Technical paper

Improving hospital performance in the Eastern Mediterranean Region

Globally and regionally, hospitals absorb around 50%–70% of total government health expenditure, employ a large workforce and make extensive use of sophisticated biomedical technology. Improvement of hospital performance as part of improving overall health system performance is high on the reform agenda of countries in the Region. This paper raises awareness of the gaps in hospital performance in the Region and of the crucial roles of clinical governance and leadership and management in improving hospital performance.

A draft resolution is attached for consideration by the Regional Committee.
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Executive summary

Hospitals are important and costly components of the health system worldwide. Globally and regionally, hospitals absorb around 50%–70% of total government health expenditure, employ a large workforce and make extensive use of sophisticated biomedical technology. WHO and the International Hospital Federation undertook a comprehensive global study of hospital performance during 2001–2002. The study identified the major challenges affecting hospital performance as the disconnect between hospitals and the national health system; chronic underfunding in low-middle and low-income countries, concomitant with underfunding of the health system in general; and predominance of the curative orientation of hospitals and minimal involvement in preventive and promotive care to the catchment communities. The absence of a culture of costing and cost analysis was a feature in many public hospitals and hospital managers in most countries lacked competencies and skills in this area.

In the Eastern Mediterranean Region, weak management of hospitals has been emphasized as one of the causes of low hospital performance, especially in lower-middle and low-income countries. Poor management of human resources has also been noted to be widespread with an absence of incentive and reward systems and comprehensive appraisal systems. Improvement of hospital performance as part of improving overall health system performance is high on the reform agenda of countries in the Region. Many countries have developed programmes to strengthen hospital managerial skills and to introduce modern procedures in hospital management, including hospital autonomy, to provide greater flexibility in management, improve information systems and increase hospital efficiency.

Clinical governance was introduced in hospitals in developed countries to bridge the gap between clinical and managerial cultures and bring together the often separate tasks of management and quality assurance, including hospital public health involvement. It is based on the principle that those responsible for enhancing the quality of care must also be able to influence the use of resources. Clinical governance has not yet been introduced in any hospitals in the Region. However, all countries of the Region have been engaged at some time in some aspects of clinical governance, which will facilitate introduction of the concept.

Based on the perceived needs of countries in the field of hospitals, WHO has produced a number of focused publications and policy papers on hospitals and has developed several tools that can be used to improve performance through strengthening hospital management, assessing and improving quality, patient safety and accreditation. WHO has also strengthened support to countries by building support networks, establishing collaborating centres and establishing interactive websites.

The objective of this paper is to raise awareness of the gaps in hospital performance in the Region and of the crucial roles of clinical governance and leadership and management in improving hospital performance. It is critical for Member States to improve hospital performance if patients in the 21st century are to receive cost-effective and quality services. This can be achieved through: cost analysis and containment in regard to hospital financing; strengthening leadership and management in hospitals; introduction of clinical governance; and use of the performance assessment tool for quality improvement in hospitals.
1. Introduction

Hospitals are important and costly components of the health system worldwide. Globally and regionally hospitals absorb around 50%–70% of total government health expenditure, employ a large workforce and make extensive use of sophisticated biomedical technology. Besides treating patients, hospitals play important roles in teaching, research, health system support and employment of health professionals [1]. Hospitals range from small 30 bed rural settings supervised by general physicians, to district and secondary hospitals, to highly sophisticated tertiary hospitals with advanced medical specialities, high technology equipment and well known for teaching of health personnel. Rules of performance apply variably to them all [2]. Hospital performance can be looked at in two contexts: within the context of the overall goals of the health system, i.e. ensuring high quality and equitable health services that are responsive to public expectations and fairness in the way people pay for health services; and as a subsystem encompassing responsiveness to patients, clinical efficiency, effectiveness, quality and safety [3].

As institutions, hospitals increasingly face external and internal challenges. Externally, this includes evolving epidemiological and demographic scenarios, changing patterns of disease and ageing populations. Internally, hospitals face substantial challenges, such as increasing complexity and specialization, the introduction of new medical technologies and pharmaceuticals, rising public and political expectations and new financing mechanisms. These challenges require management and leadership of the highest calibre [2].

