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# World Hospitals and Health Services

The Official Journal of the International Hospital Federation

## Health services moving ahead in the East Mediterranean Region (EMRO)

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# Lessons learned about Health Care from Gulf States and beyond



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**W**ith the 43<sup>rd</sup> World Congress generously hosted by the Government of Oman, we will focus this editorial of the World Hospitals and Health Services (WHHS) Journal of the International Hospital Federation (IHF) on lessons learned from GCC member states (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and United Arab Emirates) and other contributions from authors across the Eastern Mediterranean Region and elsewhere. This special focus on the Eastern Mediterranean Regions is coming at a very important moment, for they are facing an urgent need for stability and reconstruction while also rapidly transforming and aligning their health services with the world's most advanced countries. Recent industrialization and improvement in health care services have led to a significant increase in life expectancy for GCC member countries from age 62 years old in 1970 to 77 in 2012; at the same time, the infant mortality rate decreased from 62 per 1000 live births to less than 9. During this period, all countries have gone through a demographic and epidemiological transition and are now faced with an aging population, where infectious diseases as the leading causes of death have been replaced with chronic conditions like cerebro/cardiovascular disease, cancer, diabetes, hypertension and other diseases. Like elsewhere in the world, this shift in disease patterns puts the health care system under enormous pressure to adapt to more expensive ongoing conditions rather than episodic infectious conditions. Several GCC and other Eastern Mediterranean countries found in Universal Health Coverage a relevant agenda for shaping reforms and transforming their health systems. Accordingly, several GCC countries embarked on developing long-term visions for shaping the future of their health systems—in 2012, Oman launched its Health System Vision 2050 and, more recently, Saudi Arabia engaged in a major Health Transformation Program. These and other landmark initiatives provided opportunities to rethink the health system organization so it could benefit from what did and did not work elsewhere; they also provided valuable lessons for other countries embarking on similar initiatives.

Over the past 30 years, the GCC countries responded in an impressive way to this challenge through both public and private initiatives. In many areas, the GCC member countries are now approaching Western European standards in terms of health services and infrastructure. The average number of doctors in the GCC member countries has now reached around 2.5 doctors per 1000 population and general practitioners are on an average 2.1 per 1000 population. Nursing personnel increased to an average of around 4.7 per 1000 population. Furthermore, over 15,000 new hospital beds have been added recently, reaching around 2 per 1000 population.

Recent advances in diagnosis, technology and treatment modalities have increased overall health care costs. However, innovative and cost-effective strategies have helped keep these costs under control; an enviable situation by most standards. In Sept 2018, all Eastern Mediterranean Countries endorsed the UHC Salalah Declaration on adopting a progressive universal approach to enhancing service coverage and financial protection. Since then, efforts have been made to help countries define what and what not to cover under a Universal Health Coverage Agenda. As a result of these advances, although the rate of patients seeking overseas treatment is still high, mostly for conditions lacking specialty care, new public-private partnerships with top academic institutions in the US and Europe are allowing patients to receive the best possible care for many conditions in their home countries. The World Health Organization has played a major role in supporting member states in the Eastern Mediterranean Region, reforming and transforming their healthcare services while moving toward Universal Health Coverage. The patient safety program widely adopted by many countries is an international landmark and a permanent reminder of this topic's importance for health service leaders. The WHO has made unprecedented efforts to support the professionalization of health service management as well as initiatives to strengthen emergency care as the backbone of health service delivery systems. Several countries have embarked on developing health financing strategies to inform mobilization efforts and guide the efficient use of their resources. All Eastern Mediterranean countries signing the UHC 2030 Global Compact demonstrates the high level of the political commitment for making UHC's SDG target a reality by 2030. The authors contributing to this issue of the WHHS Journal expand on many of these topics and some of the challenges that all countries are facing, in addition to the GCC member states. Dealing with the health care needs of migrant and non-resident populations, maintaining top quality care standards and coping with the increasing pressure from population expectations and expenditure are global issues not unique to the Eastern Mediterranean Region. The IHF remains committed to sharing experiences in dealing with such challenges on a global basis. The 43<sup>rd</sup> World Hospital Congress in Muscat, Oman, scheduled for November 6-9, will provide excellent opportunities to continue this discussion in face-to-face meetings with professionals from around the world. The articles selected for this issue of the Journal give a flavor of the richness of these topics that will also be shared with all the participants during the upcoming 43<sup>rd</sup> World Congress.



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# A commentary article about the implementation and advancement of the Patient Safety Friendly Hospital Initiative (PSFHI) in the Eastern Mediterranean Region



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**ABSTRACT:** Patient Safety (PS) is a global health concern that has been immensely emphasized in the global agenda pursuing universal health coverage. The Patient Safety Friendly Hospital Initiative (PSFHI) is a World Health Organization (WHO)-led initiative that comes as a needed response to assess, monitor, and advance PS standards across the Eastern Mediterranean Region (EMR). It was founded in 2011 and has so far been implemented in more than 160 hospitals across the EMR. The WHO-Eastern Mediterranean Regional Office (EMRO) is providing continuous support to the Member States to adopt and institutionalize the initiative at their respective national level. A third edition of the initiative's manual will be published by the end of 2019 updating the previous 2016 version. Because of the improvement observed upon its implementation, the PSFHI has become one of EMRO's top ten strategic initiatives and a priority for its 2019-23 vision.

## Introduction

In the era of Sustainable Development Goals (SDGs), the World Health Organization (WHO) insistently advocates for quality and safe healthcare practice as fundamentals to ensure the health and well-being of the world population. Patient safety has been recognized as a global health priority in the pursuit of Universal Health Coverage (UHC). It has been emphasized in the resolution of the most recent 72nd World Health Assembly to declare September 17th World Patient Safety Day, to be observed annually (1, 2).

Evidence shows that, every year, nearly 10% of global hospital admissions might lead to healthcare services harming patients. It is estimated that almost 42.1 million hospital admissions are associated with adverse events every year (3). According to the WHO, there is a risk that up to one per each 10 inpatients might experience an adverse event during hospitalization, even in high income countries (4).

Patient harm is ranked 14th in the list of most common health hazards in the world. Moreover, adverse events consume almost 15% of the overall health expenditures in OECD countries. Every year, in Low- and Middle-Income Countries (LMICs), 5.7 to 8.4 million deaths are attributed to poor-quality healthcare services, accounting for 15% of all deaths. Annually, unsafe medical practices cause around 134 million adverse events in LMICs, of which 2.6 million are lethal (5).

The Eastern Mediterranean Region (EMR) has special challenges in terms of applying patient safety standards. The region includes 22 countries, with approximately 538 million people. It is the origin of more than 30 million forcibly displaced people, i.e.

half of all displaced populations globally. In addition, the region faces an unprecedented scale of conflicts and violence with 11 graded emergencies in 8 countries (6).

These conditions described above have led 58 million people to seek emergency healthcare. The EMR's alarming figures show that up to 18% of hospital admissions are associated with adverse events (7). A previous study estimated as 10% the incidence rate of adverse events among hospitalized patients, 60% of which were stated to be preventable and 21% were lethal (8). The study reported that around 90% of those who experienced adverse events in surgical departments had a prolonged hospital stay, which carried a risk of developing almost 21 adverse events per each 1000 hospitalization days (9).

These figures show a systematic lack of patient quality care and safety assessment tools and monitoring processes. EMR countries need these tools to identify and address patient safety gaps and priorities. These were the foundations for developing the Patient Safety Friendly Hospital Initiative (PSFHI). The initiative is considered as a platform that integrates the key principles and interventions required for the successful implementation of patient safety improvement programs at the operational level.

## Foundation of the Patient Safety Friendly Hospital Initiative (PSFHI)

In response to the immense need for improvement actions to address lapses and gaps in patient safety practices, the WHO Regional Office for the Eastern Mediterranean (EMRO) launched the PSFHI in 2011. This is a WHO-led initiative to harmonize evidence-based patient safety standards to which hospitals would



adhere to provide safer care (7). Compliance with the standards would ensure that patient safety is accorded the necessary priority and that hospitals' staff implement best practices.

The initiative's standards are a set of critical requirements for the establishment of patient safety programs at the hospital level. They provide a framework that enables hospitals to assess patient safety, build up staff capacity and involve consumers in improving health care safety.

The very first version of the PSFHI standards was developed with the involvement of a group of regional and international experts. The initiative was pilot-tested in seven EMR countries while experts were trained to conduct an initial baseline assessment in a pilot hospital in one of the participating countries, based on the standards and implementation guidelines. The pilot test spotted adaptations that needed to be considered to contextualize standards and tools according to the EMR. Since then, EMRO has been continuously monitoring and updating the tools to be tailored according to different contexts.

An updated version (second edition) of the PSFHI manual was published in 2016 (10). Since issuing the first version of the manual in 2011, the PSFHI has now expanded beyond the Eastern Mediterranean to other WHO regions. Countries that are currently endorsing the PSFHI include Afghanistan, Iran, Oman, Pakistan, Palestine, Qatar, Saudi Arabia, Tunisia and Yemen.

Driven by the initiative's success and effective outcomes, EMRO's Regional Director has declared in 2019 that expanding the adoption of the PSFHI is among the top ten priorities in the region for reducing the burden of unsafe healthcare practices. Moreover, the WHO is currently working on updating the tools based on the implementation experience and expert consultation to provide an updated third edition of the standards by the end of 2019.

### Implementation and expansion of the PSFHI

The patient safety friendly hospital assessment provides hospitals and institutions with means to determine their patient safety system level for the purposes of both ongoing and new programs. The assessment is voluntary and is conducted through an external, peer review survey. It starts with a WHO Regional Advisory Group on Patient Safety as a primary assessment team. The group assesses hospitals to determine whether or not they comply with the WHO's patient safety standards and performance indicators. It is followed by capacity building of national patient safety initiative teams to provide expert PSFHI support.

The PSFHI manual (second edition) recommends compliance with 139 criteria that align with five key principles to improve patient safety, including leadership commitment, developing efficient management structure, providing safe evidence-based clinical practice, following clear policies and guidelines, compassionate health professionals, lifelong learning, engaging patients and public with healthcare services and using data to ensure a safer care environment. The criteria are categorized into three groups, critical, core, and developmental, offering a stepwise approach towards improvement.

The PSFHI standards and implementation tools have been proven to be feasible and adaptable to different contexts. A systematic multi-country patient safety assessment using PSFHI standards was conducted in seven developing countries within the EMR.

These countries showed a range of compliance rates with the standards. The critical ones showed a compliance rate ranging from 8 to 78% among the participating countries. Standards pertaining to patient and public involvement showed the least compliance rate (25%), while compliances with the standards of safe environment and evidence-based clinical practice were estimated as 64% and 53% among the participating hospitals (7).

Conducting a patient safety assessment at hospitals provided several benefits; it demonstrated to the public the commitment and accountability of these hospitals in terms of ensuring patient safety, and it offered key benchmarking tools and venues for improvement to attain standard targets. Monitoring the practices motivates the staff to participate in improving patient safety. The assessment would ultimately aim to advance the level of patient safety at hospitals by creating a safer care environment that would protect the community from avoidable harm and reduce adverse events in hospital settings.

The PSFHI can be integrated and used with other patient safety assessment tools for external evaluation. However, the PSFHI is different from other methods; it is an action-based tool for improvement not concerned with recognition or awards. Because of this distinction, the number of countries adopting the initiative is set to rise. So far, more than 160 hospitals across the EMR have implemented and adopted the initiative (10). Since the last edition in 2016, WHO-EMRO has trained a group of surveyors in Oman (40), Pakistan (120), Qatar (30), Saudi Arabia (30) and Tunisia (40), expanding its implementation in the EMR and beyond.

For instance, the Sultanate of Oman had great success in adopting the PSFHI. In 2016, Oman initiated the adoption of the PSFHI in 11 hospitals, including governmental and private ones, by establishing a 1-year plan to implement the standards. These hospitals showed advanced patient quality care and safety measurements as compared to hospitals that did not participate in the program. They demonstrated 100%, 78% and 32% adherence rates to the initiative's critical, core and developmental standards. On the contrary, the average level of compliance to the core standards of non-participating hospitals recorded a less than 50% rate at best (11).

### PSFHI is a strategic priority for the WHO-Eastern Mediterranean Regional Office

As mentioned, the PSFHI has been recently identified among the ten key initiatives targeted by EMRO's vision and the Regional Director's roadmap for 2023 (12). The WHO is continuously providing technical support to scale up regional capacities on how to use, contextualize, and institutionalize the tools within the region and beyond. Efforts are also being made to adapt the standards to Primary Health Care settings and integrate the initiative with national healthcare quality policies.

EMRO has recently added 10 public hospitals from different provinces in Pakistan to the initiative. This complements the previous technical support offered to implement the PSFHI in 10 hospitals in Punjab. The PSFHI was indeed the entry point highlighting the need to develop a National Quality Policy and Strategy (NQPS) in Pakistan. Developing an NQPS is an emerging priority for all countries to drive the systematic improvement of their healthcare quality standards (13).

The WHO is supporting PSFHI implementation for both stable and emergency circumstances in the EMR. It adds to the ongoing EMRO-led efforts to address patient care quality and safety in extremely adverse settings (14). For example, all support is currently being provided for Yemen to apply the initiative and cope with its emergency and conflict settings.

## Conclusion

Patient safety is a foremost global health concern. Lack of patient safety standards could waste national resources, threaten patients' lives and burden the health system on all levels. EMRO founded the PSFHI as the point of reference for patient safety in the region. It offers a platform for integrating concepts of patient safety into the health systems' priorities. It is a venue for achieving the optimum level of hospital patient safety practices, supported by a committed leadership and a clear vision that advocates for safer care as a foundation for achieving universal health coverage.

## Biographies

**Dr Mondher Letaief** is the regional adviser at the Health System Development Department responsible for the Healthcare Quality and Safety Program at the Eastern-Mediterranean Regional Office of the World Health Organization. He is also a Professor of Preventive Medicine at the University Hospital of

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**Dr. Ahmed Alboksmaty** is a medical doctor and public health practitioner, currently working as a consultant on patient quality care and safety at the Department of Health System Development at the World Health Organization (WHO) - Regional Office for the Eastern Mediterranean (EMRO). Since joining WHO-EMRO, he has been actively involved in promoting the safety and quality of health care services across the Eastern Mediterranean Region; including work on the Patient Safety Friendly Hospital Initiative (PSFHI), validating and implementing Primary Health Care Quality Indicators, developing an action framework for addressing quality and safety in extremely adverse settings and other projects to introduce patient care quality and safety as core elements for achieving Universal Health Coverage.

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# Review of the Governance of Public Sector Hospitals in Pakistan: Lessons for the Future



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**ABSTRACT:** Governance of public sector hospitals has been a major challenge in Pakistan. A framework has been adapted to assess governance at the macro- and micro levels of decision making. At the macro-level, the experience of hospital autonomy to improve efficiency and quality of care has been inconclusive in the absence of proper rules and regulations. Following devolution in health, the provincial governments have instituted regulatory regimes for improved governance and have experimented with PPPs to improve management of district hospitals.

At the micro-level, the focus has been on institutional aspects of hospital management. Most public hospitals face challenges related to human resource, financial and supply chain management; lack of information technology, poor quality of care, and lack of disaster preparedness and management capability.

This paper offers three strategic priorities for policymakers to consider – first, demonstrate consistency and commitment in implementing policies related to hospital governance; second, launch a countrywide capacity development program for hospital managers; and third, establish e-governance to enhance accountability, transparency and performance of hospitals.

## Introduction

Hospitals form an integral part of a health system and are instrumental in providing patient care while complementing other functions. They hold a key position in providing support to primary health care providers and community outreach services and the training of health care professionals and researchers. Achieving universal health coverage (UHC) and sustainable development goals requires an absolute commitment from all tiers of a health system, including hospitals (Dale H., 2015).

The efficiency, performance and sustainability of hospitals rely heavily on sound hospital governance. The term “hospital governance” has been defined as a set of decision-making processes and tools that influence organizational behavior and recognize the complex relationships existing between multiple stakeholders. Three factors drive change in public hospital governance: (i) technological improvement in clinical and informational capacity; (ii) growing patient expectations regarding quality, safety, responsiveness and choice of providers; and (iii) growing political pressures on public authorities to restructure

traditional command and control models (Saltman RB., 2011).

The governance of public sector hospitals has been a major challenge in Pakistan due to inconsistent policies and poor implementation, yet it has remained a neglected area of study. We sought to assess the governance of public hospitals in Pakistan to understand the current landscape and identify areas of further improvement.

## Health System of Pakistan: The Country Context

Pakistan consists of a mixed health system where the public and private streams run in parallel. The public health care delivery system is organized into four tiers; outreach facilities forming the first, the primary health care facilities the second, the tehsil/district hospitals the third, and the tertiary care hospitals the final tier.

The total number of public hospitals in Pakistan was 1,167 with a hospital bed-population ratio of 1 per 1,613 in 2015 (WHO recommendation of bed-population ratio: 5 per 1000 population) (Gallup Pakistan, 2016). Pakistan spends less than 1% of the GDP on health; 80% on tertiary care hospitals utilized by only 15%,

and 15% on primary health care services used by 80% of the population (Ministry of Finance, 2017).

Constitutionally, health has been a provincial subject in Pakistan. After devolution in 2010, the provincial governments were mainly responsible for health planning, financing, human resource management and service delivery. The governance and management of hospitals in the current scenario come largely under the domain of the provincial governments (Zaidi SA., 2019).

### Framework of Analysis

We adapted the framework presented by the European Observatory on Health Systems and Policies to evaluate hospital governance in Pakistan at two levels of decision making; the macro and micro levels (European Observatory on Health Systems and Policies, 2012). The macro level of hospital governance incorporated national/sub-national government policies, strategies and decisions that determined the basic structure, level of authority, accountability, organization and financial arrangements of the hospitals. The micro level of hospital governance related closely to institutional aspects of hospital management (Figure 1).

FIGURE 1: ANALYTIC FRAMEWORK TO ASSESS THE GOVERNANCE OF HOSPITALS



### The historical and macro level of hospital governance

#### Historical context

The basis of Pakistan's current healthcare system was laid down in the 60s when primary, secondary and tertiary level facilities were organized as part of the tiered system of progressively higher levels of specialization connected by referral linkages. While most five-year plans mainly focused on preventive and primary level healthcare, some expansion in hospital sectors was evident especially in the 70s (Lashari T., 2004).

#### The constitutional basis of federal and provincial roles

Pakistan's constitution of 1973 created a predominantly decentralized polity with a distinction between the roles of the federal and provincial governments. Legislative power for healthcare could

be exercised by both federal and provincial governments as health was a "concurrent"<sup>1</sup> subject, with the federal law prevailing in case of disagreements between the two. Based on this provision, the health sector policy was mainly determined at the federal level with provinces being responsible for its implementation.

The regulation was also a federal subject in the 1973 constitution<sup>12</sup> and a number of autonomous regulatory bodies were set up under federal jurisdiction, mainly tasked with regulating the entry of medical and allied professionals (Marchildon G., 2018). There was no specific federal or provincial independent regulation of clinical governance in hospitals, most quality assurance and governance issues were dealt with at the hospital level by hospital administrations (Shiwani MH., 2006).

### Hospital autonomy

The potential of hospital autonomy as a way to improve efficiency and quality of care has been under discussion since the mid-90s. Mainly two provinces, Punjab and KP, have tried to improve the efficiency and performance of their major hospitals using various degrees of autonomy. Under the Punjab Medical and Health Institutions Ordinance 1998, all nine teaching hospitals and 16 other hospitals were granted autonomy (Ud Din et al. 2017). Closely linked was the Sheikhpura pilot project of Punjab which involved creating semi-autonomous district hospitals. Amendments to this initiative were made in 2002 and 2003 by the military government. The proposed objectives were to improve the efficiency and quality of services, promote local decision making and ensure the economic viability of the institutions. Independent Chief Executives and Finance Directors were appointed for each hospital to manage the new financial and clinical autonomy (Saeed A., 2013).

