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The Health Management Asia (HMA) Conference is the premier learning conference and expo for hospital managers in Asia. Now in its thirteenth year, HMA is committed to keeping hospital managers, clinicians and health care leaders and medical doctors in Asia updated on worldwide health care management thinking and experience while creating a real and virtual forum for regional networking among health care managers. It includes thought-leading topics for the plenary sessions, and a CEO Forum and a Health Leaders' Summit that are targeted at senior and top executives.

The articles in this issue of *World Hospitals and Health Services* include some the most innovative contributions from the twelfth HMA held at the Shangri-La Hotel in Bangkok, Thailand, on 12–13 September 2013, which hosted over 880 delegates representing 398 hospitals and organizations from 34 countries.

In "Building a culture for innovation: A leadership challenge" the author, Lynne Maher, emphasizes the important impact that strong leadership can have on the culture for innovation and change in health care. This message about the important role of leadership is repeated in The key to health services in Turkey: New perspectives on leadership and hospital management" where Alper Sahin summarizes some of the important reforms in leadership and management in Turkey since 2005.

In "The National Accreditation Board for Hospital and Health Care Providers accreditation programme in India" the authors Girdhar Gyani and B Krishnamurthy describe the progress made on accreditation in India, while in "Hospital accreditation – A foundation for higher reliability", Paula Wilson highlights two different but complimentary methods of improving the quality and safety of health care.

Shifting from quality to efficiency issues, in "Hospital productivity: How to KILL or create a productive hospital environment" Michael Podolinsky stress that productivity comes from investing in people and giving them the tools and authority to do their jobs effectively.

Likewise in "Teamwork and communication: An effective approach to patient safety" the authors Sandhya Mujumdar and Diana Santos remind readers about the critical role played by effective communication and teamwork in the delivery of high quality safe patient care, especially within a complex organization.

In "Are clinical audits enough to bring about improvement in the overall health care delivery?" Amin Rajani and Syed Sohail show that regular audits and system reviews not only improve the quality of services to patients but also build a more positive organizational culture.

Finally, in "Opinion matters" the authors Khuderchuluun Nanjid, Chimedsuren Ochir, Sumberzul Nyamjav and Purevjav Mendsaikhan describe the specific conditions required to meet the health care needs and demands of Ulaanbaatar City by 2020.

At the 2014 HMA on 28–29 August 2014 in Cebu City, Philippines, there will be an emphasis on e-solutions aimed at offering hospital and health care managers an opportunity to learn about specific tools and techniques that enable them to do their jobs better in an environment of quality learning and friendly social exchanges. There will also be "how-to" skills-related workshops, run by experienced professors and industry experts with a track record for teaching. As usual, HMA will bring together hospital and health care managers from different parts of the Asia Pacific region in the belief that this fusion is conducive to broadening the mind and building the contacts of the participants, as well as providing a forum to update and review the best hospital management practices.

We look forward to seeing you there later this year. ❏

Building a culture for innovation: A leadership challenge

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ABSTRACT: It is recognized that health services are facing increasing cost pressures amid a climate of increasing demand and increasing expectations from patients and families. The ability to innovate is important for the future success of all health care organizations. By making some simple but profound changes in behaviours and processes as illustrated across seven dimensions, leaders can have great impact on the culture for innovation. This in turn can support the transformation of health services through increased innovation.

Many health care staff would agree that working within health care services feels challenging at the moment. There is a need to operate in an environment of minimal or no real term growth, while also increasing quality and safety and improving the patient experience at the same time as reducing cost.

It is tempting for leaders to respond to the challenging health care environment with an over-reliance on cost-cutting methods, such as freezing expenditure on education and recruitment and restricting the purchase of some supplies. While such measures appear to provide a quick fix, they do not create sustainable change and can jeopardize the quality of care provided to patients and their families. In addition, cost-cutting measures can result in a demoralized workforce who feel that leaders are wielding a stick. They also tend to create mindsets that focus on scarcity of resources rather than recognizing the abundance of skills and expertise that are present in our staff, other partners, and the patients and families who use our health services.

Today's leaders need to build and utilize the confidence, skills, wisdom and experience of their entire workforce if they want to successfully meet the challenges ahead. This requires a more innovative approach than many leaders have tried before. The call for innovation has featured in many health policy documents and health community strategies as the ability to innovate becomes increasingly important. However, despite well-articulated needs and strategies – and the availability of methods and tools – efforts at real innovation in health care are likely to move at the same slow pace and have the same mixed results that general improvement efforts have had in the past. That is, unless we explicitly address the organizational culture needed to support innovation by putting in place "…the right climate, culture, organization (team-based) and leadership for innovation – the people side, which is perhaps the most difficult to achieve" (Cooper 2010).

Leaders who wish to support innovation must understand the seven dimensions of culture that distinguish highly innovative organizations from those where staff feel stifled and unable to be innovative (Figure 1).

These dimensions in more detail
The notion of risk taking often creates anxiety for health care staff,

> **"Culture will trump rules, standards and control strategies every single time."**
> National Advisory Group on the Safety of Patients in England 2013: 11

who believe their role is to keep patients safe and reduce risks. However, when we consider risk taking in the context of innovation it is about establishing an organizational climate where people feel free to try out new ideas. Teams need to develop risk assessment mechanisms that avoid either taking inappropriate risk or prematurely rejecting ideas due to an over-estimation of risk. Those in health care can learn from leaders in innovative organizations who respect and occasionally even celebrate "failure", demonstrating that they are more interested in learning from failure than in punishing it.

Basadur (1995) commented that "fear to make a mistake" and "fear of appearing foolish and looking bad before others" often resulted in staff preferring the status quo rather than embracing creativity. The value of learning from failure has been highlighted by many notable innovators, including Sir James Dyson: "I made 5,127 prototypes of my vacuum before I got it right. There were 5,126 failures. But I learned from each one. That's how I came up with a solution. So, I don't mind failure" (http://www.fastcompany.com/59549/failure-doesnt-suck. 2007).

Many innovative organizations actually view failure as an important learning process rather than something to fear or chastise – most plan for it and actively welcome it as an important part of the process.

The resources dimension is not concerned only with finance; it considers resources in a broader sense, taking into account factors such as the authority and autonomy to act on ideas. However, it is worth highlighting that the presence of some financial resources does signal that the organization is taking innovation seriously.

FIGURE 1: DIMENSIONS OF INNOVATION CULTURE

Relationships
• Honouring everyone's input
• Diversity
• Trusting, open environment
• Team based work

Risk taking
• Emotional support
• Balanced assessment
• Learning from failure rather than punishment
• Trying new things

Tools
• Flexibility
• Deliberate process
• Training
• Encouragement for skills development

Resources
• Funding
• Time
• Authority to act

Rewards
• Aligned with organizational goals
• Recognition
• Intrinsic motivation
• Individualized

Goals
• What, but not how
• Specific call for innovation
• Tie to strategic plan
• "Stretch"
• Clear case for need

Knowledge
• Wide scope search
• Uncensored, unfiltered, unsummarised
• Free-flowing

Source: Maher, Plsek, Price and Mugglestone 2010: 9.