The relationship between the hospital and other health care services varies considerably. At one end of the spectrum, typically in rural areas of middle- and low-income countries, the hospital has a central role in the delivery of all types of health care, often with administrative responsibility for outlying facilities. At the other end of the spectrum, the United Kingdom, for example, has transferred budgets for purchasing hospital care to groups of primary care physicians, thus potentially giving them more power over hospitals [1].

In the late 1980s, it became clear that poor performance and declining health outcomes were caused not only by under-funding, but also by inadequate management of health care resources [3]. Recently, weak management of hospitals has been emphasized as one of the causes of low hospital performance in the Eastern Mediterranean Region, especially in lower-middle and low-income countries [4]. There is a long history in all countries of the Region with regard to building up hospital managerial skills and introducing up-to-date procedures, practices and quality programmes. Many countries, to reduce costs and improve management and accountability have tried hospital autonomy¹ and have adopted contracting out of clinical and non-clinical services.

The data collected by hospital systems in the Region are mostly quantitative in nature and usually focus on productivity indicators related to curative and rehabilitative services. They do not capture qualitative data, such as information on the needs and expectations of the population, which would enable managers to address performance improvement.

In the past decade, new strategies have been developed at global level and used to address performance improvement. These include assessment of hospital performance against a set of indicators, to help hospitals become more responsive to community needs [5]. The new concept of clinical governance is a major innovation, first developed in the United Kingdom in 1998. It was introduced as a set of activities that bring together the often separate tasks of management and quality assurance. Clinical governance is defined as a framework through which national

¹ Hospital autonomy: degree of autonomy (decision rights) hospitals retain in relation to their owner, organized purchasers, the government and consumers. In the context of hospitals, critical decision rights include control over input mix and level, outputs and scope of activities, financial management, clinical and non-clinical administration, strategic management (formulation of institutional objectives), market strategy and sales [4].
health system organizations are accountable for continuously improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish [6,7].

Despite the large share of the health budget devoted to hospitals, and in contrast to the growing body of research on primary care, there has been relatively little research on hospital performance. Hospitals are usually assessed in relation to the production of curative services without measuring their contribution to support for primary health care, public health services, research in health and training of health professionals. Nevertheless, during the past decade more attention has been dedicated to hospital performance and many organizations interested in hospitals have started to produce focused publications and policy papers and to develop more tools to help in strengthening hospital performance [2].

In 2000 WHO proposed a health system framework proposal that was well accepted by Member States and, based on their input, revised in 2007 [8,9] Health stakeholders are becoming more and more interested in health systems and in streamlining hospital services as part of the health system [10]. Improvement of hospital performance as part of improving overall health system performance is high on the reform agenda of countries in the Region. Many countries have developed programmes to strengthen hospital managerial skills and to introduce modern procedures in hospital management, including hospital autonomy, to provide greater flexibility in management, improve information systems and increase hospital efficiency.

The objective of this paper is to raise awareness of the gaps in hospital performance in the Region and of the crucial roles of clinical governance and leadership and management in improving hospital performance. The paper describes the current situation and presents validated evidence-based tools and recommendations to address these issues.

2. Global situation

Until the Second World War, hospitals were largely run as independent charitable and religious institutions. After the war, hospitals became the focus for the development of modern health systems in many countries, and particularly in the industrialized economies. The growth of hospitals was supported by the development of health and biomedical technology, particularly antiseptic techniques, more effective anaesthesia and surgical knowledge [2].

The issue of hospital efficiency and performance dominated the policy debate in many countries during the last two decades of the 20th century. One important dimension of that debate was focused on cost recovery in order to reduce government involvement in financing public hospitals [11]. Health professionals were expected to become more cost-sensitive, and a culture of costing and cost analysis was promoted in many public and private hospitals. Costing, coupled with epidemiological information on causes of discharge, led to the adoption of the concept of diagnostic related groups as a refined mechanism for reimbursement [2].

Globally, the number of hospitals beds per population in a country has traditionally been used as the indicator of quality of health care. However, evidence has shown that decreases in morbidity and mortality are influenced more by public health preventive and promotive actions and better hospital management rather than mere numbers of beds. Three major developments have

2 Residential establishment equipped with inpatient facilities for 24-hour medical and nursing care, diagnosis, treatment and rehabilitation of the sick and injured, usually for both medical and surgical conditions, and staffed with at least one physician. The hospital may also provide outpatient, preventive and promotive services.

