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Reforming the Financial Health Care System: The Case of the Republic of Albania*

Niccolò Persiani, Claudia Galanti
University of Florence, Florence, Italy
Alberto Romolini
International Telematic University Uninettuno, Rome, Italy
Maria Jose Caldes Pinilla, Michele De Luca
Center for Global Health, Florence, Italy

The Albanian health care system is currently in a period of deep transformation as well as the country is reflecting the future reforms after the turbulent development of the most recent years. The admission of Albania among future members of the European Union requires also an innovation in the health care system in order to build a model more compliant with the European performance and standards. These innovations are required also in the managerial approach to the health care and in its financing system. The aim of this paper is to analyze the actual financing model of the Albanian health care sector while highlighting the possible future managerial development. First of all, this article presents a history review of the Albanian health-care system, analyzing the current governance model. The goal of this approach is to describe the starting point of the reform paths for the future policy makers. Afterwards the research underlines the transition from a financing model based on historical public expenditure to a system based on the performance as one of the main innovation in the managerial approach to the health care. The introduction of management thinking will then allow developing a cost-based financing model, an accounting system in the teaching hospital and, finally, a financing system able to pay for services provided by private health care entities. The article then offers also a contribution to policy makers in order to define the "paths" of the Albanian health care system in the next years.

Keywords: Albanian health care system, governance, health care financing system, transition economies

Introduction

Albania is located in the southwestern part of the Balkan Peninsula. It covers an area of 28,748 km square, with a population of 3.162 million. Since the 1990s, it has undergone major social and political changes

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Niccolò Persiani, Ph.D., full professor in Financial Accounting, University of Florence, Florence, Italy.
Alberto Romolini, Ph.D., assistant professor in Financial Accounting, International Telematic University Uninettuno, Rome, Italy.
Claudia Galanti, Ph.D., research fellow in Financial Accounting, University of Florence, Florence, Italy.
Maria Jose Caldes Pinilla, Ph.D., director of Center for Global Health, Tuscany Region, Florence, Italy.
Michele De Luca, Ph. D., Center for Global Health, Tuscany Region, Florence, Italy.
Correspondence concerning this article should be addressed to Niccolò Persiani, CUSAS, Viale Morgagni 40/44, 50134, Florence, Italy. E-mail: niccolo.persiani@unifi.it.

through a transition to a market economy and a democratic government. Nowadays, compared to the European Union, Albania can be considered as a "young country" with a high percentage of 0 to 14 years old population and a low percentage of over 65 (World Health Organization, 2013).

The Albanian health care system is rapidly evolving. After a long transition from the previous model of the Soviet period, the country has tried to enhance an economic growth with an equivalent development of health care services. The aim of this growth was the creation of a welfare state based not only on foreign donors but also on services provided by private entities.

The new health care system will focus on a financing model based on performance in which the Central Government must increasingly reach the role of the "regulator". The creation of governance in health care expenditure is then one of the main challenges and perhaps, one of the gaps for the entry process in the European Union.

This work analyzes the main features of the Albanian health care service and the challenges that the country will face in the future. The objective of this work is therefore to delineate the path of the health care system towards a financing model based on performance, rather than on the traditional model based on historical expenditure.

The research is managed through the case study method (Eisenhardt, 1989; Yin, 1994). This work is related to the studies about the problems and perspectives of the health care systems of countries in transition, with particular attention to the European countries in the post-Soviet period (Lewis, 2000; Mckee, 1991). A large part of the studies and literature focused on the countries belonging to the former Soviet Union or to the former Soviet Bloc (Cercone, 2002; Chawla, Berman, & Kawiorska, 1998; Gamkrelidze, Atun, Gotsadze, & MacLehosc, 2002; Hovhannisyan, Tragakes, Lessof, Aslanian, & Mkrtchyan, 2001; Kurkchiyan, 1999; McKee, Healy, & Falkingham, 2002; Rahminov, Gedik, & Healty, 2000). However, the literature has given less attention to the Albanian experience.

The paper analyzes the governance and the financing model of the Albanian health care starting from the central level to the health care entities following an approach already used by Cepiku (2005). In particular, the financial data used in this research were collected through visits to the National Insurance Institute and the Ministry of Health in Tirana.

In order to analyze the future perspectives of the health care system, the paper investigates the transition from a model, based on the historical expenditure to one based on performance. To achieve this goal, this research analyzes the experience of the Durres Hospital which is currently part of a ministerial experimentation aimed at the application of a tariff system. This approach will be extended in the following years to the whole Albanian health care system. The case history allows, ultimately, describing the evolutionary path of the financing model and how it can support the policy makers in the planning of future strategies.

Historical Review

During the long period of dictatorship, there was a system of reforms aimed at introducing a centralized health care system into Albania following the approach of the so-called "Semashko Model" (Maciocco, 2009), a Soviet health care system completely free for each service delivered to the citizens. Indeed, in the period preceding the Second World War, only a small part of the population had access to health services. Albania had, in fact, a low number of doctors, most of which were trained abroad, with few hospitals in the main urban centers that were managed mainly by religious groups (Nuri & Tragakes, 2002).

The effectiveness of this system was maintained for an entire 50 years surviving until the breaking of diplomatic relations with the Soviet Union. Indeed, the Soviet aid was decisive for the development of the health care system after the war in terms of supply of medicinal products and the training for the doctors.

In particular, the 1960s saw the development of the primary health care system through the creation of epidemiological centers in each of the 26 districts of the country and through the provision of a midwife for every village with the function and responsibility for pre-natal care and vaccinations. Only in the 1970s Albania started the construction of a first hospital network with a hospital for every district responsible for basic care and clinics for specialist treatments.

Moreover, since the 1980s, the Ministry of Albanian Health started a modest path of decentralization through the identification of specific districts. In each district there was an established director, responsible for the administration of the health care services and for carrying out the government programs for the Ministry of Health (Cepiku, 2005). The latter managed directly clinical hospitals appointed the directors and guaranteed the supply of drugs and medication. In this context, the administrators of the district received instructions directly from the executive committee of the Labor Party and had very limited powers with regards to the use of financial resources and personnel management.

It must be highlighted that, at the time, there was no innovation system or lifelong learning for health care personnel, likewise, any model of planning and control were not implemented; moreover the resources for research activities were very poor. The quality of services delivered was, finally, very low even due to the obsolete medical technology and the low level of training (S. M. Tomini, Packard, & F. Tomini, 2013).

With the advent of democracy, the national health care system, as most of the existing public structures, entered irremediably into a crisis. In fact, almost all the countries of the former Soviet Bloc, starting from the 1990s, showed a significant decrease in health public expenditure as a result of the significant financial difficulties of the years after the end of the Soviet era (Bonilla-Chacin, Murrugarra, & Teumorov, 2005; Kornai & Eggleston, 2001). This lack was filled by the increase in supplying and spending for health care services provided by private entities (Goldstein, Preker, Adeyi, & Chelleraj, 1996) and by "informal" payments, which still have a strong presence in Albania. Numerous studies have highlighted the negative effects of "informal" payments in different countries (Balabanova & McKee, 2002; Belli, Shahriari, & Curtio Medical Group, 2002; Ensor & Savalyeva, 1998). Among these an increased difficulty to access health care services for the poorest populations can be observed (Falkingham, 2004). The problem, however, also significantly affects Albania (Albania Ministry of Health, 2000; Bonilla-Chacin, 2003) where also "under the table" payment has enlarged the gap between the poorest and the richest population (Tomini et al., 2013; Tomini & Groot, 2013).