Mulgan and Albury (2003) reviewed the innovation literature and suggested that supporting people to create time away from their core tasks is critical for stimulating innovation in the public sector. This is not necessarily about completely freeing people up from their day jobs; it is about allowing them time to think differently and explore a range of potential ideas that can solve a problem or transform a service.

Having a broad knowledge from both within and outside the organization or system enhances staff ability to be inspired and creative. Organizations that are known to be innovative are always "scanning the horizon", not just to monitor possible competitors but to understand what is happening at the leading edge of innovation across the industrial sectors. The University of Birmingham's Health Services Management Centre recommends that health service organizations should make it as easy as possible to find and share new knowledge about innovation. They should also help staff to learn from organizations that have a track record of innovation and encourage links with private sector organizations (Williams, de Silva and Ham 2008).

A practical example of finding and using knowledge from another industry is the World Health Organization's Surgical Safety Checklist (2008) which was adapted from the aviation industry and is now in regular use across the world.

As well as looking outside of the organization, it is important to ensure that knowledge and information about and within the organization is shared widely. In addition, it is preferable if the methods of communication are varied: for example, use lunchtime learning sessions, seminars, stand up huddles as well as newsletters and other forms of electronic communication.

Information that provides teams with knowledge about their standards and performance should be available in a format that does not feel like a negative judgement but rather inspires teams to seek out new ideas and improve.

Goals can actually support innovation, even if they are "tough". Leaders need to formally signal that innovation is desired by specifically asking for new ideas to existing challenges. They should strive to articulate what the goal is, but let staff work out how to achieve it. Innovation is often stifled if leaders state both the "what" and the "how". Clearly specified strategic goals often enhance people's creativity. These goals can be stretching and should be linked with operational and strategic plans so that innovation can clearly contribute to organizational needs.

Rewards for innovation can encourage people to look for and implement new ideas. Many organizations have celebration events where they provide awards to recognize significant achievements. Although these can be positive, they may also feel like "tokenism". The most successful recognition schemes avoid a one-size-fits-all approach; the best rewards are those that appeal to people's intrinsic and individual motives. For example, many people would rather have the time to spend visiting an organization that they feel is innovative, or researching new ideas, rather than a certificate or plaque to put on the wall. In addition, personal expression of appreciation is often felt to be the most important reward, and is more important to many people than a financial reward.

Tools. Leaders need to consider how they build capability and capacity in deliberate methods for creative thinking, idea management and implementation. There cannot be an expectation that people just know how to generate, select, test and implement

> "Without innovation, public services costs tend to rise faster than the rest of the economy. Without innovation, the inevitable pressure to contain costs can only be met by forcing already stretched staff to work harder."
>
> Mulgan G and Albury D 2003: 5

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ideas to achieve innovation. Successful organizations promote training and the application of formal creativity techniques by front-line staff. Many also encourage individuals to gain unusual and diverse experiences by visiting different industries or undertaking unusual mini courses that are not specifically related to health but could bring new ideas in. For example, a clinic receptionist spent a morning at a busy hairdressing salon to learn about their complex scheduling, which included different experts in cutting, colouring, setting, perming and styling. Similarly, a short course on design yielded new methods in problem solving for a graduate nurse, who then taught many of her colleagues.

The relationships dimension considers the interactions between staff in the organization or system. Environments where staff are regularly exposed to a range of different thinking from people other than those they usually work with provides rich inspiration for innovation. Many innovative organizations purposefully employ people from diverse backgrounds. Others create rich partnerships with local industries and find that there is much cross-pollination between respective staff. Within core teams, skills in effective teamwork, recognizing and valuing differences and in understanding everyone's perspectives enhances the ability to innovate.

The cost of health service provision is rising rapidly and this situation is not sustainable. Innovative approaches are needed to increase quality and safety and at the same time reduce cost. Today's leaders need to build and utilize the confidence, skills, wisdom and experience of their entire workforce if they want to successfully meet the challenges ahead.

This requires a more innovative approach than we have ever used before from every leader in health systems, creating a culture within which innovation can flourish is an essential way to start. ❏

Lynne Maher is a successful visionary leader who has been influential in creating significant improvement in health systems. Lynne has published guidance on innovation, patient experience, improvement and change management and has worked with a wide range of health care organizations and charities.

The key to health services in Turkey: New perspectives on leadership and hospital management

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ABSTRACT: Health services are one of the most important criteria for making a country function. Turkey has mobilized all of its resources to provide high-quality, easily accessible and patient-friendly services for its population. To achieve this aim, the Turkish health care system has been undergoing a significant transformation through its Health Transformation Programme begun in 2005. The reforms focus on the introduction of a general health insurance system, changing hospital health services, improvements in hospital management and transformational leadership skills.

Firstly, all state-run hospitals in the country were merged under the same umbrella, giving millions of people covered by the national security agency access to all of these hospitals. Secondly, all drugs and medical equipment used by patients were made free of charge. Thanks to these developments, hospitals were modernized, and this modernization process in the health sector is still continuing swiftly.

On the other hand, for Turkish hospitals to survive, they need to modernize further and become closer to European models, and produce new leaders with new paradigms.

In this new and changing health system, hospital leaders and executive officers should be visionaries and strategists advising when to change direction. Following this doctrine, most Turkish hospitals are now run by two top executives: the hospital manager and the chief executive officer who is in charge of business functions. These executives should clearly be the leaders of high-quality, health care organizations.

One of the most difficult areas for innovation across the world is the health care sector and, in particular, hospital services. Given the rapid changes in the hospital's operating environment and stakeholders, innovation and reform have become strategically important in managing hospitals. Professional management is one of the most essential functions in a hospital and is vital for achieving efficiency in performance. It is key to a hospital's survival. It is also important not to ignore the fact that education, knowledge and skills are the other key elements required in the health care sector.

Turkey's status as a country transititioning to a European system solidifies its place as an attractive site for investment because of its dynamic economy and young, growing workforce. Especially in the last two decades, the Turkish health sector has been growing faster than Turkey's current Gross Domestic Product (GDP).

Turkey has made tremendous improvements in its health care system over the past years and brought in many reforms, which were carried out by its government. One of the most important reforms is to improve the health care system that was first adopted in 2003. In the same year, the government passed new legislation which introduced a new system based on the performance of medical personnel at Turkish hospitals, and it encouraged most doctors to work full-time at their hospitals, which in turn reduced the need for most patients to go to clinics run by private doctors. Cancer screening and education centres were also opened in all Turkish provinces. In the following years, all state hospitals in the

country will merged under the same umbrella, giving millions of people using the national security agency cover access to all of these hospitals.