Under the NWFP Medical and Health Institutions Reform Act of 1999, a similar autonomy initiative was rolled out in the province now called Khyber Pakhtunkhwa and the four biggest public hospitals were granted autonomy in 2000. Under the Khyber Pakhtunkhwa Medical Teaching Institutions Reforms Act of 2015, autonomous institutions were to be managed by an independent board of governors, set their own rules for appointments and service, maintain independent institutional accounts and invest residual funds in the institution's name.

While, in theory, hospital autonomy has the promise of better quality of service and efficient resource management, the experience in Pakistan has been mixed and while there was no impact assessment, autonomy initiatives in both provinces suffered from issues of absence of rules and regulations for governance, staff absenteeism, poor staff performance incentives, deterioration of infrastructure, shortage of facilities and equipment and scarcity of funds (Abdullah MT., 2007). Both provinces lacked clarity in the planning, design and implementation of the autonomy reforms as there was no accurate and complete documentation.

### 18<sup>th</sup> constitutional amendment and hospital governance

In 2010, the 18th constitutional amendment fulfilled a long-standing demand for substantive provincial autonomy. The concurrent governance arrangement between federal and

1 Concurrent Legislative List, Constitution of the Islamic Republic of Pakistan, 1973

2 Federal Legislative List, Part 2, entry 6, Constitution of the Islamic Republic of Pakistan, 1973

provincial governments was abolished by the 18th Amendment, granting provinces exclusive legislative and executive control over healthcare (Nishtar S. 2013). Thus, hospital governance is now a fully provincial matter except in cases where service delivery institutions are located in federal capital territory and in cases where the federal government had invested in creating large hospitals in provinces using a special constitutional provision.<sup>3</sup> These hospitals were devolved to the provincial governments in the aftermath of the 18th Amendment. However, the effective takeover by the provincial governments continued to face many problems, related especially to human resource reporting, career structures, promotions and retirement benefits, as the employees remained either federal employees or deputies of the provincial governments (Marchildon G., 2018). This has led to an ongoing tussle about the management of these hospitals between the federal and the provincial governments. In early 2019, the Supreme Court decided that they should be under the purview of the federal rather than the provincial government. However, recently the federal government has decided to hand over these hospitals to the provincial governments citing financial constraints.

### The beginning of a robust hospital regulatory regime

Post 18th amendment, the most profound change in hospital governance has been brought by the initiatives of various provincial governments to institute explicit and institutionalized regulatory

regimes for clinical governance. This is being institutionalized in the form of autonomous healthcare commissions in three provinces created by provincial legislatures. The Commissions, which are at various stages of development, aim to improve the quality of healthcare services and foster a culture of clinical governance. The Commissions require all health facilities, whether allopathic, traditional or alternative, to be registered with it and acquire a license to operate based on achieving a minimum set of service delivery standards. The Commissions have also instituted charters of facility and patients' rights and responsibilities, online complaint systems, and actions against unqualified medical professionals. The Commissions are also the first coherent attempt in the country to regulate the private health facilities.

### The emerging role of public-private partnership in public sector hospital management

Until very recently public-private partnerships in Pakistan had been used exclusively in primary care facilities. Recently, PPP is being used as a mechanism to improve the management of secondary care hospitals and a legislative and regulatory framework has been created in three provinces. While the experience of PPPs in secondary hospitals is still evolving, lessons can be learned from the experiences of PPP experiences in primary care including ambivalent bureaucratic support, service quality issues, adequate monitoring of contracts and accountability (Siddiqi S. et al., 2006).

TABLE 1. KEY POLICIES AND REFORMS RELATED TO HOSPITAL GOVERNANCE IN PAKISTAN

	Punjab	Sindh	Balochistan	KPK
<b>Policy</b>				The North-West Frontier Province Medical & Health Institutions and Regulation of Health-Care Services, Amendment Act of 2010: Financial autonomy of new hospitals.
<i>The national health vision of Pakistan 2016-2025 does not mention the role of hospitals in the health systems of Pakistan</i>				
<b>Strategic planning</b>	<i>Punjab Health Sector Strategy 2012-2020:</i> outlines action areas to improve service delivery across hospitals and implement a standardized Tertiary-level Health Information System (THIS).	<i>Sindh Health Sector Strategy 2012 -2020:</i> establish hospital autonomy pilots for major tertiary hospitals, strengthen district health systems, improve accountability in health service delivery.	<i>Balochistan Comprehensive Development Strategy 2013-2020:</i> decentralize HR management to health facility level, strengthen HMIS, evolve minimum service delivery package	<i>KPK Health Sector Strategy 2010 – 2017:</i> hospital minimum standards checklist.
<b>Healthcare commissions</b>	<i>Punjab healthcare commission:</i> registration, licensing, MSDS	<i>Sindh healthcare commission:</i> detail the rights & responsibilities of health-care establishments, SDS for hospitals	No commission	<i>KPK healthcare commission:</i> registration, licensing, MSDS
<b>PPPs</b>	Hospitals re selectively outsourced	All tehsil and district hospitals are outsourced to the NGOs	PPP Bill was reviewed in 2018	PPP Act was passed in 2014 and then an amendment act in 2017

3 Federal Legislative List, Part 1, entry 16, Constitution of the Islamic Republic of Pakistan, 1973



**BOX 1: DEVOLUTION AND HOSPITAL GOVERNANCE**

*The case of National Institute of Cardiovascular Diseases (NICVD), Jinnah Postgraduate Medical Centre (JPMC) and National Institute of Child Health (NICH) in the Sindh province*

Up to the 18<sup>th</sup> Amendment in 2010, as federal institutions, the three tertiary care hospitals provided employment and training to people from across the country rather than just people from the province of Sindh. A constitutional Implementation Commission, created post-devolution to divide federal and provincial subjects in previously shared jurisdictions, recommended that the three hospitals be devolved to the provincial government. This recommendation was approved by the Federal cabinet and in 2011 the federal government formally notified the devolution of these hospitals. The employees of the three hospitals were sent on deputation to the provincial government.

Since that decision, the status of these hospitals has remained contentious with continuous disputes between provincial and federal governments, uncertainty in employee retention and promotions raising serious service delivery concerns. The following post-devolution events signify a turbulent governance environment in the hospital sector unfavorable to quality service delivery:

June 2011 – Federal government notifies the devolution of hospitals to the province and sends their employees on deputation to the provincial government

July 2011 – Employees of the three institutions challenge the devolution of the hospitals in the Sindh high court

May 2015 – Sindh Assembly passes legislation making JPMC and NICVD constituent hospitals of a new provincial medical university

July 2016 – Sindh High Court decides that the decision to devolve the three hospitals was unconstitutional and suspends relevant provincial legislation since devolution, asking the federal government to reimburse the provincial government for all incurred expenditures since devolution

July 2016 – Sindh government challenges the decision of Sindh High Court in the Supreme Court

July 2016 – Supreme Court suspends the Sindh High Court decision, leaving the hospitals under provincial control

August 2017 – Sindh government signs an agreement with NICVD giving NICVD charge of a number of its satellite cardiac care centers in the province

January 2019 – Supreme Court rejects the Sindh government's appeal against the Sindh High Court decision and gives the administration of the three institutions to the federal government

June 2019 – Federal cabinet decides that, due to financial constraints, the federal government will hand over the three hospitals to the provincial government.

**Micro-level of hospital governance**

The micro-level of hospital governance profoundly relates to institutional aspects of hospital management embodying policies and procedures that help improve standards of health care. This section reviews hospital governance at the institutional level in Pakistan under several different domains as presented in the following sections.

**Models of public sector hospital management**

The public hospitals, especially tertiary and teaching institutions of Pakistan, enjoy a spectrum of independence; ranging from completely autonomous (e.g. Lady Reading Hospital) to semi-autonomous institutions, to centrally managed hospitals (e.g. Mayo hospital). The autonomous hospitals are given a degree of independence under a statutory law passed by the parliament or at least the cabinet and are managed by a board of governors (BOG). The experience of such autonomy by hospitals has not proven to be highly successful for several reasons. First, the chair of the BOG has always been the Minister or Secretary of Health, which limits the authority of the hospital CEOs who are subjected to political and bureaucratic interference. Second, these public hospitals remain largely dependent for financial resources to the Ministry of Health and do not receive a one-line global budget. Third, hospitals are not given clear targets

against which their performance could be objectively measured. And, fourth, hospital managers are reluctant to exercise the newly acquired authority due to lack of capacity and commitment. A formal evaluation of what hospital autonomy brings in terms of benefits and costs has not been undertaken. In recent years, the experience of instituting autonomy and improved management of the Lady Reading Hospital in Peshawar has shown some positive results (De Geyndt W., 2017). The current government in Pakistan has committed itself to the policy of instituting and expanding autonomy to hospitals across the country.

Most public sector hospitals, tertiary and district or sub-district, continue to be centrally managed by the Ministry or Departments of Health. These hospitals are headed by a time-honored position, a legacy of the colonial past, of a medical superintendent or for larger hospitals an executive director. The heads of tertiary and teaching hospitals report to the secretary health, the senior-most bureaucrat, and those of district and lower hospitals to the director-general health, the senior-most technical person in the Ministry. The appointment of the hospital leadership can be tainted by political influences and, if that is not the case, then the senior-most officer gets the job. In both instances, merit is compromised.

In recent years, several provincial governments have experimented with the outsourcing of district-level hospitals to

non-governmental organizations. This is particularly prevalent in the provinces of Sindh and Punjab. Although managerially a challenge, as the NGOs that receive a one-line global budget are not allowed to remove any regular employee of the government, there is some evidence to show that range and quality of care, level of utilization and satisfaction of users has improved as a result of such partnership (Ahmed, 2010).

### Human resource management

Pakistan is faced with major health workforce challenges in terms of planning, production, and deployment. Overall, there is a dearth of health professionals with a density of 12 per 10,000 population (World Health Organization, 2016). The doctor-population and the nurse-patient ratio of Pakistan are 1:1300 and 1:50 respectively. The shortage of nurses and allied staff is more acute compared to the doctors, with a nurse-doctor ratio of 0.3 compared to the standard 4:1. There is disproportionate distribution, with the scarcity of health professionals in rural areas (Heartfile, 2013). A major concern is staff absenteeism and ghost workers on the payroll. The absenteeism rate for Sindh was estimated to be 36%, 27% and 19% for doctors, nurses and technicians respectively along with 1200 ghost doctors (Agboatwalla M., 2009). The lack of accountability along with work overload, unsatisfactory salaries and no staff appraisal remain the mainstay for absenteeism.

In general, tertiary care hospitals are well-staffed in terms of the number of physicians, although they may lack the necessary skills and competencies. The relative shortage of specialized nurses and allied health professionals such as pharmacists, physiotherapists, laboratory and blood bank technologists is a challenge. The situation of district hospitals varies across provinces. In general, there are positions of specialists and generalists. The former remains unfilled in many situations. For instance, a recent assessment of 23 hospitals across the country revealed that only 13% had a trained neonatologist (Aziz S., 2019). The shortage of nurses and allied workers is even more acute in district hospitals.

Some tertiary care hospitals have a human resource department responsible for continued medical education; however, most of the staff privately attend workshops, training and seminars based on personal motivation. Public sector hospitals suffer from the recalcitrant problem of “dual practice” by health professionals for which a proper remedy has yet to be worked out. It is estimated that more than 90% of the senior doctors run their private practice in the evenings, which is a source of conflict of interest. In Punjab and Sindh, private practice by government employees is illegal; however in Baluchistan, KPK and the federal hospitals, private practice is permitted with a share going to the government, although in practice these regulations have little meaning. Previous attempts to put a moratorium or at least introduce institutionalized practice have not proven to be successful.

From a governance perspective, hospital managers are by and large physicians with little or no training. There are no organized programs for the hospital managers, capacity development workshops occur sporadically. Similarly, the transfers and postings of the hospital managers are not transparent, rather based on personal links and connections. Some institutions have a vision/

mission statement in writing; however, there are no strategic plans for hospitals and they function on an ad-hoc basis.

### Financial management

Public sector hospitals consume the major proportion of the public sector expenditure of around USD 12 per capita (Fatima K., 2018). Almost 70% of the hospital budget is consumed on salaries, leaving limited resources for medicines and supplies, utilities and other non-salary expenditures. The major tertiary hospitals of Pakistan get the lion's share and some big institutions are fairly well funded. For instance, the annual developmental and regular budget of the Pakistan Institute of Medical Sciences is as much as USD 40 million (Ministry of National Health Services Regulations and Coordination, 2019).

Centralized financial management leads to delays in release and utilization of allocated budgets. The hospitals of KPK enjoy financial autonomy as per legislation, whereas the rest of the provinces do not have policies that offer financial autonomy to hospitals (Government of Balochistan, 2013; Health Sector of Punjab, 2012; Zaidi S., 2012). It is observed that the utilization and expenditure of the resources are according to the wishes of the hospital leadership and do not stick to any roadmap. There is also a dearth of trained financial managers as staff appointments do not follow any structured process.

### Supply chain management

The provinces have detailed the policies and guidelines for procurement of goods and supplies; however, their implementation across the hospitals is uncertain (Department of Health, 2014; Government of Sindh, 2010; Government of KPK, 2014). The hospitals commonly have a procurement cell/ department that carries out all the purchases and maintains records. Availability of medicines and other supplies are generally deficient, pushing the patients to spend out of pocket. There are leakages in the system and medicines licensed for the public hospitals can be sold at the private pharmacies. Paradoxically, procurement of surplus drugs for tertiary care hospitals of Punjab was recently brought to light, emphasizing the prevalent mismanagement in hospitals (Chaudhary A., 2019).

### Information systems and technology

The hospital information systems are fragmented with little information flow from the districts to the provincial and federal government. The majority of the hospitals had manual databases until 2015. Since then, there has been a gradual shift towards greater use of information technology. Currently, computerized patient data entry followed by manual maintenance of records/ registers is generally followed. Generally, there are deficient record-keeping practices, lack of accurate and timely information, and limited data management capacity of the staff. The International Classification of Diseases (ICD) coding is not followed for disease reporting and notification of reportable diseases such as measles, cholera, STDs, etc. to the district health offices is incomplete. In hospitals such as Mayo, Lady Reading and Ayub complex, management information services departments exist with limited human resource capacity and technology, slowly taking the hospitals from “paper-based” to “paperless” environment.

## Quality and safety

There are only a handful of private hospitals in Pakistan (Aga Khan Hospital, Shaikat Khanum Memorial Cancer Hospital and Shifa International Hospital) that enjoy international accreditation. The provincial healthcare commissions have outlined the minimum service delivery standards (MSDs) for the public sector hospitals; however, their implementation is questionable. Most hospitals do not have a well-established, functioning quality and safety assurance mechanism in place, without a reporting system for near misses and adverse events. Quality assurance is led by the personal concerns of the departmental heads with the hospital administration having a minimal influence. Overall, 63% of the people are dissatisfied with the quality of public health care. Lack of capacity and number of health care providers, non-functional equipment, delay in the provision of services, lack of concern and empathy by the doctors and unclean environment of the hospitals are some of the frequently mentioned issues.

## Disaster preparedness and management

The National disaster response plan elaborates the role of the national, provincial, district disaster management authorities and armed forces and civil forces in case of disasters; however, the role of the hospitals is not outlined. Few public hospitals have a comprehensive plan or strategy to respond to disasters. There is an absence of adequate infrastructure, hospital networking and the health care providers are not trained to manage the emergency

following a disaster. Assessment of hospitals of 12 disaster-prone districts of KP and Punjab, revealed attaining only 28% of the indicators for appropriate management of crises (Ul-Haq Z., 2018).

## Conclusion and way forward

Public sector hospitals of Pakistan face significant governance challenges at the macro- as well as the micro-level of the health system. Despite these shortcomings, they serve as the backbone of hospital and health care in the country and are the last resort for the poor and less affluent segments of the society. Improving the governance and management of these institutions offers a huge opportunity to be more efficient and provide a better quality of care to the population in general.

This paper offers a comprehensive analysis and a sound diagnosis of the governance problems that public hospitals in the country face. While the purpose of this paper is not to provide a roadmap for addressing the hospital governance challenges, there are a lot of lessons to be learned. The policymakers in Pakistan may wish to consider three strategic priorities in order to reform hospitals in Pakistan – first, demonstrate consistency and commitment in implementing policies related to hospital governance whether around strategic planning, autonomy or partnership with the private sector; second, launch a countrywide program of capacity development of hospital managers through in-service and pre-service training; and third, establish and expand a system of e-governance benefiting from information technology to enhance accountability, transparency and performance of hospitals.

### BOX 2: KEY GAPS AND CHALLENGES IN PUBLIC SECTOR HOSPITAL MANAGEMENT – MICRO- PERSPECTIVE

- Most hospitals across the country lack a strategic plan of action and work on an ad-hoc basis.
- Allocated health budget falls short of the essential, ensuing lack of medicines and equipment, and standard infrastructure.
- Health professionals, specifically nurses, are insufficient in numbers and clustered in big-city hospitals.
- Data and record-keeping are compromised in terms of quality, completeness and timely sharing with the stakeholders. ICD coding is not followed, rendering the data unavailable for international comparisons.
- Quality assurance programs, clinical governance initiatives or external accreditation programs are not in place that would help achieve the required quality of care standards.
- Lack of trained hospital managers and inappropriate practices lead to wastage of resources and inherent inefficiencies.

## Biographies

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# Referral system and integrated information management system in the public hospital sector in Oman



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**ABSTRACT:** Oman has a highly developed e-government. Its public health information management system has been well-established with across-the-country integrated e-referral system for a couple of decades now. This is an illustration of the impact of this system on hospitals from surgery and newborn deliveries. The challenges described are about balancing the need for advancing healthcare information technology and end-user electronic burnout.

## Introduction

Oman is an oil-producing country located in the Arabian Gulf with an area of 309,500 Sq. Km. It has a population of less than 5 million.<sup>1</sup> According to the World Bank, 2018 classification, Oman is classified as a high-income economy. Oman's ranking in the e-Government Survey 2018, published by the United Nations Department of Economic and Social Affairs (UNDESA), was 63 out of 193 countries.<sup>2</sup> It is ranked sixth among the Arab countries and second in the Online Services Index.<sup>2</sup>

Technology development has become one of the strategic elements of healthcare organizations.<sup>3</sup> A national health database is vital for all governments. It aids strategic policy development and delivery of efficient health care to the community. Due to their limitations, paper records are not capable of providing proper communication between care providers. Also, when urgent health status data is needed, it may not be available on time.<sup>3</sup> Solving the problem, and moving forward, health information system piloting in Oman, began more than 2.5 decades back with a standalone database (Medicom) in 1994 to a fully integrated Health Information System in 2004 (Al Shifa System).<sup>4</sup> It became Oman's most developed public health information management system and has won multiple international awards, including the UN Public Service Award.<sup>5</sup> More than 86% of the country's medical records for all Ministry of Health institutions were digitized by 2010.<sup>4</sup> Since then,

it has evolved continuously with more than 95% digitization (DGIT unpublished data) to better cater to the needs of the end-users. The Ministry of Health has been linked electronically to a central database by 2015.<sup>4</sup> This allowed access to patient information across the different health care levels in the country. This paper discusses the strengths and challenges of a locally developed and integrated health information system. This includes the electronic referral system with a reflection on its impact on the management and administration of a public hospital.

## Exposition

### Universal Health Information System in the Ministry of Health

The Ministry of Health (MoH) in Oman is the country's agency responsible for the health sector. It develops policies, plans and implements these in coordination with all constituents of the health sector. The public sector runs 90% of the hospitals and employs most of the healthcare providers.<sup>1</sup> MoH is also the principal provider of preventive, promotive and rehabilitative services. The population is concentrated in major urban cities with a few people scattered in isolated small lands, thus making it expensive to develop an equitable health care infrastructure. However, with the dawn of the health information system, there was an exponential improvement in the equitable provision of healthcare.