The health care system soon collapsed due to the increase in the quantity and complexity of the health care services. In this context, some factors were crucial: the movement of internal migration and the consequent urbanization; the increased costs, obsolescence and deterioration of health care facilities (for the most part damaged or destroyed in the period of political transition); the inability to ensure the supply of electricity and water; and, finally, the lack of financial resources for the salaries of the medical staff (Albanian Council of Ministers, 2001).

Just to face these factors, starting from the early 1990s, several initiatives were developed to reform the regulatory framework of the health care system. This process has involved the main intergovernmental organizations (such as the World Bank and the World Health Organization) in the role of main donors and

promoter of policy documents processed during these years (Akin, Birdsall, & Ferranti. 1987; The World Bank, 1987, 1993)[1].

The new organizational structure and administration of the public health care system were thus processed in order to facilitate access to public health care services and provide quality and variety of services at low costs, ensuring the financial self-sufficiency of the system at the same time. To achieve these goals, the first planning document of the health care system in the post-communist period (Ministry of Health of the Republic of Albania, 1993) identified the three fundamental paths that constituted the principles of the current reform:

- decentralization—the Ministry of Health would gradually become a regulatory entity;
- creation of a public insurance fund in order to reach a significant increase in health expenditure;
- introduction of an accreditation system for quality in health care entities.

The goals described in the document of 1993 were subsequently included in policy documents of the Ministry of Health, up to the substantial reconfirmation in official strategy approved by the Council of Albanian Ministers in 2004: the Long-term strategy for the Development of the Albanian Health System (Ministry of Health of the Republic of Albania, 2004).

This document can be considered as the first reform of the Albanian health care system, developed with the contribution of the World Health Organization and the World Bank. It was reflected in 2007 with the Health System Strategy from 2007 to 2013.

With the strategic documents and with the local authority laws in 1993 and 1998, a first transfer of competencies from the center to the local entities can be observed, giving the management of primary health care services (Primary Health Care—PHC) to the local authorities in rural areas and the Ministry of Health in the urban areas.

Laws No.7718 and No.7738/1993 abolished the right to free health care, privatizing the pharmaceutical and dental market and starting a payment system that opened the road to an insurance model. The latter was introduced by the law No.7850/1994 which led to the creation, in the following year, of the Institute of Insurance against disease (IACM), then called the Nation Institute of Insurance.

The difficulty of implementing a modern insurance system has led to some experimentation in order to understand the needed changes in the regulation and organizational framework. In 2000, with the decree No.547 and No.560 of the Council of Ministers, the Regional Authority for Health Care (Tirana Regional Health Authority—TRHA) was established such as pilot project. It was responsible for the planning and management of primary health care services in the area of Tirana and for the financing and management of the Durres hospital. The aim was to build a more modern planning, control and performance system for health care services in line with the development of the country. Particularly significant for the purposes of this work is the experimentation conducted at the Durres hospital, which has outlined a specific accounting and financing system.

[1] From *Financing Health in Developing Countries*, published in 1987, and from the report *Investing in Health* in 1993, the attention of countries in transition moves definitively toward issues of sustainability and efficiency, with strong pressures to reduce costs. The World Bank begins to propose specific policies for poverty reduction and for the improvement of the global health care situation by promoting more and more explicit privatization of health care services. It provides a strong support for the policies oriented to the market, an increase in private investment and a reduction in the supply of public services with consequent problems of balance between the goals of efficiency and fairness.

Governance Review

The reforms that have involved the health sector in Albania have resulted in a reorganization of the governance that is composed of a plurality of actors with specific functions (Figure 1).

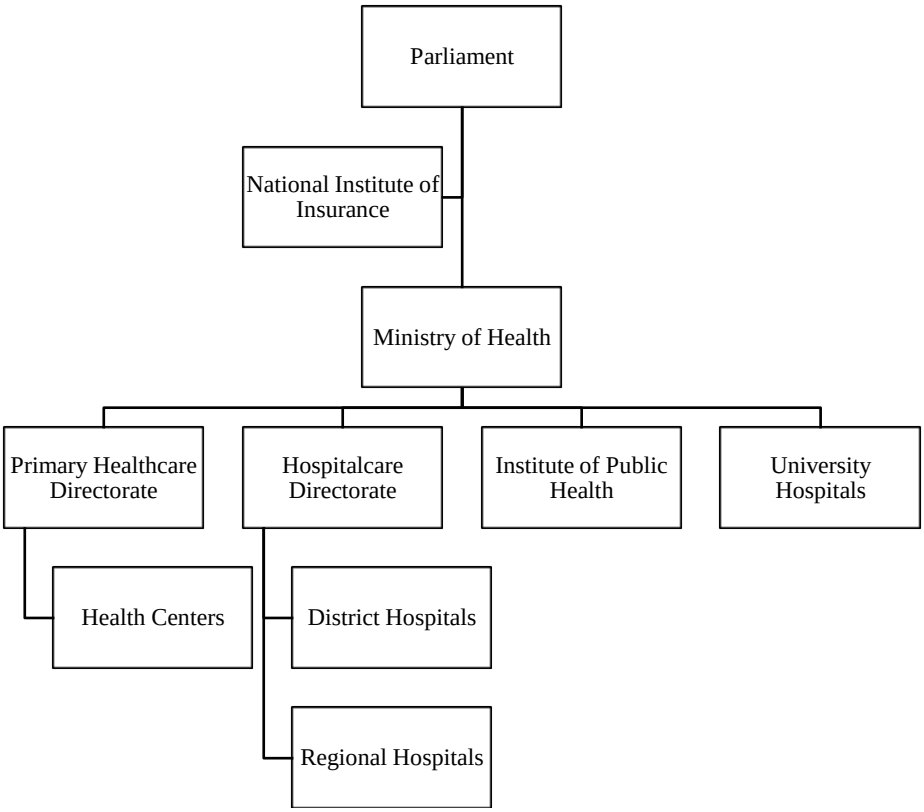

Figure 1. The governance of the Albanian health care system.

The main actors of the governance are:

- The Ministry of Health assumes a central role as the main backer and planner of health care. It is responsible for the administration, planning, policy formulation, and allocation of resources for health as well as the definition of the essential levels of service provided by the Public Health Service. Many health care institutions, especially in regards to the assistance of third level, are working under its direct control;
- The Institute of Public Health is directly dependent from the Ministry of Health and is responsible for the protection of public health (with particular reference to the prevention and control of infectious diseases and to the National Program of vaccination), the environmental health, the control over the quality of food (along with the Ministry of Agriculture), drinking water and air quality. The institute organizes and conducts research and surveys, collects statistical data, monitors the quality of services, and provides technical support as a national center for research and training;
- The National Institute of Insurance is an autonomous institution that is directly dependent from the Parliament. It is recognized as the task of the government to supply health care and its regulation of its providers through the accreditation system. The Institute covers the role of funder of health care services and operates through Regional Directorates, branches and local agencies distributed throughout the country. The Board of Directors is composed of 11 members representing the various categories of stakeholders.

