and treating materials, employment of well-informed and skillful personnel and existence of a system, that's an organization, which is transforming all inputs taking roles throughout the process as well as the infrastructure into an effective service face the risk of being neglected.

Besides this general information and reception asymmetry, the quality rewarded in the liberal market is directly related with the personal perception and preferences of the served. The harm of the cigarettes is a universal fact; nevertheless, we should not forget the millions who make their choices besides smoking. Damaging their lives, our citizens can spend an amount on cigarettes that is much more than the expenditure on medicine for treatment every year in Turkey. From a respect, the sector which is deteriorating the health is rewarded in the market situations. Mostly in developed countries people may pay much more money willingly for the fatty food which cause obesity and deteriorate the health. Through this attitude, quality perception of the consumers is rewarded. In short, "quality" in liberal market is just like "beauty" which depends on who look at it. Here, we should not extract a meaning that is in direction of excluding liberal markets in pursuits of quality. Any service which does not have any aim of customer pleasure will not reach its goal. Thus, as the quality of service is being evaluated, pleasing the people receiving service appears to us as an important fact. The point we get as a discussion subject is whether health quality control can be obtained or not.

In order to activate the factors encouraging the quality, it is necessary to distinguish the high quality service from low quality one without any debate and put forwards the performance indicators which will reveal the discrimination clearly between the acceptable services and the quality increases that do not cost much in by either the patient or independent private observers.

Unfortunately, it is a known fact that scientific level of quality definition and assessment in is yet in the crawling stage. A proper quality control mechanism in the health field should include different dimensions of the clinical processes and outputs as well as the pleasure that the patient received from the service offered. Today, a genuine quality assessment is limited mostly with the experiences of the clinical professionals that have taken special education on important dimensions of the quality or professionals that are specialized in this area.

4.6. A Healthy Information System For Health

A systematic information collection which will record the health service offers and that this information should be shared with the health servers and the public was stressed before. A healthy recording of the health services is essential for very kind of assessment, assessment and rewarding. The more practical, standard, accessible and easy to analyze this recording system is the more useful it is for the system and the system manager.

Classical archiving methods remained far beyond responding our expectations today. It is impossible to talk about a health recording system that is not taking advantage of health technologies. It is inevitable for the health records to be assessed as regarding the controlling and managing of the past services offered and to get benefit of informatics infrastructure as a data bank for taking future decisions.

Following up the performance indicators in time, assessment of the performance and thus health protection can only be achieved through a widespread and standardized information system through which all service sectors taking roles in the health service can information exchange. This data processing infrastructure requires a common language, software and a hardware that all shareholders can adopt with. Thus, information systems go on being the area which the researches lean against and studies focus on in almost every country.

In order to provide the quality security, it is an evitable priority to equip appropriately the health man power such as doctors, nurses, pharmacists, laboratory assistants and biomedical specialists with the health care based on proof. These personnel should be provided effectively with the clinical supportive tools such as clinical diagnosis and treatment guidebooks (12). Namely, an informatics net and a powerful and supportive unity must exist to give the necessary information support for the health care based on proof. It will not be a dream to expect the examples such as NICE, AHRQ and Cochrane Electronic Library that provide information to increase by time.

Providing information resources based on proof does not mean that we take the health care based on proof under guarantee. Firstly, it should have an information way that will be able to move fast from the advanced level of the most correct information search which indicates the best clinical practice to the stage of clinical practice. In addition to that, continuous quality control by outside observers is a requirement that is proved to be definite by experience. This requires a secure information path that will supply the observation and control of the information. Briefly, the way of maintaining a high quality health service is possible with a secure information system that has an ability to indicate to the people who are receiving the service that which server produces high quality and which server does the low quality service. Moreover, the whole health system can be observed and taken under control in this system. Sharing this information regularly with the public direct the establishments which produce low quality services; at least, it will play a role pushing them upwards the country averages. The feedbacks of such information will establish the most effective internal control and arrangement mechanism of the health system.

No health system that will serve these aims exactly has been established by any country in the world yet (9). There are countries which leave enough resources for this; however, we should not forget that the matter is not merely financial resources and technical infrastructure but that the adaptation of all the organizations beginning from the patient and health personnel involved in the health to such information system, takes too much time.

4.7. The Imbalance Between Supply And Demand

The annually average number of the applications to doctors is 6.9 (13). According to the National Health Calculations, this rate is 4.2 in 2000 in our country. It won't be a soothsaying to argue this number is increasing day by day. Because, the easy achievement of the health services and low costs encourage the excessive applications

to doctors which is called as "doctor/hospital trade". The increases in the economical development, transportation and communication facilities are effective factors on the application increase. Especially in recent few years, it is natural that the fast innovations in the health field included in Transformation in Health Program cause such result.

Limitless freedom of the patients to choose the doctors, irresponsibility of the patients to pay dissuasive contribution for this choice, putting the doctors and hospitals into a competition based on the patient application result in instant inspection for 3-4 minutes. It is inevitable that such practice causes unwanted results such as wrong diagnosis, missing treatments or delaying of the proper treatments (15).

World Health Organization accepts the inspection time (time spent between the doctor and the patient) as a measure for the response to the need of patient. This is an important dimension that shows the quality of health system. It is known that, this time is 19-21 minutes as an average in the USA (16). Therefore, while it is a requirement to take steps to ease the accessibility of the patients, it is necessary to develop mechanisms which will decrease the excessive demands. On the other hand, building a structure where all the doctors take part actively in the system and the load is distributed equally will provide a facility of widespread distribution of the patients to the doctors and spending more time for each patient.

Here, while expecting a high quality in health services, sufficient health manpower, one of the most important inputs, appears as an important subject. The number of the doctors and nurses per individual is very important from this aspect. 0.5 nurses are left per bed in Turkey. This number is attained merely by the late contractual personnel policies of the Health Ministry. This rate is, as an example, 0.62 in Taiwan (9), 7.9 in Japan (17). 2.3 doctors left per 1,000 individuals in the USA (18). While an average of 2.9 doctors employed per 1,000 individuals in the OECD countries, this number is higher in Europe (13). Among the 52 countries of the World Health Organization Europe Zone, Turkey is the last with 1.3 doctors employed per 1,000 patients.

Compared with the examples of many developed and developing countries', it is seen that the doctors and nurses working in our country are so few in number. That long time is spent for the patients during the inspection with such a staff and the nurses treat compassionately the patients with smiling face in patient care, and the degree of the possibility of offering service with desired quality must be discussed.

Facing this fact does not necessarily mean that some of the patients should be deprived of the health service so as to offering high quality health service. The claim of being a social government attributes the responsibility on us to provide all of our citizens with the accessibility of the health services and get benefit from them as much as their needs. However, increasing the number of the health personnel, primarily the doctors, to a sufficient number is a long term solution; we have to put the time of our personnel to good at the utmost level. Therefore, an environment needs to be established for especially the doctors to utilize their time the best, for almost every doctor to perform his/her isochronal job actively in the system and produce the service.

Such a dynamic working environment is not possible to be established merely by orders and the law changes. The performance assessment and the payment mechanisms based on this are desired to be the motivation means that will establish this environment. Why the other sectors except from the health have difficulty in accepting this practice is because they are not aware of this supply-demand imbalance. The point where all the doctors in the system take place actively and the burden is distributed equally in order to supply the demand is the point the most time can be left to the patient. That is, there is need for such thing even at the first step of a high quality health service.

5. PERFORMANCE MANAGEMENT IN HEALTH

In order to increase efficiency and quality in health case and obtain a better health output, emphasis is being increasingly put on performance management. Efforts are ongoing in different countries on this issue, and various models are created. To give an example, practices of Canada, Ontario government are quite interesting. Local health administrators in Ontario have developed a project with Ontario Hospital Association, and prepared a comprehensive performance indicators set in order to score the hospitals and compare them with each other. These performance areas cover financial performance, patient satisfaction, clinic applications and outputs, as well as the integrity and variability of the system. Performance is measured on these areas and annual reports are prepared and shared with the public. In this manner, it is targeted to shift the hospitals to performance management and thus improve them in terms of organizations and management. At the beginning, in this project, no relation was established between the payments made to hospital and the performance. However, shift of patients to hospitals which have better performance indirectly affect the finance flow. (19).

Financial performance criteria from among performance measurement fields cover unit costs, patient admission days, number of enterprises, and cost of patient care hours. Among the patient satisfaction criteria are the outputs of health care as well as service care, practitioner care, house care and support care services. In measuring clinic practices and outputs, access to coronary angiography, repeated applications due to myocardium infarctus, complications, daily surgery rate and post-hysterectomy admissions are taken into consideration. As performance criteria demonstrating system integrity, clinic information technologies, clinic data gathering, intensity of information usage, continuity and coordination of care services, and ability of collaboration with other service providers and institutions than the hospital are assessed(19,20).

Performance assessment efforts are not limited only to the hospitals. Rewarding of performance is not ignored in protective health services. A Family Health Network rewarding system has been created in order to encourage protective health service and chronic disease management in Ontario (21). This system is based, in addition to payment made per every registered patient, on payment of local wage rates against various services provided at a certain rate on per service basis, giving additional premium for the success of targeted protective health services, and separately rewarding continuous medical training, some practical applications and nursery services (20,22).

In order to make a decision, it is required to know, and have knowledge. Strong, reliable data are required for information. The data may only be converted to information is it is in measurable, analyzable format; otherwise we can speak about data dirtiness or eventually an information dirtiness which does not have any impact on decisions. In order to motivate health professionals, ensure that the provide more efficient services and provide higher quality services, it is required to make measurable service definitions. For performance management, it is required to make these definitions in a clear manner so as not to lead to any discussion. Emphasis is put on different performance criteria in order to realize this aim. Providing the satisfaction of people to whom services are provided, to obtained a better health level (output), comply with a well-defined quality health services provision process, perform the norms defined for infrastructure, human and material resources (input) used for providing this service are among the leading criteria. Regardless of which of these is used as performance criteria, it is not possible to get relief from critical approaches. Each has certain advantages and disadvantages. For this reason, health politicians who would like to have an equity based performance measurement, tend to design a system in which they can use all these criteria together. These criteria are individually analyzed below.

5.1. Performance Criteria In Health Services

a) Ensuring human pleasure (patient satisfaction)

Ensuring human pleasure is one of the most important tools of competitive systems. The concrete application of this in the field of health services is to ensure patient satisfaction. The approach to health services with the understanding of free market tends to determine the quality of health system with final output criteria. This criteria is the extent to which the beneficiaries of health services are satisfied with clinical findings or the environment created, regardless of how this satisfaction takes place. In determining performance rewarding criteria, patient satisfaction should definitely be taken into consideration. However, a measurement which solely depends of the perception of the patient will not suffice in a health area where information asymmetry is much and particularly in societies where the level of education is low. (5).

b) Accessing to better health level (health outputs)

Health output is accepted as the access of the receiver of the service to a better health level as a result of the service he / she receives. Given that, for a better health level, the mental and physical well being condition of the person should be elevated, "health output" may be perceived as a criteria determined as a result of taking into account the clinic results and patient satisfaction together. Payment of the consideration of high quality outputs is seen as the most reasonable method of performance based payment. However, we face with two basic problems in output approach. First, "health outputs" may be affected by various factors which are out of the control and inspection of the health system such as the behavioral patterns and living environments of the patients. In an output based performance measurement system, it is required to carefully analyze these factors. If sufficient statistical adjustment is not made for factors which are effective out of the control of health system, service providers who have problem of

harmony with payment based on health outputs and who are to deal with patients living in negative environmental conditions (5).

On the other hand, several facts at diagnosis and treatment stage face with different medical disciplines such as several practitioners, laboratory and imaging systems. Each has a contribution in the output at different rates. For this reason, it is not so easy to measure and assess the specific health outputs (23). If all practitioners whose service is to be measured are in the same clinic or hospital, the institution may be rewarded by making a general performance assessment, however, it is not possible to reward the practitioners and other health professionals singly.

Despite the fact that there are various discussion about theoretical approach of output based performance measurement, there are hesitation on the processing of this. A satisfactory management of the output analysis should be present for rewarding performance. According to David Eddy, the leading American quality control scientist, a bad designed output measurement will deteriorate the system rather then improving it. Besides it is not only the health output which determines the conclusions. In the end of the complicated diagnosis and health care procedures, the main importance is on the overall output. The positive level of output does not always necessarily lay out the quality level of the healthcare service and usually there is not a direct proportion between those two aspects (24).

c) Rewarding the service provision process (process measurement)

In using the service provision process as criteria, it is targeted to inspect and assess the process followed while producing health services such as performing the process in line with determined norms and evidence based diagnosis and treatment guide. Perhaps the most practical approach for performance based payment, is to focus on the process of providing health care services and rewarding evidence based good clinical practices. However, an issue to be

considered is that a certain health output might not be connected to a known treatment applied to a known patient. For this reason, provided that all external factors are equal, it is assumed that only a health care service process in while may provide the high quality output. However, evidences substantiating that the situation is as assumed are quite weak. Because, even if we manage to equalize the external factors, reactions of the facts are not similar all the time. It is apparent that process based performance measurements carry various problems with them (5).

Steinberg and Luce suggest in one of their paper that the diagnosis and treatment guides, which constitute the cornerstone in process based performance payment systems, rely on inconsistent works towards health output in methodological terms, and that they bear various variability (25). In a work related to the analysis of evidence based output works related to different medical applications, 121 different approaches were used to assess the output quality, and only 19 of these assessment methods found to measure the high quality suitable for such type of analysis (25). According to this study, determining the power of data which constitutes the background of a certain clinic application constitutes a very complex structure behind what is assumed of it. For this reason, some gaps emerge while assessing the evidence based structure of a good clinical application process and these gaps are required to be covered generally by subjective opinions. This situation deteriorates the objectivity of process measurement.