The next step was to make drugs and medical equipment completely free of charge for patients at state hospitals. Also, all emergency and intensive care treatments were made free at hospitals in Turkey as well. This complete change was justified as an "efficient use of resources to decrease costs and produce more services out of the same resource" by the Turkish Health Ministry. After all, the health ministry had created the principles and regulations that had united all the state hospitals. The aim was to mobilize the all resources allocated for service provision to serve the public. The Public Hospitals Union (PHU) and the hospitals in Turkey now offer low cost but world class medical care and

> Turkey's status as a country transititioning to a European system solidifies its place as an attractive site for investment because of its dynamic economy and young, growing workforce

> **To make people's jobs easier, leaders should also learn how to communicate with health sector workers and the public, to delegate and to upgrade their own abilities**

affiliated health services for the public. Hospital administrations in Turkey have operated more independently and become more flexible when using their resources. Autonomous administrative units have also gained responsibilities along with their competency and are given direction in planning their resources, personnel investments, management costs, budget and objectives. All these factors are taken into consideration in the strategic work load for the area for which they are responsible. According to the Turkish Health Ministry regulations and directives, the aim of this union is "to determine the relevant principles on the establishment and operation of public hospitals in Turkey as determined by the Council of Ministers in order to ensure that secondary and tertiary health services are provided in participatory, equal, high quality and easily accessible ways and are appropriate for the needs and expectations of society, through the efficient and effective use of resources".

On the other hand, for Turkish hospitals to survive, they need to become modernized and follow European models, which means bringing in new leaders with new paradigms.

Hospitals and their systems should be reconfigured to become more patient-centred, patient-focused and patient-driven, rather than doctor-driven. While a hospital's medical staff may be reactive in their medical processes, its management should be proactive and strategic in outlook and decision-making. According to this idea, new hospital leaders should be the masters of change. They should be able to transform and turnaround hospitals. They should also be able to enthuse the entire organization with new possibilities. The hospital managers and chief executive officers, as well as other health sector leaders, should serve as inspirations and models for their staff. It is accepted that the leaders should also be a qualified communicators and it is important that they seek and find useful solutions. Since most hospitals have funding problems which will worsen, hospital leaders nowadays should also be resourceful. In the new system, according to PHU, hospital leaders and executive officers should be visionaries and strategists who should know when to change direction. Most Turkish hospitals are run by two top executives: the hospital manager, and the chief executive officer who is in charge of the business functions. The office of chief physician, administrative and financial affairs and health care services directorates are established under the hospital manager.

To become an effective health care manager, the manager must have a core set of skills, including various operational, relational and analytic skills. Hospital administrators will have to formulate long-term strategies taking account of scarce and transient resources. Because, the future of hospitals and their services will

be decided by a long-term strategy, and mainly shaped by its leaders and management, the role of hospital leaders will be to establish an innovative working environment by projecting a unifying vision for the hospital. A good leader must also be able to set goals, create plans, make decisions and oversee all job functions, and most importantly, to support and train people. To make people's jobs easier, leaders should also learn how to communicate with health sector workers and the public, to delegate and to upgrade their own abilities.

With all of the opportunities and threats involved in hospital management, the leaders of these institutions must secure the right professionals. In addition, they must make sure that regulators have the right support and focus, and that issues are taken to the right place for resolution.

Finally, for health care organizations that aim to provide high-quality health services, better educated personnel and leaders must be available to serve patients, which not only meet patients' expectations, but also increases their satisfaction with the health services they receive. To make this possible, it also requires changing hospital policies from quantitative processes to qualitative processes. For quality management, hospitals in Turkey and all around the world should have five elements: "philosophy, vision, strategy, skills, and resources". ❏

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His pharmacy experience includes research, oncology pharmacy, phytotherapy and quality management. He is the Programme Director at Ankara Numune Education and Research Hospital for International Hospital Federation (IHF). Mr Sahin is well known in the Turkish hospital pharmacy sector and has given numerous talks to health care professionals, students and to the public. Currently he is working on helping to develop pharmaceutical accreditation for the Turkish pharmaceutical education service.

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The National Accreditation Board for Hospital and Health Care Providers accreditation programme in India

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ABSTRACT: Quality in health care is important as it is directly linked with patient safety. Quality as we know is driven either by regulation or by market demand. Regulation in most developing countries has not been effective, as there is shortage of health care providers and governments have to be flexible. In such circumstances, quality has taken a back seat. Accreditation symbolizes the framework for quality governance of a hospital and is based on optimum standards. Not only is India establishing numerous state of the art hospitals, but they are also experiencing an increase in demand for quality as well as medical tourism. India launched its own accreditation system in 2006, conforming to standards accredited by ISQua. This article shows the journey to accreditation in India and describes the problems encountered by hospitals as well as the benefits it has generated for the industry and patients.

Health care services are regulated in most parts of globe because health care has a direct impact on the well-being of citizens at large. Regulation comes by mandatory enforcement of minimum standards covering infrastructure and manpower. Some countries include processes and even outcomes under regulation. We on the other hand have accreditation which provides the necessary framework for quality governance of hospitals. It is based on optimum standards covering structure, processes and outcomes. It encourages a hospital to continuously improve its performance through peer evaluation. Whereas regulation is mandatory, accreditation is voluntary and is driven by market forces including paying agencies. As mentioned above, accreditation is not by itself about quality, but it lays down a robust framework on which the quality journey becomes easy.

The quality journey in India

Health care services have been in short supply. Under these circumstances, quality often takes back seat. The early 1990s saw the emergence of a corporate sector in health care which triggered a new demand for quality. Leaders have included multiple options in their choice of the standards-based quality improvement management:

+ Opting to use the ISO standards for quality, environment and occupational health and safety management. These are termed as the integrated management system (IMS–ISO 9001, 14000 and 18000).
+ Opting to follow standards proposed by international accreditation agencies. The most well-known are the United States-based Joint Commission International (JCI) and the Australian Council for Health Care Standards International (ACHSI). There are also similar accreditation agencies from the United Kingdom, Canada and France.

+ Opting to follow standards proposed by the National Accreditation Board for Hospital and Health Care Providers (NABH) established by the Quality Council of India (QCI).

Embarking on the IMS–ISO system is perhaps the standard route which most health care organizations (HCOs) in India followed until recently. Considered achievable, the ISO certification proves that the HCO is actively considering quality, environmental and occupational health and safety and has put in place the necessary structure and processes. However, this does not immediately translate in to health care quality accreditation.

If international acceptance and medical tourism are the two main objectives in obtaining accreditation, the HCO can opt for one or the other international schemes. The cost of accreditation, however, may vary considerably.