More complex and articulated is the system for the supplying of services. It is organized on a territorial basis with reference to the 12 regional prefectures and 364 districts of the local administration of the country[2].

At the district level, there are three directorates dependent from the Ministry and the Institute of Public Health:

- the Primary Health Care Directorate;
- the Hospital Care Directorate;
- the Directorate of the Public Health.

Health care within the territory is then supplied by a network of public entities responsible for providing the services of first, second, and third level.

The health care services of first level are administered in urban areas by the Ministry of Health, while in rural areas these are under the management of the local government by the Ministry of Finance. Due to the specificity of the territory and to the high urbanization, a specific organization for the prefecture of Tirana was designed for which a single organization responsible for planning and management of its health care was created. This is the Tirana Regional Health Authority established in order to integrate the programs of primary health care.

More specifically, the primary health care consists of basic performance and prevention; it is provided by general practitioners, pediatricians, and nurses[3].

In rural areas, each village has a clinic for the minimum services, while health care centers of the larger cities guarantee the other activities. A trained nurse or a midwife directs a clinic; they provide the care to the mother, the child, and the vaccinations.

The 421 health centers, located in the urban centers, are composed of a number of doctors and nurses variable with respect to the territory served. These centers shall ensure, as said above, that the primary health care services (such as basic health care for adults), pediatric assistance; care of women, postnatal care, prevention services, and care for emergencies (initial management and stabilization of urgent problems). They therefore offer outpatient specialized visits using the medical staff of the hospitals.

Primary health care works with about 1,682 family doctors and pediatricians and over 7,000 nurses and midwives. Of a total of over five million visits per year on the national territory, the Tirana Region has the largest number, covering the 32% of total: This fact is totally understandable considering that about one fourth of the Albanian population is concentrated within the territory of this region (see Table 1).

Second and third level health care are instead provided by a network of 39 hospitals whose services are articulated as follows:

- district hospitals;
- regional hospitals;
- university hospitals.

The health services of second level, delivered by all three types of hospitals, relate to some visits and specialist treatment, hospitalization, and long-term care.

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[2] The prefectures created with the 1993 reform are: Berat, Diber, Durres, Elbasan, Fier, Gjirokaster, Korce region, Kukes, Lezhe, Shkoder, Tirane, and Vlore.

[3] This institute operates through the support of the United Kingdom Department for International Development and the World Bank.

Table 1

Activity Data of Health Centers Aggregates for Region—Year 2011

Region	Number of health centers	Number of visits	Number of general pratictioners	Staff
Berat	27	277,248	98	499
Diber	35	182,673	65	520
Durres	34	564,762	204	691
Elbasan	53	444,115	169	740
Fier	45	529,534	177	658
Gjirokaster	31	151,377	65	398
Korce	39	465,262	159	648
Kukes	20	71,897	38	213
Lezhe	21	216,981	84	341
Shkoder	37	359,167	126	664
Tirane	41	1,727,299	354	1,353
Vlore	17	275,743	96	361
Sarande*	13	73,463	34	131
Tropoje*	8	32,689	13	140
Total	421	5,372,210	1,682	7,357

Notes. ∗ Sarande and Tropoje are actually capitals of homonyms districts, but they are considered equal to the other regions as regards to the collection of data; they have their respective Regional Directorates of the Insurance Institute to which they refer. Source: Health Insurance Institute.

The health services of third level include the diagnosis, the hospitalization, and the care for diseases particularly serious and are exclusively practiced by university hospitals.

The district hospitals are equipped with at least four specialized departments (internal medicine, pediatrics, general surgery, and obstetrics/gynecology) through which they offer inpatient care in the territory. They are also entrusted by emergency services, anesthesia and intensive care, radiology, biochemical laboratory, and service pharmacy.

The regional hospitals instead offer 10 to 12 specialist departments and must ensure services with greater specialization.

The university hospitals are mainly located in Tirana. More in depth, there are two departments of the teaching hospital at the hospital of Durres.

The reality of Tirana, in fact, for its density of population, its central role, and the strong presence of the university world is that it is equipped with the facilities of high specialization defined as "university hospitals for the high level of specialization", which offer health services of the third level. The university hospitals in the Tirana are:

- Tirana University Hospital "Mother Teresa" (Qendra Spitalore of Applied Sciences "Nene Tereza" Tirane—QSUT), the largest hospital in the country;
- Tirana Obstetrics and Gynecology hospitals[4];
- University Hospital for Lung Diseases (the Spitali award Universitar the Semundjeve te Mushkerive) that offers secondary and tertiary assistance and long-term treatments for patients with tuberculosis.

[4] Specialized Hospitals in obstetrics and gynecology are the Spitali Universitar Obstetrik-Gjinekologjik "Koço Gliozheni" and the Spitali Universitar Obstetrik—Gjinekologjik Mbretersha "Geraldine". The initials Mat.1 and Mat. 2 are reported in the following tables.

It should be remembered also that the Military Hospital belonging to the Ministry of Defense specialized in trauma. It also contains a university department for orthopedic medicine.

The hospital service today is the prevailing response for the need of health care services for Albanian citizens (Table 2) with an offer of 7,608 beds: Albania detects a ratio beds per 10,000 inhabitants of 28, well below the European Union average, which is around 62 beds for 10,000 inhabitants (World Health Organization, 2013).

Table 2
Activity Data of Hospitals—Year 2011

Second and third level health care	Number of hospitals	Number of beds	Number of employees
District hospitals	24	2,045	2,701
Regional hospitals	11	3,649	5,545
University hospitals	4	1,914	3,642
Total	39	7,608	11,888

Source: Health Insurance Institute.

However, the Albanian health care system cannot be understood regardless of the description of private activities.

They are the results, on one hand, of the first privatization of the 1990s (with particular reference to dental and pharmaceutical services); and on the other hand, they are derived by the penetration of private entities in the health care market: Their goal was to cover part of the demand (in particular qualitative) not satisfied by public facilities.

The first sector privatized in Albania was the pharmaceutical distribution, which is composed by a dozen of private companies that import most of the drugs, biological products, and diagnostic equipment. A network of approximately 750 private pharmacies and pharmaceutical companies, including rural areas, guarantees the distribution.

Also the dental health is guaranteed by private structures. In fact, with the exemption of the emergency services and those paid in schools to children up to 18 years free of charge, there are several private diagnostic centers and clinics especially in urban areas of Tirana. Some private entities are funded and organized by non-governmental entities, private companies, or religious bodies (see Table 3).