Alan Garber indicates that most of guides which are beneficial for assessing the clinical processes are long texts drafted flexibly so as to give a right of discretion of practitioners. According to the author, it is not healthy to use these guides instead of the debated performance measurement criteria. Moreover the rate of the change for medical information and the requirement for updating the legislation according to this change rate, the need to transfer this updates to the health staff make the process in fact more complicated (5,23).

d) Quality of infrastructure and inputs (input analysis)

In addition to good clinical practice guides, a performance management system relying on the measurement of quality of such inputs as the information technology infrastructure, material and human resources used in the process of providing health services. This approach has been developed by a union (Leap Frog Group) comprising of 160 big health service payer institutions in the USA. Institutions which are the members of the group consider the quality improving processes such as executing practitioner records and orders in computer media, number of health professionals and practitioners assigned in intensive care unit, and engaging in evidence based referral to hospital while making payment to the hospitals (26). However, the impact of this group in American health system has been gradually decreasing since 2000 when it was established (5). This sort of performance criteria is seen as quite applicable. In order to realize this, required standards are being defined for the licensing of health service units. But, because those standards are at minimum level, more data for the quality criteria must be needed to be defined as well. Besides, the fact that all these infrastructure and inputs are at the desired level does not mean that always a quality health service output will be obtained.

6. PERFORMANCE BASED PAYMENT SYSTEMS AND THEIR CHALLENGES

In the financing of health services various payment methods are used including payment per service, per visit, per day, per case and item-based budgeting and global budgeting. Regardless of which payment method is used, certain basic principles should be protected. First of all, service price and budget to be used for a certain purpose should meet the cost of the expected service, and even provide a plus value share for research and development. Secondly, rates prepared in order to make repayment to service providers should not be so high to provide lopsided profit in some service items. It may be strategically acceptable only to make certain services exceptionally profit bearing in order to encourage them such as protective health services as an attractive method. Thirdly, whether it be payment per service, budgeting or other methods, services of high quality should be separately measured and graded in addition to routine payments, and the system should be designed so as to provide opportunity for rewarding them (9,27).

There are reform initiatives for increasing the efficiency of the service on fields where there is a need for more and higher quality services. For this reason, **reform searches in health are always in the agenda of countries as an almost never-ending process.** Unless there is a reason for the persons or organization providing services to perform better as a whole, the development will not be at an expected level so as to satisfy the needs. Yet, in an age when tools of diagnosis and treatment develop rapidly, type and amount of demand for health services increase, more health services are needed as the average life expectancy increases and people demand for health services for a life with better quality, there is a need for fast change in health services sector. It is a known fact that the efficient way to mobilize a clumsy enterprise is to associate financing with performance. Therefore, performance based payment system becomes the important item of health sector agenda more than any other sector.

When speaking about performance based payment, the first thing that comes to mind is paying health professionals,

including the health facility or practitioners providing the service, proportional to their "productivity"(28). For this reason, initiatives immediately face with critical approaches. What is understood from productivity here is not the quality of health services provided, but the volume. Such a system where the productivity only means quality will ensure that the increase in demand towards health services will be encouraged by practitioners. Rewarding more services will lead the practitioner and hospitals to compete towards admitting income bringing patients (9). For this reason, not creating a profile of patients with priority should be among the priorities of the system.

In cases where the supply is insufficient to meet the demand, such a system could be easily tolerated and is results oriented. Such type of systems have always encouraged towards continuously increasing the supply. However, when the supply becomes sufficiently meeting the demand, the problem of system's being unable to be controlled will emerge, and undesired situations in terms of quality will emerge. In this regard, quality elements should definitely be included in performance based payment systems.

We have indicated above, despite the fact that various performance criteria have been defined, there is no evidence based data indicating that any of them is absolutely true. Generally complex structures in which these criteria are assessed together are created. Regardless of whether any of them is available, or there is a complex structure hosting many of them simultaneously, of whatever performance measurement methods we might use, we have various questions which require to be answered at the implementation stage.

To what extent are the performance criteria, which could not go beyond being empirical, reliable?

Who will actually be the institution or person to be rewarded in case of a health service which is observed to be provided at high quality? To what extent may the limit be extended for rewarding these people? Should the performance measurement be competitive, contest based, or should a level which is constant and not open to

competition be taken as basis? Should services which are considered to be at low quality based on quality criteria be completely isolated, without paying the cost thereof? Should a budget restriction be an option towards the inflationist impact risk of performance based payment? Answers to be given to these questions will play a significant tole on the fate of the impact level expected from performance based payment system. One should also know that no payment system which do not lead to undesired side effects in terms of health could be developed.

6.1. To what extent are the empirical criteria reliable?

Different criteria to be taken into consideration for making performance based payment are explained above in a detailed manner. Regardless of which of these criteria are taken into consideration, either patient satisfaction, or quality of the output, or the quality and reliability of the process or the infrastructure and inputs, it is known that almost all of these are debated in terms of reliability and objectivity, and that they are empirical methods which could not be clearly measured. When considered in this regard, it is seen that rewarding quality and performance in health services will not necessarily be sufficient to provide absolute justice. The fact that the search for absolute justice will not be realized should not lead to the conclusion that one should withdraw from rewarding.

6.2. Who deserves to be rewarded?

In fact, the simple answer that can come to your mind that the target required to be rewarded for performance should be those who provide health services. While this can be easily assessed partially in case of a hospital, it is not so easy to analyze this on the basis of employees. In a service many individuals may have a share including any type of support staff, nurse, practitioner and even the manager of the institution. In addition to the difficulty of sharing among them, the opinion that the patient should be targeted for

rewarding a health service of high quality should not be ignored. Rewarding of patients may be included in the agenda of repayment institutions due to such reasons as preferring hospitals which provide better health services and causing less health expenditures for these. No performance criteria is as efficient as the economic impact which the patient directs through his / her preferences. For this reason, it is suggested that it would be more efficient to make payment indirectly over the patient, rather than paying to health service providers directly based on performance criteria. (5).

6.3. What should be the degree of rewarding ?

Every service has a price. This price may be related to the cost, as well as to an incentive which is sufficient enough to strengthen the impact which will challenge the service provider to the service desired. This issue is revealed at a higher level while rewarding the performance of people rather than the institution, because the criteria of labor are much more relative. Payment made against performance should be at a level to take the same performance to a further step, or at least protect it. If there are not criteria for comparison, repeated high payments are inured and the performance looses its character to be a sufficient drive. For this reason, rewarding of quality service arising with high performance should be affected from the variability of performance, and this should be reflected to the service providers. The fact that the degree of rewarding is at a level which is low enough to have no effect on motivation will not be sufficient for improving the system.

6.4. Competitive and non-competitive rewards

Power of financial drives on performance is partially related to whether the payment made as per performance is competitive or not. In a competitive practice, certain number of service providers compete for sharing a fixed or low amount of rewards, and only a few of them acquire the same. In a non-competitive practice, service providers

are rewarded if they exceed a performance limit which is determined in advance. When there is a fixed payment budget, the more the number of people exceeding the bar is, the lower the share they acquire will be. This means that the financial drive of the performance will decrease proportional to the rate of performance increase(5). Decrease in the amount of money pay to repayment institutions to our hospitals despite the increased performance, and even any non-payment, may lead to this unfavorable consequence.

6.5. Should the services provided at low quality be completely excluded?

It is an undoubted fact that institutions and persons demonstrating high performance and providing quality health services are rewarded. Then, is it possible to punish, ignore and exclude from the system those institutions or persons which could keep in step with this situation? Or, to what extent such an approach is true? Though this situation might be seen as possible at first sight, no health system which targets all society to receive health services will confront this. Practitioners, nurses and health institutions should fully cover the health services of the society in a quality manner, and even they should provide excess services so as to create the opportunity to exclude those who do not provide services of sufficient quality and performance out of the system. This will be possible in a system where the health service providers wait patients for this, rather than in a system where the patients wait for receiving services. It is always possible that private insurance organizations which undertake the health insurance of limited number of people will engage in discrimination between the service providers, and exclude some. However, it is seen that this would not be so easy when compared with the responsibility of a social health insurance system covering all the society under its umbrella.

6.6. Budget Restriction

Regardless of which payment method is used in the

financing of health services, the size of budget allocated constitutes the main frame of the system. If the foregoing basic principles are ignored while preparing the budget, it will not be a good approach to associate the problems emerged with the payment methods. If the determined price of the service expected from nurse, practitioner or institutions providing health services could not cover the cost of that service in a realistic manner, naturally there shall be a shift of service. That means, the same patient will face towards diagnosis and treatment applications with more affordable costs. Or, if the medical requirement is unavoidable, the service provider will be in necessity to seek for a method which will close the gap. In both cases, we can not speak about quality and efficient service. If such deviations are reflected negatively to the output of health services, restriction in health expenditure may ironically lead to the increase of health expenditures.

It is known that the payment in health is among the important control buttons managing the system. Repayment in health services is an important control button controlling the system (2). This control button is a significant toll which could manage the performance of the system. In particular the service areas required, health incentives, protective health applications may be made more attractive with this control button, and the service providers may thus be directed. Unconscious restriction of the budget or applying unbalanced payment rates will eliminate health services from being controllable and manageable.

Performance based payments systems face with resistance in terms of budget restriction. If performance criteria to be demonstrated do not have the power to increase motivation and remove hesitations, it will be politically hard to implement the system. It may be thought that partially punishing the persons or institutions which provide low quality services with low performance through restricting their payments may partially relieve the burden of health expenditures. However, the fact that the restriction of budget allocated to the institution emerges as an efficient power will damage the performance development systems in that institution.

Whatever the burden imposed on the budget might be, when the power of budget restriction reaches to a level to make the size of rewards to be given to high performance ineffective, the system will not provide the expected benefit.

The relation which could be defined between health expenditures and performance has a number of alternatives (2). The first alternative highlights the issue of saving. Costs should be decreased at the point which health services have reached, whatever the result of this might be. For this, it is preferred to keep the performance low. The second alternative is not as ruthless as this. Here the result is not also considered to be important, however low performance is not a preference. Saving may be a target without looking at the result. These two alternatives are usually the approaches of finance authorities who have undertaken the responsibility to improved the economy in countries which are in economic bottleneck.

The third alternative is to seek for the ways of efficiency to increase the performance and also decrease the costs. That is, the economic concern and the concern for performance in health have equal weights. According to the fourth alternative, it is requested to increase the performance to a maximum level possible within the limits of the existing budget. That means, while the budget restriction remains as a fact, the target to increase performance in health is at the front plan. These two alternative relations are the approaches which are highlighted in the effort of health policy makers and health economists to elevate the level of health despite limited country realities.

As the fifth alternative, it may be possible to leave the economic concern aside and consent to making more expenditures than determined in order to increase performance. If the party which emphasizes this is required to pay a price for this, it should be in an attitude to undertake this. Which of these alternatives is preferred is closely related to the fate of the system performance. It should never be forgotten that if excessive saving in health expenditures leads to "saving in health", we may face with heavy prices which are hard to be paid.

7. COMPONENTS COMPLEMENTING PERFORMANCE BASED PAYMENT

If the performance based payment system is considered as an isolated system independent of other dynamics, it is apparent that the health policy makers will not be able to bear the heavy burden of main agenda issues such as providing equity in access to health services, search for quality and cost control. Many daily works which are important in health care services will not be included in performance criteria. In this regard, it will be a more realistic approach to consider improving the system as a whole and consider performance measurement and rewarding method as one of the important tools, rather than pretending this as the one and only solution. It will be more efficient if the performance based payment system is associated with well trained, qualified human power well equipped in terms of knowledge and ethics, a well functioning information processing infrastructure, well-defined evidence-based clinic processes, well-defined service and material database, and no recourse of cost and quality components to the service provider. If this is supplemented with professional reliability and reputation, it will be easier to take steps towards the target of real quality services.

Later below, you will find information and main frameworks related to the institutional quality and performance measurement which is put in affect but the impact of the conclusions of the implementation on the measured coefficient are intentionally kept as low because of the insufficiency about infrastructural issues as seen when tested in this period besides the common implementation prior to the individual performance within health care provisions.

The measurement of individual performance has been revised many times according to the field applications and evaluating the results of those and indeed this measurement has become almost like an algebra model. On the other hand, the institutional performance measurement has started the quality improvement efforts, given a direction for them, encouraged the progress of capacity in this direction an at last by the first quarter of 2007, it has been

consolidated with the legislation of the Ministry under the quality development topic and put in affect in all of the hospitals of the Ministry of Health.

8. PERFORMANCE-BASED PAYMENT SYSTEM IN THE MINISTRY OF HEALTH PRACTICES

Our experience has shown us that just encouraging and reminding health care professionals their responsibility for giving productive and qualified health care services, though being a pre-condition, is not sufficient alone. We also know that the search for such models, which will ensure the sustainability of efforts and enhance responsibility of employees, widely occupies the agenda of policy-makers in health. The Ministry of Health has put signature under rapid changes in health sector for the last few years. Among the basic targets of these changes, to establish a system, which presents the ways for higher motivation of service providers and which is capable of using the instruments needed for delivery of productive and qualified health care services seem to be mostly standing out.

One of the most prioritized steps taken to this end is the performance-based contribution payment, which aims to establish a payment and pricing system that will encourage service providers for delivering productive and qualified health care services. Performance-based contribution payment system, which was first a pilot implementation at 10 hospitals in the second half of the year 2003, has been implemented across Turkey from 2004; it has also covered the primary care. There are mainly two phases of the implementation which has been conducted up to now. One-year practice made in 2004 facilitated the adaptation of health care professionals and facilities to the new condition and paved the way for inspections and audits to sustain the measurement of performance. Considering the changes and experience, a limited number of quality criteria easily measurable in domestic conditions were tested and the most eligible ones were put into practice in the year 2005. By these smooth changes, it is aimed to elevate the consciousness about providing qualified health care and to motivate the infrastructural settings.

8.1. Individual Performance Measurement

As the first step, an innovative model was developed by means of directives that envisage to identify individual performance at primary care facilities and hospitals and to make contribution payment based on this performance and in this implementation many different parts are involved (29, 30).

Labor intensive medical services, according to their significance and frequency, were scored and the services given by practitioners were made measurable on a monthly basis.

Individual services given by practitioners were made measurable as much as possible and the system was promoted by strengthening patient-practitioner relations and patient's right to choose practitioner.

Considering the fact that delivery of health care services is a team product, non-clinic practitioners, other health employees and managers were scored in accordance with the average score of their institutions. So, total performance of the institution is reflected upon all employees.

As for the monthly revenues at institutions, which are distributed to employees as legal contribution payment, every other employee could have a share based on his/her individual performance and score. So, employees make contribution to and have a share in positive values produced by their institutions.

As for calculating the scores of practitioners, a difference is emphasized between two groups, working in public sector on part-time and full-time basis. So, full-time working in public sector is subsidized.