The establishment of the NABH by QCI and the implementation of mechanisms for hospital accreditation are unforgettable landmarks in the history of health care quality and safety standards in India. From 2006 onwards, the NABH's journey has been one of progress, with the foundation of nearly 10 different types of standard and the creation of an educational base and assessor building. Today, NABH is a well-known acronym among health care organizations, considering that more of them are seeking accreditation. The NABH has also inspired central and state governments to improve their hospitals and seek NABH accreditation.

The NABH offers local applicability, orientation towards health care quality and safety, international acceptance (NABH standards as well as the organizations are accredited by ISQua) and a wide range of standards from which to choose. In terms of annual cost, NABH accreditation is very close to IMS–ISO and is significantly cheaper than international accreditations.

A few frequently asked questions are listed below and answered:

Do Indian hospitals need NABH accreditation?
This is perhaps the most important question the HCO has to consider before embarking on its accreditation journey.

Top management and governance should clearly understand the reasons behind their accreditation quest. They need to educate themselves on the purported benefits of accreditation and understand that this process is voluntary and can be difficult. They must also recognize what NABH accreditation is and what it is not.

HCOs may enter the accreditation pathway for a variety of reasons:

✚ Local peer pressure is one strong reason. When a hospital in a particular region of the country achieves accreditation, other organizations in the region feel the pressure to follow.
✚ When paying agencies make it mandatory to have accreditation to join their schemes or provide increased reimbursement rates.
✚ As a component of their expansion into medical tourism or improvement programmes.
✚ As a step towards a progressive quality management programme.

What does accreditation confer on Indian hospitals?
Accreditation communicates the fact that:

✚ the hospital has made a commitment to continuous quality improvement and patient safety;
✚ the hospital has established the appropriate structures and processes that serve as the foundation for quality care;
✚ that the structures and processes have been codified in policy and procedure documents;
✚ the hospital has substantially implemented these processes and is monitoring the outcomes.

Accreditation does not indicate:

✚ excellent patient care outcomes;
✚ how well a hospital is doing;
✚ a guarantee of absolute quality.

Hence it is important for senior management to understand what accreditation is and what it is not.

Are accredited hospitals any better?
Accredited hospitals have a right to feel proud of their achievements. However, is this excitement borne out by objective evidence of an improvement in safety, quality and outcomes?

This subject has been well researched in the both the developed and the developing world. Many publications are available which reveal that accreditation has a direct impact on quality of care, patient safety indicators, hospital readmissions, length of stay and patient satisfaction.

Why are there so few accredited hospitals In India?
There are about 50,000 HCOs in India. As of 28 February 2014, 201 Large HCOs and 29 small (<50 beds) HCOs are accredited by NABH. In addition, 397 large HCOs and 123 small HCOs are in the process of gaining accreditation. This means that only small percentage of HCOs are accredited or are in the process of accreditation.

The first reason for such a small percentage may be because NABH accreditation is a voluntary process. Not only is there is no compulsion for HCOs to opt for it, but HCOs may also not perceive it as an added value. There is no evidence available that has proved that NABH accreditation has improved the business prospects of HCOs by making them more profitable. Hence the HCOs may distinguish this painful journey to be a path of "no returns". Also because this NABH accreditation process has been felt to be so difficult, many HCOs do not feel the need to begin on such a strenuous journey.

Another reason may be that there are a very few professionals who can guide HCOs in the accreditation process. There are only a handful of NABH-approved consultants who can provide a fee this service. NABH conducts awareness and implementation programmes with specific tailored workshops on medication errors, legal aspects and clinical audits. In comparison, HCOs have to resort to training local people. Larger HCO consortiums are able to tackle this through their own quality management teams and learn as they go. But smaller HCOs may not have the able quality management people. A few HCOs may have an empanelled NABH assessor/s on their staff and would use their services.

The NABH has not yet created the enabling mechanisms to make the HCOs seek and achieve accreditation. The approved assessors of NABH are strictly required to stay away from offering consultancy for HCOs seeking accreditation; they can do so only for their own institutions where they work. This is believed by many to prevent biased assessment in the future. There are other instances of accreditation agencies in other countries offering consultancy services along with accreditation services. They strive to keep these two apart and can easily ensure the absence of bias based on prior consultancy.

What is the essential documentation?
Every objective element that requires documentation is marked by an asterisk (*). HCOs can ensure that they use the guidelines and suggestions given by the NABH.

What are the common programmes that are needed for NABH accreditation?
Most HCOs will not have any of the programmes mandated by the NABH when they embark on accreditation. The following programmes must be initiated:

✚ A hospital infection control programme.
✚ A quality assurance programme for:
  – a. laboratory services;
  – b. radiology services;
  – c. intensive care services;
  – d. surgical services.
✚ A continuous quality improvement programme with:
  – a. clinical indicators;
  – b. managerial indicators.
✚ A hospital safety programme for:
  – a. laboratory safety;
  – b. radiology safety;
  – c. facility safety;
  – d. patient safety with special emphasis on risk reduction.
✚ An internal audit programme.
✚ A medical records audit programme.
✚ A medical audit programme.
✚ A nursing audit programme.
✚ An induction training programme.

+ An in service training programme.

All of these programmes need to be initiated, maintained, reviewed and improved upon at regular intervals.

What are the common steps in quality management and NABH accreditation?
The steps can be summarized as below:
+ rectify structural/legal defects;
+ document policies and procedures;
+ allocate resources;
+ guide behavioural change;
+ introduce a culture of fairness;
+ build team work and monitor implementation;
+ monitor performance;
+ collect data on key indicators;
+ monitor effectiveness of training;
+ identify and analyze trends and carry out root cause analysis;
+ carry out a PDCA.

What are the stages in NABH accreditation?
+ Implement standards for three months.
+ Do an internal audit.
+ Submit application and self-check list.
+ Pre-assessment.
+ Corrective action report submission.
+ Final assessment.
+ Corrective action report submission.
+ Verification visit if needed.
+ Accreditation.
+ Surveillance assessment after 18 months.
+ Reassessment.
+ Surprise assessment.

What are the expenses involved?
This is a common question asked by almost all HCOs. The expenses involved depend on the nature of the HCO and will include the following:
+ **Direct costs:** This includes the fees paid to the NABH secretariat and the expenses involved in hosting assessment visits. This is perhaps the smallest of the actual expenses.
+ **Indirect costs:** This varies from organization to organization and involves the expenses in changing infrastructure (civil, electrical, plumbing, medical gases, HVAC, fire and non-fire safety, disaster and HAZMAT management, clearing legal issues, obtaining licences, certifications, registrations and permits, establishing an acceptable human resources structure, documentation expenses) and in changing the process (training and implementation of quality and safety management, infection control and other programmes previously mentioned). The indirect expenses should not be accounted for in NABH expenses. HCOs, however, running as a business will treat them as capital or operational expenses. In the end, it is the indirect costs that will decide the overall costs of accreditation.