Table 3
Beds in Private Hospitals

Private hospitals	Number of beds
American hospital	100
American hospital 2	100
Hygeia hospital	100
German hospital	60

Financing Review

The financing of health services in Albania is guaranteed by a public insurance system focusing on the activities of the National Institute of Insurance. If even today the insurance system cannot be considered operational, it lays at the heart of the strategy of the country's public health that aims to ensure an ever-greater

supply of health care services of the highest quality.

The National Institute of Insurance and Finance is financed:

- from the state budget through the Ministry of Finance;
- through health insurance compulsory and voluntary for all active people with permanent residence in Albania. It also covers the categories of economically inactive people. In this case, the payment of contributions is covered by the state budget or by any other resources provided by the law. People who do not fall within the active categories have the right to voluntarily adhere to the system of insurance. The contribution rate of compulsory insurance is 3.4 % of the basis for calculating, represented by gross salary for employees and by the average of the minimum and maximum wage for the self-employed. For the health insurance the voluntary contribution base of calculation is the average of the minimum and maximum wage;
- through forms of private health insurance and rates. Citizens can ensure themselves and their families with private insurance to cover excessive medical expenses or services not delivered by compulsory insurance. In addition, non-insured citizens pay health care fees according to rates defined at ministerial level. Conversely, insured citizens only pay in the case of hospitalization and some specific exams which are requested the 10% of the total fare (the remaining 90% still has to be covered by the insurance institute). Finally, citizens insured of a certain region and cared for in another one are considered in the same way as the non-insured citizens.

The composition of revenue and expenditure of the insurance institute has remained essentially unchanged over the last three years (the last available data covers the period from 2009 to 2011).

It can be observed as in the past three years that the contributions of the active population have been represented on an average of 24% of the insurance institute's fund, about six million Lekë, while the 76% (in average about 19 million Lekë) is covered by resources from the public budget. In relation to the expenditure, it can be observed that half is absorbed by the hospital assistance, while the remainder is divided between reimbursements from the drugs and primary care (Table 4).

Table 4

Revenues and Expenditure of the National Institute of Insurance (Values in Millions of Lekë)[5]

	Year 2009			Year 2010			Year 2011		
	Plan	Fact	% Total	Plan	Fact	% Total	Plan	Fact	% Total
Total revenues	24,211	23,010		25,649	25,836		27,767	26,877	
From which:									
State budget	18,332	17,543	76.2%	19,635	19,402	75.1%	20,857	20,724	77.1%
Health insurance	5,829	5,377	23.4%	5,914	6,304	24.4%	6,510	6,030	22.4%
Other revenues	50	90	0.4%	100	130	0.5%	400	124	0.5%
Total expenditures	24,211	22,982		25,649	25,268		27,767	26,970	
From which:									
Drugs' reimbursement	4,840	4,856	21.1%	5,900	5,927	23.5%	6,901	6,883	25.5%
Primary health care	6,000	5,722	24.9%	5,930	5.899	23.3%	6,470	5,903	21.9%
Hospital care	12,527	11,738	51.1%	13,054	12,821	50.7%	13,715	13,581	50.4%
Administrative expenditures	624	579	2.5%	665	573	2.3%	667	598	2.2%
Investments	110	11	0.0%	100	48	0.2%	15	5	0.0%
Other expenditures	110	76	0.3%			0.0%			0.0%

Source: Health Insurance Institute.

[5] Exchange rate: 1 Lek = 0.0071 Euro.

The Ministry of Finance also guarantees resources to the Ministry of Health and to the rural municipalities for the management of health services. It also provides resources for the financing of the National Institute of Insurance, the purchase of basic medicines against diseases, and the grants for the weaker sectors of the population (with particular reference to the elderly and infants). Finally, to have a complete vision of health expenditure in Albania, the important role played by foreign donors cannot be underestimated[6].

Research Results

The Financing of the Health Care Entities

For the management of the health care system, the insurance institute, using the logic public insurance, provides resources for the purchase of the health services through a system of conventions. The goal is to introduce a specific system of tariffs based on the costs of the services. Today, the conventions are prevalent and based on the coverage of costs, though differentiated depending on the types of entities and performances.

In particular, health care centers receive funding directly in the accounts of each entity via the Regional Directorates of the National Insurance Institute. The financing model is divided into three items:

- fixed budget: These resources are provided for monthly payments distributed in 12 months on the historical basis. The fixed budget represents 80% of the total budget;
- activity-based budget: This amount is commensurate with the performance of the center, calculated on the basis of the number of visits for each doctor (the number is determined differently in the territory in which the performance is delivered). The amounts are equivalent to a maximum of 10% of the total budget.
- budget bonus: This amount is delivered quarterly to the attainment of certain standards of quality commensurate on the basis of quality indicators proposed by the insurance institute. This amount may not exceed 10% of the total budget.

It can be observed that budgeting is primarily based on an historical basis aimed to cover the fixed costs of the entities. However, it should be appreciated as the first attempt to recognize a financing model connected not only to the performance but also to their quality that, in time, will allow Albania to start first monitoring at the national level (Table 6).

The institute establishes also a series of performance indicators expressed in terms of a goal-percentage in order to evaluate and then finance health care centers. The indicators are divided by category of activities:

- percentage of patients visited for the first time in a year;
- average cost of prescriptions for relevant diagnostics;
- percentage of chronic patients visited every month;
- percentage of pregnant women receiving the first care visit within the first trimester of pregnancy;
- percentage of children of age 0-14 vaccinated during a quarter;
- percentage of staff that participate in training courses;
- percentage of children of age 0-1 visited in a year over a quarter;
- percentage of patients with a diagnosis of Arterial Hypertension (AHT) that detects values inside of the standard;

[6] The main contributions derive from: the World Bank, the European Community Humanitarian Office (ECHO), Germany, Italy, France, Switzerland, Japan, United Kingdom, Greece, the Agency of the United States for International Development (USAID), the Catholic Church, the Fund of the Organization of Petroleum Exporting Countries for international development (the OPEC Fund), UNICEF, the United Nations Fund for Population Activities (UNFPA), the WHO.

- percentage of patients with diabetes who detect glycemic levels inside the rule.

Taking an example, the first indicator is determined as the ratio, expressed as a percentage, between the number of patients seen for the first time and the number of total patients visited throughout the year. The Health Insurance Institute sets a target annual value of at least 60%. Table 5 shows the average values of the quality indicators collected for the year 2011. Some data are not available (n.a.) for the Regions of Diber and Sarande.

Table 5
Data Analysis Acquired in Reference to Quality Indicators. Average Values of Health Centers Aggregated by Region—Year 2011

Region	Patients visited for the first time in a year	Average cost of prescriptions for relevant diagnostics	Chronic patients visited every month	Pregnant women	Children age 0-14 years vaccinated	Staff that participate in training courses	Children of age 0-1 visited in a year	Patients with a diagnosis of AHT	Patients with diabetes
	Goal percentage 60%	Goal percentage 60%	Goal percentage 95%	Goal percentage 90%	Goal percentage 95%	Goal percentage 90%	Goal percentage 100%	Goal percentage > 60%	Goal percentage > 60%
Berat	14	60	50	30	100	2	50	40	30
Diber	9	n.a.	77	54	100	9	56	81	64
Durres	34	70	59	66	99	8	71	77	31
Elbasan	29	75	54	37	100	8	56	68	17
Fier	29	59	50	49	100	5	70	62	26
Gjirokaster	26	68	60	62	100	0	14	19	11
Korce	35	64	74	70	100	2	70	70	52
Kukes	35	68	65	44	100	24	49	37	32
Lezhe	12	60	50	20	99	1	30	56	19
Shkoder	55	67	53	39	99	5	33	29	13
Sarande	20	62	39	86	100	0	23	46	n.a.
Vlore	29	62	60	70	99	0	95	59	37
Tirane	57	67	73	46	100	19	85	74	25
Tropoje	53	66	39	66	100	0	34	100	0

Source: Health Insurance Institute.