Health information system (HIS), refers to “a system designed to manage healthcare data. This includes systems that collect, store, manage and transmit a patient’s electronic medical record (EMR), a hospital’s operational management or a system supporting healthcare policy decisions.”<sup>5,6</sup>

Al Shifa provides complete point-of-care technology, which is the most crucial component of Al Shifa. It is a system that captures all aspects of patient information that has clinical significance, right from a patient e-referral to tertiary and secondary care including walk-in to a healthcare facility to discharge from the facility. It effectively reduced information silos to integrate all service departments to provide systematic and coordinated care delivery.<sup>7</sup> The great success in implementing Al Shifa in MoH attracted non-MoH healthcare organizations to implement it.<sup>6</sup>

### E-Referral System and Levels of Healthcare Access

The World Health Organization defines an effective referral system as “it ensures a close relationship between all levels of the health system and helps to ensure people receive the best possible care closest to home.”<sup>8</sup> In Oman, this referral system is electronic, which creates a cost-effective use of hospitals and primary health care services. Support is provided to health centers and outreach services by experienced care providers from the hospital. It helps build capacity and enhance access to better quality care. In most MoH institutions, a high proportion of clients seen at the outpatient clinics in tertiary specialized care facilities are appropriately referred back to their primary health care centers. This is extensively enhanced by the e-referral system as it allows a specialist evaluation of whether there’s a need for the referral.

Oman’s Ministry of Health electronic referral system across the country solved multiple difficulties faced by the health institutions. It reduced the laborious manual processes involved in the exchange of information related to patient referrals. Inappropriate, repeated investigations through laboratory, radiology and other diagnostic procedures were minimized. However, the main challenge that continues to surface with this system was the increased volume of referrals. This will continue to occur in freely accessible healthcare service. It can become challenging for the different specialties in a tertiary care hospital to solve. This revealed the importance of continuously creating standardized clinical pathways for common clinical conditions to reduce the challenge of inappropriate referrals.<sup>7</sup>

### Role of HIS in Hospital Operations

Al Shifa HIS played a vital role in starting, collating and controlling the operations of the sub-sections of the hospital operations. It provided a synergistic augmentation of the care process. It enabled the hospital to move to a simultaneous review of quality, patient safety and appropriateness of care. It allows the generation of reports to support the hospital administration in decision making. For example, it generates information on bed utilization, the volume of patients seen in a clinic and bed occupancy. It allows follow up of a specific inventory. Also, it supports reporting of performance through the incident reporting system, which allows an analysis of incidents and dissemination of learning lessons.

Hospitals demand a lot of information, especially on the patients’ details, which requires being security conscious.<sup>9</sup> Personal information includes: family history, social history, patients’ medical history, drug allergy, and other important information. This becomes easily accessible to all hospital stakeholders and may occasionally become a confidentiality breach.

### Role of Health Information System in Managing Demand and Supply

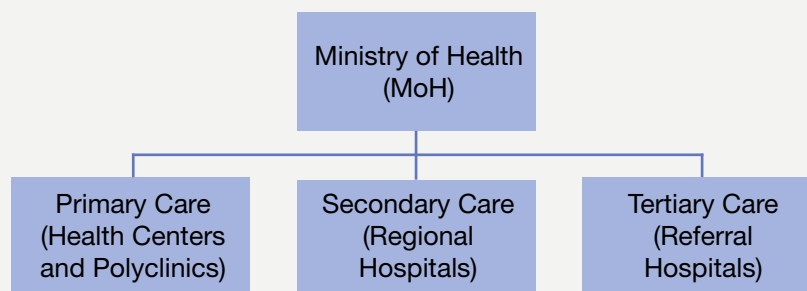
#### Pooled Referral Systems for the Management of Surgical Patient Flow

Improved management of waiting lists and referrals requires an understanding of the relationship between the demand for a service and the rate of supply. This understanding requires the development of information systems, which not only record the numbers of patients waiting for admission but enable calculation of the demand and supply for a given services, to be monitored through key performance indicators. This allows hospital management to follow up these measures periodically. Through the e-referral to surgery, for example, Al Shifa system has an electronic pooling system, which allows the classification of the urgency of surgery (e.g. urgent cancer patients versus elective surgery). The benefits of the surgical pooling system are well described in the literature.<sup>10</sup> It also allows for contacting patients and having them prepared in case there is a potential cancellation of current cases, facilitated by the tracking officer.

### Public Health Surveillance

There is an Electronic-Notification system which is related to public health surveillance in Oman and interchange of related information between institutions. Healthcare organizations use the system to

FIGURE 1: THE THREE LEVELS OF CARE IN MINISTRY OF HEALTH INSTITUTIONS. (SOURCE: MOH, OMAN)





notify the central authority, of the cases of public health concern identified in an institute. The System also provides the notifying center with updates and feedback related to the notified case.<sup>7</sup> This is crucial during epidemic outbreaks and the vital role hospitals play to control such events.

### Information Management System for Hospital Newborn Deliveries

This information management system has made the Ministry of Health institutions among the top countries in the world in providing effective, efficient and safe holistic care for mother and child.<sup>7</sup> It allows integrated care provision across the levels of care between primary care for antenatal care, followed by post-natal care (hospital deliveries) and newborn follow-up back in primary care. It records the birth history, antenatal care for mother and newborn then transferred back to the primary care system. This is extended to the child under the Integrated Management of Childhood Illnesses system (IMCI). IMCI is a global strategy<sup>11</sup> recommended by WHO and UNICEF and was adapted by Oman, MoH. The main focus of the program is to reduce childhood deaths, illnesses, disabilities, and to contribute to the improved growth and development of children in Oman. It allows integrated and appropriate obstetric and neonatal care delivery during admission.

### Challenges in the e-Referral System and HIS

Ministry of Health services are free. Hence, there will always be a challenge of meeting the demand and equity of the services provided. Efforts aimed at strengthening the electronic referral system to comprehensively manage clients' health needs should become a national strategic priority. Common barriers to successful referral are generally known<sup>8</sup> but can be unique to the national situation and infrastructure. For example, highly specialized pharmaceuticals, diagnostics, and parenteral nutritional support have become centralized in the tertiary care institutions. This resulted in the reluctance of specialist care providers to refer patients back to a lower care level. It created a negative impact on waiting lists in different specialist services. Changes require coordination between the three levels of the referral system (Figure 1), strengthening the public sector system, increasing public awareness about the referral system, and control of self-referral.

Evaluation of AI-Shifa on the standard dimension of information systems, namely, organization management and information technology, reveals that on an organizational and management dimension, AI-Shifa as a HIS stands well.<sup>12</sup> However, its chosen and present IT infrastructure is effective but not efficient. One bottleneck in its efficiency is its client-server technology.<sup>12</sup> Client-Server technologies fare well for a single organization, single location information system but it certainly shouldn't have been a choice for a country-level information system, especially given the availability of web technologies and cloud computing.<sup>12</sup> Similarly, a single centralized database for the entire nation is ideal but its absence leads to complicated and monotonous methods of information transfer and sharing.<sup>12</sup> Electronic medical record-related physician burnout is caused by an inefficient information management system.<sup>13,14</sup> In a study<sup>13</sup>, 70% of doctors using EMRs attribute the bulk of their administrative burden to the software. Another study,<sup>14</sup> showed more after-hours time spent on the EMR was associated with burnout and less work-life satisfaction in primary care residents and faculty.

Improving HIS performance is very crucial to ensure successful use of the system by the care providers. Some suggestions and recommendation have been introduced to resolve the technical difficulties linked to information quality, system quality, and services to improve the system and the healthcare sector. This is to encourage an effective relationship between the technology and the users. A good HIS can improve users' computer self-efficacy, which allows them to interact effectively with the system. Also, clinical decision support (CDS) is integrated with AI Shifa to a certain extent, CDS is believed to reduce medication errors, improve laboratory ordering and clinical outcomes through alerts. Although, physicians' compliance with alerts because of information overload may be compromised as they tend to override it. Studies<sup>14</sup> that have evaluated the use of a basic HIS without a highly effective clinical decision support system showed that it did not improve overall patient safety.

### Information Management System and Introducing Artificial Intelligence (AI)

It is important to note that many of the current challenges in the information system can be rectified with the introduction of AI. Healthcare sectors are increasingly adopting artificial intelligence to improve patient care and improve process efficiencies.<sup>15</sup> Several Ministry of Health institutions have piloted the use of AI for radiological breast cancer screening with a 96% success rate.<sup>16</sup> This is a promising endeavor towards introducing AI in other aspects of the HIS, including disease management. However, this needs to be weighed against return on investment, as these solutions can be very expensive with debatable improvements in service provision.

### Conclusion

The introduction of the HIS to the Omani healthcare organizations has revolutionized the way these organizations run, with an impact in improving clinical care and hospital operations. However, in the interest of sustainability and continuous improvement, there's a clear need to evolve the information system by introducing artificial intelligence and efficient clinical decision support systems to handle the extensive information the end-users are obliged to handle daily.

### Biographies

**Ms Jehan Al Fannah**, (MSc, MBA, CPHQ) is a consultant pharmacist and a certified professional in healthcare quality. She leads the Hospital Performance Improvement unit of the Royal Hospital through the application of lean and process improvements.

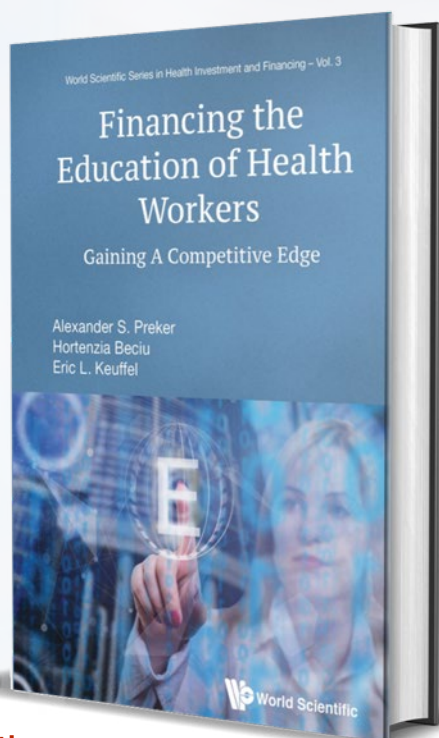
**Dr Harith Al Harthy**, (MD, MSc) is a public health senior specialist at the Royal Hospital. He has interest in hospital performance improvement with a focus on innovative use of information technology to improve healthcare delivery.

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*"Technology is changing health care but the benefits will come from how health workers use it. It is their skills, wisdom, empathy and compassion that will make sure patients and populations benefit."*

**Lord Nigel Crisp KCB**

Member of British House of Lords  
Former Chief Executive of British NHS

*"Providing high quality of education programs for health workers is a central theme of the US\$ 1 billion Health in Africa initiative that I manage at the World Bank/International Finance Corporation. The research done for this publication shows that delivering such programs are both affordable and feasible in low- and middle-income countries, not just in higher income contexts. Africa is in dire need of new and innovative approaches in education to offer to its youthful population, in order to reap the demographic dividends."*

**Khama Rogo MD PhD**

Head of Health in Africa Initiative  
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Health Finance and Access Initiative, USA

This volume reviews the economic underpinnings (investment and financing) and institutional reforms needed to successfully scale up the education of health workers. In this regard, the book examines five major economic and institutional challenges that policy makers face: (1) governance of health education organizations and systems; (2) approaches to financing the education of health workers; (3) the special nature of capital investment in expanding the capacity of health education institutions; (4) public-private partnerships in health education; and (5) equity in accessing health education, with a special focus on issues that arise from private approaches to the education of health workers.

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# Public Hospital Service Reform in the Kingdom of Saudi Arabia guided by Health Vision 2030



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**ABSTRACT:** Objective: To review the emerging themes in global health system reforms, compared to the reform in the Kingdom of Saudi Arabia guided by health vision 2030.

Data generation: Reforms are the privileged mode of social change used by modern societies. Persistent in-adaptation to health needs within the health system in Saudi Arabia has motivated a search for emerging strategies that might implement the highly-demanded health reform. Upon exploring the subject, we identify areas of potential improvement and resistance to better understanding health system reform.

Conclusion: Addressing reform tensions requiring re-enforcement of governmental capacities to design and support the targeted reform.

## Introduction

The Saudi Arabian Ministry of Health has the responsibility for planning, delivering and funding the public health system. Such system is capacitating the major burden of health services offered to citizens, residents and, in addition, millions of pilgrims visiting the holy lands annually. In this paper, we explore global health reform policies and those undertaken in alignment with the national Saudi Health Vision 2030 to reveal challenges and opportunities faced. Health Vision 2030 has focused on the improvement of health service quality and endorsement of a healthy life pattern. Upon launching the needed reform, we have to explore the prevailing conditions and the proposed strategies' implementation, successes, and areas of reform resistance.

Contemporary health systems were created in the golden period of the 1990s and have to adjust to a new set of

contingencies. Such systems have faced great opposition to reform due to the bilateral monopoly held by government and the medical profession. Also, health reformers face significant unwillingness to accept health reforms due to the particular configuration of political institutions, pressures, and resistance. All these factors constitute a form of inertia that is labeled "Paradigm Freeze". (1)

In this paper, we are going to review the literature regarding health reform policies and by the end will project on the Saudi national experience in this respect.

## EXPOSITION

### Data Generation

#### Global health reform policies experience

The term "reform" is the privileged mode of social change

used by modern societies and is defined as deliberate changes to the structures and processes of public sector organizations with the objective of better management. (2, 3)

Health care is characterized by complex social and political dynamics that make government intervention more or less possible or legitimate. (4) Also, reforms are not the sole purview of policy-makers (5, 6) as they also emerge from a dispersed set of policy actors that structure ideas, where broad techniques are promoted in a more or less coherent way. (3) While cost control is an important objective, it is not synonymous with delivering effective and appropriate care. (7, 8)

Persistent dysfunction and failure to adapt to emerging health needs and priorities within health systems provide a strong policy rationale to search for alternative strategies. (8) One reference on the experience of health reforms concludes that “health systems struggle to achieve system-ness but have never fully succeeded in the trajectory of system building that continues to be distressingly flat”. Also, many key policy issues have yet to be discussed, much less settled, by the governments that must take responsibility for governing our healthcare system. (9)

Persistent challenges and opportunities for reform in health system governance, for health system performance and population health governance, have been an enduring theme in the health policy landscape. Governance involves balancing the multiple conflicting logics and interests of patients, staff, citizens, and politicians as well as other stakeholders (10) while focusing on improving access, quality and outcomes, and has a different scope at all levels. (11, 12)

The assumption was that regional health authorities (RHAs) would theoretically increase capacities to adapt health systems to regional realities and better respond to population needs. RHAs were expected to effectively mediate between central government policies and local priorities. (13) RHAs appeared as new players within the governing apparatus system that were supported centrally. It is difficult to assess the benefits of centralization and consolidation of governance structures in health systems. So, balancing reform policies between centralizing and regionalizing will continue as a matter of argument. (14)

### Clinical governance; the drive to health system improvement

Clinical governance (CG) involves processes that connect clinical practice more explicitly to the organizational context and are aimed at fostering the creation of an organizational environment that develops professional practices and ensures better quality of care. (15) CG is based on the assumption that in any health setting there are latent capacities to be harnessed to generate improvements. By focusing efforts on the level of clinical settings, health system reformers can access resources and processes for improvement that are not available through interventions restricted to meso- and macro-systems level. (12) These approaches are rooted in work on clinical micro-systems,

(16), high-performing clinical units (17, 18), high-performing health systems (19), and collaborative quality improvement in health care. (20 - 22)

### Medical profession and prospects for novel health policies

The question of physician engagement, leadership, and accountability is an enduring issue in health policy and reform. (17, 23) Medical doctors play a crucial role in the allocation and utilization of resources in health systems, and in shaping capacities to renew policy orientation and modeling of care. The status of the medical profession and the bilateral monopoly between the healthy body and the profession have been underlined as a major cause of blockages in health reforms. (1) Payments to physicians are growing so progressively that governments are still struggling to find ways of getting the best out of these resources. (24)

The medical profession also exerts a significant influence on what other health professionals can do in the health system. Rules around the scope of practice and funding for education and positions within the health system are important levers for change. The scope of practice allowed for other healthcare professionals now allow pharmacists to switch or adjust drug dosage independently and advanced paramedics and nurses to provide care for rural residents with chronic health conditions. (25)

### OUR NATIONAL SAUDI HEALTH REFORM EXPERIENCE

Saudi Arabia is classified as a high-income country according to criteria used by the World Bank. In health spending, Arabia is ranked globally the 27th with USD 3,121 per capita in 2015; according to the latest “Global Health Expenditure Data Base”. (26) Being so, and upon linking the expenditure to the quality of health services offered, we find discrepancy to be adjusted via considering a cost-effective health policy.

Up until recently, there were no medium or long term plans for ambitious health policies or plans for health system reform. With the newly implemented “Saudi 2030 Vision” in all fields of society, the Saudi Ministry of Health has been committed to this broad vision regarding health reform.

“Ada’a Health Program” (Ada’a means performance in the Arabic language) has been launched in 2015 as a public health system reform program; piloting performance in limited health domains in addition to both patients’ and health providers’ satisfaction and also measuring the financial impacts. Going step by step, paving the policy for both vertical and horizontal expansions, we launched the program in 33 hospitals in the year 2015, expanded to involve 72 hospitals during years 2016 & 2017, and reached 159 hospital and 63 specialized center in the year 2018. Effective in 2019 and beyond, all clinical domains within all specialized medical cities, hospitals and medical centers including mental health and primary health care centers in addition to extended home care services are all included below Ada’a Health Program. This huge expansion has to involve all the public health bodies and would not take

place unless demonstrating growing successes and show motivations to reach the hidden potentials and capabilities within the national Saudi health system.

#### Structural units & operating levels of “Ada’a Health Program”:

- I **Strategy Unit:** Concerned with the design of strategies necessary to approach targeted goals.
- I **Data Collection Unit:** Involves data collectors and domain leaders.
- I **Nerve Centre Unit:** Sensing and correlating data from all hospitals, validating and analyzing data, issuing reports and finally commenting with a critic on results; locating domains that need operational improvement projects, citing areas of better performance potentials and making recommendations for higher ministerial authority regarding the needed policies and decisions.
- I **Knowledge and Capability Building Unit:** Concerned with all levels of training; basic, advanced and invented training programs as directed by the strategy and nerve center units to face the emerging needs of the program.
- I **Performance improvement unit:** Implementing suggested operational solutions and improvement projects to rectify sub-optimal practices.
- I **Council of Higher Ministerial Authority:** The supreme program authority; supervising operational reports, review and modify policies and considering decisions to overcome obstacles, accelerate achievements and launch extra-targets as seen proper.

#### “Ada’a Health Program” performance, achievements and faced obstacles are summarized below:

- A. Consolidation with international consultancy firms in the field of health intelligent systems and health administration has been structured and activated.
- B. Health information system infrastructure was initially sub-optimal to receive heavy load data transfer. Temporary clouding and other intelligent solutions were adapted creating a temporary network. Recently, starting in January 2019, a proper health information system solution was activated, allowing synchronized data collection and data processing dashboards.
- C. Heterogeneity of the social and cultural nature across the widely variant provinces of the Saudi kingdom have obligated application of buffering management among reform policies implementation and the versatile communities.
- D. Program staff training and continuous knowledge and skill improvement for data management and processing have been initiated and maintained as due.
- E. Implementing synchronized functional integration among various clinical health structures (primary, secondary and tertiary care bodies), provincial health

administrations and “Ada’a Health Program” central units through periodical meetings and workshops. Also, instant communication channels for emerging issues or problems have been established.

- F. Continuous data analysis, validation, reporting and monitoring trends of performance in various fields. Periodical reports including remarks and suggestions to units of “knowledge and capability building” and “performance improvement units” to initiate rectifying solutions as required.
- G. Preliminary resistance by provincial managers to reform policies has been sensed and negotiated through repeated meetings and discussions to commit with and abide by the central supervision and performance reviews.
- H. “Ada’a Health Program” has tremendously improved health administrative and clinical practices in every aspect and created a clear “panoramic” and “zoom in” of detailed pictures of the public health bodies for the first time. Also, the program has enabled the application of health reform and supervision of achievement progression.