What are the common problems faced by HCOs?
The biggest problem faced by most HCOs is to gaining the support of staff for the accreditation process. This is especially so with the doctors and consultants. Many problems can be solved if the leadership concentrates on this angle. Involvement in quality management and NABH accreditation must be made a component of every one's job description.

The second problem faced by HCOs is the inability to keep to timelines and schedules. While structural projects may have unanticipated delays, it is the documentation, training and implementation that do not follow schedules. Clinical and managerial duties that are necessary to manage HCOs consume the majority of the time available. Strict watch must be kept on timelines and actions to remedy delays when they occur.

Another area of delay is the completion of documentation as well as the format and creation of records and registers. The leadership team must anticipate such dilemmas and take preventive measures by using strict project management. HCOs that use information technology to create and disburse new data, information and knowledge seem to do well in this respect. HCOs have to use all methods of information distribution. In-service training, notice boards, circulars, the intranet, training documents and brochures, handbooks, and question and answer booklets are all methods used by different HCOs. The effectiveness of these methods must be monitored daily. In addition, the human resources department must keep a strict vigil on this aspect and report to senior management weekly regarding missed schedules.

Ensuring the smooth flow of quality indicator data is also difficult. Even when data comes in regularly, the veracity of that data may be questionable. While data on quality may be reasonably correct, safety data largely depends on individual reporting. Because many health care workers are afraid to admit mistakes and failures, incidents often go unreported. The leadership team must instill a sense of confidence and fairness in the staff's minds.

Clinical audits are another area of difficulty and delay. While nursing audits are generally executed, meaningful medical audits are often challenging to achieve. The medical audit committee must play an active role in this process. Furthermore, training is essential for clinical audits, and it must be mandatory for every major clinical area to audit at least one issue every six months.

Why do HCOs struggle to achieve and retain NABH accreditation?
At times, senior management fails to lead and lower management levels do not know where to turn to receive instruction. There is a general "make do" feeling and no honest attempt is made to correct issues or introduce systems that outlast individuals. Public HCOs have an entirely different set of problems, of which leadership and staff motivation are the most prominent.

Because they do not have local expertise to manage quality, many HCOs struggle and are forced to make do with what is available. While achieving accreditation can lead to a sense of invincibility, systems might not be maintained as a result. With such a talent exodus soon after accreditation, all the systems may cease to function. Senior management changes can also unsettle the process and lead to a lack of orientation.

Physician and surgeons consultants are in short supply. It has not been easy to involve them in the accreditation process. A lot depends on them in terms of conducting clinical audits and monitoring clinical outcomes. This has not been easy and HCOs struggle in monitoring, measuring and reporting the 60-indicators required under NABH.

Conclusion

This article brings into focus some of the aspects of NABH accreditation from the perspective of an implementer, assessor and trainer. In past eight years, only 230 hospitals have been able to achieve accreditation. In countries like India, where regulation has not been very effective and there are not substantial incentives, this can be considered sufficient progress. This article has illustrated the various issues of implementing accreditation standards which can be true for any other developing country as well and so be a good learning resource. ❏

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For the last three years, he has devoted himself to helping various hospitals establish quality and safety management programmes and achieve certification and accreditation.

Hospital accreditation – A foundation for high reliability

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ABSTRACT: The people who work in health care organizations are committed to providing the best care possible to their patients. In the contemporary health care environment this is a very difficult commitment to keep. Health care has never been more complicated or demanding of the people who work in the industry. This article describes two different but complimentary methods for improving the quality and safety of health care. Accreditation provides a foundation for creating systems of care across many types of health care organizations. High reliability inspires people and organizations to strive for the highest levels of performance. Together, these methods give people working in health care an opportunity to fulfil their commitment to their patients.

Sixty-three years ago The Joint Commission was established in Chicago, Illinois. Since that time, it has become the premier and largest accreditor of hospitals and other health care organizations and programmes in the world. For most of that history The Joint Commission accredited health care organizations in the United States where more than 20,000 organizations display the "Gold Seal of Approval™" to signify their accreditation. However, global economic and health care trends made The Joint Commission a global company when Joint Commission International (JCI) was created in 1994. Today, JCI accredits nearly 700 health care organizations around the world.

Accreditation at its core is a process that helps health care organizations improve the quality and safety of the care they provide. The heart of accreditation is the standards used to evaluate an organization. The JCI standards are based on the Donebedian Model of structure, process and outcomes. The standards related to structure look at the buildings, equipment and staff of the health care organization. Process standards examine the clinical interactions between the providers of care and the patients. And the outcomes standards strive to evaluate how the care provided affected the patient's health status and/or their satisfaction with the care. The other component of accreditation is a periodic onsite survey of the organization. This involves a team of health care professionals, usually a physician, a nurse and an administrator who spend several days reviewing documents, interviewing staff and examining the building and equipment to compare the organization's performance against the standards.

A highly effective survey tool invented by The Joint Commission is the tracer methodology. With this method a surveyor selects a patient and traces their care processes from admission to discharge, evaluating the organization's compliance with the standards along the way through observation and conversations with the staff or sometimes the actual patient. The methodology takes the surveyor into many different parts of the organization enabling them to evaluate the systems of care across the organization.

In addition to the international standards, JCI accredited hospitals must also comply with the International Patient Safety Goals. These six goals include:

+ Identify patients correctly.
+ Improve effective communication.
+ Improve the safety of high-alert medications.
+ Ensure right-site, right-patient, right-procedure surgery.
+ Reduce the risk of health care-associated infections.
+ Reduce the risk of patient harm from falls.

These goals reflect the most vexing patient safety problems for hospitals and other providers. As a result, beginning 1 April 2014, when JCI's new fifth edition of hospital standards becomes effective, these goals will have a heavier weight in the evaluation process than has been the case in the past.

Accreditation is both a voluntary and a mandatory process depending on where the health care organization is located. In the United States, many organizations use Joint Commission accreditation to meet the requirements of the Centers for Medicare & Medicaid Services, a government agency that reimburses hospitals for care of specific populations including elderly and lower-income patients. Other countries make licensure dependent on accreditation. Private health insurers may also be a driver for accreditation in some regions requiring accreditation as a term of reimbursement or offering discounts to patients utilizing the services of accredited organizations.

For hospitals accredited by JCI the decision to pursue accreditation is usually voluntary. Hospitals find the standards helpful in creating effective systems of care and improving the quality of care. The international JCI brand also distinguishes the organization and is a symbol of their commitment to patient safety and quality.