The analysis shows a rather diversified situation among the different regions. In particular, it shows a significant capacity for achievement of standards in the context of urban areas, with particular reference to Tirana.

Only the indicators relating to the percentage of vaccinated and the cost of diagnosis reach the target level established, at least 95% and 60% respectively, in all regions.

The most evident defects occur in the levels of staff training, whose ministerial reference is indicated within 90% compared to an average value detected at 6%.

A further topic that highlights the evolutionary phase of the system is the analysis of the deviation between total budget allocated by the institute and the resources actually used. It reflects the ability of health entities to use the funding previously allocated. Taking the years 2009-2011 (the first years after the introduction of the new system) as a reference, the budget used is substantially lower than the funded; only in 2011, the situation improves and the system shows a better ability to spend the resources allocated. However, there are still significant differences among the regions (Table 6).

The financing of district and regional hospitals is carried out by the institute according to the terms provided by individual contracts for salaries, goods, and services. The funding, in this case, only is provided for the fixed budget, established by the Ministerial Decree and directly allocated within the Treasury of the Insurance Institute. This system is based on the historic expenditure, without any particular analysis related to the production, nor from a qualitative or quantitative point of view. The budget of the district and regional hospitals accounts for, 60% of salaries, 10% of contributions to social insurance, and 30% of the purchase of goods and services.

Table 6

Financing and Spending Health Centers Aggregates for Region 2009-2010-2011 (Values in Lekë)

Health Centers —Region	Year 2009			Year 2010			Year 2011		
	Financed	Used	Deviation %	Financed	Used	Deviation %	Financed	Used	Deviation %
Berat	359,602	347,721	-3%	365,095	368,460	1%	364,041	367,713	1%
Diber	364,321	362,434	-1%	368,755	365,170	-1%	374,678	369,854	-1%
Durres	550,659	543,422	-1%	577,256	576,189	0%	580,562	589,252	1%
Elbasan	572,090	554,810	-3%	575,720	580,616	1%	599,154	606,513	1%
Fier	537,754	513,084	-5%	551,290	545,816	-1%	544,604	547,384	1%
Gjirokaster	262,086	262,496	0%	267,261	266,892	0%	276,886	279,577	1%
Korce	492,413	470,681	-4%	505,819	498,439	-1%	495,945	513,512	4%
Kukes	156,563	150,078	-4%	160,989	160,709	0%	161,374	165,765	3%
Tropoje	84,953	90,922	7%	93,082	89,698	-4%	92,914	92,985	0%
Lezhe	263,569	244,230	-7%	274,828	271,334	-1%	270,278	270,307	0%
Shkoder	477,900	458,399	-4%	495,220	490,198	-1%	489,610	498,115	2%
Tirane	1,146,538	1,111,802	-3%	1,203,513	1,191,658	-1%	1,204,765	1,231,918	2%
Vlore	286,633	277,475	-3%	299,514	294,649	-2%	296,573	301,464	2%
Sarande	111,550	108,527	-3%	108,746	109,055	0%	111,854	112,367	0%
D. Central	55,817	55,817	0%	51,479	51,479	0%	39,483	39,483	0%
Total	5,722,448	5,551,898	-3%	5,898,567	5,860,362	-1%	5,902,721	5,986,209	1%

Source: Health Insurance Institute.

Also the comparison between budget and expenditure by district and regional hospitals reflects a homogeneous trend over the three-year period (see Table 7 and 8)[7].

For district hospital, a growth in the total budget of 4% (in average) in 2010 and 3% (in average) in 2011 can be observed; the total amount allocated in the last year is nearly three billion Lekë.

The variation of the budget between 2009 and 2010, however, is very diversified, presenting extreme values that fluctuate between -9% of Kolonje and the +12% of M. madhe; more contained is instead the variability between 2010 and 2011. The expenditure of the district hospitals should be following a broad outline of this trend.

The regional hospitals move resources for about five billion Lekë presenting a total growth of the budget over a three-year equal to 8%, comparing with an increase in the expenditure by 15% concentrated mainly

[7] Monthly hospitals shall process the data reported to the three revenues (salaries, contributions to social and health insurance, goods and services) and communicate them to the National Insurance Institute through the report in electronic format provided in the contract. At the end of each year, the expenditure of each hospital can be compared with the budget.

between 2010 and 2011. However, very different values from this average are found for the hospital in Fier.

Funding for the third level of health care is determined in the same manner as the district and regional hospitals with the exception of the addition of a few items concerning annual research, universities and training.

The budget for the university hospitals, the only true health resource of high specialization, detects a growth of 6% per year. It should be noted that, among these hospitals, the volumes of resources absorbed and used by the University Center Hospital in Tirana (QSUT), whose budget in 2011 amounted to approximately 4.5 billion Lekë, is the highest.

Table 7

Budget and Expenditure in District Hospitals (Values in Lekë)

Hospitals	Year 2009			Year 2010			Year 2011		
	Financed	Used	Var %	Financed	Used	Var %	Financed	Used	Var %
Bulqize	88,380	86,870	-2%	89,610	87,803	-2%	92,200	88,239	-4%
Delvine	25,150	23,891	-5%	27,920	27,510	-1%	29,600	27,528	-7%
Devoll	47,970	46,536	-3%	49,640	48,041	-3%	53,300	51,875	-3%
Gramsh	134,400	125,577	-7%	141,790	141,023	-1%	148,690	145,024	-2%
Has	39,250	37,756	-4%	42,200	41,769	-1%	42,400	41,691	-2%
Kavaje	126,350	116,213	-8%	128,490	121,504	-5%	134,600	132,296	-2%
Kolonje	116,890	95,190	-19%	106,810	98,583	-8%	109,720	106,777	-3%
Kruje	141,500	138,942	-2%	149,460	148,144	-1%	153,360	151,241	-1%
Kucove	59,750	57,919	-3%	62,790	61,570	-2%	65,170	63,488	-3%
Kurbin	84,800	79,613	-6%	92,600	89,072	-4%	92,950	89,867	-3%
Librazhd	165,500	162,472	-2%	172,440	168,870	-2%	180,600	179,486	-1%
Lushnje	266,620	264,251	-1%	282,260	281,631	0%	294,500	292,320	-1%
M.madhe	17,135	15,865	-7%	19,160	16,666	-13%	19,000	17,838	-6%
Mallakaster	33,970	32,390	-5%	36,540	34,577	-5%	37,600	36,151	-4%
Mat	167,815	166,325	-1%	176,460	172,969	-2%	180,900	177,546	-2%
Mirdite	149,345	148,617	0%	157,810	156,968	-1%	163,220	161,986	-1%
Peqin	29,790	27,053	-9%	32,010	30,886	-4%	33,310	32,824	-1%
Permet	99,110	95,000	-4%	101,330	99,160	-2%	107,375	103,892	-3%
Pogradec	210,610	209,454	-1%	225,840	222,834	-1%	234,970	232,582	-1%
Puke	148,015	134,511	-9%	141,430	138,720	-2%	143,250	139,656	-3%
Sarande	179,260	157,411	-12%	174,670	171,175	-2%	184,000	183,493	0%
Skrapar	90,780	85,928	-5%	100,370	95,675	-5%	103,830	102,133	-2%
Tepelene	128,100	118,587	-7%	128,710	120,537	-6%	127,600	127,193	0%
Tropoje	120,800	117,758	-3%	130,200	128,689	-1%	134,340	131,679	-2%
Total	2,671,290	2,544,129	-5%	2,770,540	2,704,376	-2%	2,866,485	2,816,805	-2%