Through the years 2015 to 2018, reform policies for clinical, administrative and outcome have been implemented, piloted, rectified and maintained as standard professional practices through health bodies of the Ministry. Such practices, in spite of improving performance indicators’ readings and effectively reducing the national health care budget, have not considerably improved either patients’ or health providers’ satisfaction. This has shown that aspects of satisfaction are discrete from the goals of health care reform targets. On the other hand, the financial impact in the form of saving a considerable amount of the budget is achieved. (27)

The final phase of “Ada’a Health Program” was launched starting January 2019, to include all specialized medical cities, hospitals, mental health centers, primary health care and extended home care units with high expectations to magnify impacts of the program on various levels.

#### CONCLUSION

The principles and approaches to governance embedded within the health system constitute a shift from adherence to rules of bureaucracy, toward externally-oriented and responsive public administration that focuses on citizens’ preferences, public consultation and participation and implementation of results-based management and accountability. These principles mean that reform policies will be competent to face contemporary challenges and complex problems.

Governing and reforming health systems become possible through growing government capacity to internalize complexity in policymaking. Governments are considered the most legitimate entity to orchestrate the design of solutions to address critical problems such as achieving the “Triple Aim” in health care (outcome, satisfaction & cost-effectiveness) (28).

Health system reform in the Kingdom of Saudi Arabia started in the year 2015, guided by the global advances in this issue. National health system reform underwent long organization, started by preliminary planning, piloting performance, reviewing plans and repeating implementation to approach the targeted reform. Upon doing so, we have gained cumulative experiences on every level and reached the final stage by applying the program on all public health bodies.

The Ministry of Health as a governmental body aligned with the “Royal Vision 2030” and has proved dedication, realizing an unprecedented achievement that every member of the Ministry and “Ada’a Health Program” is proud of. Continuation of such health reform program assures offering high standard health services through a cost-effective policy.

### COMPLIANCE WITH ETHICAL STANDARD STATEMENTS

- I **Conflict of interest:** The authors declare no conflict of interest related to the study or financial ties to declare.
- I **Statement of disclosure:** This paper complies with research ethical and scientific rules and regulations stated by the Ministry of Health, Kingdom of Saudi Arabia.

### STATEMENT OF AUTHORSHIP

All authors have equal authorship regarding conception, design, scientific material collection, acquisition of and interpretation of data. The corresponding author is responsible for the drafting of the work and revising it critically for important intellectual content and the integrity of the work as a whole from inception until article publication.

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# Accreditation: Jordan's Quality Improvement Sword



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**ABSTRACT:** In this article, the Health Care Accreditation Council puts forth its argument on how adopting and establishing accreditation mechanisms was able to push Jordan's health care sector to improve quality and patient safety issues, to nudge healthcare institutions and government to address these issues systematically and measurably, raise the bar on many issues and influence policy and capacity building. In a country that fairs very well on many indicators of health, accreditation was the eye-opener for and driver of safer care in a well-regulated environment yet with weak enforcement and vacuum of data.

Graduate English speaker Lucila Takjerad in her address to fellow students in the Class of 2019 at Harvard's Commencement ceremonies on May 30, 2019, said that usually Harvard Graduates are asked to go into the world and do the most. She was asking them to do the LEAST. From her personal experience, a simple act of support by a stranger opened the world doors for her and her family. At the Health Care Accreditation Council (HCAC), we truly believe that simple basic improvements are the stepping stones to achieving better and safer care. When HCAC was established, it was entirely focused on establishing standards and a measurement mechanism for compliance to award accreditation; little did our crafters know that we will be the driver for change in quality and patient safety for Jordan expanding beyond a stamp on healthcare institution's walls. The day-to-day work we do to empower healthcare institutions to achieve accreditation even after a very long and lengthy journey is the LEAST we can do but has the most impact as we instill a culture of change, information management, skills, and tools in a systematic form ensuring continuous quality improvement.

HCAC was established in 2007 to support Jordan and the region to elevate the level of Quality and Patient Safety through the provision of accreditation awards and the surrounding packages of consultation, training, standards development, and advocacy.

When the idea first came to be in 2004, a national committee representing all healthcare stakeholders in Jordan was established to look at the best means and ways that Jordanian hospitals could be nudged to comply with quality and patient safety requirements and be measured

for their compliance. Accreditation schemes were one of the ideas presented to the Jordanian government.

Many international and national entities and individuals were skeptical about this approach, challenging the thinking with many questions including sustainability, financial viability, and even impact. But Jordan decided to go forth with setting up an accreditation entity, ensuring it is accredited by the International Society for Quality in Healthcare (ISQua) right from the start, and equally at a distance from government and private sector in the form of a nonprofit public-private partnership.

In a country like Jordan, where healthcare indicators were fairing towards industrialized countries, access was and is still not an issue, and human resources were well trained and competent, along with a well-written set of regulations; however, no one had looked more in-depth into the actual provision of healthcare and its quality and safety ramifications. Despite the well-designed regulatory system, enforcement was almost nonexistent, and when applied, there is no continuous follow-up or regular checking and inspection.

Therefore, the proposed accreditation tool came on time and in a much-needed environment. The development and establishment of HCAC in a collaborative and participatory manner allowed all stakeholders as well as service providers, to learn more about quality and patient safety, have tools to assess their performance, access training for building their capacities as well as advocate for policy reform, patient rights, public awareness and continuous quality improvement.

Today, since its establishment in December 2007, HCAC

has eleven sets of standards, 30 accredited hospitals, 97 accredited primary healthcare centers, 27 accredited breast imaging units, 26 accredited medical laboratories, and 2 accredited ambulatory centers. It also boasts more than 2000 attendees of its renowned biennial conference and has graduated 565 certified professionals across its five flagship courses in occupational safety, quality, executive leadership, risk management, and infection control.

care.

- Accreditation requires and instills effective administrative and clinical procedures that set clear expectations and facilitate information sharing and problem-solving between patients and staff and among staff.
- The accreditation process helps establish a “culture of quality” and encourages staff to do their best.

FIGURE 1: THE HCAC MODEL



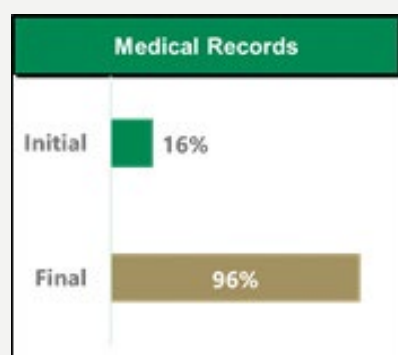
Through two very distinct arms, the enabler and the accreditor, HCAC provides a multitude of services recognized by the International Society for Quality in Health Care (ISQua) including the surveyor training program, the organization itself and the standards, as well as several training courses recognized by the Continuous Professional Development organization (CPD) of the United Kingdom.

Several types of research over the past 10 years have come out with evidence on the importance and impact of accreditation in Jordan. The studies looked at the impact of accreditation from different angles and some findings are quoted below:

- Accreditation positively pushes clinical effort of provider as well as rights-based practice.
- Accreditation highly and positively pushes the time spent with a provider.
- Accreditation had a significant positive impact on hospital effectiveness in the HCAC accredited governmental hospitals in Jordan leading to an increase in hospitals performance.
- The accreditation process can generate multidimensional improvements in the quality of

- Practices instigated by the accreditation process created and formalized opportunities for patients' and staff members' voices.
- Accreditation standards also support voice and participation among staff.
- Such transparency, forced by accreditation, creates and reinforces a culture of respectful patient-centered care.
- In accredited organizations, it was noted that family planning through the measurement of the Couple Years of Protection was improved in addition to an upward trend in Hypertension and Diabetes Control.
- Patient satisfaction and referrals were also improved through accreditation, and health workers have also shown a very positive view of the role of accreditation in improving the work of health centers.
- The mere preparation for accreditation of primary healthcare centers results in substantive quality improvements such as better medical records keeping, more effective human resource management practices, and improved oversight of equipment and consumables, among other outcomes.

FIGURE 2: IMPROVEMENT OF MEDICAL RECORDS



- Accreditation appears to have catalyzed increased community input and engagement with local health facilities, which in part derives from the requirement for health care facilities to establish community health committees to engage with community members and groups more extensively as part of the process.
- The accreditation process involves a range of quality-enhancing changes, including the establishment of a Community Health Committee, the presence of which is associated with higher provider effort.
- Accreditation seems to support the reduction in return to the intensive care unit (ICU) within 24 hours of ICU discharge, reduction in staff turnover and completeness of medical records.
- Accreditation had a net impact of 1.2 percentage point reduction in patients who returned to the ICU, 12.8% reduction in annual staff turnover and 20.0% improvement in the completeness of medical records. Pooling both hospitals over 3 years, these improvements translated into total savings of US\$ 593,000 in Jordan's healthcare system.
- Accreditation significantly improves patients' satisfaction in analyzing the preference of patients of accredited vs. non-accredited hospitals.
- Accredited hospitals provide convenient working hours which implies vested effort to influence patient satisfaction in comparison with the non-accredited hospitals.
- Indicators were higher in accredited hospitals and events were lower which decreased the length of stay.

In early 2019, HCAC started looking at a group of hospitals with baseline data available vis-a-vis the HCAC hospital accreditation standards at the initial assessment and final assessment points. These hospitals were assessed against the 3 categories of HCAC standards where the critical holds the bulk of regulatory and safety issues while the core is more process focused.

The objective of this exercise was to assess improvements in the number of standards 'met' between the initial and final assessment of within accreditation

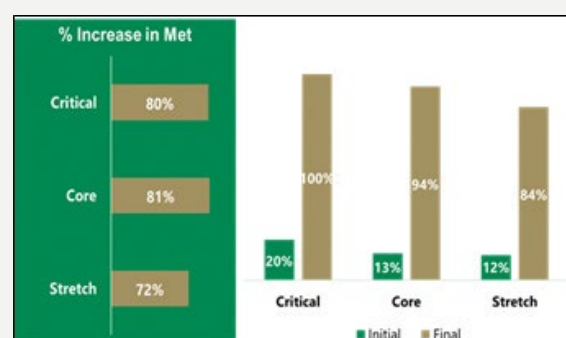
FIGURE 3: HCAC HOSPITAL STANDARDS DIVIDED INTO 14 CLUSTERS AND EACH STANDARD IS LABELED CORE, CRITICAL OR STRETCH



process. A sample of 15 of the 30 accredited hospitals was looked at. The initial and final assessment data were analyzed and compared across the Standards, Standard Groups 'Clusters', and Standard Categories (Critical, Core, and Stretch). Results for 346 Standards from each of the 15 hospitals (5,190 Standards in total) were studied. As each hospital has different services, some of the standards were not applicable and therefore have been removed from the analysis for that hospital (5,025 Standards in total).

At the initial assessment, only 14% of the standards were met. The critical standards averaged 20%, the core and stretch averaged 13% and 12% respectively. During the final assessment, there has been a noted increase in compliance in critical, core and stretch of 80%, 81%, and 72% respectively. In an interview with a patient, the following quote was documented: "I could easily tell the difference between walking into an accredited hospital and a non-accredited hospital."

FIGURE 4: RESULTS OF INITIAL VS. FINAL ASSESSMENT AND PERCENTAGE INCREASE IN THE STANDARDS MET

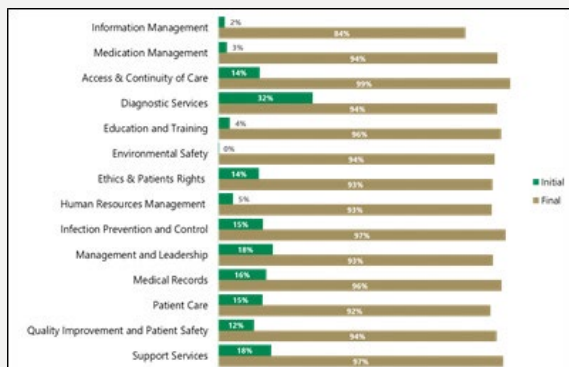


It is one thing to see low compliance in management and leadership standards, but it is mind-boggling to walk into operating hospitals that have almost 0% achievement in environmental safety measures or only 15% in compliance with requirements of infection control and prevention, let alone the very low levels of compliance in medication management (3%) and education and training (4%) and



information management (2%).

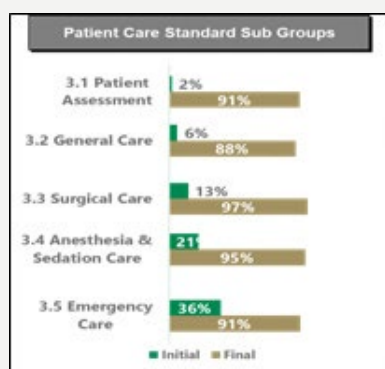
**FIGURE 5: MET VS. UNMET STANDARDS IN ALL 14 CLUSTERS DURING THE INITIAL AND FINAL ASSESSMENTS**



When looking a bit more closely at the standards of patient care, we can note huge improvement in patient assessments (from 2% compliance to 91%), general care (from 6% to 88%), surgical care (from 13% to 97%), anesthesia and sedation care (from 21% to 95%) and emergency care from (36% to 91%). In conversations with doctors, we were able to note the following comments:

- “As physicians, due to accreditation requirements, we get immediate laboratory critical results that allow us to make the necessary and timely interventions.”
- “HCAC accreditation requirements allowed us to minimize the risks during surgical procedures.”
- “A critical area of improvement was the enforcement of specific procedures for anesthesia management prior, during and post-operation to ensure that patients are safe candidates for anesthesia administration.”

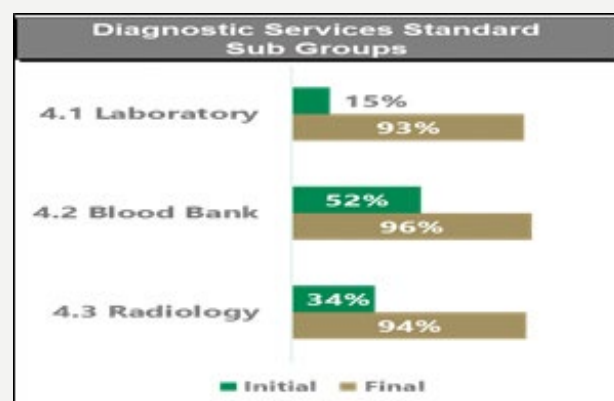
**FIGURE 6: PATIENT CARE STANDARDS BY SUBGROUP AND THE LEVEL OF COMPLIANCE**



Moving on to diagnostic services, the patient is not the only point of concern; employee health was core to the

challenges being faced, and of course, with any possibility of a skewed diagnosis, there is a multitude of possibilities of error in prognosis and treatment. Laboratories in these hospitals were only on average 15% in compliance during the initial assessment, blood bank slightly better at 52% and radiology taking a step backward at 34%. During the final assessment, these areas were 93%, 96% and 94% respectively in compliance with the HCAC hospital accreditation standards requirements.

**FIGURE 7: COMPLIANCE TO STANDARDS IN THE AREAS OF INFECTION CONTROL AND DIAGNOSTIC SERVICES**

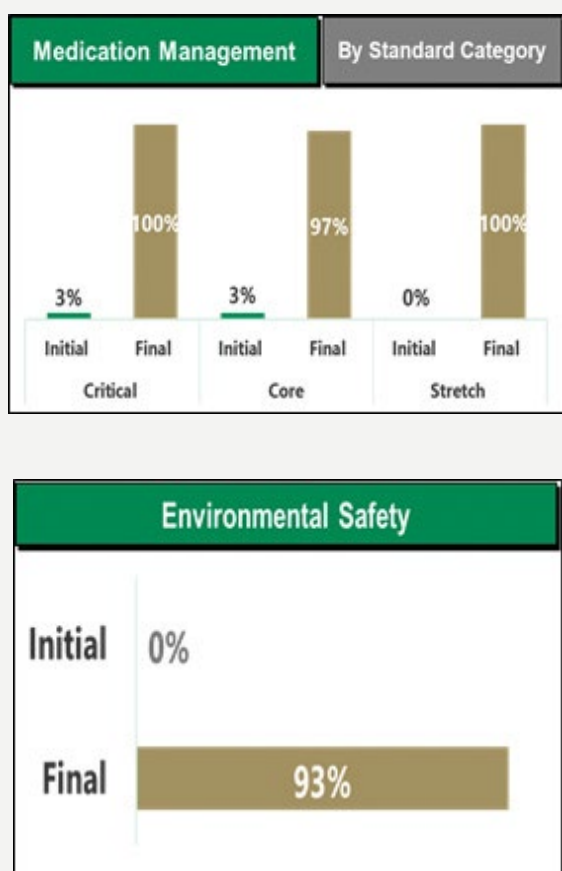


Infection control was among those sets of standards that would take you aback. Starting with an overall compliance level of only 15%, with 7% for infection prevention and 30% for sterilization, you can only wonder what could have been the level of hospital-acquired infections and the environment in which staff work and families visit. This, of course, is a hidden problem in Jordan with the lack of measurement of many indicators starting with infections to health outcomes. This vacuum of data to build real findings and drive change has been a deterrent of the needed immediate attention and action in Jordan. The accreditation tool has come to fill

part of this gap and nudge improvements forward.

One of the nurses was very vocal about the lack of compliance in the medication management cluster (3%); she indicated that: “Having our institution accredited has improved our workflow and accuracy. We now receive the medication labeled with full name and directions for administration and the expiry date, we have received training on medication administration, and we are involved in the patient care plan.”

**FIGURE 8: MEDICATION MANAGEMENT AND THE ENVIRONMENTAL SAFETY CLUSTERS – THE LEVEL OF COMPLIANCE TO STANDARDS**

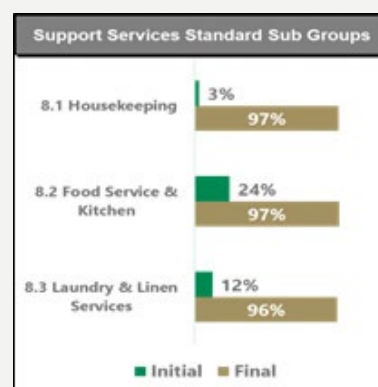


With regards to environmental safety (0% standards met)), it is sometimes hard to believe that institutions were given the license to operate, and how they grew over time without being reassessed and inspected. As basic as fire safety and as complicated as medical waste, these are immediate threats to the visitors, workers, patients and the environment. We are glad to report 100% compliance during the final survey.

And how do you expect service providers, with no training on quality and patient safety, to do when measuring their compliance to quality and safety standards in the areas of

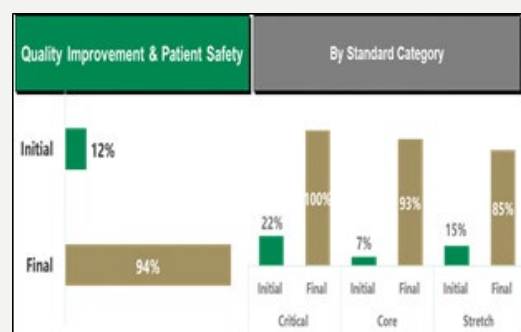
housekeeping, food service and kitchen, laundry and linen services? From as low as 3%, 24% and 12% respectively, once the hospital starts working on its accreditation journey, these numbers rise to 97%, 97% and 96% respectively. Discussions with support staff helped us better understand how the work on accreditation helps them do a proper and better job. “I’ve been trained on how to use the personal protective equipment to handle blood spills and how to prepare the cleaning solutions and how to clean patients rooms and contaminated linen”, said one member of the team. While another was focused on the fact that he was well empowered: “Due to the accreditation requirements, I’ve attended training on how to segregate medical and non-medical waste, and how to handle sharp waste such as needles, and to report any stick needle injuries”.

**FIGURE 9: LEVEL OF STANDARDS MET IN SUPPORT SERVICES**



With Ethics and Patient Rights standards fairing at 14% in the initial assessment, hearing a patient tell us that : “The pharmacist now explains the medication instructions to me in detail, even if I’m a recurring patient, while surgeons describe the operative procedure and its risks and benefits - allowing me to make an informed decision.”, is evidence enough that using accreditation as a tool for improving quality is definitely working in Jordan.