The current state of patient safety

In 1999, the Institute of Medicine issued the report "To Err is Human". Nearly 15 years after that report health care providers around the world continue to struggle with finding ways to improve their patient safety performance. World Health Organization data indicates that patients receiving care in developed countries have a one in ten chance of being harmed; the numbers are much higher in undeveloped countries. Data from the United States indicate that high volume errors such as medication errors and

health care acquired infections are routine. We also know major events like fires in the operating room and wrong site surgeries, while less frequent, still occur on a regular basis.

The current state of safety is far better in high risk industries outside of health care. These are complex organizations that operate in hazardous conditions but experience far fewer adverse events than what we experience in health care. Aircraft carriers, aviation and air traffic control, wildfire firefighting, nuclear power plants and amusement parks are examples of industries that practise the principles of high reliability.

High reliability and health care

High reliability organizations (HROs) expect bad things are going to happen and as a result they are looking for signs of trouble all the time and everywhere. Health care does not have this obsession.

In *Managing the Unexpected*, Weick and Sutcliffe (2001) present five principles that are embraced by HROs:

✚ **A preoccupation with failure.** HROs are extremely attentive to small mistakes, knowing that they are not only hazardous (especially when more than one happens at a time; see Reason and the Swiss Cheese model (1997)), but also HROs crave knowing about small mistakes as they are opportunities to learn about ways to improve. They are aware that success can breed confidence that leads to complacency.

✚ **A reluctance to simplify.** HROs know their work is very complex and they do not accept the obvious answer. They want the root cause of mistakes.

✚ **A sensitivity to operations.** HROs understand that the entire supply chain of an organization contributes to the overall safe performance of its work. This includes having the right equipment in the right place as well as having a competent staff.

✚ **A commitment to resilience.** HROs are resilient in that they are able to continue operating and/or recover quickly when there has been a major error or adverse event.

✚ **A deference to expertise.** HROs give authority to employees based on their expertise rather than on title or position in the hierarchy. In health care settings this can mean listening to all of the staff as well as the patient's family.

Underlying these five principles is the concept of mindfulness. The authors define mindfulness as "a rich awareness of discriminatory detail". Practising mindfulness requires both vigilance and discipline. Each of the five principles depends on a

> **High reliability organizations (HROs) expect bad things are going to happen and as a result they are looking for signs of trouble all the time and everywhere**

collective mindfulness in the organization to discover risks and take action to ameliorate them.

Achieving high reliability in health care

Over the last several years The Joint Commission has been studying the principles of high reliability to better understand how high reliability can help health care organizations improve patient safety and quality. In the article "High Reliability Health Care: Getting There from Here" [http://www.jointcommission.org/hr_pubs.aspx] Chassin and Loeb (2013) describe three domains where health care organizations, and in particular hospitals, will need to change to move up the path to high reliability. These areas are:

✚ Having a leadership team committed to zero errors. Working towards high reliability is difficult and time consuming. It must be embraced by all levels of leadership including the board of directors.

✚ Creating a strong safety culture inside the organization. The discovery of errors, especially early signals of potentially bigger problems, is central to achieving high reliability. The only way the leadership learns about problems is for everyone in the organization to report them. And the only way this happens is to establish a culture that celebrates mistakes and does not punish those who report problems.

✚ Developing the ability to use the most sophisticated process improvement tools such as Lean Six Sigma and change management. There are some quality problems that can be improved by the use of standard operating procedures. However, most quality problems such as hand hygiene and correct site surgery, require far more. Recent work being done at the Joint Commission's Center for Transforming Health Care is developing online tools that enable health care organizations to gain a deep understanding of the specific reasons why certain care processes fail. This allows them to create the specific solutions needed to solve these highly complex problems.

A framework for evaluating a hospital's progress in their journey to high reliability is included in the article. Work continues to be done on the framework with the goal of creating a self-assessment tool for use by hospitals in the future. Readers are encouraged to view the article and see the framework in its present state.

The foundation for moving toward high reliability begins with accreditation. Many aspects of accreditation also create the building blocks for high reliability. For example, the fifth edition of the *JCI International Accreditation Standards* for Hospitals includes several areas of standards directly related to the domains described above. The JCI leadership standards call for the hospital

> **In the United States, many organizations use Joint Commission accreditation to meet the requirements of the Centers for Medicare & Medicaid Services, a government agency that reimburses hospitals for care of specific populations including elderly and lower-income patients**

leaders, staff and the board of directors, to plan and oversee the implementation of a programme for improved patient safety and quality. Leaders are expected to use metrics to track their progress in improving care and to communicate regularly on their performance. The standards also require hospitals to create a safety culture that enables staff to report problems or errors and not feel at risk from any type of retribution. While the standards do not specifically call for the use of Lean Six Sigma and change management processes, all organizations are expected to be able to conduct a root cause analysis of sentinel events including serious injury or death of a patient. ❏

Paula Wilson has more than 30 years of experience in the health care industry. She was on the faculty at Columbia University's School of International and Public Affairs and the Wagner School of Public Service at New York University where she taught courses in financial management.

Ms Wilson received her master's degree in social work from the State University of New York at Albany. She previously served as a member of the Board of the New York City Health and Hospitals Corporation as well as on the finance committee of the Saint Mary's Center, Inc., a nursing home for people with AIDS.

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Hospital productivity: How to KILL or create a productive hospital environment

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ABSTRACT: Productivity is NOT the same as quality. Productivity is about the value-add we bring to work, to each job, to each day. To create a productive hospital environment, it is so much more than buying the right equipment or hiring the right mix of people. Productivity comes from investing in our people and giving them the tools and authority to do their jobs effectively. Adding more "quality programmes" can actually kill productivity by taking people away from their core jobs. Adding a tick-list in the operating theatre can cut mortality rates in half by eliminating the smallest of mistakes.

This article is a guide to help you focus on the key elements of productivity and not to get distracted by the hype and confusion from media. Its bottom-line focus and "how-to" tools and ideas make it useful and practical.

If I entered the operating theatre and started to perform vascular surgery, patients would die. Why? I am not a medical doctor. I read about health and wellness a great deal. I actively study endothelium dysfunction and its causes to improve my own health. But studying something without formal schooling, does not qualify me to hold a scalpel.

Similarly, learned, highly trained medical professionals are not automatically qualified to lead, run and organize productive hospital teams. After 32 years of devoted study of productivity, having helped over 700 clients boost productivity and teams including hospitals (USA and Asia), medical products and pharmaceutical companies and having authored 15 books on the subject, please consider that I might be the "resident expert" on the subject of productivity and teams. Below are some key thoughts to help you achieve your productivity targets.

Productivity comes mostly from people and systems. The biggest gains in productivity do not necessarily come from additions to plant or equipment. A new USD 10 million machine is impressive but maybe investing in your people will ultimately make you more money.