Source: Health Insurance Institute.

The composition of the budget for the university hospitals is based on the 44% of salaries, the 6% of contributions for social insurance, and the 50% of goods and services.

The difference between budget and expenditure is decreased over a three-year period, with an average value in 2011 of just over 1%, differentiating university hospital from the other structures (Table 9).

Finally, the private entities are not currently affiliated with the institute and do not receive funding.

Table 8

Budget and Expenditure in Regional Hospitals (Values in Lekë)

Hospitals	Year 2009			Year 2010			Year 2011		
	Financed	Used	Deviation %	Financed	Used	Deviation %	Financed	Used	Deviation %
Berat	369,610	366,763	-1%	383,750	369,880	-4%	402,800	388,882	-3%
Durres	626,000	599,831	-4%	654,000	631,568	-3%	669,500	662,954	-1%
Diber	351,280	299,049	-15%	349,400	335,627	-4%	357,600	354,535	-1%
Elbasan	510,650	479,044	-6%	545,940	528,100	-3%	566,500	558,267	-1%
Fier	465,750	390,900	-16%	494,050	473,398	-4%	560,765	558,797	0%
Gjirokaster	241,050	235,393	-2%	248,950	245,949	-1%	259,800	248,313	-4%
Korce	613,300	491,391	-20%	535,700	542,132	1%	573,050	572,096	0%
Kukes	260,950	249,485	-4%	266,750	261,180	-2%	272,250	266,607	-2%
Lezhe	237,920	232,823	-2%	252,220	248,016	-2%	268,700	263,178	-2%
Shkoder	596,520	590,716	-1%	625,940	614,458	-2%	657,700	653,358	-1%
Vlore	472,800	447,054	-5%	500,780	491,244	-2%	520,300	514,221	-1%
Total	4,745,830	4,382,449	-8%	4,857,480	4,741,552	-2%	5,108,965	5,041,208	-1%

Source: Health Insurance Institute.

Table 9

Budget and Expenditure in University Hospitals (Values in Lekë)∗

Hospitals	Year 2009			Year 2010			Year 2011		
	Financed	Used	Var %	Financed	Used	Var %	Financed	Used	Var %
QSUT	4,080,500	3,808,625	-7%	4,339,720	4,285,042	-1%	4,601,000	4,597,941	0%
Mat.1	376,900	352,275	-7%	399,120	390,982	-2%	418,700	412,143	-2%
Mat.2	306,500	287,151	-6%	324,110	313,695	-3%	335,000	323,827	-3%
Sanatoriumi	345,980	337,479	-2%	363,030	363,029	0%	384,350	382,709	0%
TOTAL	5,109,880	4,785,530	-6%	5,425,980	5,352,748	-1%	5,739,050	5,716,620	0%

Notes. ∗ QSUT is the name of the University Center hospital of Tirana; Mat. 1 and Mat. 2 are the hospitals specializing in obstetrics and gynecology; Sanatoriumi refers to the university hospital for pulmonary diseases. Source: Health Insurance Institute.

Toward a Model of Payment Based on Rates

Among the perspectives strongly advocated by long-term strategy, there is a transition to a system of financing strongly based on activities of health care entities rather than to their historic expenditure.

For the last few years, the National Institute of Insurance has provided the health care entities of a data-collection system for activities and expenditure that would create a database to carry out and assess performance. The health centers are obliged, therefore, to fill in reports for the amount of visits and for related expenditures. Reports must be sent monthly to the institute for estimating budget and indicators of activity and quality.

The accounting system used by hospitals is instead more complex and fed through the data collected from medical records, still manually filled in by doctors and nurses. Through the compilation of reports, the institute is able to collect accounting and performance data about the activity of the hospitals. For each individual,

medical records are required, in fact, such as the information about the patient (sex, age, insurance, etc.), the drugs used, expenditure for diet, clinical analysis, and transfusions. Hospitals that have an agreement with the national institutes are therefore obliged to estimate the expenditure for the health care services.

The institute has also provided the health care entities with a framework for cost accounting, using the classification into direct and indirect costs. In particular, the direct costs are calculated separately for each service offered by the hospital, while indirect costs are allocated on services according to the following ratios: Eighty percent of the cost total is divided into services with beds on the basis of the number of hospital days; twenty percent of the cost total is allocated on the other services (emergency room, outpatient clinics, laboratories, exams) and on the basis of the number of patients. The use of cost accounting, despite a gap of Information Technology and training, allows having a first analysis of the costs and performance of services provided.

The following data (Table 10) are an example of the Pathology, Surgery, Obstetrics and Gynecology, Pediatrics observed in all Albanian hospitals.

Table 10

Data Relating to the Four Main Services Clustered by Sort of Hospital (Values in Lekë)

Hospitals	Pathology			Surgery			Pediatrics			Obstetrics and gynecology		
	Number of cases	Average days of staying	Average cost per case	Number of cases	Average days of staying	Average cost per case	Number of cases	Average days of staying	Average cost per case	Number of cases	Average days of staying	Average cost per case
Regional Hospitals	15,282	6.31	39,361	19,508	5	45,293	23,682	4.11	25,833	25,058	4.2	32,529
District Hospitals	11,772	7.24	57,415	6,653	5.87	60,931	12,567	4.25	31,365	10,225	4.47	42,919

Source: Health Insurance Institute.

This information today is the basis of the control system of the institute and for the future development of a model based on rates that will allow a proper allocation of resources and greater levels of efficiency.

A first pilot program has been defined and applied at the Durres hospital. This structure has been identified as a benchmark for the implementation of this model that will be enlarged to the entire country. In this hospital, the cost accounting was introduced seven years before the other national structures. The first results are showed in the following table (Table 11).