Providing that the incentives which aim to prevent hospital infections, within the main framework identified, are achieved on a regular basis, then practitioners of relevant branches will be awarded, as well.

The necessity of a registry and information system which could provide a proper follow-up of service quality and quantity, is a common known fact. For regular collection

of monthly data, keeping the services of employees under record, transmitting these records to reimbursement agencies and calculating the score distribution of institution in a transparent and realistic way, hospital information systems rapidly has begun to become widespread. Hospital information systems, though not being a provision in this directive, turned out to be a natural outcome of the directive. This is the first time that health care services have been kept under numerical records to such an extent and in details so far.

This implementation does not measure financial performance directly. However, monetary value of calculated scores remains quite alike to the monetary surplus value which is created by the institution that month. For this reason, this implementation indirectly influences to financial performance like decline in per unit costs, saving in current expenditures, check of the patient's hospital admission date and increase in the investment in curative devices and infrastructure.

At training and research hospitals, additional scores are given to clinic chefs, deputy chiefs, chief interns and specialists providing that they make publications of a definite number. Clinic chefs and deputy chefs at training and research hospitals are also given additional scores providing that they give certified theoretical and practical trainings of a certain level. Thus, uncompetitive performance criteria are used in the field of scientific publications and specialty training.

Commissions, which are set up in provincial health directorates for primary care facilities and at hospitals, with the participation of representatives from different professions, determine the amount of contribution payment to the personnel by considering income-expense balance, debts, credits, fiscal status and needs of the institution. Thus, participation of different groups and levels in hospital management is encouraged and the capacity of at-site administration is promoted.

In order to ensure that health care services given in health facilities are being kept in record regularly and

invoices sent to institutions are being arranged unerring, the system of auto-control in every facilities is put into practice. This is achieved by the way of inspection committees, set up at hospitals for the aim of evaluating and controlling the quantity, quality and appropriateness of services to determined principles. Negative attitudes detected in measuring performance might be punished.

Based on distance of primary care facilities from city/ town centers, facilities such as transportation and considering if they are located in villages, towns, districts or city centers, onsite classification is made and so a discrepancy is formed, and in return for working in deprivation regions, higher premiums are given.

As for health care services given in primary health care facilities, various factors such as the follow-up of infants, pregnant, the number of vaccination, new-born scanning tests and use of modern family planning methods are also used as performance criteria. Thus, preventive health care services are also awarded and encouraged.

In 2004 and 2005, within the context of the directive, the applications which are provided by the sub legislation has been changed and developed continuously considering the feedbacks, inspections and the results which were observed from the field. The basic principles which make the main framework like providing more productive and qualified health care, motivating the preventive health care services, scientific studies and the training ships of specialists, foreclosing the disorder of staff distribution, rewarding the staff who work at areas of multiple deprivation and in incentive and risky units much more and promoting full time working at public health sector establishments.

In this period, a permanent legal infrastructure has been set. For this purpose, additional clauses were added to the 5th article of the Law About Supplementary Payment Which Would Be Distributed To The Institutions and Rehabilitation Establishments Affiliated To The Ministry Of Health No: 209 by the Act which was passed on date 7.3.2006 and No:5471 (see the publication in Turkish Edition for details, Ministry of Health, 2006a). Consequently, depending on

this rearrangement of law, *Regulation Regarding Making Supplementary Payment From Revolving Fund Proceedings To Health Staff Who Works Within The Ministry Of Health Institutions And Establishments* has been issued (see the publication in Turkish Edition for details, Ministry of Health, 2006b). By this way, this implementation as it was said temporary and which many speculations were made on this implementation have been replaced on a strong base and has finished the arguments about this subject in public opinion.

8.2. Quality Development and Measurement of Institutional Performance

With directive on the measurement of institutional performance which was put into effect in the second half of the year 2005, performance assessment system, which was predominantly implemented based on the quantity measurement and related criteria, was enlarged by an attempt to measure the quality (31). Sanctions on developing institutional quality both cover internationally accepted hospital quality criteria and meet our domestic needs. Integral performance of health facilities could be measured by evaluating these criteria. By this way, numerical comparison and success rate of hospitals could be available. During the period of institutional performance measurement and its auditing, it is aimed to elevate the consciousness for quality and enlarging the capacity within our health establishments and because of the mentioned reason, the must implementations were put in effect in a limited content and on and off periodically. Reactions and the implementation capacity of the field people have been observed during the said periods and also it is aimed to enlarge the knowledge and capacity of the auditors. As a conclusion, in 2007, within the integration of overall quality studies of Ministry of Health, *The Directive For* Improving Quality And Performance Assessment Instruction In Institutions and Agencies Affiliated To Ministry Of Health was issued and put in effect. This directive would be the periodical assessment and grading manual's prototype for our hospitals which will further achieve autonomy.

There has been built a link between institutional performance measurement and payment system so that rewarding the individual performance has been closely connected to the institutional quality and performance level. Final performance level of the institution which is determined as a conclusion of the institutional assessment that serves as the factor to convert individual performance scores to the amount of contribution payment. In other words, councils at institutions, which used to identify the needs and make financial allocation in the past, were replaced by the degree of institutional performance. In brief, individual performance, which is the same as at another institution, is awarded more if it is available at an institution with higher institutional performance. So, the award given for quantity is determined by quality.

Difficulty, complexity and ambiguity nature of quality measurement was mentioned before. Taking this point as the basis, no one can claim that the Ministerial practices are excellent. However, when the public hospitals' accumulation, capability and capacity is taken into consideration, it is obvious that objective criteria are tried to be implemented as much as possible. Implementation and practices up to now are, naturally, limited in regarding applicability and objectivity. There may be still some defects and/or shortcomings to remedy.

By this implementation, Province Performance and Quality Coordinating Units at Province Health Directorates and Hospital Performance and Quality Offices at all our hospitals have been established. Those coordinating units and offices are responsible for the institutional performance measurement and improving quality at province directorates and hospitals related to healthcare and other supportive services. At this implementation, methods of institutional performance measurement are classified in six groups, which are outpatient services, hospital quality criteria, auditing of hospital infrastructure and processes, and measurement of patient's satisfaction, as well.

a) Access to Examination

Under the policlinic services, one room for each and every doctor is taken as principle for the measurement of coefficient of access to examination. However the directive isn't proposed as a must by the World Health Organization, it is adopted as acceptable indicator for our country in the beginning (32). We are also aware of the significant deficiency level for the number of practitioners in our country. Establishing a system, in which all practitioners are assigned with active tasks and the burden of system is equally distributed to meet demand, will facilitate fair distribution of patients to practitioners and thus will ensure longer period of treatment per one patient. It will also enable patients to choose their practitioners. That is why such a change is adopted and implemented in Turkey. It could also be used as an instrument to increase the quality of infrastructure and inputs in basic performance criteria. It is vital even for a first step to a more qualified health system. However, supporting that with the criteria such as determination of the minimum time for each patient will be useful. The approach to accept one room for each and every doctor as a principle is a target and by this target it would be possible to register the distribution of the doctors during working hours, to maintain a central appointment system in order to distribute the patients in balance with the doctors and the branches as well.

In 2007, a manual was issued which determines the specifications of the working office which the access to service is maintained and the service is given and by this manual the measurement of the indicator has become standardized all over the country.

b) Auditing of Hospital Infrastructure and Some Processes

Hospitals are audited based on a control scheme. Although auditing of hospitals did not have a significant role beyond formality in past practices, today it is requested by hospital managers and employees since it is closely linked to contribution payment. Thus, problems at that hospital are

detected and provincial administrators come to know these problems.

The auditing which is mentioned above also enables to measure the quality of hospital infrastructure and inputs which are among health service performance criteria. On the other hand, not having a strong registry system for sufficient number of qualified and trained personnel and taking on the information systems superficially are the aspects due to be criticized. However it should be kept in mind that what we try to achieve is to make performance assessment which is applicable within limited conditions of public hospitals. As a matter of fact, there is an agenda for making cross assessments in year 2008 as another method in order to maintain the objectivity for all of the assessment studies and during this year, this agenda will be put in effect in different provinces. Other components of our directive and the criteria which were mentioned above would also take an important role in classifying the hospitals during the period of making them autonomous.

The monitoring of this criterion was started under web based infrastructure and process assessment system which the data are being entered at provincial level and this system began in 2007.

c) Measurement of Patient Satisfaction

Some questionnaires have been designed to be applied at the hospitals for inpatients in order to measure the satisfaction of the patients as an annex of the directive named "Questionnaire for the patients and their caregivers Two sets of questionnaires and questionnaire principles were developed for in-patient and out-patient health care receivers. Thus, not only patients but also their families were covered in the process of health service performance measurement. As known, patient satisfaction is one of the most important instruments of competitive systems, and the most tangible evidence in health sector is patient satisfaction and happiness. All parties and shareholders in health sector agree upon that patient satisfaction should be taken into consideration as the performance assessment criteria.

That is why hospitals were encouraged to conduct these questionnaires in the beginning. By this way, institution capacity could be developed. It will become much more useful once it is conducted by independent agencies out of these institutions.

Through such practices, quality criteria assessment and questionnaire conduct units have been set up with the institutional performance and quality representatives at all hospitals and the concept of health services quality has been introduced to all managers at public hospitals.

d) Assessment of the Institutional Productivity and Measurement of Institutional Targets

In this criterion, the will is to encourage the healthcare organization to use its resources at most productive way and to improve this ability as much as it can. Here, at least for beginning, the financial productivity is not the most important issue. Surely, it would be involved into the system naturally meanwhile but it is even more important for a public health office or a hospital to learn how to use its existing physical features at most productive way according to the targets of the healthcare institution and this would make an improvement by itself. Especially, when the hospitals would achieve autonomy, it will urge them to use their financial resources at mot productive way naturally. Otherwise, Lack of productivity will be reflected in all processes of the healthcare services. Lack of productivity aspect was not a sanction on low quality or quantity service until then because there was not a competitive component within the budgeting system before. From this point, those healthcare institutions which are incapable of adapting themselves to the ongoing period will be unsuccessful in keeping themselves within the system as if the progress goes on as it expected.

In the beginning of the path, at least reasonable goals should be determined and all of the providers of healthcare services have to pay efforts in order to achieve those goals. All of the goals do not have to be related with the productivity in a direct way but an assessment system under this topic

which aims to lead all of the healthcare service providers to produce more productive and qualified service would be set by this way. In order to raise the bar in determining the goals and to renew them dynamically, periodical institution productivity criteria would be announced. By this way, instead of placing hard goals all of a sudden, it is chosen to improve incrementally and become closer to the ideal situations more and more at each and every period.

Some basic goals such as bed occupation rate, average stay-in-bed duration statistic, rate of inpatient and staff expenses rate to the overall budget have been put in effect. Beside those, some criteria such as caesarean section rate, moonlighting rate of doctors etc. which help to motivate and follow the policies of the Ministry of Health to be put in effect within healthcare organizations have been evaluated as well in the content of the mentioned goals above.

The most important tasks of the primary care establishments are preventive/protective services and being aware of this principal, prior goals of them have been determined according to this principle. Pregnancy, puerperal, newborn and child monitoring, vaccination rate under extended immunity programs are some of them and those statistics would be determined periodically and tried to be reached at them in primary care establishments.

e) Hospital Quality Criteria

As for the quality measurement of hospital services, some of criteria were selected among the international accreditation standards (developed by the Joint Commission International Accreditation). They were tested at our hospitals and then evaluated in national scale. These criteria usually focus on access to examination, administration, information management, laboratories, O.R., clinics, patient and staff security, prevention of infections and their control, intensive care, dialyses, management of the establishment and its security, pharmacy, E.R., kitchens and other logistic service fields.

Although external assessment is not a pre-condition at this point, this implementation is very important for creating awareness of quality at an institution. The system will be promoted once more criteria are embedded after they are tested and the practices are audited by independent external auditors. When the scope of quality criteria is taken into consideration, it could be thought that the process of delivery is tried to be awarded partially. Measurement of the process, however, focuses on the process of healthcare service providing and aims to award evidence-based good medical practices. It has, in other words, a more enclosing specification. On the other hand, it should be recognized that this is a topic which is considered rather in theory and which is subject to severe discussions.

The said set of criteria which has taken place in the annex part of the directive with the changes which have been made during 2007 is sort of a manual for hospitals and does not have a large effect on the amount of supplementary payment practically but still the criteria set serves in order to settle the quality culture at public health sector.

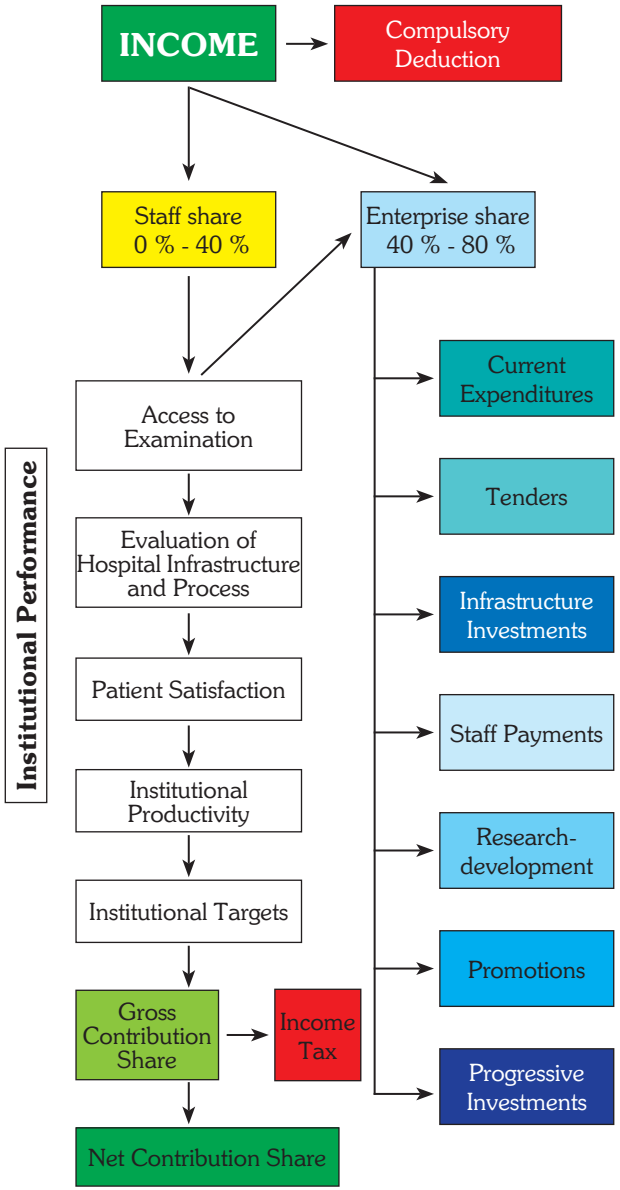
8.3. Progress in Measurement of Performance

As it is known, various performance criteria have been a subject of discussion to ensure productivity and quality in health care services. Compliance with a well-defined health care services delivery of higher quality, meeting the norms defined in relation to the utilization of infrastructure, human resources and material supply (input), achieving a better level of health (output) and making service receivers happy are the main pillars of these criteria.