3 Diagnostic related groups: a way of categorizing patients according to diagnosis and intensity of resources required, usually for the period of one hospital stay [8].
influenced hospital care in recent decades: the transfer of long-stay psychiatric patients to community settings; the increasing provision of nursing care for the elderly outside hospitals; and the restructuring of acute care, with more ambulatory treatment and rehabilitation outside hospital. These changes have resulted in a decrease in the number of acute hospital beds and a decreasing average length of stay. Admissions have risen, reflecting the more efficient management of patients, new technologies and financial incentives to reduce length of stay. The number of acute care beds in European Union countries actually fell from 41 beds per 10 000 population in 1990 to 34 in 1999 [12].

One of the most powerful factors shaping change in hospitals has been increasing medical specialization. Health care workers are increasingly required to acquire new competences in order to perform their tasks. They also have to keep up to date with new developments in information technology. In the future, technological advances will require an even more specialized workforce. There is also a trend towards strengthening nursing as an independent health profession, and some European countries have introduced various types of nurse practitioner. Overall, the role of multidisciplinary teamwork is increasing, which will require new skills, new attitudes to collaboration and new mechanisms to ensure continuity of care [3].

Hospital organization and management underwent major transformations during the 1980s. Management models were borrowed from the private sector. These aimed at making managers more accountable, flattening previously hierarchical management structures, promoting competition to produce greater efficiency, linking inputs to results and setting performance indicators against which to assess staff compliance and productivity. Management information systems were strengthened by using information technology and the international classification of diseases (ICD) [2].

Hospital autonomy was promoted in lower and middle-income countries, but concerns were raised that such reforms represented a first step towards privatization of publicly owned hospitals. The models on which current experiences are based did not emphasize the role of the Ministry of Health in regulation, evaluation and ensuring equitable access [13]. It is evident from evaluation studies carried out in Africa, Asia and Latin America [14,15] that well designed autonomy and improved governance are generally associated with better performance. Failures were attributed to lack of clearly defined mission, inefficient decision-making and management systems, and insufficient motivation of personnel [16,17].

The concept of clinical governance is based on the premise that those responsible for enhancing the quality of care must also be able to influence the use of resources. It requires hospitals to integrate financial control, service performance and clinical quality, the latter encompassing activities such as improving information systems, instituting professional development and developing peer review systems [18]. The clinical governance elements are: education and training, clinical audit, clinical effectiveness, openness of performance results to public scrutiny, research and development, and risk management to the patient, the practitioner and to the organization.

In order to understand the drivers of hospital performance better and to assess the factors influencing it, WHO and the International Hospital Federation undertook a comprehensive global study on hospital performance during 2001–2002. The results were published in 2008 [19]. The study chose at least two countries from each of the six WHO regions totalling 20 countries. From the Eastern Mediterranean Region it included: Egypt, Cyprus (now in the European Region), Lebanon, Morocco and Syrian Arab Republic. The objective was to review the role of hospitals within the health system and their capacity to meet the population’s needs. The study observed that while there are huge differences between countries, there is considerable commonality
between countries regarding factors which affect the performance of hospitals. In most of the countries studied, hospitals tend to be run as a separate system with very little connection with the national health system.

The study concluded that chronic under-funding and poor management in most middle and lower-income countries led to decay and neglect of public hospitals. The effect was greatest at the district level, resulting in the diversion of patients to the tertiary level. Most hospitals deliver overwhelmingly curative services, and hospital involvement in providing preventive and promotive care to the catchment communities is minimal. Their role in education and training of health workers is limited, with most using conventional methods. With regard to human resources management in hospitals, in most countries the study found that poor management of human resources is widespread with incentive and reward systems absent. Systemic appraisal systems exist in very few countries, while a few countries lack even job descriptions and skills specifications. Low morale, underpayment and inequities in availability and distribution of human resources have created problems in recruiting and retaining competent staff. [19].

3. Regional situation

Hospitals in the Region are quite diverse in their size, functions and ownership. A large proportion of hospitals are owned by government and provide free or subsidized hospital care. Nevertheless, there is increasing dependency on user fees to cover hospital budgets in the public sector, consequently reducing access to hospital services by the poor. To address the resultant inequity and to increase efficiency, transparency and cost containment, almost all countries are introducing some reforms.