It can be observed that cost for a single service in the department of surgery for Durres hospital is an average of 33,545 Lekë (238 Euro), while the same service in the other regional hospitals is equal in average to about 47,000 Lekë (333 Euro). Likewise for the performance of Obstetrics and Gynecology, an average value of Durres equals to 21,487 Lekë (250 Euro) compared to an average in other regional hospitals of 35,272 Lekë (152 Euro). The only exception is the Department of Pediatrics: It accounts higher costs in comparison with the other regional hospitals due to its higher specialization and its subdivision in separate units (somatic illnesses, infectious diseases, and intensive therapy).

The differences are easily explained with the highest degree of efficiency achieved from the application of managerial tools and with the most significant amount of services. This assumption is demonstrated by the following Figure 2 and Figure 3, which put relationship in the number of cases and the days of hospitalization with the total expenditure.

Table 11

Data From Durres Hospital (Values in Lekë)

Services of Durres hospital	Number of cases	Average days of staying	Average cost for case
Internal Disease	1,548	7.91	53,890.03
General Surgery	2,683	4.63	33,545.44
Orthopedics	560	7.06	51,922.45
Ophthalmology	388	4.15	28,729.61
Cardiology	641	6.61	49,752.04
Cardiology—Intensive care	439	5.79	46,507.45
Neurology	1,233	6.05	41,050.71
Infective	541	6.79	62,849.49
Obstetrics	2,842	3.22	17,436.11
Gynecology	54	4.65	234,696.98
Neonatology	2,733	3.03	13,509.30
Pediatrics—Somatic diseases	1,193	3.58	29,669.41
Pediatrics—Infectious	506	3.08	32,528.15
Pediatrics—ICU	283	4.61	48,204.61
Obstetrics - isolation	133	5.07	10,457.49
Gynecological diseases	228	3.80	11,580.51
Gynecological Surgery	268	5.53	22,377.58
Abortion Gynecology	994	3.77	11,473.74
Pregnancy pathology gynecology	397	7.14	35,201.14

Source: Health Insurance Institute.

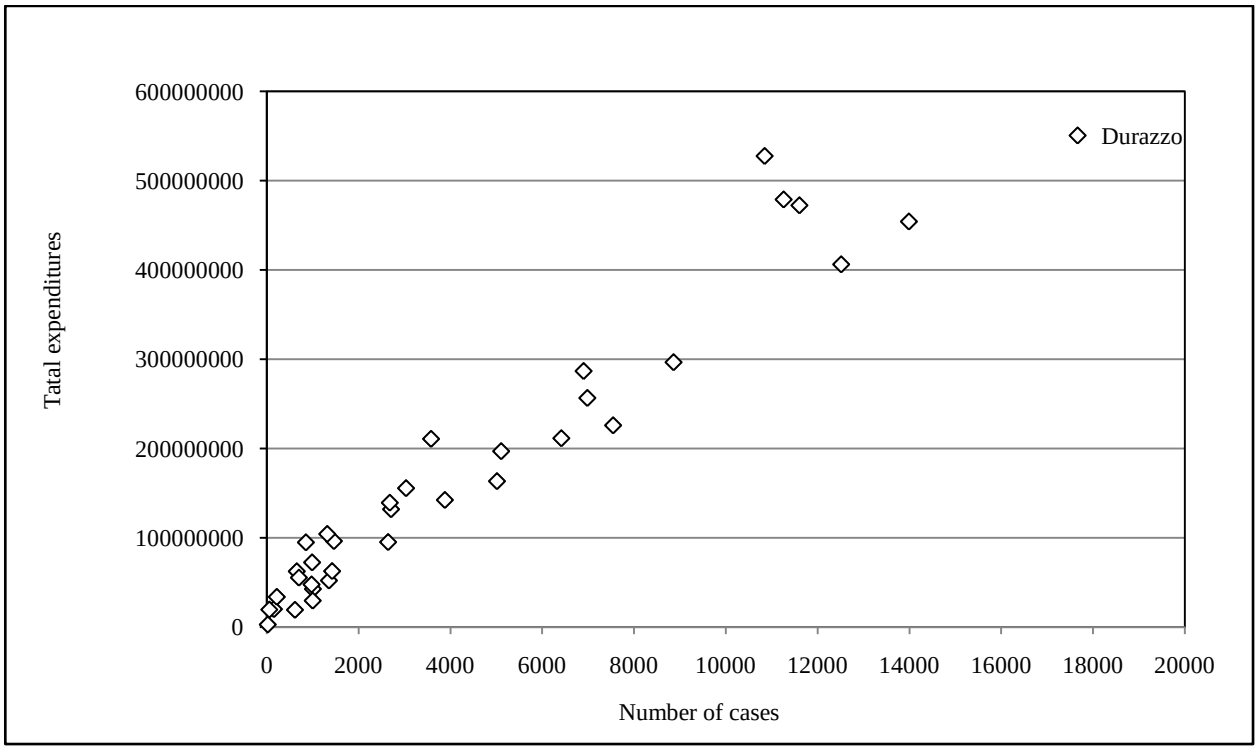

Figure 2. Placement of hospitals based on the number cases and total expenditure in Lekë

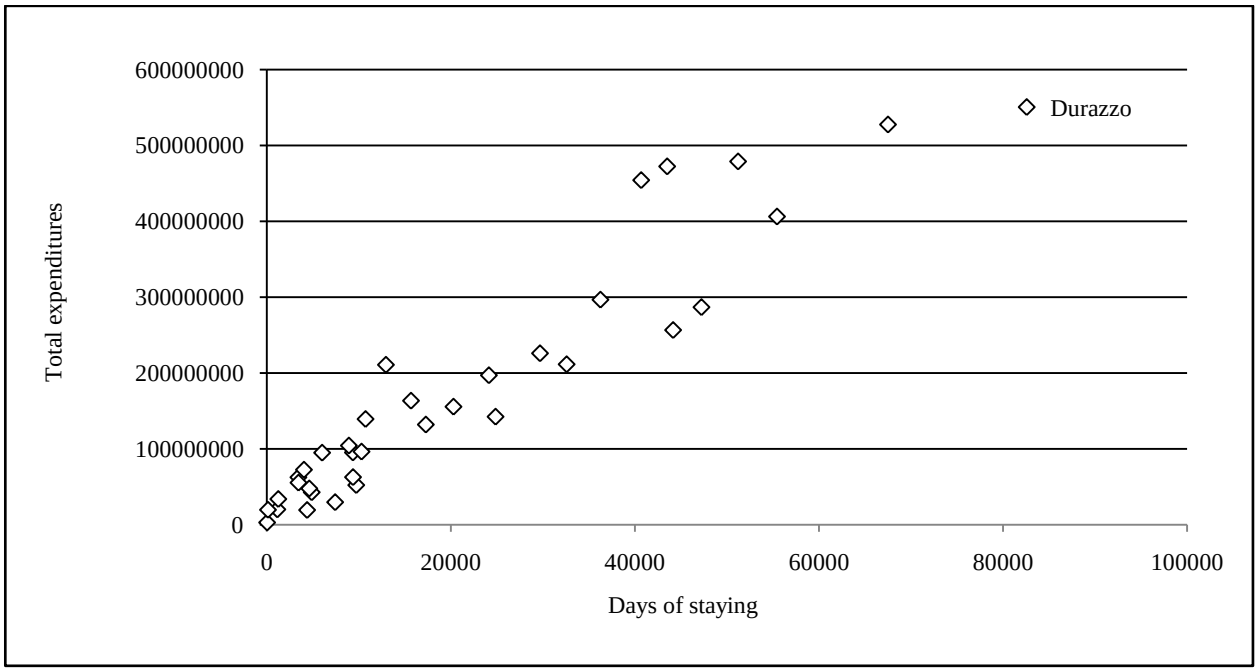

Figure 3. Placement of hospitals based on the days of hospitalization and total expenditure in Lek ë.