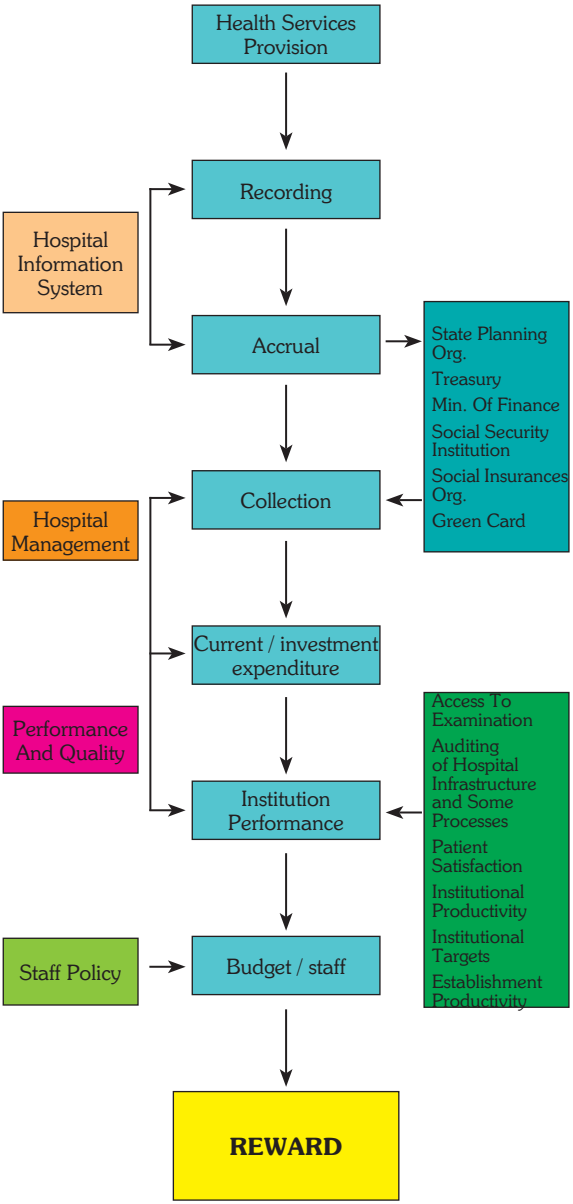
If we assess current practices with respect to performance criteria at health care services, it could be seen that these criteria are tried to be used though in a limited way. Practices regarding the measurement of patient satisfaction and infrastructure are relatively more tangible. Measurement of the process, however, is limited and measurement of outputs is not available for now. Further studies are required to measure clinical process and outputs, on the other hand. Encouraging and facilitating such efforts will pave the

way for studies in the future. However it should be kept in mind that functioning of the output-based performance measurement is still under debate although it is agreed in theory. We also know that it is difficult to determine the power of data, which constitutes the background of a well clinical practice in process analysis. As discussed above, gaps occur while evaluating evidence-based nature of a well clinical practice and these gaps are usually filled with subjective judgments. Thus, it should not be forgotten that the subjects, which seem like defects or shortcomings, are very controversial ones under hot debates, in fact.

Distribution of Revolving Capital Incomes



Factors Having Impact on Rewarding Performance



◆ *Mehmet DEMİR*
Ministry of Health

9. WHAT IS PERFORMANCE BASED SUPPLEMENTARY PAYMENT SYSTEM?

Performance based supplementary payment, is a system which is being implemented in all health facilities affiliated to the Ministry of Health, determining the rate, principles and procedures of the supplementary payment to be made to the staff assigned from the revolving capital incomes in order to ensure that health services are improved, and quality and efficient service provision is encouraged, which payment shall be made at health facilities based on such elements pertinent to the staff as

- title
- task
- working conditions and duration
- contribution to service
- performance
- whether employed freely
- examinations made in institutions
- surgery, anesthesia
- initiative actions,
- working in risky departments having risk

taking into account the conditions of criteria of service provision determined by the Ministry.

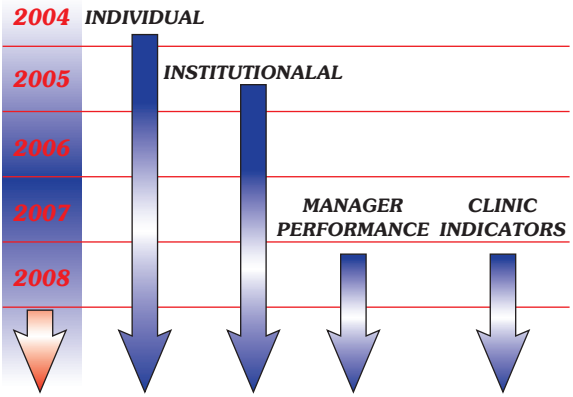
The system is not only a monetary payment model, it is an application which rewards the staff according to "success criteria" determined, and ensuring saving, efficiency and productivity together with the "institution performance criteria" in addition to increasing individual efficiency.

With the launch of Health Transformation Program at the beginning of 2003, initial works have been performed about the system. Pilot application has taken place in 10 hospitals and 1 provincial health directorate starting from the second half of 2003. The system has been developed as a result of the pilot application, and been applied in all facilities of the Ministry of Health starting from the beginning of 2004. **Whereas the system having more individual**

and qualitative performance criteria in 2004, institutional performance criteria have been added to the system in 2005, and the quality aspect has been integrated. Quality aspect has been continued to be developed during 2006 and 2007. In 2007, works are ongoing on "manager performance criteria" and "financial indicators", and as the "clinic indicators" are added, the health system will be assessed according to internationally accepted clinic success criteria by means of this practice. **Performance based supplementary payment system, being a dynamic application, has been continuously developed since the date on which it was launched and renewed according to the strategic targets of the Ministry of Health.**

Experts of management science indicate that the principles and characteristics of performance management which have been implemented for long years in private sector institutions, could not be applied to public administration in the same manner. Together with this, elements of public performance management are indicated as the acceptance of performance understanding, creating institution performance, and monitoring individual performance. Performance targets, measurable performance criteria, openness, legality and humanity principles are underlined (33). Performance based supplementary payment system has been developed under the light of these principles, despite all challenges existing in terms of its application in public sector.

Development of performance based supplementary payment system.



Performance based supplementary payment system is being applied in all health establishments and institutions of the Ministry of Health. With the transfer of health facilities and staff of SSK to the Ministry of Health at the beginning of 2005, the performance system has been started to be applied at almost 90 % of our health system. Besides, with the legal regulations enforced, the way to implement a similar system in medical faculties has been opened.

Scope covered by performance based supplementary payment

- **975 hospitals affiliated to the Ministry of Health**
- **6400 local health centers**
- **Approximately 310.000 staff, 58.162 being practitioners**

The performance system has been implemented within the context of 3 different models and these models have been explained in details in the regulation which has been issued in the Official Newspaper on date 12.05.2006 and with no: 26166 and its name is "Regulation Regarding Making Supplementary Payment From Revolving Fund Proceedings To Health Staff Who Works Within The Ministry Of Health Institutions And Establishments".

In the first model, there are application principles and procedures towards primary health care services. This regulation has been prepared taking into account the treatment and protective health care services depending on the nature and structuring of primary health care services, as well as the issue of service provision in rural areas. For primary level establishments, protective health services scores and regional administrative scores increasing towards the total area have been defined in the regulation in addition to the criteria related to treatment health services.

In the second model, 2 models pertinent to state hospitals and training and research hospitals have been defined. While both models have similar aspects, there are certain different application principles. The practice in Training and Research hospitals is based on clinics, and has been modeled taking into account the training and

scientific studying issues. One of the main components of the system is scoring 5120 medical processes being performed in health institutions by determining their relative values. Among these processes, those which are personally finalized by practitioners with their mental and physical professional contribution from the beginning to the end have been scored (For example: examination, surgery, intervention processes etc.). Processes performed by devices and auxiliary health staff were not scored, even these were under the responsibility of practitioner (for example: injection, laboratory processes etc.)

Sample processes being performed in institutions and performance scores.

CODE	NAME OF PROCESS	SCORE
510.121	Patient visit performed at least twice a day in services of internal branches (daily for each patient)	**21**
520.010	Consultation fees (for each practitioner)	**10**
520.020	Emergency polyclinic examination fee	**21**
520.030	Normal polyclinic examination fees	**21**
520.031	Referred examination	**5**
520.032	Examination in 'On Call' shift	**30**
520.033	Psychiatry Examination (30 points for the first 10 patients, 21 points for patients thereafter)	**30**
530.020	Abscess or haematomy drainage, deep	**150**
530.100	Electrocardiograph	**0**
530.140	IM injection	**0**
530.150	IV injection	**0**
530.581	Ria insertion	**40**

Sample processes being performed in institutions and performance scores.

CODE	NAME OF PROCESS	SCORE
550.130	Anesthesia A1 group (special surgeries and interventions)	**1.200**
550.131	Anesthesia A1 group (special surgeries and interventions), together with expert and anesthesia technician	**400**
604.910	Coronary artery by-pass, charoid endarterechtomy + patch plasty	**2.500**
607.980	Splenechtomy, total	**500**
610.130	Appendectomy	**420**
619.910	Birth with intervention	**143**
619.920	Normal birth	**143**
619.921	Birth in accompany of midwife	**36**
619.930	Caesarian	**143**
801.690	Lung graphic (double direction)	**4**
804.190	MR, brain	**20**
901.500	Glucoses	**0**

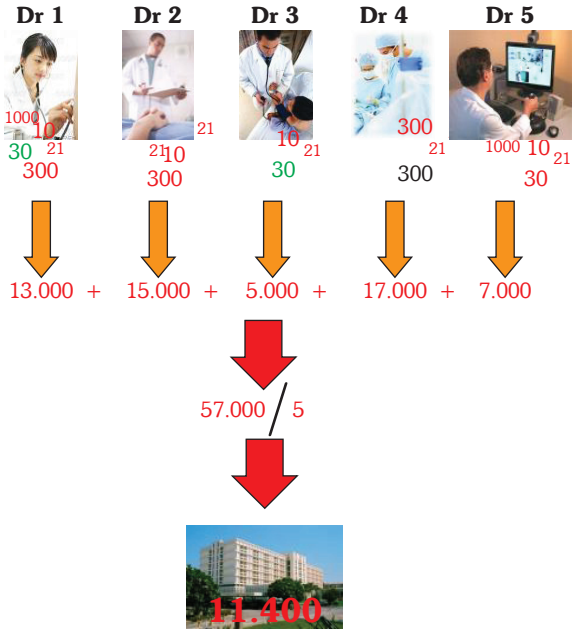
10. HOW THE SYSTEM WORKS?

Performance based additional payment system is being implemented in 3 different models as primary healthcare institutions, state hospitals and research and training hospitals in Turkey. In this chapter the summary of the details of the implementations about the system at state hospitals and research and training hospitals and then the procedure of the ongoing system will be explained in consequence of each other.

10.1. Performance Based Additional Payment System at State Hospitals

Scores of all processes performed by the practitioners each month are added to measure directly their individual performances. Taking into account the days on which they work, the arithmetic mean of performance scores of all practitioners working in the hospital is used to determine the performance score average of the institution for that period.

Finding performance score average of the institution



Coefficients of hospital managers, laboratory branch practitioners and other health staff determined taking into account such elements as their titles, tasks, working conditions and duration, and whether they work in risky departments, are multiplied by the institution performance score average to determine their (indirect) individual performance scores.

Indirect performance calculation according to hospital service score average


HEAD PHYS 4,50 x


= 51.300


BIOCHEM 2,50 x


= 28.500


MANAGER 1 x


= 11.400


ANAES.TECH 0,50 x


= 5.700


NURSE 0,40 x


= 4.560


OFFICER 0,25 x


= 2.850


SERVANTS 0,25 x


= 2.850

Individual performance scores of all staff (direct or indirect) are multiplied with such parameters as self employment coefficient, number of active working days, and staff title coefficient, and net performance scores are determined by adding the additional scores which they were awarded when they were performing different tasks such as tender and purchase commission

Calculation of net performance score

X Coefficient of Cadre Title Per Each Staff Member X Active working days coefficient X Self employment coeff. + Additional score	X Coefficient of Cadre Title Per Each Staff Member X Active working days coef. X Self employment coeff. + Additional score
+	

NET PERFORMANCE SCORE

Particularly the self employment coefficient, which is determined according to whether the practitioners perform their profession as self employed has a significant effect on the net performance score. While this coefficient is 0,4 for those who are self employed, it is set as 1 for practitioners working in public sector. This coefficient has been decreasing gradually from the year in which the system was started up to now. The purpose behind this is to encourage the practitioners to work only in public sector on the basis of volunteerism.

In this manner, the direct performances of clinic practitioners are measures, whereas indirect performances of managers, laboratory branch practitioners and other staff. In addition to this, by means of rewarding and deterring elements existing in the system, the net performance score indicated above is decreased or increased.

Scores of the staff are multiplied with a monetary coefficient determined each month, and the amount of supplementary payment they will receive depending on their performances is determined.

Monetary coefficient is expressed in the system as period supplementary payment coefficient. Period supplementary

payment coefficient is determined by the revolving capital commission by dividing the amount decided to be distributed in that period to the sum of net performance scores of all staff.