**FIGURE 10: QUALITY AND PATIENT SAFETY OVERALL COMPLIANCE**



"When it comes to the comprehensiveness of services and safety procedures through medical records and education on service and its risks, accredited hospitals are noticeably better," said one of the interviewed patients. And of course, that is the least that is expected to be heard. The cluster on quality improvement and patient safety has only 12% of its standards met in the initial assessment while that on medical records 16% and drastically information management scored 5%. All of these and their measurable elements are worked on through committees, implementers and agents of change, with the journey towards accreditation compliance, is increased to 83%, 93%, and 93% respectively.

Hospital administrators, who unfortunately are not selected based on competence, but either following the civil service bureau priority guidelines or simply obtaining the job because of ownership, have also been very vocal about the impact of accreditation. Though, when seeking their buy-in, they were skeptical and unbelieving that the hospitals they run are not in compliance with quality and patient safety requirements. But after the process begins, they use the initial assessment and, later on, the final reports as a means to manage their hospitals. One of them said: "Having our institution accredited has improved our understanding and monitoring of workflow, patient and employee needs and satisfaction." While another mentioned that: "Additionally, we enforced the smoking regulations and received training on how to deal with smoking patients and now have access to smoking cessation clinics to refer patients and employees."

hospital to be well managed, with risks assessed and addressed and compliance in alignment with the basic requirements of the regulatory system.

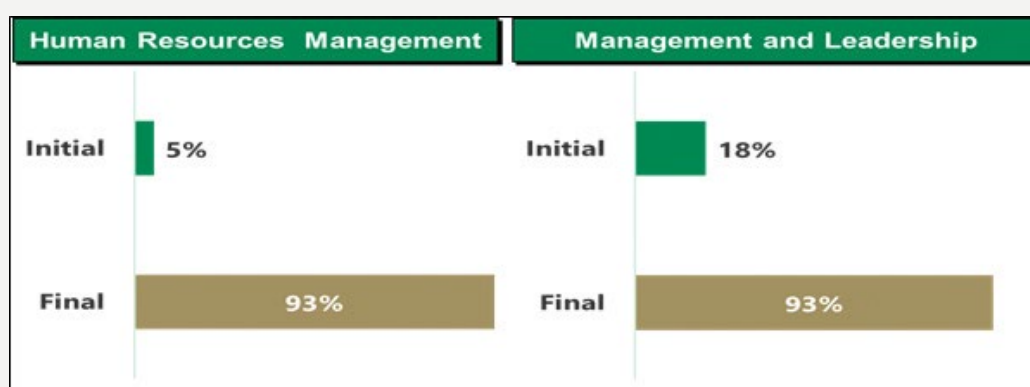
Last but not least, education is not only for the employees but for the family and the patient. During the initial assessment, compliance with the required standards in those areas stands at 3% and 7% respectively and reach 97% and 93% at the time of accreditation. A physician said: "Preparation for accreditation requires us to train for Basic Life Support (BLS) and Advance Cardiac Life Support (ACLS) saving many lives in sudden and immediate emergencies."

Most of the studies and research that have been done have shown improvement in core areas: (1) patient safety, (2) client focus, (3) infection prevention, (4) environmental safety and (5) human resources.

Though the above areas may seem basic in many countries and institutions, in Jordan, enrolling in the accreditation journey was what unveiled the challenges but what at the same time provided a tangible tool to rectify and improve the existing practices.

Therefore, the impact of accreditation in Jordan cannot and should not be discounted. Each country should think and assess its abilities and the possible impact of accreditation on its healthcare system and on driving safer care. It is not one-size-fits-all and not one-ruler-measures-all. The experience of Jordan provides unprecedented and unnegotiable proof of how accreditation has helped a whole country improve its care. We should always ask why we are using this tool. And why is it stronger than any other? For Jordan, it

FIGURE 11: HR & MANAGEMENT LEVEL OF COMPLIANCE BEFORE AND AFTER ACCREDITATION



Human resources stand at 5% and leadership and management at 18%. That means that records are not available, basic strategies for manpower planning, strategic planning, yearly operation plans, performance appraisal, and privileging are performed in a disorganized manner. The accreditation journey puts them into perspective, gives them weight, and allows a

is a consistent tool, evidence-based, has recurrence, is not an inspection, conducted by peers, specific and tells you what to do, transparent and reliable, not tied to any monetary incentive, done on voluntary basis but has been embraced as a mandatory system, all because of the visible and tangible impact it has brought about during the past 10-12 years.

TABLE 1: THE BELOW IMPACTED AREAS ARE THE MOST INFLUENCED AND IMPROVED BY ACCREDITATION

Patient safety	<ul style="list-style-type: none"> <li>■ Patient identification at critical care procedures ( administering medication blood transfusion, surgical procedures )</li> <li>■ Implementing surgical protocols ( site procedure verification, site marking, and time-out )</li> <li>■ Patient assessment for anesthesia-related risks before induction of anesthesia and monitoring patients during and post-anesthesia-related procedures</li> <li>■ Triage process for patients visiting the emergency room</li> <li>■ Credentialing and privilege for clinical providers</li> <li>■ Critical equipment maintenance ER, anesthesia and QC laboratory and radiology</li> <li>■ Medication management related to medication ordering, administration, preparation, reconciliations, adverse events reporting, counseling, storage, rationalized use of antibiotics</li> <li>■ Securing patient and administrative data and avoiding their loss</li> </ul>
Client focus	<ul style="list-style-type: none"> <li>■ Value patient voice and patient engagement in care provision through the building of complaints, suggestions and patient experience systems</li> <li>■ Improved coordination of care inside the hospital units and departments and outside the hospitals through referral systems to external health care practitioners or facilities</li> <li>■ Improved collaborative approach between the healthcare team, patient and family ( e.g. care plans that engaged health care team, patient, and his/her family, medical records, case management)</li> </ul>
Infection Prevention	<ul style="list-style-type: none"> <li>■ Improved practices (hand hygiene, safe injection practices, disinfection, cleaning, and sterilization)</li> <li>■ Food safety and avoiding food contamination</li> <li>■ Management of clean linen and contaminated linen</li> </ul>
Environment safety	<ul style="list-style-type: none"> <li>■ Fire and smoke safety</li> <li>■ Utility management</li> <li>■ Waste management</li> <li>■ Safety program in laboratory and radiology</li> </ul>
Human resources	<ul style="list-style-type: none"> <li>■ Health evaluation</li> <li>■ Training on safety</li> <li>■ Incident reporting</li> <li>■ Availability of protective personal equipment</li> <li>■ Staff skill mix and number</li> <li>■ Qualified staff by training (e.g. hospital leaders and managers qualified in quality and risks aspects, quality coordinators, risk managers, infection prevention, and medical record managers)</li> <li>■ Continuous professional development for staff providing direct care on BLS, ACLS</li> <li>■ Staff satisfaction</li> </ul>

## Biography

**Salma W. Jaouni** is the CEO of the Health Care Accreditation Council/Jordan for quality and patient safety since 2012. She was the Senior Advisor to the Jordan Prime Minister on public and social policy after serving as the founding director/3-year manager of Jordan's National Breast Cancer Program. She also worked with Booz Allen Hamilton, the World Bank and

USAID in MENA consulting/managing public health, poverty, employment, and social services initiatives. She holds an MPA from Harvard Kennedy School, a PGD in Health Systems from the University of London and a B.Sc. from American University of Beirut. She is an ISQua expert, serves on several National Boards and is a recipient of several awards on leadership.



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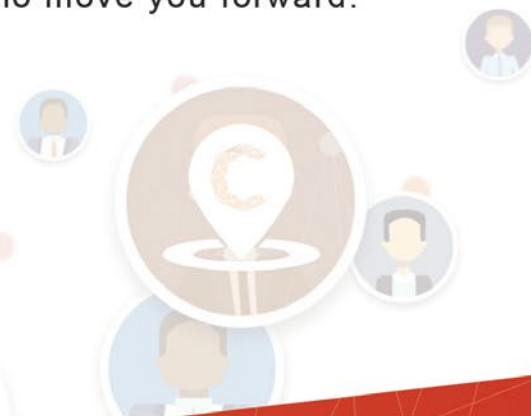
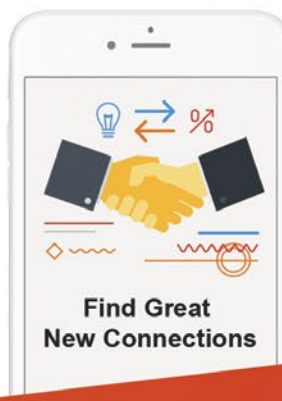


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# Quality at the hospital, between standardization and competition: the Moroccan experience



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**ABSTRACT:** In a context of health financing reform and quality deficit in health care institutions, the Ministry of Health of Morocco has initiated two quality improvement strategies: accreditation/certification and competition. Over a period of 10 years (2007-2017), the results of hospital accreditation were disappointing since no hospital could be accredited but several competitions on results (performance) and quality of processes (quality contest) were organized. Technical and financial support have been instrumental in the sustainability of these strategies, but they need to be a part of a national policy of mobilizing stakeholders and resources for quality.

## Introduction

In recent decades, knowledge, skills and information required for health quality improvement became available throughout the world. Despite the availability of tools and methodologies, the country-level decision-makers have often faced the problem of choosing the most relevant and effective quality management tools that could have the greatest impact on their health care systems.

For low and middle-income countries, the diversity of quality management tools and approaches could be both of an asset and a constraint. An asset, as it provides flexibility for experimentation, learning, and adaptation of the quality approach to the values of society and the objectives of the health system and also a constraint because the complexity of these tools and their level of sophistication could stop the political commitment to the quality of care. It could also be an argument to committing only to tools and methods that benefit from technical and financial support.

In Morocco, two approaches to quality improvement were launched: hospital accreditation and quality competition. Based on analysis of documents issued from quality

management processes initiated at the national level, and on the experience of the first author who, as a national coordinator, has accompanied all the steps, this article aims to analyze these two approaches and their complementarity for improving the quality and to share lessons learned from the experiments.

## Steps for quality development in the health sector in Morocco

The Ministry of Health of Morocco (MOH) has committed to quality as part of a process of health reform-sector. This reform process, launched in 1999, has taken a long time because of its big ambition and the lack of required resources for its achievement regarding the political agendas. The health reform included, in addition to institutional capacity building, three major transformation projects: health financing reform for the implementation of basic medical coverage (CMB), health system regionalization and public hospital reform. To accompany these reform projects, in 2000 the MOH initiated a national quality assurance program (PNAQ) which evolved thereafter according to two complementary and reinforcing steps: (i) the implementation of a competition process for



health institutions and (ii) the standardization of management processes.

### The competition between health institutions

The competition between hospitals in Morocco was motivated by the optimization concerns about resource value and improvement of quality. The focus on resources optimization led the MOH to develop a results-based hospital performance analysis framework in 2002. This framework included a selection of about 30 tracer indicators (markers) that reflect the main public hospital functions. The first report published on this hospital performance analysis was published in 2004 (MOH, 2004).<sup>1</sup> This analysis has since become a regular exercise in the context of the annual meeting of hospitals since 2008.

In addition to this performance measure, the MOH has engaged another process based on competition, called the quality contest (QC). The QC is a systemic approach to continuous quality improvement of national stature that creates positive and voluntary competition between health facilities and promotes a culture of recognition of merit. QC tends toward a transparent ranking of health organizations based on quality dimensions. Six editions were organized in 10 years (2007-2017). Participation in the first two and last two editions was voluntary-based (between 188 and 480 participating institutions including 86 hospitals) and mandatory during the 3rd and 4th editions for all hospitals and other health institutions (661 participants including 96 hospitals).

### Accreditation/Certification

Quality is often seen as a set of “standards” with which an institution should comply. Accreditation/certification is the most commonly used external mechanism for assessing this compliance. The MOH has embarked on two standardization procedures: (i) hospital accreditation, initiated in 2007 on 4 pilot hospitals before involving 14 other hospitals; and (ii) certification approach focused on priority health policy programs such as those related to the Millennium Development Goals (maternity, tuberculosis and HIV / AIDS services). A multilevel model was adopted for hospital accreditation according to the WHO recommendations (WHO, EMRO., 2003). The majority of the delivery structures had participated in certification in its first phase (518 birthing centers and 140 maternity hospitals) and the results of their external audit enabled the initiation of an organizational and functional upgrade program to improve their level of compliance, including Emergency obstetric care functions, which are essential for managing deliveries with minimal maternal and neonatal risk (Khassouani., 2012). The process was subsequently regionalized and limited to the birthing centers as hospital maternity participated in both QC and hospital accreditation.

### Discussion

A survey of quality improvement strategies in 389 majority European hospitals in the public sector (Lombarts et al.,

2009), showed that no country has implemented all quality improvement strategies in all hospitals and implementation varied by country and quality improvement strategies. Quality improvement in Morocco is a combination of many initiatives that have evolved into a national movement for quality improvement. Ownership of these initiatives was partial and poorly supported. The analysis of the different stages of development of the quality of care in Morocco shows that it is essentially based on two approaches: standardization and competition.

### The Standardization Strategy

The implementation of the standardization approach seemed to be more complex than the competition because it required absolute compliance with standards (yes / no or partially). Competition is a ranking that relativizes the results of care and the quality of processes, in which all health structures could participate. At the end of ten years, no hospital was accredited, even among those ranked in first position in QC, while 8 hospital performance evaluations and 6 QC editions were organized. Also, on the basis of volunteer participation in both approaches, participation in the quality contest has never stopped, while that related to accreditation has not resumed since the participation of 14 hospitals to an external evaluation in 2010. However, the certification of delivery structures was successful because it related to a national priority and was supported by strong political commitment and mobilization of resources.

In view of the documentation of the two processes, we found out that the difficulty of completing the hospital accreditation program in Morocco relates to 3 factors:

(i) Context: the establishment of the standardization program has coincided with an epidemiological transition in which 77% of morbidity is due to chronic and degenerative diseases or trauma (MOH, 1995).<sup>2</sup> The management of these morbidities mainly occurs in hospitals that were not prepared to accommodate them. The increase in the use of hospitals in a context of restructuring and lack of resources and quality presented a constraint for establishment and completion of the accreditation program.

(ii) The heaviness of the procedure and standards: the second factor of difficulty in the execution of the accreditation program is the evolution of standards at the international level. Accreditation manuals have been revised three times to incorporate all the dimensions and criteria that are relevant to the quality of the structure, process or results and have taken into consideration the criteria related to patient safety which made them heavy and difficult to meet in a context of limited resources and obsolescence of buildings.

(iii) Accompanying measures: the accreditation program has not been accompanied by the establishment of a strong organization to pilot its implementation, nor incentives for the participation of hospitals. The lack of political commitment, the instability of hospital officials and the lack of the strengthening of the organizational and functional capacities of hospitals did

<sup>1</sup> Ministère de la santé, 2004. « Les hôpitaux publics au Maroc : Niveau de l'offre et bilan d'activités ». Document de travail Direction des hôpitaux et des soins ambulatoires, Rabat.

<sup>2</sup> MS, 1995. « Rapport d'Etude sur la charge globale de morbidité ». Ministère de la santé, Direction de la planification et des ressources financières, Rabat



not favor the appropriation of the approach.

So, despite its relevance, the multi-level accreditation model (Novaes *ans al.*, 2000) adopted in Morocco and in 10 countries of the WHO Eastern Mediterranean Region (EMRO) has not been able to overcome all these difficulties.

Thus, the Moroccan experience confirms the results of studies on the sustainability and effectiveness of the implementation of hospital accreditation programs. Indeed, according to a large cross-sectional comparative study of 44 health facility accreditation programs in 38 low and middle-income countries (LMICs) and high-income countries (PREs), the sustainability of an accreditation program, regardless of characteristics of the country, is influenced by the continuity of government political support, the stability of program funding, the incentive for participation in accreditation and the level of sophistication of the entity (public or private) in charge of accreditation (Brathwaite *and al.*, 2012).

### The Competition Strategy

A meta-analysis conducted in 2011 on the basis of 53 studies and 9 databases, mainly from the United States and the United Kingdom (*The health foundation inspiring movement*, 2011), showed that competition could improve certain aspects of quality and have a negative impact on others. The study showed that there is a positive association between competition and improved clinical outcomes, reduced costs and improved efficiency in some settings and that competition can have negative impacts on access and equity. Other empirical studies confirm that greater competition between hospitals is positively related to quality and that the degree of quality competition can be improved by providing more accurate quality information to patients, for example by publishing data on quality measures (Brekke *and al.*, 2015).

In Morocco, competition aims at optimizing resources and improving quality. It concerns only public establishments where the pricing of care is regulated and the budget is generally insufficient. The measure of performance was limited to management aspects and did not provide an idea of the effectiveness of patient care. This limit can be offset by the promotion of good clinical practice. For QC, the results of competing health organizations revealed that hospitals participating in these competitions had improved their performance in terms of management quality. They showed a significant association between the number of times that hospitals participated in QC and the performance scores obtained (Sahel, Belghiti *and al.*, 2015). The constructive exchange of experiences between the structures, as well as a communication of the constraints, the needs and the expectations between the managers, were considered as positive elements. Recognition of effort was also appreciated but seemed insufficient to maintain motivation (Sahel, Debrouwere *and al.*, 2015). The World Bank has described the establishment of the quality competition in Morocco as an example of success because it recognizes good work and motivates change, creating an environment conducive to the delivery of quality services, although its impact is not uniform (Lust *et al.*, 2015).

We can consider that competition in this context is a part of a learning dynamic that allows managers and health professionals to better understand an institution's capacities (through an internal audit) and to be able to classify structures among competitors according to reference practices and also joins initiatives for solving problems. This learning is proactive because it can be the basis for a change or a movement for continuous improvement of quality.

### Complementarity and capitalization of approaches

Systematic deficits in the quality of care cause far more deaths than the lack of access to health care (Kruk *and al.*, 2018). The standardization strategy (accreditation/certification) is the most widely used for quality improvement (Lombarts *and al.*, 2009). There is general agreement that a thriving accreditation program is one of the institutional foundations of a high-quality health care system (Braithwaite *et al.*, 2012). The context of the reform of the CMB in Morocco should push the Moroccan health authorities to capitalize on their experience and learn from the quality approaches initiated. Because of its less restrictive and mobilizing character, competition could become the main mechanism for the optimization of resources and the continuous and systemic improvement of the quality of care. It is also a way to prepare and guide the standardization process. Because of its notoriety, standardization can evolve into a tool that brings together all standards and that would be established in a progressive manner through resource mobilization.

Competition should be open to the private sector to make it profitable and because the more competitive an environment is for a public provider, the higher the intensity, productivity, and share of medical care is (Kankaanpää *and al.*, 2011).

### Recommendations

The application of several quality improvement strategies or mechanisms does not necessarily guarantee more positive effects on the performance of the health system. But it offers the opportunity to make better strategic choices for the future and to capitalize on the resources of knowledge and cumulative experience. The revision of the constitution and its adoption of health as a fundamental human right, as well as the desire to control the costs of care in the context of the generalization of the CMB, should make quality improvement a national priority. This prioritization must be supported by a broad consensus and political commitment that should result in the development of a national quality improvement strategy supported by all stakeholders including CMB stakeholders and civil society representing patients. This national strategy should build on the two already-tested strategies (competition and standardization) in a progressive approach and a well-defined design. It should also enable a more active role for patients in improving the quality of care. The regulatory framework that is being set up should facilitate implementation rather than constrain it, and enable quality accountability. In any case, the upgrading of information systems and institutions remains essential for this capitalization to succeed.

## Biographies

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# Hospital transformation plan: achievements, challenges and lessons learnt



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**ABSTRACT:** In this article, the authors discuss the evolution of the Iranian hospital management system after the Iranian Health Transformation Plan (HTP). These changes point to “Decreasing “Out-of-Pocket” payments for the hospitalized patients in the hospitals”, “Enhancing the quality of hoteling services in the hospitals run by the Ministry of Health”, “Capacity building of public hospital managers”, and ultimately “establishing independent hospitals”.