Conclusions

The Albanian health care system is based on an insurance model with a predominant role of the National Insurance Institute. It represents the regulator in regards to financing the health care entities. From an organizational point of view, the health care system is based on three levels that operate through different types of entities:

- health centers for primary care;
- district hospitals and regional hospital for secondary care;
- university hospitals for the higher level of specialization.

The Albanian health care system is going through a transition period. A transition from a financing model based on historic expenditure to the introduction of quantitative and qualitative indicators can be observed, such as objectives for the assessment of the performance (Borgonovi, 2005). This "reform" is affecting the health care centers where the budget is allocated on the basis of an historical expenditure. The institute is also trying to introduce managerial tools in hospitals starting with the pilot case of Durres that has improved the efficiency of the structure after the implementation of cost accounting.

Durres is a case study for the subsequent application of a model of payment based on rates at national levels.

After this research, the next steps of the Albanian health system can be summarized as follows:

- creation of a cost accounting system collected in the pilot case of Durres and, more recently, within the guidelines of National Insurance Institute;
- implementation of a cost accounting system in university hospitals that are currently excluded from the model;
- definition of a contracting system for private entities that today are not yet included in the public insurance system.

These steps will lead the Albanian health care system to a uniform growth and to a complete integration with the European health care approach. It will help to ensure a more equitable and uniform health care service to the whole population.

References

Akin, J., Birdsall, N., & Ferranti D. (1987). *Financing health services in developing countries: An agenda for reform*. Washington, D.C.: The World Bank.

Albania Ministry of Health. (2000). *Albanian public's perceptions of the health care system*. Tirana: Albanian Health System Recovery and Development Project.

Albanian Council of Ministers. (2001). *National Strategy for socio-economic development*. Retrieved from http://siteresources.worldbank.org/INTALBANIA/Resources/National_Strategy_for_Socio-Economic_Development.pdf

Balabanova, D., & McKee, M. (2002). Understanding informal payments for health care: The example of Bulgaria. *Health Policy, 62,* 243-273.

Belli, P., Shahriari, H., & Curtio Medical Group. (2002). *Qualitative study on informal payments for health services in Georgia*. Washington, D.C.: The World Bank.

Bonilla-Chacin, M. E. (2003). *Health and poverty in Albania: Background paper for the Albania.* Washington, D.C.: The World Bank.

Bonilla-Chacin, M. E., Murrugarra, E., & Teumorov, M. (2005). Health care during transition and health systems reform: Evidence from the poorest CIS countries. *Social Policy & Administration, 39*(4), 381-408.

Borgonovi, E. (2005). *Principi e sistemi aziendali per le amministrazioni pubbliche*. Milano: Egea.

Cercone, J. (2002). *Moldova: The health sector in transition* (Policy Note). Washington, D.C.: The World Bank.

Cepiku, D. (2005). *Managerialità e governance nei sistemi sanitari dei Paesi in transione: il caso dell'Albania* (In Rapporto CEIS Sanità Sette parole chiave del SSN, Università Tor Vergata). Roma: CEIS.

Chawla, M., Berman, P., & Kawiorska, D. (1998). Financing health services in Poland: New evidence on private expenditures. *Health Economics. 7,* 337-346.

Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review, 14*(4), 532-550.

Ensor, T., & Savelyeva, L. (1998). Informal payments for health care in the former Soviet Union: Some evidence from Kazakhstan. *Health Policy and Planning, 13,* 41-49.

Falkingham, J. (2004). Poverty, out-of-pocket payments, and access to health care: Evidence from Tajikistan. *Social Science and Medicine, 58,* 247-258.

Gamkrelidze, A., Atun, R., Gotsadze, G., & MacLehosc L. (2002). *Health care systems in transition: Georgia*. Copenhagen: European Observatory on Health Care Systems.

Goldstein, E., Preker, A., Adeyi, O., & Chelleraj, G. (1996). *Trends in health status, services and finance: The transition in Central and Eastern Europe*. Washington, D.C.: The World Bank.

Hovhannisyan, S., Tragakes, E., Lessof, S., Aslanian, H., & Mkrtchyan, A. (2001). *Health care systems in transition: Armenia*. Copenhagen: European Observatory on Health Care Systems.

Kornai, J., & Eggleston, K. (2001). Choice and solidarity: The health sector in Eastern Europe and proposals for reform. *International Journal of Health Care Finance and Economics, 1,* 59-84.

Kurkchiyan, M. (1999). *Report on health care in Armenia*. Washington, D.C.: The World Bank.

Lewis, M. (2000). *Who is paying for health care in Eastern Europe and central Asia*. Washington, D.C.: The World Bank.

Maciocco, G. (2009). *Politica, salute e sistemi sanitari.* Roma: Il pensiero scientifico editore.

McKee, M. (1991). Health services in Central and Eastern Europe: Past problems and future prospects. *Journal of Epidemiology and Community Health. 45,* 260-265.

McKee, M., Healy, J., & Falkingham, J. (2002). *Health care in central Asia.* Milton Keynes: Open University Press.

Ministry of Health of the Republic of Albania. (1993). *A new policy for the health care sector in Albania* (Hard copy available, Tirana).

Ministry of Health of the Republic of Albania. (2004). *The long term strategy for the development of the Albanian health system* (Hard copy available, Tirana).

Nuri, B., & Tragakes, E. (2002). *Health care systems in transition: Albania.* Copenhagen: European Observatory on Health Care Systems.

Rahminov, R., Gedik, G., & Healty, J. (2000). *Health care systems in transition: Tajikistan*. Copenhagen: European Observatory on Health Care Systems.

The World Bank. (1987). *Financing health services in developing countries. An agenda for reform.* Washington, D.C.: The World Bank.

The World Bank. (1993). *World development report 1993: Investing in health*. New York: Oxford University Press.

Tomini, S. M., Packard, T. G., & Tomini, F. (2013). Catastrophic and impoverishing effects of out-of-pocket payments for health care in Albania: Evidence from Albania living standards measurement surveys 2002, 2005, and 2008. *Health policy and planning, 28*(4), 419-428.

Tomini, S. M., & Groot, W. (2013). Paying informally for public health care in Albania: Scarce resources or governance failure? *Applied economics, 45*(36), 5119-5130.

World Health Organization. (2013). *European health for all database.* Retrieved from www.who.int

Yin, R. (1994). *Case study research: Design and methods* (2nd ed.). Thousand Oaks: Sage Publishing.