10.2. Performance Based Additional Payment System at Research and Training Hospitals[1]

The model, which was put into implementation by the Ministry of Health, both respects some basic principles such as enabling happiness and satisfaction of service users, ensuring better health status, complying with a well-described service delivery process of qualified health care services, and fulfilling the norms defined in terms of infrastructure, human resources and material sources (input), and underlines other different criteria which depend on the characteristics of the implementation field. While individual performance at hospitals is based on quantitative measurement of medical procedures which are made directly, its reflection on personnel is shaped together with the performance of that institution. Institutional performance is made up of a variety of factors such as the existence of adequate working environment for physicians at a hospital and access to services, patient's satisfaction being the user of services, physical infrastructure and supervision of some processes, compliance with quality criteria identified for services and the hospital's ratio of achieving the goals identified by the Ministry. A justified criticism which might be addressed in this context is that the effect of each factor – though a great many factors' coming together - on result is too limited and thus it makes difficult to perceive the level of effect. Increasing effectiveness of performance and quality personnel at hospitals and periodic visits of performance and quality supervisors to hospitals in daily practice both originated from this policy. Targets set at most of our hospitals for better quality services, efforts to improve processes and to develop infrastructure are the most natural results which are expected from performance implementations.

1 This part is not included in the Turkish version of this book.

Institutional framework of performance at training hospitals is not different from that of other hospitals. That is, all factors which are mentioned above also apply to training hospitals. Description of individual performance, however, is a little different for training hospitals. The said difference primarily originates from the addition of scientific studies and educational criteria to directly-produced medical services at training hospitals. Besides, team success in a training clinic rather than individual efforts of personnel is taken as the basis when calculating performance points obtained from direct medical services. Different coefficients are used considering the hierarchical structuring in training clinic but training clinics are handled in integrity as common denominator. At this point, it is taken into consideration that a clinic is managed by its chief and thus the chief's managerial success means a lot more than individual efforts. Still, individual points which are below the clinic's average are accepted as a separate but limited factor so as to avoid any kind of injustice towards individuals with different performance levels within a team, to award physicians with higher performance or to hold responsible physicians with lower performance on the contrary.

Differently from the model which is used at state hospitals, a formula which also includes average clinical service points is used to respect the afore-mentioned team approach when calculating performance points at training and research hospitals. To set out details, average clinical service points are found out by dividing total points of medical examinations and invasive procedures, which a clinic chief, deputy chief, head assistant and specialist physicians will obtain in return for medical examinations and invasive procedures, into total active workday coefficients of physicians also including assistants, who work in that clinic and so contribute to the clinic's service points.

As it is obvious, procedures which are made directly by assistants are not included in total sum when calculating clinic's total points. However, assistants are involved in the calculation of clinical service points with their active workday coefficients. To sum up, assistants are medical specialty students and they do not obtain any individual points since

they have to perform all tasks and make all procedures under the supervision of their clinic chiefs, deputy chiefs or specialist physicians but still they are included in divisor since they make contributions to the procedures made by respective specialists.

Given the aspects detailed so far, assistants at all clinics with points at a certain hospital are included in divisor when calculating average hospital service points just like all assistants being included in divisor when calculating average clinical service points as described above.

On the other hand, the formula, which is applied to clinic chiefs, deputy chiefs and head assistants, is a bit more complicated. When calculating their net performance points, average clinical service point in that month is multiplied with position-title coefficients. The number found is multiplied with active workday coefficient of average clinical service point. The number found is subtracted from invasive procedure point and the result is multiplied with 0.5 then. So, the number eventually found is applied to them.

This formula aims to encourage respective physician to collect points which amount to minimum half of average clinical service points or to foster his or her harmony with the team, in other words. In addition, two other points – if available- are also used in calculations which are called "Scientific Study Support Point" and "Training Support Point". Primary task of training hospitals is to conduct scientific studies and give specialty training, as well as service production. However, measurement, supervision and sanction mechanisms, in this aspect, have not been established and run at training and university hospitals so far. The effects of self-competition between clinics and academic approaches, individual efforts, motivation and consciousness of trainers have played major role in general. Performance-based payment model, on the other hand, aims to fill this gap at our hospitals and thus refer to scientific study and training support points as major determinants of trainers' individual performance. The reference value is average hospital point, which is used to make these two important factors eligible for measurement. It endeavors to standardize training and scientific study points of physicians

who are assigned at different clinics. Its reflection as average hospital point than a standard point also creates balance for its weight in total individual points both throughout the process and among hospitals.

As a means to support scientific studies and encourage physicians to make publications and depending on some criteria such as if scientific studies are included in SCI and SCI Expanded or published abroad and which rank they have, clinic chiefs, deputy chiefs, head assistants and specialist physicians are given Scientific Study Support points which are 30 % of monthly average hospital service point for chiefs and deputy chiefs, and 10 % for head assistants and specialist physicians providing that prove scientific studies of 500 points.

Moreover, clinic chiefs are also awarded with Training Support Points in line with the efforts to make assistant's training adequate and qualified, which amount to 30 % of average hospital service point and deputy chiefs are given Training Support Points which amount to 20 % of average hospital service point on condition that they prove 40-hour visits and 20-hour polyclinic work for internal medicine clinics; 20-hour visits and 20-hour polyclinic work and 20-hour operations for surgery clinics; 60-hour training for laboratory clinics; and 10-hour theoretical training for assistants for every other clinic in a month's time.

As could be seen, threshold values are used in the assessment of training and scientific studies instead of competitive criteria. In this context, our goal is to facilitate trainers to fulfill the minimum terms and conditions and so to reach a certain level of competence. Though being more modest criteria, threshold values are taken as the basis just because scientific study and training are questionable concepts in terms of quality and quantity, and no satisfactory consensus is available on the issue.

Hard core of performance points of chiefs or deputy chiefs is a combination of average clinical point in the ratio of clinical hierarchical status-based coefficient, 30 % of average hospital point condition that the identified quantity of scientific publications are made, identified quantity of

visits for patients and 30 % of average hospital point on condition that theoretical and practical training is given to assistants. Apart from this, service points of individually-produced services are affected by their difference from clinic's average to some extent, either positive or negative but certainly limited. In other words, the weight of individual performance point of a chief, who fulfils his or her working and training liabilities, depends on the clinic's and hospital's performance, indeed.

Such distribution aims to encourage a clinic chief to increase team performance which will have effect upon clinical average firstly and to increase hospital's performance secondly, and aims to foster conditions to obtain better scientific study and training support points, thirdly.

On the other hand, a less complicated formula is used to calculate net performance points of assistants and non-physician personnel who are affiliated with a clinic. As in state hospitals, Net Performance Points are found by adding the point, which is found by multiplying average clinical service point, position-title coefficients, and active workday coefficients, to additional points, if available. Another method applied for non-physician personnel at training hospitals is average hospital service point-based additional payment upon the agreement of the commission on revolving funds, instead of clinical average.

If subspecialty clinics are available at training hospitals, then these subspecialty clinics could be assessed within the framework of major degree and calculation could be based on a single clinic.

Besides, assistants also receive additional payment from average service points of their respective clinics, during intramural or extramural rotation. Yet, they are assessed in terms of the subspecialty clinic during training in major specialty-affiliated subspecialty clinic and they could receive additional payment from that subspecialty clinic.

When calculating average clinical service point of a clinic, assistants in rotation are not included in divisor but receive additional payment from their affiliate clinics. When identifying clinical average of a clinic that an assistant is in

rotation and thus contributes to services in that clinic, that assistant is included in divisor in the ratio of active workday coefficient. For this reason, assistants are not considered when identifying average points of their affiliate clinics since they do not conduct active tasks there due to their rotation in another clinic.

When calculating net performance points of Specialist Physicians, Physicians and Dentists, who are not affiliated with a clinic at training and research hospitals, average hospital service point is used together with physician's performance point instead of average clinical service point, which is different from those who are affiliated with a clinic. Since there is no assistant's training, not training support point but scientific study support point is included in the formula. Goal of the formula that is applied for physicians who are employed at a training hospital but not affiliated with a clinic is to facilitate harmonized work with other clinics and or departments at a hospital by supporting net performance points of physicians with average hospital service points, who need to be existing at training hospitals and give services independently from a clinic except for training clinics.

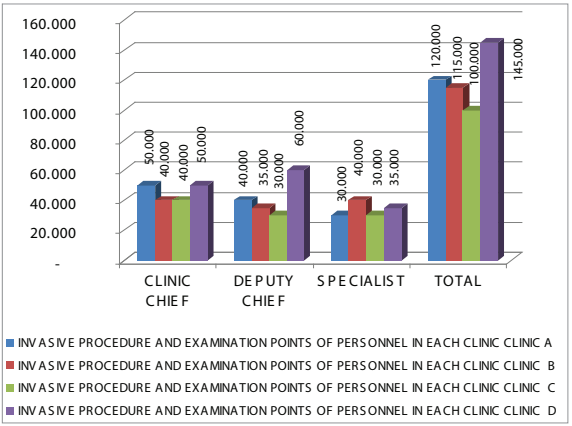
As it is apparent, there are a great many factors which are recognized and considered when implementing performance-based payment system at training hospitals than just service hospitals, which leads to a more complicated model for training hospitals. If the complexity of these factors is alleviated, the system will certainly become more suitable for easy understanding and implementation. Yet, such approach will also divert the system from its objectives to measure performance and steer not only personnel but also institutions. On the other hand, multi-factor structuring of the method diminishes the individual influencing power of every other factor and leads to the ignorance of some factors. Reflections could be clearly seen in behaviors and attitudes of physicians and managers who have difficulty in comprehending the system. We, however, believe that the existence and asset of various factors will be better understood as the system is more criticized, questioned and studied in the course of time. Although these factors are

narrowly reflected on revolving funds-financed additional payment, awareness which is likely to occur by the time will certainly increase the power of motivation. It is essential for our successful managers to implement these criteria, check their validity and publicize the results in their institutions carefully as a means to improve the system.

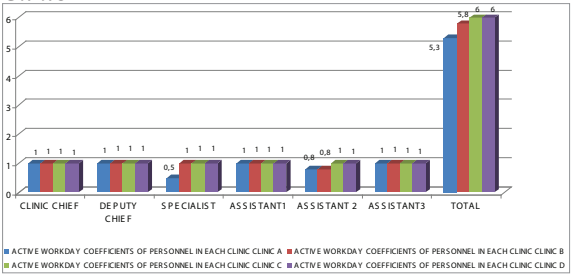
For example:

At a hospital having 4 clinics

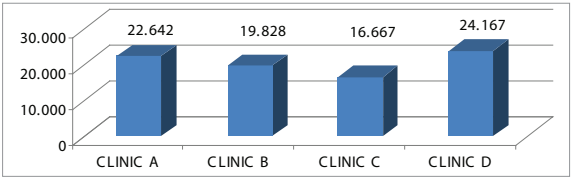
Invasive Procedure And Examination Points Of Personnel In Each Clinic



Active Workday Coefficients Of Personnel In Each Clinic



Average Clinical Service Points Of Personnel In Each Clinic



Average Hospital Service Point

Found by adding up total examination and invasive procedure points of clinics, which have physician's examination and invasive points, and physicians, who are not affiliated with any clinics, and then dividing this number into total active workday coefficients of the same individuals and assistants. (Laboratory clinics with unavailable/ unmeasured physician's examination and invasive points, and general practitioners and physicians with no points are not included in the calculation of average service points.

(Total Invasive Procedure Points (Clinic A + Clinic B + Clinic C + Clinic D + Independent Specialist Physician, GP, Dentist) / (Total Active Workday Coefficients (Clinic A + Clinic B + Clinic C + Clinic D + Independent Specialist Physician, GP, Dentist + Assistants)

As a result, hospital's net performance point is found out by adding net performance points which are calculated separately for each individual personnel.

The amount of additional payment which will be distributed by the Commission on Revolving Funds is identified in a way that does not exceed the amount, which is found by the multiplication of Institutional Performance Coefficient with 50 % of the amount, which is remained after the share allocated for Treasury, Society for Social Services and Protection of Children and Ministry of Health's Central Organization is deducted from the accrual charge in the respective month. "Additional payment coefficient" is later obtained by dividing this amount into the hospital's total net performance point. Additional payment coefficient refers to the monetary value of 1-point net performance point.

Then, gross net payment is identified for each personnel by multiplying net performance point of that person with additional payment coefficient.

Ceiling additional payment coefficients are identified by law for the position and rank of each personnel. This coefficient is multiplied with the collection of one-month salary (including additional indicator), bonus payments and

all kinds of redemption (except for rank, representation and assignment) in order to find out ceiling additional payment for an individual. Gross payment is not available even if gross additional payment amount for an individual is higher than the amount of ceiling additional payment for that individual.

11. ASSESSMENT OF INSTITUTIONAL PERFORMANCE

At the beginning of 2005, the concept of "developing institution quality and institution performance" was taken to the agenda, and thus a new dimension was presented to the practice. In this frame, the answer of the question "How is hospital performance measured and monitored" in terms of monitoring the works for improving hospital services was tried to be given by analyzing the World Health Organization European Office reports and the country analysis where this is applied. Initially part of Institution Performance measurement concept and methods was used, and "Ministry of Health Inpatient Treatment Institutions Institution Quality Development and Performance Assessment Directive" was prepared and put into force.

Consequently, the directive has been changed and updated with the name "Improving Quality And Performance Evaluation Instruction In Institutions Agencies Affiliated To Ministry Of Health". The set of new criteria has taken place not only for the 2nd and 3rd level but also for the primary care healthcare establishments for providing healthcare services within the directive

The Directive has collected the institution performance measurement methods under six topics:

a- Coefficient of Access to Examination

b- Coefficient of Assessment of Hospital Infrastructure and Some Processes

c- Coefficient of Questionnaires For The Patient and Their Caregivers' Satisfaction

d- Coefficient of Institutional Productivity (including Coefficient of Establishment (Primary Care Healthcare Units) Productivity)

e- Coefficient of Institutional Targets

a) Coefficient of Access to Examination

This coefficient is determined like that: the total number of actually used rooms for polyclinic services and every room assigned for each doctor and/or dental units actually used to give dental services would be divided by the total number of medical doctors and/or dentists. Room number is not being

used at Mouth and Teeth Healthcare Centers. The number of medical doctors contain all of the M.Ds except chief and chief assistants of the clinics, assistant doctors, continuously working doctors at anesthesia, laboratory, E.R., Intensive Care, Newborn, Burnt Patient, Dialyses, Cancer Early Diagnosis and Scanning Units and Administrative Units of the Polyclinics and Education Centers and specialists of Essence Medicine Branches. Though this criterion is not recommended by World Health Organization as hospital performance measurement method, it was initially accepted as a suitable indicator for our country. As known, the most important challenge in health services arises in polyclinic services. Besides, the local health offices system, as of its current status, has become insufficient to cover the patient demand**.** Consequently, a patient demand which could not be postponed is increasingly directed towards our hospital polyclinics. In this frame, the rate of number of practitioners which could provide polyclinic services, to the number of polyclinic rooms has been used as a measurement method in terms of covering patient demand and responding the practitioner preference of the patient. The largeness of the said place is an indicator depending on the success of covering the patient demand and the right of patient to select his / her own practitioner as if satisfied or not , and the period assigned for examination being long is an indicator that patient care quality has been increased and waiting duration is being decreased.

b) Coefficient of Assessment of Hospital Infrastructure and Process

A form has been some prepared which consists of 150 criteria including topics in order to question the service processes and hospital's physical and technical conditions for the healthcare services being provided at hospitals and is called The Form of Institutional Infrastructure and Process Assessment. This form must be filled out at each and every period for the hospitals by the Province Performance and Quality Coordinating Units for every establishment and institution of healthcare affiliated to the Ministry of Health. The score is determined for every provincial healthcare unit by the assessment of those forms.