The hospitals reform has significantly reduced patient out-of-pocket payments, increased productivity, reduced patient dissatisfaction, and promoted fair access.

Major problems in the way of these improvements are the lack of sufficient resources, waste bureaucracy and lack of managerial skills among managers.

**Key words:** Iran health transformation plan, capacity building, health managers, independent hospital, hospital hoteling

“A healthy human” is the mainstay for the sustainable development and “Healthiness” is essential for benefiting from other divine blessings. Maintaining and promoting “Health” is not only a personal but also a social, organizational and sovereign responsibility. It is one of the most important goals in Islamic Republic of Iran’s vision 2025. The main mission of the national health system in Iran is to promote the standard of health in the country and to meet people and society’s needs.

The policies issued and communicated by the supreme leader and the programmes of the Ministry of Health and Medical Education in the “Medical Treatment Field” in the 11th government, especially the health transformation plan, are the basic documents that are translated into the mission of the “Deputy Minister’s Office for the Medical Treatment” and shall promote the health of the people of Iran.

On the other hand, the report of health that was collected during the first 100 days of work of the 11th government’s administration and presented thereafter, showed that there are serious challenges in reaching the highly valuable goals of the health system in the country; challenges that need

to be solved; to name a few: inequalities in the access to health services, unfair health financing, high out-of-pocket payments, inequalities in meeting medical and nonmedical expectations of the people from the health sector and neglected social determinants of health (such as employment, job security, food safety and security, healthy water, appropriate housing, literacy, welfare, early childhood development, etc.)(1)

To solve these problems and to reach the goals & targets of the 5th National Development Plan, such as decreasing out-of-pocket payments to below 30%, the government has already decided to use the financial resources from the 2nd stage of targeted subsidies programme. The Health Transformation Plan (which consists of almost all health activities in the country such as hygiene, medical care, education, research and technology and etc.) aims to promote the health of the people to match their dignities and, once fully implemented in all medical centres throughout the country, and particularly in hospitals run by the Ministry of Health and Medical Education, we will notice the health standards of the Iranian people promoted and

the goals of the vision 2025 fully achieved.

In Iran, all the hospitals are affiliated to The Ministry of Health and Medical Education under supervision of medical universities. This hospital was a public governmental hospital, which means it utilizes the governmental budget system.

The Health Transformation Plan has 3 main aims: to protect patients against financial problems because of health services, ensure fair access to health services and improve the quality of health services proceeded in seven service packages in the country at 2014.

1. Decreasing "Out-of-Pocket" payments for the hospitalized patients in the hospitals run by the Ministry of Health
2. Enhancing the quality of hoteling services in the hospitals run by the Ministry of Health
3. Advocating for "Natural birth" (normal vaginal delivery)
4. Supporting physicians to keep them in the deprived areas/regions of the country
5. Presence of medical specialists 24/7 in the hospitals run by the Ministry of Health
6. Enhancing the service quality of doctors' visits
7. Development of "Air Emergency Services" (2)

In the first package, the health system tried to prevent patient referrals for purchasing medicines, medical equipment and consumables and diagnostic services to the suppliers outside of the hospital, financial protection of the citizens against health expenditures with its main focus on vulnerable people's hospitalization services through organizing the security of hospital services, decrease out-of-pocket payments for hard-to-cure diseases and manage these kinds of illnesses in centres run by the Ministry of Health, Treatment and Medical Education and decrease direct (out-of-pocket) payments by patients eligible to be covered by basic health insurance, down to 10% of total hospitalization expenses for the services subject to the programme (and down to 5% for those admitted through referrals) in the hospitals run by the the Ministry of Health and Medical Education. All of these plans were installed in all hospitals in Iran (585 hospitals at that time). (3)

Along this process, the health system was able to support more than 40 million patients admitted to the hospitals affiliated with the Ministry of Health and financially protect hospitalized patients against catastrophic expenditures for 77.4% of the country's population in a targeted manner. (3)

Covering vulnerable groups of refugees with basic health insurance in cooperation with the health insurance organization and decreasing the payment share of people (out-of-pocket) from 37% to 8.5% for hospitalization costs were the other achievements of this package. Other achievements of this package had some positive effects on resource management in hospitals such as enlisting the services deliverable in public hospitals, enlisting the medicines and essential items deliverable in the public hospitals and managing and controlling the market for expensive medical equipment. (4)

The second important part of this plan that has direct and indirect positive effects in hospitals was enhancing the quality of hoteling services in the hospitals run by the Ministry of Health. With the initiation of this package, the quality and quantity of hoteling services increased. The supply and development of medical equipment for Ministry hospitals, the establishment, standardization and refurbishment of the physical structures of hospitals, standardization of the hoteling services based on needs and expectations of clients and increasing the satisfaction of patients and their accompanying support were the other achievements of that package. (4) According to surveys, patient satisfaction in governmental hospitals increased more than 85% because of improvement of rebuilding 3 million square meters of floors, walls and roofs and hospitalization space, using consultation services for designing the interior of the hospitals and the renovation of 45,000 hospital beds. Distribution of 78,000 pieces of hoteling equipment, 18,241 hospital beds, 7,500 stretchers, 12,000 televisions and refrigerators and the improvement and equipping of 12,500 nursing personnel restrooms (expandable canopies, carpets, microwave ovens and TVs) not only had positive effects on patients but also satisfied health workers:

- 86% patient satisfaction regarding the physical environment
- 90% patient satisfaction regarding the medical treatment team
- 84% patient satisfaction regarding the attention given to their privacy by the hospital
- 66% satisfaction regarding the quality and quantity of hospital food
- 68% satisfaction regarding the quality and facilities provided to accompanying support

There were also other achievements of this important plan. (5)

- Supporting physicians to keep them in the deprived areas/regions of the country completed the puzzle of the health transformation plan, improving the quality of services and responsibility in all the cities of Iran. Presence of 5,735 physicians with specialty and subspecialty in 338 hospitals and 301 deprived cities met people's satisfaction. (6) Presences of full time medical specialists (24/7) in the hospitals run by the Ministry of Health was the next plan. Presence of residing specialists in 412 hospitals and 214 cities of the country and the presence of an average of 862 residing specialists in night shifts (with 19 different specialties) in the related hospitals were the achievements of this package. (7)

In addition to the above content, another effective program for increasing hospital productivity was the "Capacity Building of Hospital Managers".

A hospital review report prepared by MOHME1 deputy of treatment which was funded by WHO2 states that managerial skills assessment of 250 selected hospital managers was held in 2015. Then Hospital Managers Development Program(HMDP) was designed and started by



the Hospital Management and Clinical Services Excellency office in collaboration with Management Development and Administration Reform Centre of MOHME, WHO, IHF3, and IUMS4. The International Relation Department of MOHME supported and facilitated the HMDP initiative as well.

The program involved managers of 570 public hospitals affiliated with the 61 Universities of Medical Sciences and Health Services. Progress to date is exciting. In less than two years, all public hospitals managers in Iran have been trained in leadership and management skills, and WHO has confirmed its proper implementation.(8)

The tailored course entailed 28 days of training in 7 modules over a period of 8 months. The experience in Iran has been so successful that the program is being replicated in Iraq and Afghanistan, with 25 trainers from each country initially participating. Modules are now being contextualized for each nation. There are also plans to extend this to Oman and Jordan in 2019

WHO has supported the capacity building program since beginning of the program and, in addition, monitored the training and external evaluation of the hospital manager training in the public sector. In Iran, as in other countries, it will be important to continue to carry out health management training, and to justify the large investments in training programs, through rigorous assessment of their contribution to the capacity development of individuals, organizations and health systems. To accomplish this important task, the Health Managers Development and Training Supreme Institute (HMDI) affiliated to MOHME was established at 2017 to organize and lead professionalism and management development in the Iran health system. Currently, the HMDI is working to empower hospital chiefs, and the next program is the capacity building of other managers at all national and international levels of management of the health system. (9,10)

After HTP, the "Independent Hospital" was established in 2017.

These hospitals fall under the World Bank classification as autonomous hospitals.

This means independent hospital shall be governed by the Financial and Business Regulations, aiming toward continuous quality improvement of health services, increasing productivity, speediness of service delivery, community satisfaction upturn and reducing service tenure in an independent executive unit. The "Independent Hospital" Administration's guidelines were formulated by the Ministry of Health and Medical Education.

The overview of the independent hospital consisting of a CEO, two deputies and six managers is as follows:

The Executive Board has all the powers necessary to administer the hospital, including:

- Developing a hospital strategic plan within the framework of the University's Strategic Plan and submitting it to the Board of Directors for approval
- Proposing the organizational chart of the hospital to the University's Board of Trustees for approval
- Preparation and approval of internal hospital rules,

procedures and processes within the framework of laws and regulations

- Establishment of internal assessment and monitoring of hospital performance
- Contract with health, social and supplementary insurance organizations and other legal entities
- Opening a bank account based on the University's Financial and Business Regulations and performing transactions based on this instruction
- Preparing the annual operating plan, budget and submitting it to the University
- Exchange of agreements between the hospital and the university

Major outcomes of the training program:

- Strengthened capacity of managers:
  - Technical skills (instruments, tools, norms and regulations)
  - Confidence
  - Pro-activeness
  - Better awareness (on need and use of data)
- Established networking and opportunities for peer learning (e.g. telegram)
  - Between trainers, between trainers and managers, between hubs
  - With MOHME | Expanded scope of trainers' capacities (knowledge, skills)
  - "Open eyes" on some topics
  - Adult learning
- Core structure for on-job-learning established(11)

Challenges:

- Lack of full and timely allocation of project resources
- Increased medical costs in private hospitals
- Increased induction demand in relation to the 300 new services that entered into basic insurance but lacked clinical guidance
- Increasing the burden of treatment (a treatment-oriented approach to health)
- Lack of work force and increased workload of health professionals
- Increased hospitalization statistics due to lower hospital costs
- Increased tariffs gap for private and public sector practitioners by modifying tariffs
- Failure to define a specific position in midwives, especially in marginal areas
- The orientation of the treatment market towards specialized and specialized services
- Insufficient attention to dental services
- Increasing physicians' induced demand for Para clinical services, medicines, and specialized equipment
- The absence of guidelines based on the treatment system
- Lack of hospital beds, establishment of waiting queues, hospital crowding and prolonged admission times
- Inadequate electronic infrastructure such as HIS,

#### Electronic Health Record

- Failure to cooperate in the implementation of agreements for realization of tariffs
- Decentralization of resources in insurance
- Disorganized insurer organizations

### Biographies

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# Shaping the Future of Healthcare Services in Dubai



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**ABSTRACT:** The Health Sector in Dubai is growing at a rapid pace and there is a need to ensure that the Health Facility Design supports current and future Clinical Capacity Planning needs. This article briefly discusses Dubai Health Authority (DHA) experience in developing 'World Class' Health Facility Guidelines (HFG) and highlights the linkages between clinical capacity planning needs, improving regulatory compliance and patient outcomes. The article concludes with several key lessons and DHA future plans.

## Introduction

Dubai Health Authority (DHA) was established under Law No. (13) of 2007, revised by Law No. (6) of 2018 as the regulator of the health sector. DHA licenses health facilities and health professionals, conducts clinical audits and inspection, manages medical complaints, governs e-health and health informatics, issues policies and standards, and supports ongoing investment and growth and indeed strategies to promote health tourism. In recent years, Dubai has experienced unprecedented growth and is one of the fastest-growing economies in the Gulf Cooperation Council. Activities such as foreign trade, transport, tourism, industry, sustainable investment, technology and innovation, finance and mandatory health insurance have aided the economic expansion and diversification of Dubai into a major global hub (NSEAD, 2018). Dubai's GDP in constant prices reached 389.4 billion AED (US\$106.1 billion) in 2017, up by 2.8% from 378.8 billion AED (US\$103.2 billion) in 2016 (DED, 2018). Dubai low logistical and operational cost and infrastructure continues to attract investors from all parts of the world.

Population growth between 2004 and 2016 was reported +8% per annum and is expected to grow 4-5% per annum between 2020 and 2025 and approximately 3-4% per annum between 2025 and 2030 (DHA, 2019). Almost 15% of the population in Dubai are natives, 85% expatriates and 83% of Dubai's population is aged

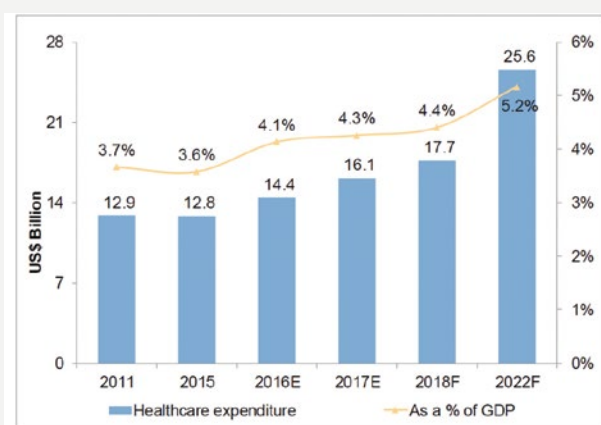
between 15 and 64 years. The current population is reported at 3,288,150 and is expected to reach 4.2 million inhabitants by 2025 (DSC, 2019). Healthcare expenditure in the UAE as a % of GDP (DHA, 2019 and AC, 2018) has been rising steadily and is expected to continue to rise by 2022 (Figure 1). Dubai's total health expenditure in 2017 was reported to be 17.5 billion AED (DHA, 2019) and it is becoming a popular destination for tourism and medical treatment, as more visitors are becoming accustomed to combining treatment with the Dubai experience. Between 2015 and 2016, medical tourists in Dubai increased from 298,359 to 326,649 with a reported increase of +8% per annum between 2011 and 2017 (DHA, 2016). In tandem with the rise in demand, there has also been an increase in the number of healthcare facilities and professionals licensed by DHA (DHA, 2019). The number of licensed health professionals increased from 17,516 in 2011 to 38,318 Q1-2019 and number of licensed health facilities increased from 2,056 in 2011 to 3,225 in Q1-2019 (Figure 2). The growth in the health sector reflects the need to meet demand in key service areas such as chronic disease, obstetrics and gynecology, psychiatry, orthopedics and rheumatology, dermatology, neurosurgery, oncology, cardiothoracic and cardiology (DHA, 2019).

The UAE 2021 vision is to become one of the best countries in the world by 2021 and "continually invest to build world-class healthcare infrastructure, expertise and



services to fulfill citizens' growing needs and expectations (UAE Government, 2019)". The UAE 2021 vision is underpinned by seven pillars: Competitive Knowledge-Economy, Safe Public and Fair Judiciary, Cohesive Society and Preserved Identity, First Rate Education System, Sustainable Environment and Infrastructure and World Class Healthcare. In line with the vision, and the Dubai Health Authority (DHA) mission to "Transform Dubai into a leading healthcare destination by fostering innovative and integrated care models, and enhance community engagement" (DHA, 2016), DHA set out to develop new 'World Class' Health Facility Guidelines for the Public and Private health sector.

FIGURE 1: CURRENT HEALTHCARE EXPENDITURE IN THE UAE



Source: Alpen Capital (2018).  
Note: E – Estimate; F – Forecast

### DHA Health Facility Guidelines (HFG)

The Health Facility Guidelines (HFG) were considered essential for current and future clinical capacity planning needs and assuring the aspirations of balancing supply and demand are not hindered due to a lack of inadequate facility design standards, high cost of construction or inefficiencies in licensing and approval processes. In the latter context, HFG covers the process of health service planning, design, construction and licensure and extends to the requirements between DHA and other competent local regulators such as the Local Municipality, Civil Defense, Electric and Water as well as other regulators at Federal level such as the Ministry of Health and Prevention and Federal Authority for Nuclear Regulation. Also, HFG was recognized to play an important role in improving regulatory compliance and healthcare outcomes. The aim and objectives of the HFG project were as follows:

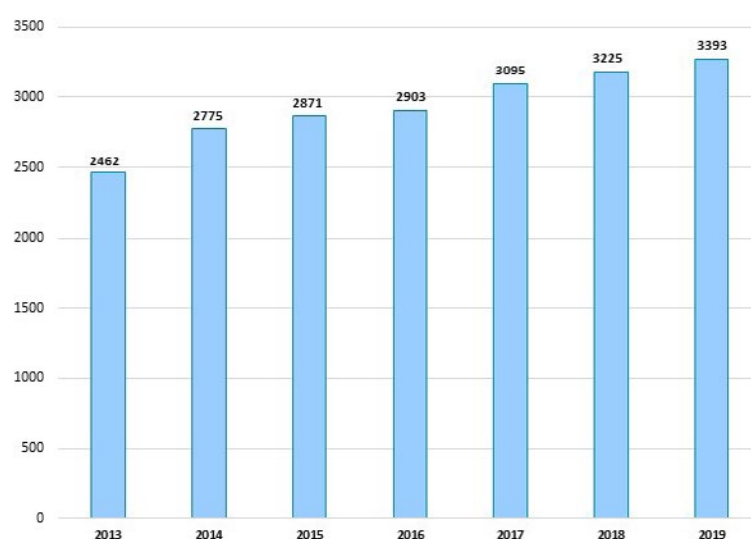
#### Aim:

Develop 'World Class HFG' to support DHA Clinical Capacity Planning Needs

#### Objectives:

- Establish the building blocks for healthcare service delivery;
- Assure the necessary functional relationships and service integration are in place for delivery of safe and high-quality care;
- Enable flexibility for new innovative care models;
- Set out the minimum standards for designers at an affordable cost; and
- Provide modern and efficient planning principles.

FIGURE 2: GROWTH IN THE NUMBER OF HEALTH FACILITIES



Source: Dubai Health Authority (2019). Health Facility Licensing Statistics.

The HFG included six parts in addition to a number of Standard Components (room data sheets and room layout sheets) for each Functional Profile Unit (DHA, 2019).

- Part A - Administrative Provisions
- Part B - Health Facility Briefing and Design
- Part C - Access, Mobility, Occupational Health and Safety
- Part D - Infection Control
- Part E - Engineering
- Part F - Feasibility Planning and Costing

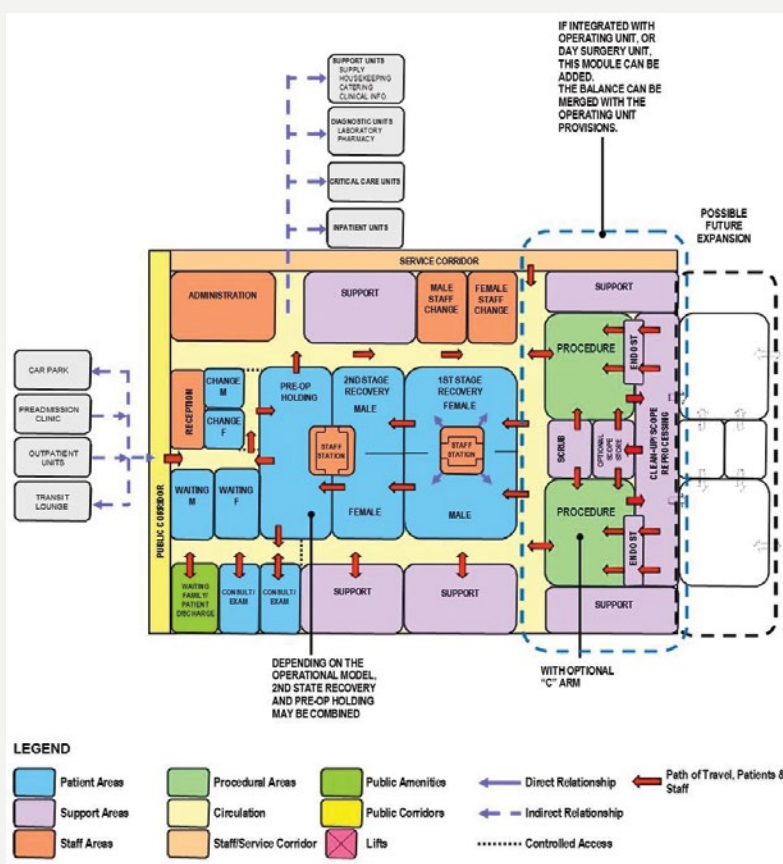
### The HFG Development Process

The HFG development process was initiated through discussions and agreement with an appointed external vendor to shortlist essential Functional Profile Units (FPUs) that align with the DHA Clinical Capacity Plan. The concept of FPUs was adopted to mandate core service requirements for each health facility type and to offer the flexibility for FPUs to be added and removed according to changes in supply and demand or services. For example, a specialized hospital may seek to add or remove specific FPUs for a change in specialization or to step up from a Specialized Hospital to a General Hospital or indeed Centre of Excellence.