Let us start first with the definition of productivity. While many definitions exist, I define productivity as "value-add". If a member of your team adds value to a procedure, a department or the hospital in general, he or she is productive. If there is no value-add, that person is overhead and should be eliminated. The question is, how much value-add comes from each person and how can and do we measure it?

Speaking for a second time at Hospital Management Asia, I shared the analogy of a taxi versus an ambulance. Our daughter broke her arm on the monkey bars when she was nine. We immobilized it with an ice cube tray and a kitchen towel and took the first available taxi to the hospital. Fifty-five minutes later, she was in surgery and two pins were inserted. Today you cannot even see the scars. Calling an ambulance would have added another 35

minutes to the process and additional trauma to our daughter. There would be no value-add and no productivity increase. In fact, it would decrease productivity.

Had it been a coronary event, an EMT checking the patient, administering an IV drip, giving vitals to the cardiologist back at the hospital would have a high value-add and hence a major productivity boost.

In 2013, I moderated Singapore's first Productivity Forum. We hosted productivity gurus from across the Asia-Pacific region and the European Union. Our esteemed colleagues from Japan shared with us how they boosted productivity by:

+ giving workers a GPS monitor to track their movements and how many steps they took to accomplish their job;
+ giving each worker a voice recorder to monitor how many words they used to accomplish their tasks;
+ modifying the area's furniture to improve the "flow" of traffic, minimizing the number of steps required to accomplish tasks;
+ modifying the furniture to minimize how far workers had to reach to complete their assignments;
+ training their people to use the optimum number of words;
+ training their people to use the minimal number of steps to give the maximum service to their clients or patients.
Result: A 10% increase in productivity across the board.

My opinion regarding this approach is not a scientific fact so feel free to disagree. This approach may not work in other countries. Would your doctors, nurses and staff submit to wearing GPS trackers and microphones with recorders? I doubt it. Culturally, this works in Japan... but in few other countries.

Furthermore, this is what we saw in the 1960s and 1970s with the "efficiency expert". Counting how many steps we take, how many times we get a cup of tea, how long nurses converse with patients is an attempt to boost the efficiency of each person and procedure and it may be "efficient" but it is often at the expense of

dignity and self-esteem. Such practices often strip the fun and "soul" from individuals and departments.

We also had the Germans present their LEAN Six Sigma. They enthusiastically shared how they monitored the quality of every job and procedure. They trained their teams in how they can improve the quality and empowered them to make the changes. In the end, they boosted productivity by 26%.

A 16% greater "value-add" and a much more "human-centric" approach. I applaud them for this effort and validate their findings. Just keep in mind, LEAN Six Sigma, Seven Sigma, etc. are primarily quality programmes and not necessarily productivity programmes. Their main function is to improve the quality of products and services. Productivity increases are a common byproduct of the processes employed.

We also had an Australian CEO of a residential aged care organization with several centres. The CEO explained how extensive staff training and development helped them grow from one to eight facilities over 12 years and how they constantly retrain their people to improve their standards. Value-add? Growing by a factor of 8 is an 800% improvement. Over 12 years, that is 66.6% per annum. Better than 10% or 26%... yes?

The CEO's CV is filled with educational references, not just in medical knowledge but acquiring an MBA at the University of New England, being a fellow of the Australian College of Health Service Management (ACHSM), member of the Australian Institute of Company Directors (AICD). Oh yes, she also got her Masters of Nursing. (Did you think I was writing about a male neural-surgeon?)

While it is wonderful to understand the medicine your people practise, productivity improvement is more a function of human motivation and education. For example, before splitting into two entities, the Motorola Corporation in North America discovered investing in their people paid huge dividends. For every dollar invested in training their people, they received USD 30 in increased productivity over a three year period. Investing in people paid back a 1,000% return on investment.

What I have discovered over 32 years of studying productivity is this: "If you want to boost productivity, the most productive way to do that is to invest in your people."

The problem for most C-Suiters is to know where and how to invest in their people. The answer starts with analytics. Long before Dr Edwards Deming started the quality movement, Lord Kelvin (Sir William Thomson) in 1848 said, "If you can measure it, you can improve it". In other words, beginning with a baseline in productivity before embarking on a programme to boost productivity. No need to be very technical or "fancy"; just find a marker that is easy to measure and would improve staff effectiveness, patient satisfaction, improve mortality rates or lessen the days that patients require medical attention.

Without the initial baseline, many attempts often go wrong. One hospital we worked with, started without a baseline. They instituted not one but five quality programmes; one after the other, each promising huge returns. Nurses and other staff were required to fill in the "paperwork" for all five Q-programmes. The result in nursing: nurses each spent 4.5 hours a shift doing paperwork. Patients got poorer care, the nurses' job satisfaction dropped and costs escalated. The only ones benefitting were the people selling the quality programmes.

After speaking with the administrator, we suggested moving to just one quality programme. He admitted they had discussed it and

were considering it. We suggested action rather than discussion. Not necessarily because of us, but a short time later we discovered they went to one hospital-wide programme and the amount of time nurses spent doing paperwork dropped to just 30 minutes per shift. Patient satisfaction scores improved as did nursing job satisfaction. It was not shared with us but I'll bet the insurance and labour costs dropped as well.

Without recording your initial baseline for productivity, not only do you risk instituting the wrong programme(s) but you may hire additional staff to improve productivity when they may or may not be the answer. In 1886, Maximilien Ringelmann, discovered what became known as the Ringelmann Effect: "When working in groups, individuals slacken." He found that adding people did not correlate with an equal amount of productivity. If 1 worker + 1 worker = 2 outputs, 2 + 2 may only equal 3.5 and 4 + 4 may be just as effective as 6 people.

This is why my productivity hero is Michael Sengol. Forty years in the hotel industry taught him how to turn unproductive properties and entire hotel chains into highly successful, profitable institutions. Michael was asked by Meritus Hotels and Resorts to be their CEO and boost their productivity. He took a simple analytic, profit per employee and had every General Manager (GM) focus on it. The GMs said they needed more people. Michael responded with a hiring freeze. "Not until your people are producing profit." Two years later, he stepped down having achieved his targets and DOUBLING their profit per employee across the hotel and resort chain.

Question: How much profit are you making per employee (include cleaners, surgeons and pharmacists)? ALL are responsible for profit. ALL are to have a value-add.

To make people productive, they need to know they must add value and must understand why their job is important and how to do it best. One of our clients, Westin Hotels & Resorts has a two-hour video on how to mop a floor. It gets into surfactants and how the right one for marble, granite, wood, tiles will clean better. Drying times based upon surface and humidity along with posting of yellow safety barriers. Care of mop fibers and the need to change water frequently. Mopping technique and strategy minimize the disturbance to people walking and workflow. By the time the now EDUCATED cleaner is through with the video, they realize they are in charge of sanitation, safety, security, inventory and overall staff wellbeing. Why have a "cleaner" just "push a mop around" when you can have a professional assist the hospital with patient satisfaction, safety, health and security?