Then, the coefficient of the assessment of institution infrastructure and process is calculated by the Provinces'

Coordinating Offices and declared to the related institution with an official letter not later than the end of the first week of the following period. Even though there is not an external assessment process, it is aimed and maintained for the hospitals to take this process at their preferential agenda from the beginning. By this way, it would be possible to find out at what level the institutions meet the national and international standards and the said assessment is quite a useful mean for that.

c) Coefficient of Questionnaires For The Patient and Their Caregivers' Satisfaction

Two questionnaire sets and questionnaire application principles have been determined towards the inpatient and outpatient people. With the questionnaires, the patients and patient caregivers have been included in this process. In this manner, what the public opinion and patients place value to and how the health care services and their results are perceived by the patients and their families are set forth as a standard.

d) Coefficient of Institutional Productivity

The criteria took place within the directorate according to the policies of the Ministry of Health during 2007 and by the parameters such as Staff Expenses Supporting Rate, Staff Expenses Rate, Bed Occupation Rate, Average Stay-In-Bed Duration, Rate of Inpatient Rate, Data Entering Score in New Performance Follow-Up System, it is aimed to question the financial productivity of the institution. In a specified period, these criteria would leave their places to some others and alike criteria are being developed continuously. Data transfer to the databases of the Ministry which were designed and operated by the by the related Ministry units have also been encouraged by these criteria.

e) Coefficient of Institutional Targets

Parallel to the targets and policies of the Ministry, the period is started to determine medical and administrative goals for our institutions by the coefficient of institutional targets. For the beginning, it is obvious that they are insufficient but these criteria still play a very important role in order to introduce public hospitals with the concept of urgency of comparing specific medical and administrative

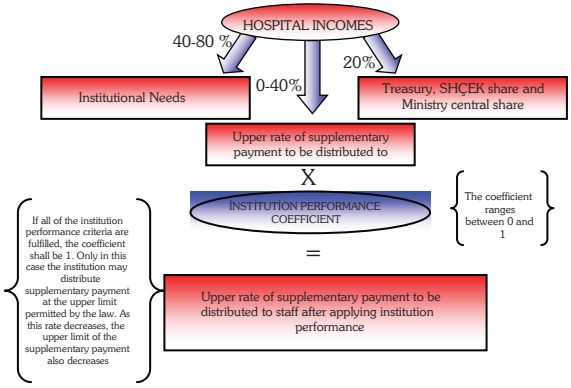
indicators among all healthcare institutions. These criteria are caesarean section rate, average operation score for each operator per day, average operation score for each operation table per day, moonlighting rate of doctors, data entering score in new performance follow-up system.

Criteria of 5 methods determined in this manner are established, an a coefficient is determined for each part. With the arithmetic average of coefficients of five parts, the "institution performance coefficient" of the institution for that period is determined. The coefficient ranges between "0" and "1".

Institution performance coefficient measured for each period determines the supplementary payment amount that the staff working in the hospital in the period will receive according to individual performance.

According to the law, supplementary payment can be distributed up to 40 % of the income of the institution. With the institution performance application, in order for the institution to distributed 40 % of its income in that particular period, the performance coefficient of the institution should be "1" As a result of institution performance coefficient falling from "1" to "0", the supplementary payment amount distributed decreases from 40 % to 0 %. In this manner, the institution performance of the hospital affects the supplementary payment which the workers will receive individually.

Effect of institution performance on individual performance



12. CONSEQUENCES OF THE PERFORMANCE SYSTEM

12.1. Ensuring the efficiency of the staff, performance assessment system has become the most important tool to cover the increasing health services demand.

Very important progresses have taken place between 2004 – 2005 in our health system. As a result of these developments, obstacles and inequalities in front of the public to access health services have been removed.

Mean reasons for the increase in the number of patient admissions in 2004 and 2005:

- Common use of SSK and Ministry of Health facilities in 2004

- Gathering the health facilities under a "single roof" in 2005

- SSK patients becoming able to get their drugs from free pharmacies.

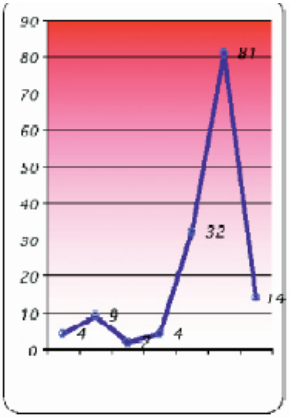
- Paying the outpatient drug and treatment expenses of green card holders

-Right to choose the health institution of first admission

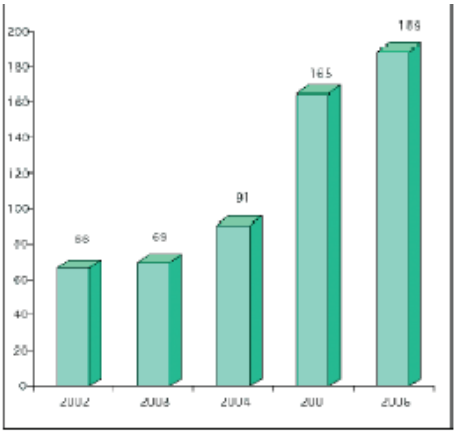
- Decreasing the bureaucratic processes required for receiving health services

As a result of these progresses, a significant increase has taken place in the number of patients applied to our health institutions. Whereas there occurred an increase between 2 – 4 % compared to 2002 and 2003 years in the previous year, there was a great increase at 32 % in 2004. Rate of increase has reached at its peak level of 80% by the end of 2005 and was balanced relatively in 2006.

Percentage of increase in number of patients in Ministry of Health hospitals compared to the previous year

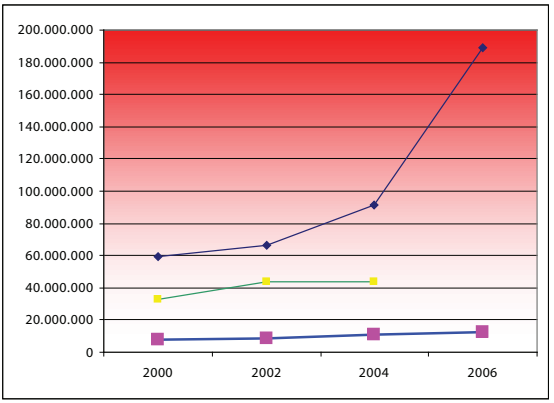


Number of patients treated over years in Ministry of Health Hospitals (Million Persons)



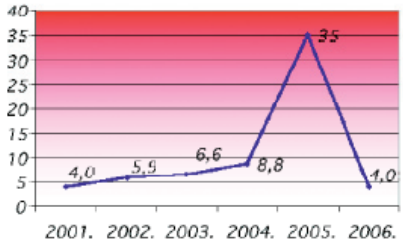
In 2004, when the effects of health transformation was very significant, it is seen that the increased patient admissions was towards the Ministry of Health facilities. While in 2004 the patient admission rat to hospitals affiliated to SSK has decreased, there has been a proportional increase in Medical Faculty hospitals compared to previous years. Apply cases also increased at the affiliated parts of MOH during years of 2005, 2006 and 2007 as well.

Number of patients treated over years in Ministry of Health (blue), SSI(yellow) and University Hospitals (pink dots)



Despite this increase in demand, the increase in health human power and hospital capacity was limited. As a result of patient admissions which have increased rapidly over the years in question, it was not possible to provide sufficient human power and physical capacity increase to satisfy the increasing demand for health services. Whereas in 2004, the number of specialist practitioners demonstrated and increase of 8.8 % compared to the previous year, the bed capacity in hospitals has increased by 3.8 %. The increase in 2005 has been a consequence of SSI hospitals and medical doctors and specialists being included within the MOH. Similarly, the increase in midwives, health officials and other health staff in various posts was at a limited level.

Percentage of increase in the number of specialist practitioners in Ministry of Health hospitals compared to the previous year



In 2004 when performance based supplementary payment has been started to be made, there was a high increase in tooth health services provided in the hospitals compared to the previous years. While prosthesis processes have increased by 243 %, there was a high level of increase such as 424 % in filling and canal treatment processes. Mouth and Teeth Healthcare Services have been opened for service between 2005-2007 years and the provision of the services and demand for them are increasing continuously.

Developments of Mouth and Tooth Health Services

PROCESSES	2.003	2.004	2.005	2.006
POLYCLINICS	5.062.290	6.870.597	11.011.000	13.595.000
PULLING OUT TOOTH (SURGICAL INTERVENTION)	1.135.555	3.147.493	4.886.000	5.413.000
FILLING CANAL TREATMENT	254.413	1.333.369	2.313.000	2.484.000
FIXED PROSTHESIS	115.776	396.735	638.000	906.000
MOBILE PROSTHESIS	46.057	156.743	261.000	413.000
OTHER	416.130	1.247.230	2.440.000	3.011.000
TOTAL	7.030.221	13.152.167	21.549.000	25.822.000

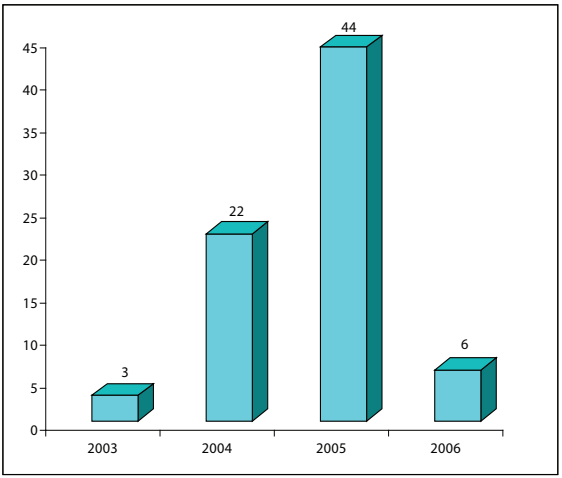
Health services demand which was not possible to be postponed and substituted between 2004 and 2005 and which demonstrated a high increase was covered by encouraging the health staff to work through" performance based supplementary payment system", or by enabling them to work more efficiently.

12.2. Performance assessment system enabled the hospitals to use their existing capacities more efficiently.

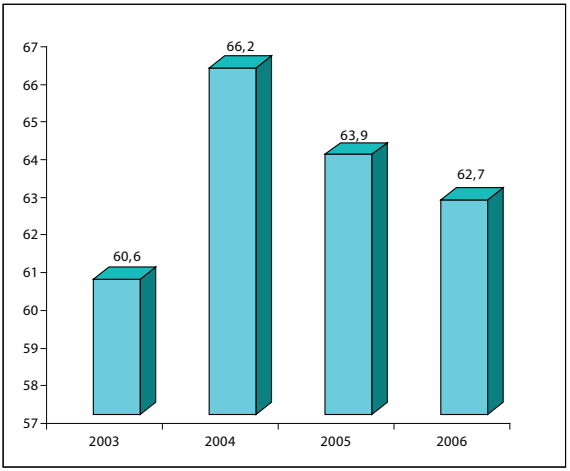
Whereas, before performance practice, there was only a 3 % increase in the number of inpatient cases in 2003 compared to the previous year, there was a significant increase, at 22 %, in 2004, compared to the previous year. Despite the fact that in 2004, the bed capacity has increased by 3.8 % compared to the previous year, the number of inpatient cases increased by around 6 folds of this, as a result of which this demand was covered by using the hospital beds in a more efficient and effective way. This was

statistically reflected to the basic indicators of the hospitals. While, in 2004, the average number of staying days has decreased, the bed occupation rate and bed transfer speed have increased. There was no significant difference in bed transfer rates during 2005 and 2006.

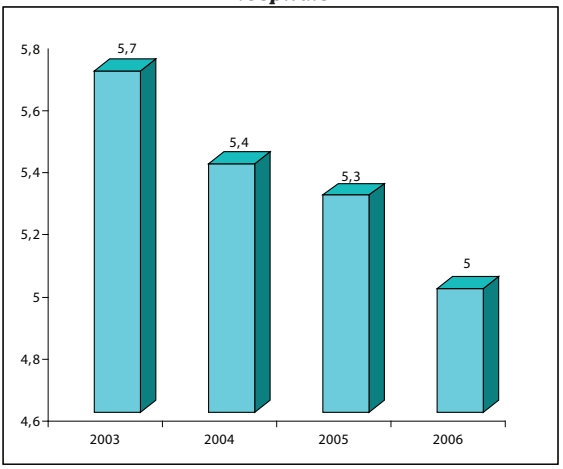
Percentage of increase in inpatient cases in MOH hospitals compared to previous year



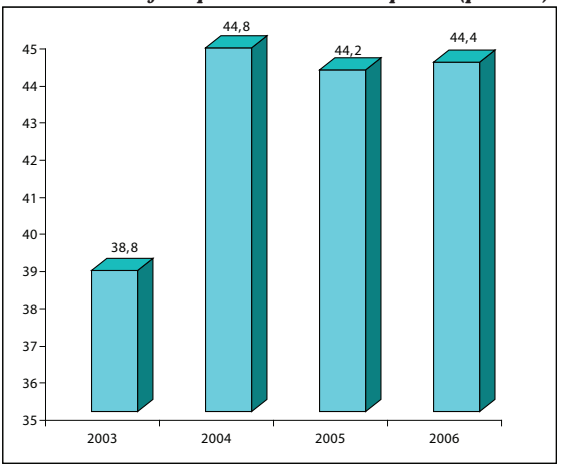
Bed Occupation Rate in MOH affiliated hospitals (%)



Average number of staying days in MOH hospitals



Bed transfer speed in MOH hospitals (patient)

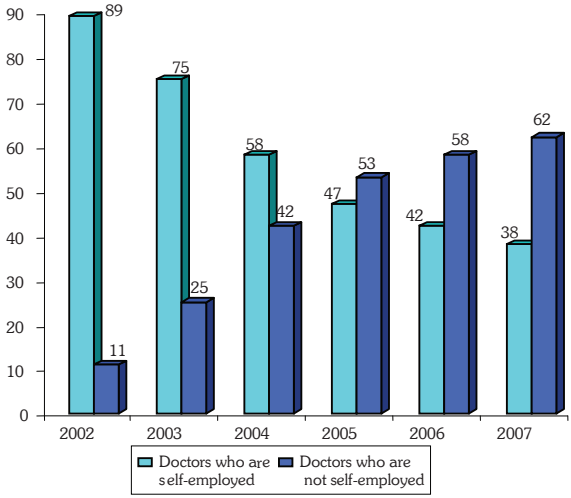


12.3. Because of the system, the practitioners appeared to become more enthusiastic compared to previous period in terms of working in public sector.