The supply of private hospitals, usually of small to medium size, has grown in all the countries as a consequence of active and passive privatization policies. Private hospital beds range from 80% of the total beds in Lebanon, to 43% in Jordan and Yemen to 8% in Sudan and 6% in Iraq. This proliferation of the private sector is not accompanied, in lower middle and low-income countries, by a parallel development of regulatory systems. Concentration of public, and especially private, hospitals in the capital and other big cities has exacerbated inequity in distribution of care in many countries.

Most countries of the Region do not have hospital strategies and plans in relation to the health system as a whole. Hospitals provide largely curative and rehabilitation services and their involvement in preventive and promotive activities is low to moderate, with great variation between hospitals and countries. Where hospitals support primary health care, that support is largely confined to training, developing management protocols and referral.

The number of beds per 10 000 population ranges from 37 beds (Lebanon 37 and Libyan Arab Jamahiriya 36) to less than 10 beds per 10 000 in five countries (Figure 1). However, across the Region, there is marked geographical maldistribution in infrastructure and staff. Hospital performance, generally, is characterized by low bed occupancy rates, varying from more than

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4 The information in this section is largely based on studies on governance in 10 countries of the Region, a study on patient safety in 27 hospitals in 6 countries, a study on health services contracting out in 10 countries, country cooperation strategies and reports of WHO in-depth review missions to 8 countries (see Regional health system observatory www.emro.who.int).
5 The data from country statistical reports, are all extracted from the respective web sites of the Ministry of Health of each country, 2005.
6 Source: reference [19] as well as consultant reports and health system reviews in Afghanistan, Bahrain, Djibouti, Islamic Republic of Iran, Pakistan, Sudan, Syrian Arab Republic, United Arab Emirates and Yemen. Afghanistan has a national hospital policy and essential hospital services documents.
80% in most member countries of the Gulf Cooperation Council (GCC) to around 45% on average in other low- to middle-income countries of the Region. Average lengths of stay in hospital are believed to be much longer than the global average due to many factors, such as appropriateness of interventions, knowledge and skills, and factors related to inefficiencies of the system. Length of stay are also affected substantially by the prevailing high incidence of hospital-associated infections in the Region.

Based on the global experience of developed countries, hospital patient load is not expected to exceed 20%–30% of the total health system patient load [2]. Figure 2 compares hospital outpatient visits and primary health care total visits in the Region and shows that hospital outpatient visits are much higher than the global norm. This has major implications for hospital performance. This situation can be expected to be worse in low-income countries with inefficient referral systems and low quality of primary health care services. In the GCC countries the system is working well, but there is distortion due to the phenomenon of expatriate communities bypassing primary health care, due to the financial barriers to public services, and entering the system through the emergency and casualty services. It is estimated that 30% to 60% of these hospital visits are non-urgent.

Some countries have invested in developing modern management systems and in training and developing managers as an independent profession. The global study found that, in the study countries, management systems in hospitals are generally poor. Availability of competent managers, policies and procedures, clinical governance systems, costing and a cost analysis culture, financial management and human resources management were not high on the health system agenda [19].

Another global study carried out by WHO on the status of human resources for health, which included five countries from the Region, showed a wide discrepancy in training of hospital managers (Figure 3). Working conditions in most middle-income and low-income countries are also not conducive to improving efficiency, owing to low staff motivation, lack of management tools and limited transparency and accountability.
Figure 2. Comparison between hospital outpatient visits and primary health care total visits in selected countries in the Eastern Mediterranean Region

Figure 3. Hospital managers trained in management in five countries in the Eastern Mediterranean Region
Clinical governance has not yet been introduced in any hospitals in the Region (to the best of WHO’s knowledge). All countries of the Region have been engaged at some time in quality programmes. However, there has been marked variation in establishing, sustaining and institutionalizing such programmes. A culture of accountability, transparency and audits is not built into the health systems and patients’ rights policies are not well applied.

The global debates around the approaches to hospital management – the continuum from autonomy to privatization – have had little impact in the Region, which is largely committed to public service. Hospital autonomy has been introduced and implemented in many low, middle and high-income countries since the early 1990s, including Egypt, Islamic Republic of Iran, Jordan, Morocco, Pakistan, Saudi Arabia, United Arab Emirates and Tunisia. Other countries have recently initiated work in this area (Oman, Lebanon, Syrian Arab Republic and Sudan). In general, little is known about the success or otherwise of the experience to date due to the lack of external and objective evaluation and proper documentation. The pilot hospital autonomy initiative in Oman was recently evaluated. The evaluation identified gaps in the planning process at hospital level in relation to the overall strategic goals of the health sector, management delegation constraints, human resources management shortcomings, inefficiencies in procurement and absence of the finance and cost analysis functions. However, the initiative has provided further evidence that well functioning health systems are the basis for success in adopting autonomy.