The project phases for developing the HFG were essentially split into the five HFG Parts with some

workstreams running in parallel. A working group for each part was set up with the exception to PART B, which included several expert reference groups to cover forty-one clinical areas. Reference groups for each FPU were multi-disciplinary and specialized to the respective field, e.g. cardiology, and were tasked to review and comment on draft FPUs before each meeting. Feedback was then gathered during and after each meeting. In conjunction with this, meetings were held within the DHA and across other regulators to review, align and agree upon the specific requirements for the healthcare setting. Some of the requirements were deemed mandatory due to local or federal laws and regulations, for example, how to store and secure narcotics while others required further clarification in the context of healthcare service provision, for example, corridor width for patient transfer trolleys and required height of ceilings for diagnostic rooms. The development process also included discussions on the design and schedule of accommodation requirements, external relationships, internal relationships and functional relationships across different FPUs (Figure 3). Following this process, stakeholder consultation across the health sector was undertaken followed by final revision, internal review and sign off by the DHA core working group. Other FPUs were identified toward the end of the project and are

FIGURE 3: FUNCTIONAL RELATIONSHIP FOR AN ENDOSCOPY UNIT



Source: Dubai Health Authority (2019). Health Facility Guidelines.

to be considered in the next planned phase of the HFG project.

### Linking HFG to Clinical Capacity Planning, Regulation and Patient Outcomes

Although the development of the HFG was deemed necessary for capacity planning, there were indeed several dimensions that benefitted from the project. The first dimension was inherent to satisfy the needs of the clinical capacity plan. Specifying design requirements for different specialty gaps encourages investment, growth and modernization in these areas as has been the experience in Dubai. The second dimension relates to assuring regulatory compliance and efficiency. Having clear facility design guidelines provides greater clarity on the requirements for designers, architects, healthcare providers and the regulator and reduces the overall project timeline and resources needed for planning, review, approvals, construction and final inspection. Dubai's approach to the development of the HFG was extended to identify and address the needs of other key regulators, thus, maximizing the opportunity to harmonize, coordinate viewpoints and improve customer satisfaction. The third dimension relates to the improvement of healthcare quality. The Donabedian Model (Donabedian, 2005) is an established model for healthcare quality and includes three key domains in addition to highlighting the linkages between structure, process and outcome (Table 1). In its essence, the Donabedian model provides a basis by which to create a culture of safety (Makary, et al, 2006), assesses processes and measures outcomes and provides a roadmap to explore the flaws within and across the three domains (Raleigh and Foot, 2011). That is to say, the relationships between structure and outcome may not be directly inherent until process is considered. Arguably, health outcome necessitates to have in place a 'fit for

purpose' structure and should, therefore, form the basis upon which good processes are developed that, in turn, will lead toward good patient outcomes.

### Conclusion

There were four keys lessons learned from the HFG project. First, assure ongoing leadership, planning and communication. Given the scale and interfaces, it was vital for these three elements to be upheld throughout the project lifespan. Second, be aware of the compromises that need to be made between engineers, architects, management, clinicians and other regulators. Whilst the ambition was to align all regulatory requirements within the HFG, some areas had to be left out due to reiterations underway by the respective regulators. Third, understand how the HFG interfaces within existing IT systems, workflows and service operations from both a regulatory and provider perspective. The opportunity to automate and adopt blockchain and artificial intelligence during the licensing process is of great benefit; i.e., our licensing data links to real time capacity planning and DHA has initiated several automated licensing processes through a parallel licensing project which links to the initial and final approvals of Health Facility Design. Finally, recognize that HFG implementation does not take place overnight. Although the HFG was seen as a new way of working and essential for capacity planning, improving compliance, efficiency, patient safety and healthcare outcomes, there was a need to minimize any unintended consequences by taking onboard a stepped approach whereby new investors and existing health facility providers are engaged through a collaborative and educational approach toward health facility design. DHA is currently pursuing updates to specific sections of its regulations to align with the new HFG as well as the

TABLE 1. THE DONABEDIAN MODEL

No.	Domain	Questions	Examples
1.	<b>Structure</b> All factors that affect the context in which healthcare is being delivered and are generally fairly easy to identify.	Have we reduced the risk of harm?	Design, physical environment and equipment, human resources etc.
2.	<b>Process</b> Entails all actions/activities related to the provision of healthcare and are generally considered technical in their nature.	How often do we apply our processes and are they the right processes to have?	Consultations, treatment, diagnosis, surgery, prescribing, care pathways etc.
3.	<b>Outcomes</b> The effect of healthcare service provision and should typically be Specific, Measurable, Achievable, Relevant and Time bound (SMART).	How often do we harm and how often do we perform well?	30-day re-admission rates, surgical site infection, patient and staff satisfaction, surgical complications, etc.

Source: Adapted from Donabedian, A (2005).

annual assessment of the pre-qualified list of health facility design consultants for different types of health facilities. This is deemed vital to assure health facility design standards are continuously being met by competent and qualified consultants.

## Biographies

**Dr. Marwan Al Mulla** currently works for the Dubai Health Authority as the Chief Executive Officer for the Health Regulation Sector. His expertise lies in Family Medicine, Health Management and Health Regulation. He managed the introduction of the new assessment model for professional licensing and led the launch of the Primary Source Verification in cooperation with the DHA related strategic partners. Dr. Marwan has over 18 years of experience and has also worked for the Health Regulator in Abu Dhabi.

**Khamis Al-alawy** currently works for the Dubai Health Authority as a Consultant for the Health Regulation Sector. His expertise lies in Health Policy and Strategy Development, Public Health and Health Promotion, Commissioning and Performance Management, Program and Project Management, Stakeholder engagement, Social Marketing and Organizational Development. Khamis comes with over 14 years of experience and has worked for several Spearhead NHS Organizations in England and the Health Regulator in Abu Dhabi.

**Mohamed Sharif Mohamed** currently works for the Dubai Health Authority as specialist for the Health Regulation Sector. His role includes reviewing all health facility plans and supporting architects, and engineers to ensure successful and high-quality health facility design and construction in Dubai. Mohamed has over 12 years of experience and has managed large-scale construction projects ranging from road reconstruction to design build residential, industrial and hospital projects both in the government and private sector in the United States.

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# Building coherent networks of health information systems to increase access to patient information and the provision of service: a timely approach to population healthcare in the Middle East



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**ABSTRACT:** The Middle East and North African Health Care systems are facing significant challenges, including a significant increase in the number of non-communicable disorders such as obesity, and the lack of availability and accessibility to sub-specialty care. Although, many regions within the United States are facing similar problems, several health care systems, including The Johns Hopkins Health Care System (JHHS) has implemented a number of e-health systems to facilitate the access to patient information and the provision of medical specialty services. These information systems include the electronic recording of patient information that provides a portal of communication between primary and sub-specialty providers and the electronic provider to provider consultations that facilitates the triage and coordination of patient referral and thus accessibility to sub-specialty medical services. In the future, coherent and comprehensive health information systems, including clinical decision support systems, would allow for a wider application of universally applied Standards of Care.

The regional burden of diseases in the Middle East and North Africa, especially among middle and high-income countries, has centered on a number of non-communicable disorders, including heart diseases, stroke, psychiatric conditions and metabolic conditions such as diabetes. All have been associated with premature death, disability, increased morbidity and enormous socioeconomic stressors within a number of countries within the region. While several countries have embraced these challenges by providing improved access to health care services (ie: Oman, Qatar, United Arab Emirates), others have been lagging behind. There are large disparities in the availability and quality of patient care within the country, often affecting the lower and middle socio-economic classes. Another contributing factor in improving access to services is the medical record system. In developing countries, healthcare records are kept on paper, thereby making it more difficult to use the patient information for the management of patient care, and in facilitating the reporting of patient information on referral to the sub-specialist. This limitation in access to patient information acts as a hindrance in the delivery of healthcare and in the coordination of healthcare between

the primary care providers and the specialists. Although there is an apparent direct correlation between the Gross Domestic Product of the country and the availability of electronic medical care reporting, many rural communities and counties among the more wealthy countries in the Middle East also have similar shortcomings in the availability of digital reporting.

The Johns Hopkins Health Care System (JHHS) has a well-established imprint on providing educational and clinical consultation services in the State of Maryland, as well as several countries in the Middle East. JHHS has implemented a number of initiatives to help deliver a more equitable and effective health care system by implementing a number of e-health strategies, including:

- A. Electronic Data Reporting: the ongoing collection of patient data through an electronic patient reporting system that is shared within the umbrella of institutions helps to provide the most up to date summary of individuals' medical and family history, investigations and past consultations. Electronic patient reporting may in the future include sensitive information involving genomic

and pharmacogenomics information that can help guide diagnostic and treatment decisions. Although these patient portal systems have been designed to enhance communication among primary and sub-specialty health care providers and help reduce the redundancy of health care services, the access to the information must be tempered by institutional firewalls to protect patient confidentiality.

- B.** Provider to provide electronic consultations: this Telehealth strategy is ideally suited to target the barriers associated with patient accessibility to health care services and efficient provider communication. In telehealth, the JHHS does provide a number of medical second opinion e-consults and e-referral services under the auspices of Johns Hopkins International for a number of affiliated clients in the Middle East. Several pilot projects are presently in effect within the State of Maryland to improve the accessibility to medical consultation services in underserved regions within the State, including the Eastern Shore. As in many countries and regions, Eastern Maryland is faced with similar problems in the rise of non-communicable diseases associated with obesity, including diabetes and heart disease, and the limited accessibility to tertiary care services that are located primarily within the city of Baltimore. This region is made up of about one half million inhabitants of lower and middle socio-economic class. The major municipalities within this region range from 1-3 hours from a tertiary care facility with less than half of its inhabitants having access to transportation. The availability of an electronic consultation system is anticipated to facilitate patient accessibility to tertiary care consultations. Electronic consultation allows primary care providers and sub-specialists to triage referral urgency, coordinate patient referral, and discuss a patient's sub-specialty needs. Our experience with provider to provider communication revealed a substantial decrease in the referral time. . Moreover, with respect to preventive medicine, especially with the increasing problem of obesity and associated co-morbidities, these electronic consultations have allowed for a closer monitoring of the patients, provide timely dissemination of paramedical services such as improved education of patient nutrition, and the provision of occupational and behavioral modification therapies.

**C.** Clinical Decision Support:

- i. Best Practice Guidelines: a number of these guidelines have been implemented within our electronic reporting systems on either new or established patients followed within the JHHS. These guidelines only serve to provide supportive measures to the principle care provider and/or sub-specialists without any discernible medico-legal implications. Based on either an evidence-based approach when

available or on published guidelines, these best practice strategies serve to identify those patients with identifiable risks, ie. Obesity, thereby setting into effect a diagnostic treatment approach and patient monitoring that is electronically provided to the care giver. Similar strategies are in place within the JHHS radiology and oncology to guide diagnostic and treatment decisions. Among those patients with an identifiable chronic disorder, ie. Inflammatory Bowel Disease, the JHHS has implemented Best Practice Guidelines to monitor the presence of sub-clinical co-morbidities, including sclerosing cholangitis, autoimmune hepatitis, and vitamin D deficiency.

- ii. Patient-Centered Care (PCC): PCC is a model embraced by JHHS in which the providers partner with patients and their families to identify and meet a full range of clinical needs. Although digitalized reporting and electronic consultation represent one aspect of PCC, several other pilot projects are well underway within the JHHS to provide a patient-tailored approach that not only integrates the care of patients among the various providers but also allows for direct patient access to the treating consulting physician. By utilizing a number of telemedicine communication strategies, including electronic patient record systems ie. MyChart, patients may facilitate direct communication with the treating consultant. Moreover, it is hoped that clinical information can be transmitted in real-time through a number of mobile applications to the treating physician. There are a number of other mobile interfaces that are available that can also be utilized, including Haiku for Smartphones, Canto for Tablets and Limeric for Apple watch. At present, we have implemented a pilot project where adolescent patients with IBD use mychart to communicate with their consulting expert in IBD. The aim is to facilitate the transmission of patient clinical information (established indices of disease activity); to measure patient adherence to therapy, including the re-ordering of sophisticated parenteral home therapies; and to create patient reminders for implementing preventive strategies ie. Vaccination among the immunosuppressed patient.

## Conclusions

As e-health experience grows, healthcare systems within the United States have the opportunity to select from a variety of tools to address the issues of access, referral, coordination, patient monitoring and patient education for certain regions within the country. The JHHS is poised to better understand and resolve most of the logistical,

technological and financial barriers in telehealth, including reimbursement for physician services within the next 5 years. These same services can also be applied an/or expanded to networks of providers and/or large public organizations in the Middle East to improve timely communication and care coordination, access to care and a more efficient use of resources.

## Biographies

**Dr. C. Cuffari** is a pediatric gastroenterologist and clinical researcher at The Johns Hopkins University, Associate Professor of Pediatrics, and Director of the Pediatric GI Fellowship Program. His primary interest is on understanding the pharmacogenomics and pharmaco-kinetics of drug metabolism in children and adolescents with a number of gastrointestinal disorders, including Inflammatory Bowel Disease. His work has been primarily focused at applying these pharmacological principles into pediatric practice with the aim of improving overall clinical response to drug

therapy while minimizing the risk of drug toxicity. He has authored greater than 100 papers, chapters and invited reviews, most of which address clinical outcomes and quality of life for children with pediatric gastrointestinal disease. He also serves as Fellowship Director in the Division of Pediatric gastroenterology and nutrition at The Johns Hopkins University.

**Hortenzia Beciu**, currently Director for the Middle East and Africa (MEA) at Johns Hopkins Medicine International, provides oversight in partnership management, market analysis and business development in MEA. Before joining JHI, Hortenzia worked for the World Bank Group where she worked with foreign governments, bilateral and multilateral development partners, international not for profit organizations and various health industry groups and associations, creating bridges and projects between these stakeholders. Hortenzia Beciu holds a Master in Public Health, Global Health from The George Washington University, and a Medical Degree from the University of Medicine and Pharmacy, Carol Davila.



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## Health Care Management Competencies Volume 55 Number 3

## Résumés en Français

**Un commentaire sur la mise en œuvre et l'avancement du Patient Safety Friendly Hospital Initiative (PSFHI - Initiative Hôpitaux conviviaux pour la sécurité des patients) dans la région de la Méditerranée orientale**

La sécurité des patients (SP) est une préoccupation mondiale en matière de santé qui a fait l'objet d'une attention particulière dans le programme mondial de couverture universelle des soins de santé. La Patient Safety Friendly Hospital Initiative (PSFHI) est une initiative menée par l'Organisation mondiale de la santé (OMS) qui constitue une réponse nécessaire pour évaluer, surveiller et faire progresser les normes de santé publique dans la région de la Méditerranée orientale (RMO). Elle a vu le jour en 2011 et mise en œuvre jusqu'à aujourd'hui dans plus de 160 hôpitaux de l'ensemble de la RMO. Le Bureau régional de l'OMS pour la Méditerranée orientale (BRMO) fournit en permanence un appui aux États Membres afin qu'ils adoptent et institutionnalisent l'initiative à leur niveau national respectif. Une troisième édition du manuel de l'initiative sera publiée d'ici la fin de 2019 sous la forme d'une version mise à jour par rapport à celle qui a été publiée en 2016. En raison de l'amélioration observée lors de la mise en œuvre, la PSFHI est devenue l'une des dix principales initiatives stratégiques du BRMO, prioritaires dans la vision 2019-23 de l'EMRO.

**Aperçu de la gouvernance des hôpitaux du secteur public au Pakistan : des leçons pour l'avenir**

La gouvernance des hôpitaux du secteur public a été un défi majeur au Pakistan. Un cadre a été adapté pour évaluer la gouvernance aux niveaux macro et micro de la prise de décision. Au niveau macro, l'expérience de l'autonomie hospitalière pour améliorer l'efficacité et la qualité des soins n'a pas été concluante en l'absence de règles et de règlements appropriés. Suite au transfert des responsabilités en matière de santé, les gouvernements provinciaux ont instauré des régimes de réglementation pour améliorer la gouvernance et ont expérimenté les PPP pour améliorer la gestion des hôpitaux de district.

Au niveau micro, l'accent a été mis sur les aspects institutionnels de la gestion des hôpitaux. La plupart des hôpitaux publics sont confrontés à des défis liés à la gestion des ressources humaines, des finances et de la chaîne d'approvisionnement, au manque de technologie de l'information, à la mauvaise qualité des soins et au manque de préparation aux catastrophes et de capacité de gestion.

Le présent document propose trois priorités stratégiques que les décideurs doivent prendre en considération : premièrement, faire preuve de cohérence et d'engagement dans la mise en œuvre des politiques liées à la gouvernance hospitalière ; deuxièmement, lancer un programme national de renforcement des capacités pour les managers hospitaliers ;

et troisièmement, établir une e-gouvernance pour améliorer la responsabilisation, la transparence et la performance des hôpitaux.

**Système d'orientation et système intégré de gestion de l'information dans le secteur hospitalier public d'Oman**

Oman dispose d'un système d'administration en ligne très développé. Son système de gestion de l'information sur la santé publique est bien établi avec un système de référence électronique intégré à l'échelle du pays depuis une vingtaine d'années maintenant. Il y a une illustration de l'impact de ce système sur les hôpitaux à partir de la chirurgie et des naissances. Les défis décrits consistent à trouver un équilibre entre la nécessité de faire progresser les technologies de l'information concernant les soins de santé et le manque de ressources électroniques des utilisateurs finaux.

**Réforme du système de santé publique dans le royaume d'Arabie saoudite guidée par la vision sanitaire 2030**

Objectif : Examiner les thèmes émergents des réformes du système mondial de santé par rapport à la réforme du Royaume d'Arabie saoudite guidée par la vision sanitaire 2030.

Génération de données : Les réformes sont le mode privilégié de changement social utilisé par les sociétés modernes. La persistance d'une adaptation aux besoins de santé au sein du système de santé en Arabie saoudite a motivé la recherche de stratégies émergentes qui pourraient mettre en œuvre la réforme de la santé fortement demandée. En explorant le sujet, nous identifions les domaines d'amélioration potentielle et de résistance à une meilleure compréhension de la réforme du système de santé.

Conclusion : Résoudre les tensions liées à la réforme, ce qui exige le renforcement des capacités gouvernementales à concevoir et soutenir la réforme ciblée.

**Accréditation : Expérience de la Jordanie en matière d'amélioration de la qualité**

Dans cet article, le Health Care Accreditation Council avance son argument sur la façon dont l'adoption et la mise en place de mécanismes d'accréditation ont pu pousser le secteur des soins de santé jordanien à améliorer la qualité et la sécurité des patients, à faire bouger les établissements de santé et le gouvernement pour aborder ces questions systématiquement et de manière sensible, à relever la barre sur de nombreuses questions et à influencer les politiques et le renforcement des capacités. Dans un pays qui obtient de très bons résultats en ce qui concerne de nombreux indicateurs de santé, l'accréditation a ouvert les yeux sur la sécurité des soins dans un environnement bien réglementé, mais avec des lacunes en



matière d'application de la loi et le manque de données.