2.300 of 15 thousand specialist practitioners (15 %) working in the Ministry of Health closed their private medical offices in 2004. Whereas, before performance practice, in

2003, rate of practitioners who work solely in public sector was 11 %, this rate has increased to 54 % as of today. In this manner, a significant step has been taken for the full day employment of practitioners in public sector, which was one of the strategic purposes of the system.

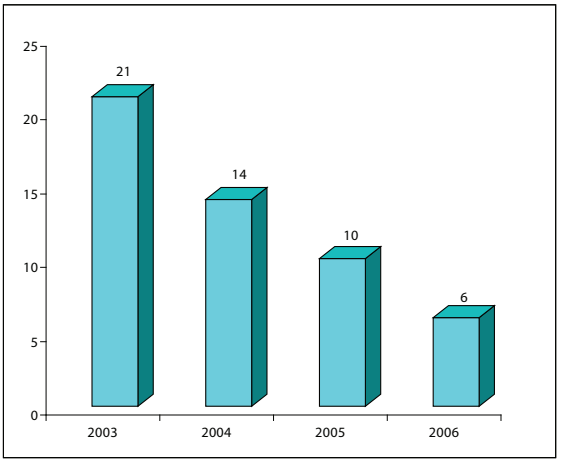
Change in the number of practitioners working on full-time basis (%)



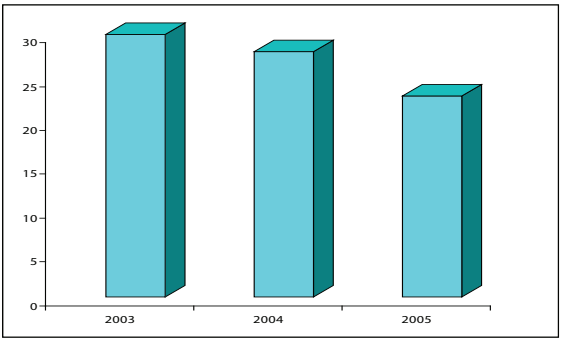
12.4.Rates of referral to a superior institution decrease, and the patients are treated at the place where they are.

As a result of individual performance assessment and encouragement, the patients have been treated to the place where they are. In particular, rates of delivery from state hospitals to province state hospitals decrease.

Rate of referral of health posts to a superior institution (percentage)



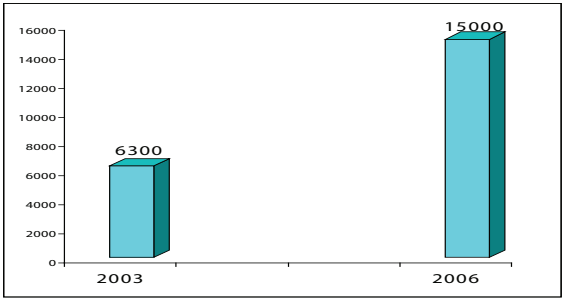
Rate of referral of hospitals to a superior institution (per thousand)



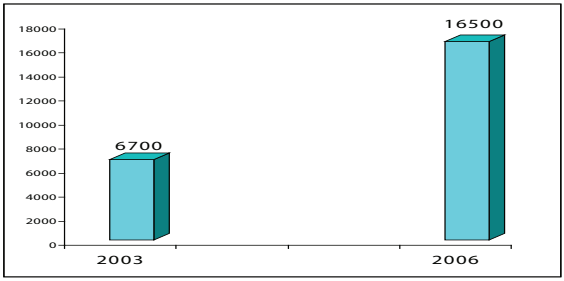
12.5. There was a significant increase in the number of polyclinic rooms.

As a result of the facts that the number of polyclinics has been taken as basis as a criteria of institution performance application and that in the system, each practitioner is assessed individually due to any processes performed by him / her, opening of new polyclinic rooms in health facilities is encouraged. As a result of this, a significant increase has occurred in the number of practitioners assigned in polyclinics simultaneously and in the same branch. Number of polyclinic rooms in hospitals, which was 6.700 in 2003, reached to 16.500 with an increase of 246 % in 2006. Thus it was ensured to prevent the period allocated to a patient from being shortened, despite the increase in the number of patients.

Increase in the number polyclinic rooms at public health offices between years 2003-2006



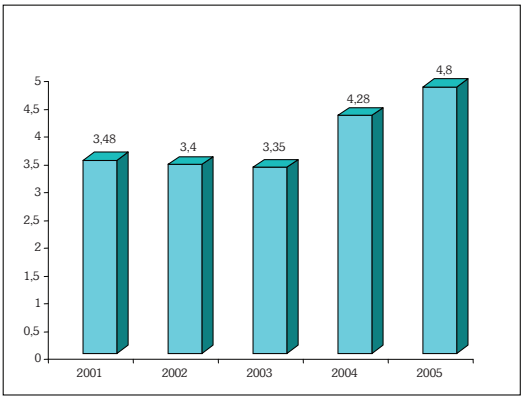
Increase in the number polyclinic rooms at hospitals between years 2003-2006



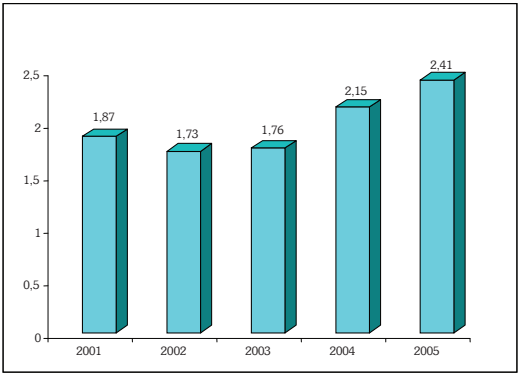
12. 6. As a result of score supports towards protective health services, there has been improvement in vaccination rates, pregnancy and infant monitoring numbers compared to previous years.

Criteria towards health services are developed for primary health care institutions and thus they are encouraged to perform these services. Infant monitoring number, pregnant monitoring number, DBT3/OPV3 vaccination percentage, screening tests (neonatal hypothyroidy, phenylketoneuri, thaelassemia etc…) sampling percentage and modern family planning method usage percentages have been used as a criteria. If an increase has taken place in that particular health institution in protective health services compared to the previous year, staff who contribute to this are scored. Then these criteria in 2004 are taken into consideration, it is seen that there has been an increase at 22 % in pregnant monitoring number, 28 % in infant monitoring number and 25 % in DBT3/OPV3 vaccination percentage compared to the following year. Vaccination rates, which were low in 2003, have increased again, reaching to high rates which could not be reached in the preceding years. Positive progress in statistics of treatment health services is also seen in the statistics of protective health services.

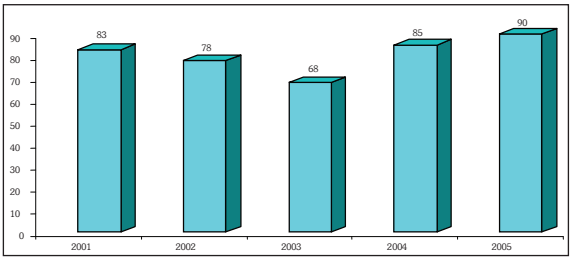
Average Number of Monitoring Per Newborn



Average Number of Monitoring Per Pregnant



Vaccination Rates of OPV3 Between Years 2001-2005



12.7. Other Results

- Working hours efficiently used in hospitals have enabled the surgery room, laboratory, imaging services for a longer period of time.
- Surgery rooms have been started to be used more efficiently and productively.
- Period of waiting for surgery has become shorter.
- Period of waiting in imaging and pathology laboratory has become shorter.
- More time is allocated for the patient at the examination stage, efforts are spent for reaching to result in short time with limited analysis , which had a positive effect on decreasing unit patient cost.

- Income- expense balances of health institutions have reached to a level where they are sensitively monitored as in the case of an enterprise.
- It has become easier to struggle against the unjust, unrecorded earning called "knife money"
- It has become easier to use the right to choose practitioner.
- Unnecessary analyze requests have decreased, and the fact that the result is tried to be achieved in a shorter period using suitable analysis had a positive effect on the decrease in unit patient costs.
- Productivity criteria were developed for the laboratories and certain significance was begun to be given for the quality at laboratories and patient and staff security issues.
- With the congress support, it has become easier to encourage scientific studies, train the assistants in training hospitals and follow up the publications.
- It has become possible to ensure that all hospital employees acquire the conscious of becoming the partners of the institution, question what has been done, adopt the steps taken towards their development, capacity and quality increasing, and support such actions, and take part in these initiatives.
- Opportunity has been provided for health directorates to perform active inspection on hospitals within the frame of the definition of institutional performance and thus improvement actions have started in many areas in hospitals, with physical structure having priority.
- Researches for patient and employee satisfaction have started within the scope of institution performance.
- Quality responsibilities of the hospital have been determined, and it has become possible to apply 150 quality criteria, among which are some adapted from JCI quality criteria, to the hospital.

- In hospitals which experienced deficiencies in such service areas as laboratory, imaging, catering, cleaning, purchasing of goods and services from revolving capital resources has accelerated.
- Performance Criteria set was developed for the Public Health Centers within the provinces which started to practice the Family Medicine.
- The system goes on working with the target of maintaining healthcare services to larger masses of people and rewarding the hardworking health staff and by these principals it serves parallel to the social state conception which is for elevating the quality of the healthcare services.

13. RESULTS OF SUPPLEMENTARY PAYMENT MADE TO THE STAFF (FIRST 8 MONTHS OF YEAR 2007)

The element of encouragement of performance based supplementary payment system is the supplementary fees paid monthly to the staff. **As a result of the chain of numerous rules with their changing weights in the system, the amount of supplementary payment to be received by the staff is determined proportional to the contribution of the staff.** Pursuant to the law, an upper limit has been assigned for the supplementary payment that each staff with any title may receive. This upper limit is determined proportional to the ceiling supplementary payment coefficient of the salary basis determined in the system.

Coefficients at the basis for determining ceiling supplementary fee of the staff

Clinic Chief and Assistant Chiefs who are not self employed	8
Specialists and specialist dentists according to the provisions of the Statute on Specialist Practitioner and Specialty in Medicine who are not self employed	7
General Practitioners and Dentists who are not self employed	5
Specialists and specialist dentists according to the provisions of the Statute on Clinic Chief, Assistant Chief, Specialist Practitioner and Specialty in Medicine who are self employed	3,5
General Practitioners and Dentists who are self employed	2,5
Staff working in specialty services such as intensive care, maternity ward, new born infant unit, breasted infant, burn, dialysis, surgery room, bone marrow transfusion unit and emergency room.	2
Staff other than these	1,5

In this manner, a ceiling supplementary payment fee has been determined to encourage all staff monthly according to their titles and certain working characteristics. When the payment figures revealed since the practitioners could not receive the ceiling supplementary fees in each period pursuant to the system are examined, we can see that this incentive is still not that sufficient.

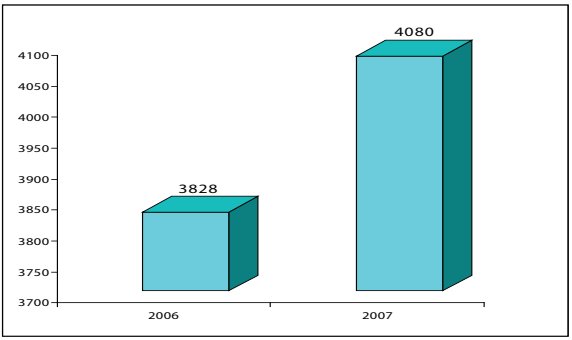
Monthly average supplementary payment amounts for 2007 of specialist practitioners working in hospitals (Net YTL)

2. LEVEL HOSPITALS AVERAGE SUPPLEMENTARY PAYMENTS PER MONTH	Specialist Practitioners who are not self-employed		
	2006	2007 (8 ay)	Artış/ Azalış Yüzde
Orthopedics and Traumatology	4.227	4.657	10,2%
ENT (Ear-Nose & Throat)	4.073	4.614	13,3%
Eye Diseases	3.944	4.554	15,5%
Radiology	4.033	4.548	12,8%
Cardiology	3.950	4.411	11,7%
Internal Diseases	4.161	4.349	4,5%
Dermatology	4.000	4.334	8,4%
Anesthesiology and Reanimation	4.021	4.282	6,5%
Neurology	4.107	4.198	2,2%
Physical Medicine and Rehabilitation	4.026	4.194	4,2%
Brain and Neurosurgery	3.648	4.174	14,4%
Plastic, Reconstructive and Esthetics Surgery	3.426	4.124	20,4%
Child Surgery	3.616	4.036	11,6%
Child Health and Diseases	3.849	4.020	4,4%
Family Medicine	3.558	4.016	12,9%
Psychiatry	3.755	4.001	6,6%
General Surgery	3.797	3.958	4,2%
Urology	3.515	3.944	12,2%
Heart and Vein Surgery	3.604	3.911	8,5%
Chest Surgery	3.840	3.854	0,4%
Medical Biochemistry	3.412	3.833	12,4%
Gynecology and Birth	3.491	3.806	9,0%
Chest Surgery	3.268	3.748	14,7%
Medical Microbiology	3.605	3.722	3,3%
Infectious Diseases	3.507	3.666	4,5%
Medical Pathology	3.098	3.532	14,0%
Supplementary Payment Average	3.828	4.080	6,5%

Average Supplementary payments of our doctors who are not self-employed show a stable increase. This increase

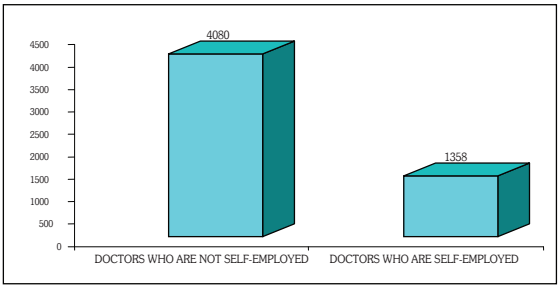
goes on from year 2004 when the implementation has started.