Accreditation of hospitals has also recently come into practice in the Region. Many countries have embarked on hospital accreditation, with some forming accreditation bodies, and others already implementing different accreditation methods. Some individual hospitals, most of them private, have been accredited already by international organizations, but it is doubtful if this is sustainable due to the high cost. The League of Arab States recently published the Arab hospital accreditation tool, user guide and glossary, based on the WHO model, after pilot-testing it in some countries.

To measure productivity of hospitals, countries have used conventional quantitative indicators unchanged for decades (bed occupancy rates, average length of stay, etc). A few hospitals, mostly private, have embarked on the use of selected qualitative indicators, including measurement of patient satisfaction.

In 2006, the magnitude of adverse events in the Region was estimated on average to be 10% of all inpatient visits. To confirm a baseline, the Regional Office supported a study of patient safety and adverse event measurement in 27 hospitals in six countries of the Region (Egypt, Jordan, Morocco, Sudan, Tunisia and Yemen). The results indicate that the regional mean of adverse events is around 8%, ranging from 2.5% to as high as 18%. However, it is associated with a rate of death and permanent disability of 2.5% which is the highest such figure globally. Identified areas of need include policies and standard operating procedures, communication and staff training. The results of the study were used to enrich the regional Patient Safety Friendly Hospital Initiative.

In the past two decades, 15 countries of the Region, accounting for 85% of the population, have been directly or indirectly involved in conflict situations. Six countries (Afghanistan, Iraq,
Lebanon, Palestine, Somalia and Sudan) have recently experienced or are currently experiencing complex emergencies. Hospitals can play a critical role in minimizing the damage as a result of public health insecurity. As such, hospitals must be able to accommodate the surge in demand for care in order to screen, stabilize and provide definitive care for affected persons [22].

4. WHO response

The World Health Report 2000 introduced a conceptual framework for the health system [8]. This was revised in 2007 to better capture the determinants of hospital performance—effectiveness, efficiency, responsiveness, quality and safety—as intermediate outcomes of the health system functions. In the World Health Report 2008 [10] the role of hospitals in support of primary health care was reiterated and renewed, and the importance of strengthening the referral systems to make it work better was emphasized.

Policy-makers need to decide which curative care is best delivered in hospitals, and to examine the trade-offs among the various services according to their cost-effectiveness, in order to improve the efficiency of departments, as well as hospital systems as a whole. WHO developed a manual on analysis of hospital costs to assist decision-makers in this regard [23]. WHO’s efforts to respond to country needs in the field of hospitals have also resulted in several focused publications and different tools to improve performance. To help in better use of these tools, web pages were established on the WHO website on management of health services in general, including hospitals (Managers taking action based on knowledge and effective use of resources to achieve results (MAKER) http://www.who.int/management/en/) and on the Regional Office website (Management effectiveness initiatives http://www.emro.who.int/mei/). To strengthen leadership and management in countries, WHO developed a framework for better management and leadership, which can be used to assess and improve the hospital management system (numbers, competences and skills, critical support systems and working environment)9 [24].

The Performance Assessment Tool for Quality Improvement in Hospitals (PATH) was developed by the WHO Regional Office for Europe to support hospitals in collecting data on their performance, identifying how they are doing in comparison to their peer group and initiate quality improvement activities. The framework for performance assessment encompasses six dimensions: four domains (clinical effectiveness, efficiency, staff orientation and responsive governance) and two transversal perspectives (safety, patient centeredness) [20]. To facilitate implementation of the framework, WHO has built up an international support network, including links to reference studies or gold standard guidelines, teleconferences, workshops, internet discussion forums and conferences. Although PATH is still in the evaluation phase and not all countries (and no countries from the Eastern Mediterranean Region) are participating at this stage, interested countries should contact WHO to discuss the strategy for implementation10.