#### « La qualité à l'hôpital, entre standardisation et compétition : l'expérience marocaine »

Dans un contexte de réforme du financement de la santé et de déficit qualitatif des établissements de santé, le Ministère de la Santé du Maroc a initié deux stratégies d'amélioration de la qualité : l'accréditation/certification et la compétition. Sur une période de 10 ans (2007-2017), les résultats de l'accréditation des hôpitaux ont été décevants car aucun hôpital n'a pu être accrédité mais plusieurs compétitions sur les résultats (performance) et la qualité des processus (concours qualité) ont été organisées. Le soutien technique et financier a joué un rôle déterminant dans la durabilité de ces stratégies qui doivent s'inscrire dans le cadre d'une politique nationale de mobilisation des parties prenantes et des ressources pour la qualité.

#### Plan de transformation de l'hôpital : réalisations, défis et leçons apprises

Dans cet article, les auteurs discutent de l'évolution du système iranien de gestion hospitalière après le Iranian Health Transformation Plan (Plan Iranien de Transformation concernant la Santé) - HTP. Ces changements se traduisent par une « diminution des paiements directs pour les patients hospitalisés dans les hôpitaux », « l'amélioration de la qualité des services d'hébergement dans les hôpitaux gérés par le ministère de la Santé », « le renforcement des capacités des gestionnaires des hôpitaux publics », et finalement « la création d'hôpitaux indépendants ».

La réforme des hôpitaux a considérablement réduit les paiements directs des patients, augmenté la productivité, réduit l'insatisfaction des patients et favorisé un accès équitable.

Les principaux problèmes qui entravent ces améliorations sont le manque de ressources suffisantes, la bureaucratie inutile et le manque de compétences en matière de gestion parmi les gestionnaires.

Mots clés : plan de transformation concernant la santé Iran, renforcement des capacités, gestionnaires de la santé, hôpital indépendant, service d'hébergement en milieu hospitalier

#### Façonner l'avenir de la conception des établissements de santé à Dubaï

Le secteur de la santé à Dubaï croît à un rythme rapide et il est nécessaire de s'assurer que la conception des établissements de santé répond aux besoins actuels et futurs en matière de planification des capacités cliniques. Cet article traite brièvement de l'expérience de la Dubai Health Authority (DHA) en matière d'élaboration de directives sanitaires de classe mondiale et souligne les liens entre les besoins de planification de la capacité clinique, l'amélioration de la conformité réglementaire et les résultats des patients. L'article se termine par plusieurs leçons clés et plans de la DHA.

#### Établir des réseaux cohérents de systèmes d'information concernant la santé afin d'accroître l'accès à l'information aux patients et la prestation des services : une approche ponctuelle des soins de santé de la population au Moyen-Orient

Les systèmes de soins de santé du Moyen-Orient et de l'Afrique du Nord sont confrontés à des défis importants, notamment une augmentation importante du nombre de troubles non transmissibles comme l'obésité et le manque

de disponibilité et d'accessibilité aux soins des sous-spécialités. Bien que de nombreuses régions des États-Unis soient confrontées à des problèmes similaires, plusieurs systèmes de soins de santé, dont le Johns Hopkins Health Care System (JHHS), ont mis en œuvre un certain nombre de systèmes de cybersanté pour faciliter l'accès à l'information aux patients et la prestation de services médicaux spécialisés. Ces systèmes d'information comprennent l'enregistrement électronique des renseignements sur les patients, qui constitue un portail de communication entre les fournisseurs de soins primaires et les fournisseurs de sous-spécialités, et les consultations électroniques de fournisseur à fournisseur qui facilitent le triage et la coordination de l'orientation des patients et, par conséquent, l'accessibilité aux services médicaux dans les sous-spécialités. À l'avenir, des systèmes d'information sur la santé cohérents et complets, notamment des systèmes d'aide à la décision clinique, permettraient une application plus large des normes de soins universellement appliquées.

## Health Care Management Competencies Volume 55 Number 3

## Resumen en Español

**Un artículo de comentario sobre la implementación y el avance de la Iniciativa del Hospital Amigable con la Seguridad del Paciente [Patient Safety Friendly Hospital Initiative (PSFHI)] en la Región Mediterránea Oriental.**

La Seguridad del Paciente (PS) es un problema de salud mundial que ha tenido un gran énfasis en la agenda global cuyo objetivo es la cobertura sanitaria universal. La Iniciativa del Hospital Amigable con la Seguridad del Paciente (PSFHI) es una iniciativa de la Organización Mundial de la Salud que surge como una respuesta necesaria para evaluar, monitorizar y hacer avanzar los estándares en toda la Región Mediterránea Oriental (EMR). Fue fundada en 2011 y desde entonces se implementó en más de 160 hospitales en toda la EMR. La Oficina Regional del Mediterráneo Oriental de la OMS proporciona apoyo continuo a los Estados miembros para adoptar e institucionalizar la iniciativa en su respectivo nivel nacional. Una tercera edición del manual de la iniciativa se publicará a fines de 2019 como una versión actualizada del anterior de 2016. Debido a la mejora observada hasta la implementación, la PSFHI se ha convertido en una de las mejores diez iniciativas estratégicas de la EMRO, priorizada en la visión de EMRO 2019-23.

**Revisión de la gobernanza de los hospitales del sector público en Pakistán: lecciones para el futuro**

La gobernanza de los hospitales del sector público ha sido un gran reto en Pakistán. Se ha adaptado un marco de trabajo para evaluar la gobernanza a niveles macro y micro en materia de toma de decisiones. A nivel macro, la experiencia de la autonomía hospitalaria para mejorar la eficiencia y la calidad del cuidado ha sido inconcluyente en ausencia de normativas y regulaciones adecuadas. A partir de la descentralización en el área de salud, los gobiernos provinciales han instituido regímenes para una gobernanza mejorada y han experimentado con los PPP para mejorar la gestión de los hospitales de cada distrito.

A nivel micro, se puso especial énfasis en los aspectos institucionales de la gestión hospitalaria. La mayoría de los hospitales públicos enfrentan retos relacionados con los recursos humanos, la gestión financiera y de la cadena de suministro; falta de tecnología de la información, baja calidad en los cuidados y falta de preparación para los desastres y de capacidad de gestión.

Este trabajo ofrece tres prioridades estratégicas para que los legisladores tengan en cuenta: en primer lugar, demostrar coherencia y compromiso en la implementación de políticas relacionadas con la gobernanza hospitalaria; en segundo lugar, lanzar un programa de desarrollo de capacidades a escala nacional para gerentes de hospitales; y en tercer lugar, establecer un sistema de administración electrónica para

mejorar la contabilidad, la transparencia y el rendimiento de los hospitales.

**Sistema de referencias y gestión de la información integrada en el sector hospitalario público de Omán**

Omán tiene una administración pública en línea muy desarrollada. Su sistema de información sanitaria pública se encuentra muy bien establecido con un sistema de derivación integrado a lo largo y a lo ancho de todo el país desde hace ya un par de décadas. Existe una ilustración del impacto de este sistema en los hospitales, desde una cirugía hasta los nacimientos. Los retos descritos tratan sobre el equilibrio necesario entre el avance de la tecnología de la información sanitaria y el agotamiento tecnológico del usuario final.

**Reforma del sistema de sanidad pública en el reino de arabia saudita orientada por una visión 2030 del sector**

Objetivo: revisar los temas emergentes en las reformas del sistema sanitario global, en comparación con la reforma del Reino de Arabia Saudita orientada por la visión 2030 del sector.

Generación de datos: las reformas son el modo privilegiado del cambio social utilizado por las sociedades modernas. La adaptación interna persistente a las necesidades de salud dentro del sistema sanitario en Arabia Saudita ha motivado una búsqueda de estrategias emergentes que podrían implementar la reforma sanitaria tan necesaria. Tras la exploración del tema, identificamos áreas de mejora y resistencia potencial para comprender mejor la reforma del sistema sanitario.

Conclusión: el abordaje de las tensiones generadas por la reforma requiere un refuerzo de las capacidades gubernamentales para designar y sostener la reforma específica.

**Acreditación: el arma de mejora de la calidad en Jordania**

En este artículo, el Consejo de Acreditación de la Sanidad expone su argumento sobre cómo la adopción y la creación de mecanismos de acreditación permitió al sector sanitario de Jordania mejorar los problemas de calidad y seguridad de los pacientes, modificar las instituciones sanitarias y de gobierno para abordar estos problemas de forma sistemática y medible, e influenciar las políticas y la creación de capacidades. En un país que obtiene muy buenos resultados en muchos indicadores de salud, la acreditación ha resultado un factor esclarecedor y ha impulsado una atención sanitaria más segura en un entorno bien legislado, si bien todavía con un cumplimiento débil y con algunas lagunas en los datos.

**«La calidad hospitalaria, entre la estandarización y la competición: la experiencia de Marruecos»**

En un contexto de reforma financiera de la sanidad y défi-

cit de calidad en las instituciones sanitarias, el Ministerio de Salud de Marruecos ha iniciado dos estrategias de mejora de la calidad: la acreditación/certificación y la competición. Durante un periodo de 10 años (2007-2017), los resultados de la acreditación hospitalaria fueron decepcionantes, ya que ningún hospital pudo ser acreditado, pero se organizaron numerosas competiciones en materia de resultados (eficiencia) y calidad de los procesos (concursos de calidad). La ayuda técnica y financiera han sido fundamentales en la sostenibilidad de estas estrategias, pero necesitan ser parte de una política nacional de movilización de actores y recursos en pro de la calidad.

#### **Plan de transformación hospitalaria: logros, retos y lecciones aprendidas**

En este artículo, los autores debaten la evolución del sistema de gestión hospitalaria en Irán tras el Plan de Transformación de la Salud Iraní (HTP, por sus siglas en inglés). Estos cambios apuntan a la «Disminución de los gastos de bolsillo para los pacientes ingresados en hospitales», «Mejora de la calidad de los servicios de hotelería brindados en los hospitales gestionados por el Ministerio de Salud», «Creación de capacidades de los gerentes de hospitales públicos» y, por último, «Creación de hospitales independientes».

La reforma de los hospitales ha reducido significativamente los gastos de bolsillo de los pacientes, se incrementó la productividad, se redujo la insatisfacción de los pacientes y se promovió un acceso justo.

Los principales problemas en el camino hacia estas mejoras son la falta de recursos suficientes, la burocracia del despilfarro y la falta de habilidades de gestión entre los gerentes.

Palabras clave: Plan de Transformación de la Salud Iraní, creación de capacidades, gerentes sanitarios, hospital independiente, hotelería hospitalaria

#### **Delineando el futuro del diseño de las instalaciones sanitarias en Dubái**

El sector sanitario en Dubái está creciendo a un ritmo rápido y existe una necesidad de garantizar que el diseño de las instalaciones sanitarias acompañe las necesidades actuales y futuras de la planificación en capacidad clínica. Este artículo debate brevemente la experiencia de la autoridad sanitaria de Dubái (DHA, por sus siglas en inglés) para desarrollar guías para instalaciones sanitarias (HFG, por sus siglas en inglés) y enfatiza las relaciones entre las necesidades de planificación de la capacidad clínica, la mejora del cumplimiento de las normas y los resultados en relación con los pacientes. El artículo concluye con varias lecciones importantes y con planes para la DHA.

#### **La creación de redes coherentes de sistemas de información sanitaria para incrementar el acceso a la información de los pacientes y el suministro del servicio: un oportuno abordaje de la asistencia sanitaria en Medio Oriente**

Los sistemas sanitarios de Medio Oriente y el norte de África están afrontando retos significativos, incluyendo un incremento notable de afecciones no transmisibles, como la obesidad, y la falta de disponibilidad y accesibilidad a atención médica en subespecialidades. Sin embargo, muchas regiones dentro de los Estados Unidos están experimentando problemas similares. Muchos sistemas sanitarios, incluido el Johns Hopkins Health Care System (JHHS) ha implementa-

do un número de sistemas sanitarios electrónicos para facilitar el acceso a la información del paciente y al suministro de servicios de especialidades médicas. Estos sistemas de información incluyen el registro electrónico de la información del paciente que genera un portal de comunicación entre los proveedores de salud primarios y de subespecialidades; y consultas electrónicas entre proveedor y proveedor que facilitan la clasificación y la coordinación de las derivaciones de pacientes y, en consecuencia, la accesibilidad a servicios médicos de subespecialidades. En el futuro, los sistemas de información sanitaria integrales, incluyendo los sistemas de apoyo en las decisiones clínicas, permitirían una más amplia observancia de las Normas de Cuidado que se aplican universalmente.

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## 中文摘要

**关于在地中海东部地区实施“患者安全保护医院计划”(PSFHI)及其进展的评论文章**

患者安全(PS)是一个全球关注的卫生保健问题。在追求全民卫生保健覆盖这一全球议程中,这一问题得到了极大的重视。患者安全保护医院计划(PSFHI)由世界卫生组织(WHO)牵头实施,以对整个地中海东部地区(EMR)患者安全标准的评估、监控和推进作出必要的反馈。这一计划自2011年启动,迄今已在地中海东部地区的160多家医院实施。世卫组织地中海东部地区办事处(EMRO)向各个会员国提供持续支持,以便其在国家层面上采纳这一计划并将其以制度化的形式固定下来。本计划手册的第三版在此前2016年版的基础上作出了更新,将于2019年底发布。由于“患者安全保护医院计划”在实施过程中取得的进展,其已成为EMRO的十大战略计划之一,并在EMRO的2019-2023愿景中得以优先实施。

**巴基斯坦公共部门医院治理调研:经验教训总结**

公立医院治理一直是巴基斯坦的一个重大难题。为此,该国制定了一个框架并进行调整,用于评估宏观层面和微观层面决策制定的治理工作。在宏观层面,由于适用的法则和规章不足,医院通过自治在提高医疗效率和质量方面的经验尚无定论。在卫生领域实施权力下放之后,省政府制定了以改善治理为目的的监管制度,并尝试通过PPP(公私合营)模式来改善区域医院的管理。

而在微观层面,将制度作为医院管理的重点工作。大多数公立医院都面临人力资源、财务和供应链管理方面的挑战;信息技术配备不足、护理质量不佳、同时备灾和管理能力也有所欠缺。

本文提出三个战略重点供决策者参考——首先,应落实与医院治理相关的政策在实施方面的一致性和承诺;其次,应在全国范围内启动针对医院管理人员的能力发展计划;第三,实行电子政务,加强医院的问责制、透明度,提高绩效。

**阿曼公立医院领域的转诊系统和综合信息管理系统**

阿曼有着高度发达的电子政务。该国的公共卫生信息管理制度系统也十分完善,遍及全国各地的综合电子转诊系统已有数十年的历史。本文详解这一系统从手术到新生儿生产等各方面对于医院的影响。主要涉及在医疗信息技术发展需求和最终用户`电子倦怠二者之间取得平衡的相关挑战。

**以2030年健康卫生愿景为指导的沙特阿拉伯王国公共卫生体制改革**

目标:参照以2030年健康卫生愿景为指导的沙特阿拉伯王国卫生改革,回顾全球卫生体质改革的新兴主题。

数据生成:改革是专属于现代社会的社会变革模式。沙特阿拉伯卫生系统为迎合卫生需求而持续实施的变革,促使人们寻求可能达成高要求卫生改革的新兴战略。我们研究这一主题后,发现了可能提升及阻碍人们更好地了解卫生系统改革的一些方面。

结论:要应对改革的紧张局面,需要增强政府在设计和支持针对性改革方面的能力。

**认证:乔丹质量提升之剑**

在本文中,医疗保健认证委员会(Health Care Accreditation Council)提出了这一论点:采用和建立认证机制能够推动约旦医疗保健行业的质量提升和患者安全等问题,从而推动医疗保健机构和政府以系统性、可衡量的方式来解决这些问题,同时在多个方面得到提升、并对政策和能力建设产生影响。在一个在许多卫生指标上表现良好的国家,认证对于监管良好的环境下的安全护理可以起到扩展视野和推动的作用,但同时其也存在执行不力和数据真空的弊端。

**“标准化和竞争之间的医院质量:摩洛哥的经验”**

在卫生保健机构的卫生融资改革和质量不尽人意的背景下,摩洛哥卫生部启动了两项质量提升战略:检定/认证和竞争。在10年的时期内(2007年-2017年),医院认证方面取得的成果令人失望——没有任何医院通过认证;但竞争方面,组织了几次关于成绩(绩效)和流程质量(质量竞赛)的比赛。技术支持和经济资助有效协助了这些战略的持续实施,但还需要将这些支持纳入国家政策,以起到对各利益相关方和资源的动员作用,从而促进质量改革。

**医院转型计划:成就、挑战和经验教训**

在本文中,作者讨论了伊朗在实施卫生改革计划(HTP)之后,其国内医院管理体系的演变。这些变化涉及“减少”医院住院患者的“自付”费用,“提高卫生部运营医院提供的酒店式服务质量”和“公立医院管理人员的能力建设”,并最终“构建独立医院”。



医院改革极大减少了患者自费支付费用，提高了生产力，降低了患者的不满意度，还提升了渠道公平性。

这些改革遇到的主要障碍包括：资源不足、浪费官僚作风和管理人员管理技能不足等。

关键词：伊朗卫生改革计划，能力建设，健康管理师，独立医院，医院旅馆

### 构建迪拜卫生机构设计的前景

随着迪拜卫生部门的快速发展，卫生机构的设计需要确保能满足当前和未来在临床能力规划方面的需求。本文简要讨论了迪拜卫生局（DHA）在制定“世界一流卫生机构指南”（HFG）方面的经验，重点指出临床能力规划需求、提高监管合规性和患者就医成效之间的联系。文章最后列出了几个重点经验教训和DHA计划。

### 建立一致的卫生信息系统网络，提升患者信息获取和服务提供：及时解决中东地区的人群卫生问题

中东和北非地区的卫生系统正面临着重大挑战，包括肥胖等非传染性疾病的数量显著增加，以及在附属专科护理方面可用性和可及性的不足。尽管美国许多地区也都面临类似的问题，但包括约翰·霍普金斯健康系统公司（JHHS）在内的多个医疗保健系统已采用多种电子医疗系统，以提升获取患者信息、提供医疗专科服务的能力。这些信息系统的内容，包括可以为主要专科供应方和附属专科供应方提供沟通平台的电子患者信息记录；还有可促进患者转诊分类和协调从而有利于使用附属专科医疗服务的供应方-供应方电子咨询服务。在未来，通过采用包括临床决策支持系统在内的全面、一致的卫生信息系统，将有助于更广泛地应用普遍适用的护理标准。

## IHF events calendar

### 2019

#### IHF

43<sup>rd</sup> World Hospital Congress  
Oman Convention and Exhibition  
Centre, Muscat, Oman  
6-9 November 2019  
Hosted by: Ministry of Health, Sultanate  
of Oman

### 2020

#### IHF

44<sup>th</sup> World Hospital Congress  
Palau de Congressos de Catalunya  
Barcelona, Spain  
3-5 November 2020  
Hosted by: Unió Catalana d'Hospitals  
(La Unió)

### 2021

#### IHF

45<sup>th</sup> World Hospital Congress  
Dubai, United Arab Emirates  
December 2021  
Hosted by: Dubai Health Authority

For further details contact the: IHF Partnerships and Project, International Hospital Federation, 151 Route de Loëx, 1233 Bernex, Switzerland;  
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## IHF/Dr Kwang Tae Kim Grand Award



Dr. Kwang Tae Kim is a surgeon with immense contributions to the healthcare sector both nationally and internationally. He was President of the International Hospital Federation from 2013 to 2015, President of the Asian Hospital Federation in 2008-2009 and President of the Korean Hospital Association in 2003-2004. He has been the Chairman of Daerim Saint Mary's Hospital in Seoul, his own hospital, since 1969.

As a strong advocate of excellence in clinical governance, leadership, quality and safety, Dr Kim initiated and generously donated to set up the IHF Awards Program during his presidency to promote IHF's visibility and its role as a knowledge hub. Because of this, the Grand Award, the most prestigious among all the IHF Awards, was aptly named after him.

The IHF/Dr Kwang Tae Kim Grand Award will be bestowed to health system, healthcare organisation or facility which achieves excellence in multiple areas including, among others, quality and patient safety, corporate social responsibility, innovations in service delivery at affordable costs, healthcare leadership and management practices. This Award is only open to healthcare service provider organisations which are either IHF Full or Associate Members.

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