Average Supplementary payments of specialist doctors in year 2006 and first 8 months of 2007



There is a significant and meaningful positive difference between the amount of supplementary payments of the doctors who are self employed and who are not as taking side by the doctors who are not self employed.

Comparison of Average Supplementary payments of specialist doctors according to being self-employed or not during first 8 months of 2007



Average supplementary payment amounts of specialist physicians according to branches (Net YTL)

1. LEVEL HEALTH ESTABLISHMENTS	Year 2007 (First 8 months)
Manager of Hospital	3.790
Assistant Manager of Hospital (MD)	3.370
Assistant Managers of Hos. (Administrative)	933
General Practitioner	972
Brunch Manager (MD)	1.429
Brunch Manager (Administrative)	911
Staff of Health Services Category	363
General Official Services Staff	328
Staff of Technical Services Category	490
Staff of Supportive Services Staff	312
2. LEVEL HEALTH INSTITUTIONS	**Year 2007 (First 8 months)**
Head Doctor (Specialist)	5.812
Head Doctor (Practitioner)	3.366
Assistant of Head Doctor (Specialist)	3.867
Assistant of Head Doctor. (Practitioner)	3.058
Specialist Doctor	4.024
Practitioner	1.952
Dentist	2.855
Pharmacist	1.339
Manager of Hospital	1.330
Head Nurse	890
Staff of Supportive Health Services Category	607
Staff of Technical Services Category	516
Staff of General Official Services Category	408
Staff of Supportive Services Other Than Health Category	331

During the years of 2004-2005 and 2006, there has been an important support to the health staff beside their official salaries by the supplementary payment system

coming from the public resources. When considered the total realized figures, this support is significantly higher and meaningful when compared to the period before 2004.

Total accruement amounts of supplementary payments which have been distributed to the health staff and its increasing rates between years 2000-2006

YEAR	TOTAL ACCRUMENT (YTL)	Supplementary Payment(YTL)	RATE (%)
2000	608.000.000	114.000.000	19
2001	1.024.000.000	226.000.000	22
2002	1.961.000.000	431.000.000	22
2003	2.919.000.000	523.000.000	18
2004	4.827.000.000	1.275.000.000	26
2005	7.542.000.000	2.157.000.000	29
2006	9.480.762.776	2.923.134.053	31

When the overall system is examined as a whole in terms of its two-yearly results; it has been seen that health staff have acquired a significant earning in addition to their salaries, that this earning is not an unconditional one and a payment model based on performance is implemented in public sector as they are paid proportional to their contribution in health services, and that the public could receive more health services, incomparable to the previous situation, despite the number of applications which increased as the obstacles and inequalities in access of public to health services are eliminated.

14. OTHER COMPONENTS OF THE SYSTEM

In performance based supplementary payment system, there are various applications executed taking into account the service provision characteristics of primary, secondary and tertiary health facilities.

14.1. Revolving capital commission

A revolving capital commission representing all staff exists in each unit where the system is applied. A participatory management model is created by means of revolving capital commission. The employees have acquired the consciousness of becoming partners of the institution, and they started to question what has been done, to adopt and support the steps taken towards increasing quality and capacity, and to voluntarily undertake tasks on these fields.

14.2. Examination commission

In order to regularly record the services provided in hospitals and ensure that the invoices submitted to institutions are issued faultlessly, an examination commission has been created for assessing and inspecting all transactions performed in terms of quality and quantity. The commission inspects the process from admission to accrual and invoicing for its compliance with medical ethics and records. Thus the individual medical processes of practitioners, who are the main element of the system, are inspected. Commission members are selected from among the practitioners who have been working in the profession for minimum 10 years and who have never received any discipline penalty. By means of this institutions, medical processes, which are very hard to assess and inspect otherwise, could be assessed and inspected through a process of self-control at the moment they are performed, in a continuously manner. This commission which has been included in the system in 2005 increasingly acquires the capacity to provide self control over days.

14.3. Infection control committee

In the system, assessment of infectious diseases and clinical microbiology is performed by means of criteria to ensure monitoring and control of hospital infection. In this manner, infection control committees have been activated, and the monitoring and controls in hospitals towards hospital infection have become performed in a more careful manner.

14.4. Scientific study support score

Scientific study support score, which was only given in training and research hospitals in 2004 and 2005, has been extended in 2006 to cover primary care and state hospitals. In this manner, those who engage in scientific studies are encouraged.

14.5. Educative support score

Assistant training process, which is one of the principle tasks of training and research hospitals is supported with the system. Maximum training periods are accepted as a criteria.

14.6. Supporting professional training

Staff who participate in in-service training, as well as other events such as congresses, conferences, seminars and symposiums related to their fields are deemed to have actually worked during the days of such participation. Thus, the staff do not experience any loss of right due to such elapsed days.

15. MONITORING PERFORMANCE BASED SUPPLEMENTARY PAYMENT SYSTEM

The system is dynamically monitored from the web site of the Ministry of Health. The site includes relevant regulations, amendments of regulations, and opinions provided by the Ministry on questions which have arisen throughout the process. It is possible to access all information pertinent to the system at http:www.saglik.gov.tr/py2006.

Besides all mentioned above, New Performance Follow-Up System, 1st Level Supplementary payment Follow-Up System and Institutional Infrastructure and Process Assessment System are being actively used for the monitoring and decision processes of the overall system which have been begun to be implemented in year 2007 aiming to collect more accurate data related to our public health sector and other related parts.

◆ *M Prof. Dr. Sabahattin AYDIN Dr. Mehmet DEMİR*

16. DOES PERFORMANCE-BASED PAYMENT - INCREASE HEALTH EXPENDITURES?

16.1. What kind of a payment system?

Performance-based payment system applied for healthcare professionals might seem a "system of payment per service" at first glance but it could be clearly seen that it is not in fact, if evaluated from all respects. Before than anything else, it is an incentive system which is partially independent of the payment system applied for hospitals. Though having links with hospital's level of income, it is rather linked with optimal effective savings and exploitation of sources.

It would not be realistic to assert that system of payment per service, which is a method used to finance healthcare service in our country, is inclined to increase redundant or unnecessary reporting which is reflected upon the performance-based payment system. Intellectual, professional and physical efforts and contributions of practitioners invested in conducting and concluding delivery of health care services from A to Z are rated in this system. All other components included in delivery of healthcare services are considered to be complementary. Practitioners are considered to be the leader and facilitator of health care teams and thus taken as reference in practice. Other medical proceedings such as laboratory and imaging services, in which practitioners do not invest much time and energy, are not rated. In such a case, rating is based on practitioners' examining and reporting such procedures.

It is obvious that the system prevents ambiguity and deficits by keeping records of all services delivered, which is also an outcome reflected upon payments made to hospitals. That's why healthcare services are still sustainable although major discounts have been made to service costs.

16.2. Balance of supply and demand

As for our country, the biggest problem is not the risk of increased demand but the need to meet demand, which is increased by raising awareness, education and communication within society, with a limited number of practitioners and healthcare personnel. Burden of patients in Turkey, which is a country with inadequate healthcare personnel in general and practitioners in particular, is far beyond acceptable limits and capability of practitioners. Thus, we can not accept that the current system leads to an excessive increase in the number of patients which is already unacceptable to the system. Though such risk could be envisaged if the number of practitioners was brought up to a satisfactory level, precautions such as restricting the number of patients per practitioner would be necessary in order for quality of the system to be sustained. However, we think that it is too early to implement such precautions now.

Since 2003, major steps have been taken in healthcare system financing, payment and organization. Therefore, most healthcare services are given at public healthcare facilities today. Increase in the number of public healthcare services, on the ther hand, has not given rise to long waiting hours and suffering patient. Contrary to this, it has paved the way for outstandingly well improvements. The effect of performance-base payment on such results could not be disregarded. Synchronized policies have distributed burden of patients fairly and equally between private and public healthcare facilities. The incentives offered to public health employees have fortified public hospitals against private hospitals in competition. At this point, it should be kept in mind that beneficiaries of private healthcare services are equivalent to less than 5 % within society.

Though it could be considered that incentives in both sectors cause an excessive increase in the number of patients, it is not the case. There has not been a severe increase in the number of applications per population. On the contrary, patients who usually prefer private offices and polyclinics and mostly are unregistered, have preferred public or private hospitals and thus have been kept under

record. Apart from this, patients who were not registered even if being treated at hospitals in the past have been kept under record, as well. Yet, the system could be criticized just because patients are transferred to in-patient facilities with higher diagnostic costs. However, the problem could be solved by encouraging private offices, polyclinics, medical centers and day-treatment hospitals.

According to the National Health Accounts Survey, a person made an average of 4,2 visits to a practitioner in 2000. According to statistical data 2000, maximum 2/3 of these patients were kept under record. Considering the number of patients who registered in public and private hospitals in 2005 when performance-based payment system was introduced first, it would be seen that the increase in the number of application to practitioners was at a disrespectable level. Based on this, we could assert that the system has not increased the number of patients but facilitated patients' being kept under record. On the other hand, it is common for patients to make the choice which seems best for them. Thus, patients have been directed from private offices of out-of-pocket expenditures towards public hospitals with upgraded capacity and private hospitals having contracts with social security agencies. In the meantime, most practitioners have preferred to close their private offices and go back to their work at hospitals not only because of additional payment-originated difference but also because of patients' preference of hospitals.

Such movement of practitioners, which occurred in synchronization with the capacity-building precautions applied for hospitals, has increased the burden of services at hospitals and thus payments to hospitals have increased as a natural result. However, it would not be easy to foresee to what extent this case is reflected upon total expenditures for health without making an in-depth research. Yet, it is a well-known fact that out-of-pocket expenditures for health have become public health expenditures to a large extent.

There is not a similar system used at university hospitals which are the second important provider of healthcare services. Data that we have, on the other hand, indicates the share of surgeries at state hospitals and university hospitals

are not so different. In other words, there is no evidence which proves that performance-based payment system has led to increase in the number of surgeries. Apart from all these, it also apparent that theater rooms at hospitals are capable of giving services for longer hours, waiting lists have become shorter for surgeries and even there is no need for patients to keep waiting for surgical appointments in most provinces.

16.3. Effect on health expenditures

When considered together with constant salaries, performance-based supplementary payments made for practitioners are comparable to the wages and salaries of most public employees. Yet, they are still far below the wages offered by the private sector. In this context, supplementary payment-caused expenditures should not be considered as additional expenditures in revolving fund expenditures. They should be assessed within the scope of personnel expenditures contrarily.

A series of changes that have occurred in Turkey since 2003, when the Health Transformation Program came into effect, have not only influenced efficiency, access and quality in healthcare services, provided better protection from financial risks and enhanced patients' satisfaction but also has led to an increase in public expenditures for health. The most significant achievements in this context are providing SSK beneficiaries with easier access to medicines and public and private hospitals and the Green Card owners with easier access to medicines, diagnosis and treatment opportunities. Almost all of expenditure-raising practices have been made in this process. Thus, unregistered out-of-pocket expenditures and under-the -counter sales have been converted to registered public expenditures.

The extent of improvement in healthcare outputs is more significant than the quantity of expenditures for health. Though it is very difficult to measure it on clinical grounds, questionnaires on patient's satisfaction might be helpful to indicate the status. Survey on the Efficiency of Polyclinic Services II, which was conducted by the Prime

Ministry-affiliated Administrative Promotion Department as for the effects of diminishing bureaucratic procedures in public administration, has laid out improvements made in this process.

Though not parallel all the time, there is a close relationship among the expenditures for health, quality and density of services. Financing sources could be transformed into services only when they are supported by a well-governed and rational health policy. Financing the burden of services which is given by a limited potential of human resources with public sources is a preference which complies with the principle of social state.

Performance-based payment system has not increased payments but has served as a tool to make such changes. It would not be fair to close an eye on other variables within the system and just to link any changes in public health expenditures with supplementary payment offered to healthcare personnel. The system has also introduced some sort of re-imbursement such as the increased number of registered patients, VAT, income tax, institution tax and treasury shares, which should be kept in mind when calculating expenditures for health.

16.4. Suppression of the Increase in Demand

As a result of health policies implemented so far, public healthcare facilities have turned out to be actors taking part in the competition within the system. Performance-based payment system, on the other hand, has helped public healthcare facilities with playing this role.

It is a political choice to re-shape public hospitals as they were in the past, prevent practitioners from making optimum efforts, put obstacles on patients' path to access to practitioners, create long waiting hours and thus achieve cut in health expenditures. It is not possible for us to play such role as policy-makers in health sector.

As discussed above, public-governed health expenditures by means of out-of-pocket expenditures, premiums or tax pooling system is a basic preference to determine the

principle of the system. The concept and understanding of "social state" is in favor of meeting service costs from public expenditures for health, which is a dominant trend seen in our country for the last decade.

Contrary to this, it is harder to develop techniques to lower public expenditures for out-of-pocket expenditures. The point is whether it is acceptable to political point of view, which is a both the cause and effect of social policies. In more clear terms, it would not be acceptable unless there were better options.

As for the goal to cut public health expenditures, it would not be realistic to think about precautions which would lower hospitals' demand for patients and make hospitalization of patients difficult. We might introduce such restriction when we have adequate number of facilities and personnel in the future.

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