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9 The framework proposes that for good leadership and management, there has to be a balance between four dimensions: 1) ensuring adequate numbers of managers and deployment of managers throughout the health system; 2) ensuring managers have appropriate competences (knowledge, skills, attitudes and behaviour); 3) the existence of functional critical support systems (to manage money, staff, information, supplies, etc.) and 4) creating an enabling working environment (roles and responsibilities, organizational context and rules, supervision and incentives, relationships with other actors).

10 The requirements for participating in the PATH process are:
1. Commitment to the philosophy of the project (using PATH mainly as a tool for internal quality improvement);
2. Ensuring quality of data;
3. Participation in meetings of the national benchmarking network;
4. Collecting all indicators in the core set (except if not relevant or applicable to their area of care); and
5. Reporting data timely to WHO.
Hospital accreditation guidelines were produced by the Regional Office and widely distributed to countries. These were intended to be as appropriate as possible for the Region and flexible enough to allow for adaptation in all the countries. There are specific features in the regional accreditation model, which differs from other accreditation approaches. One of these distinctive features includes its comprehensive scope, which includes promotive, preventive and curative standards, wherever relevant. The model also entails a stepwise approach to accreditation, starting with a basic level to be achieved by all hospitals, and moving to a more sophisticated level with the greater degree of specialization. This was the basis of the Arab hospital accreditation tool endorsed by the League of Arab States and pilot tested in Egypt, Jordan and Libyan Arab Jamahiriya.

The Patient Safety Friendly Hospital Initiative was launched in the Region in 2007 to instigate and encourage safe health practices in hospitals in the Region. In addition, this programme aims to integrate all patient safety activities in health care facilities such that they run as horizontal programmes under the umbrella of the initiative. Implementation of this programme is a joint effort between participating health care facilities, WHO and the World Alliance for Patient Safety, which guides the process and certifies the facilities on meeting set standards of patient safety.

The Regional Office has worked with countries to determine the level of emergency preparedness and risk management in the Region, and developed a strategic framework by which Member States can work to safeguard hospitals and health facilities from disasters. The framework seeks to ensure that all new hospitals are built with a level of resilience that strengthens their capacity to remain functional in disaster situations and to promote mitigation measures to reinforce existing health facilities, particularly those providing primary health care.

5. Conclusions and the way forward

The importance of hospitals and the need to run them more efficiently remain high on the reform agenda worldwide and in the Region. Attention to hospitals is timely since hospitals throughout the world are facing growing and rapidly changing pressure due to population demographics, disease patterns and new knowledge and technology. The challenges of the hospital sector are part of the overall socioeconomic challenges in general, and health sector challenges in particular. However, some of these challenges are peculiar to hospitals. The most important are: underfunding and increasing dependency on user fees; the disconnect between the hospital sector and the mainstream health services; poor hospital management systems; low quality services; and the need to collect relevant qualitative and quantitative information to support decision-making. Clinical governance has not yet been introduced in the Region’s hospitals. However, all countries of the Region have been engaged at some time in some aspects of clinical governance which will facilitate introduction of the concept.

It is critical for Member States to improve hospital performance if patients in the 21st century are to receive cost-effective and quality services. This can be achieved through: cost analysis and containment in regard to hospital financing; strengthening leadership and management in hospitals; introduction of clinical governance; and use of PATH for monitoring quality of services. WHO will work with Member States to address areas of performance that need strengthening. A variety of tools are available to support this. WHO will continue to make use of available data, especially data generated by the World Alliance for Patient Safety, to enhance its guidance on improving quality of hospital services.
6. **Recommendations to Member States**

1. Promote a culture of cost analysis and containment in the hospital sector in order to improve financial management, programme budgeting and accountability.

2. Assess and improve hospital management and quality of services through use of available tools and frameworks, including clinical governance, the framework of management and leadership and the performance assessment tool for quality improvement in hospitals (PATH).

3. Develop regulatory instruments aimed at setting norms and standards for geographic and functional distribution of hospitals, including master plans for hospital development, at protecting equity in access and at promoting patient safety in hospitals.

4. Conduct in-depth review of the national experience in hospital autonomy, if any, as part of health system decentralization and assure the role of the Ministry of Health in regulation and evaluation of autonomous hospitals and in ensuring equitable access.

5. Develop cost-effective alternative approaches to hospital admissions through development of day care, day surgery and home health care.

**References**