I am running out of space in this article so let me conclude by sharing a quote from Dr Edwards Deming, the great quality guru who tripled the output of the United States factories in the Second World War and took Japan from destruction to the world's quality powerhouse after the war: "94% of problems are due to systems, not people". If your hospital is not productive, it is not bad people, it is bad systems. Give people a better system to work in. Do not force them to do paperwork that has no value-add for patients or adds a burden to staff. Streamline the systems with your people to help them do their jobs.

Introduce systems that allow people to fix problems. East Northwick Park Hospital in the United Kingdom introduced "falls-care" bundles in 2011 and reduced falls from 77 per month to just

10 per month in three months. Same people, better systems.

The New England Journal of Medicine reported in 2009 the introduction of a 19 item checklist in operating theatres resulting in a 47% decrease in mortality. The system helped the team in the operating theatre save lives.

End systems where people with more education are seen as "smarter". Education does not necessarily equate to intelligence. It may only correlate to an improved level of job skills. Build in systems to support and empower people with empathy and caring.

Productivity is NOT "brain surgery". It requires different skills and systems that need to be studied and implemented with thought, care and monitoring. Your people and your systems more than anything else will give you the boost in productivity you desire. ❏

Michael Podolinsky is CSP of CSPGlobal and Asia's productivity guru. For 32 years he has served over 700 clients in 33 countries including the Mayo Clinic, Fairbanks Memorial Hospital, Singapore General Hospital, Changi General Hospital, National University Hospital, Hospital Management Asia, GE Healthcare, Cook Medical, Philips Electronics, GSK, Sanofi-Aventis, Schering Plough, Pfizer, Roche, 3M Medical Products and Littmann Stethoscopes. He has lectured at the Singapore Institute of Management since 1989 and was awarded the title of "Trainer of the Year" in 2013 and 2014. He authored 15 books on productivity, management and leadership with McGraw Hill, Pearson Prentice Hall and others including, Managing, Motivating, Maximizing Teams in Asia *(2013). You may contact him at Mike@MichaelPodolinsky.com*

Teamwork and communication: An effective approach to patient safety

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ABSTRACT: Teamwork and communication failures are leading causes of patient safety incidents in health care. Though health care providers must work in teams, they are not well-trained in teamwork and communication skills. Health care faces the problems of differences in communication styles, communication failures and poor teamwork. There is enough evidence in the literature to show that communication failure is detrimental to patient safety. It is estimated that 80% of serious medical errors worldwide take place because of miscommunication between medical providers.

NUH recognizes that effective communication and teamwork are essential in the delivery of high quality safe patient care, especially in a complex organization. NUH is a good example, where there is a rich mix of nationalities and races, in staff and in patients, and there is a rapidly expanding care environment. NUH had to overcome these challenges by adopting a multi-pronged approach. The trials and tribulations of NUH in this journey were worthwhile as the patient safety climate survey scores improved over the years.

The National University Hospital (NUH) in Singapore has been conducting patient safety climate surveys biennially since 2005 to gauge the hospital's standing in patient safety issues through the perspectives of its staff. Adopted from the Agency for Healthcare Research and Quality (AHRQ), this survey revealed how staff perceived safety in the hospital across the 10 safety cultural dimensions. The results allowed evaluation of the effectiveness of the hospital's safety programmes and identified areas of improvements. Two common themes in the dimensions were the status of communication and teamwork across the different levels of the organization. Over the four surveys, the majority of staff agreed that good teamwork exists within their own units (Figure 1), but there is an inconclusive response on the question of teamwork across hospital units (Figure 2). In the matter of handover, the majority agreed that there were gaps on the transfer of patient information during handover (Figure 3). Clearly, in health care, communication and teamwork were often interdependent since most clinical situations required that both should be done well. A failure in one might mean a failure in the other, and ultimately patients are the ones who would be affected the most.

There is enough evidence in the literature to show that communication failure is detrimental to patient safety. It had been estimated that 80% of serious medical errors worldwide take place because of miscommunication between medical providers. The majority of avoidable adverse events was due to the lack of effective communication (Solet, DJ et al 2005). The Department of Veterans Affairs (VA) National Center for Patient Safety in the United States has identified communication failure in health care as the primary root cause of 75% of more than 7,000 root cause analyses of adverse events and close calls. The Joint Commission reported that the primary root cause of over 70% of sentinel events was communication failure.

Effective communication and teamwork are essential in the delivery of high quality safe patient care in a complex organization such as NUH where there is a rich mix of races, in staff and in patients and a rapidly expanding care environment. According to a survey conducted in 2010 in the United States, doctors and patients alike say that when they communicate well, healing goes better. Furthermore, according to the survey of 500 doctors and

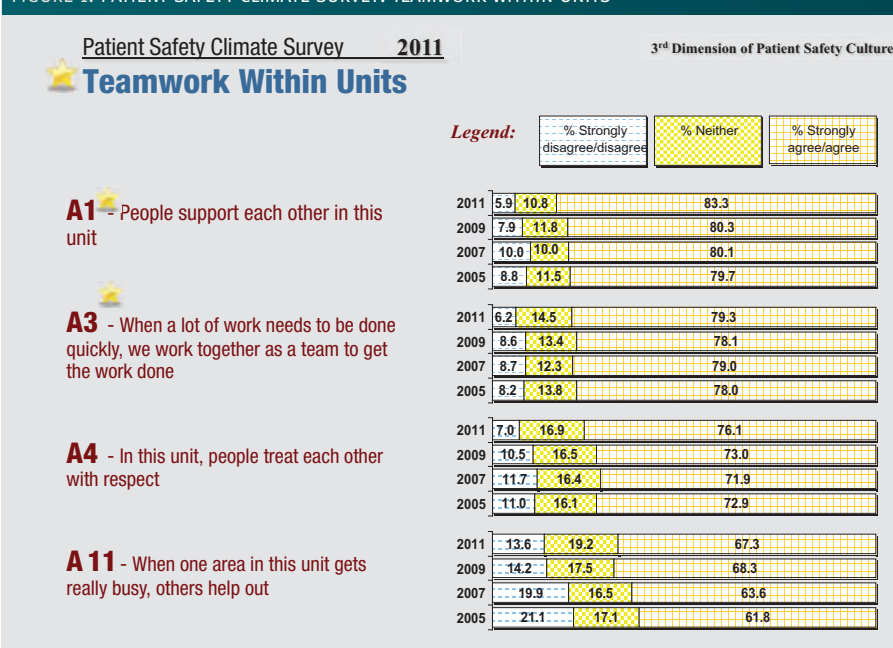**FIGURE 1: PATIENT SAFETY CLIMATE SURVEY: TEAMWORK WITHIN UNITS**

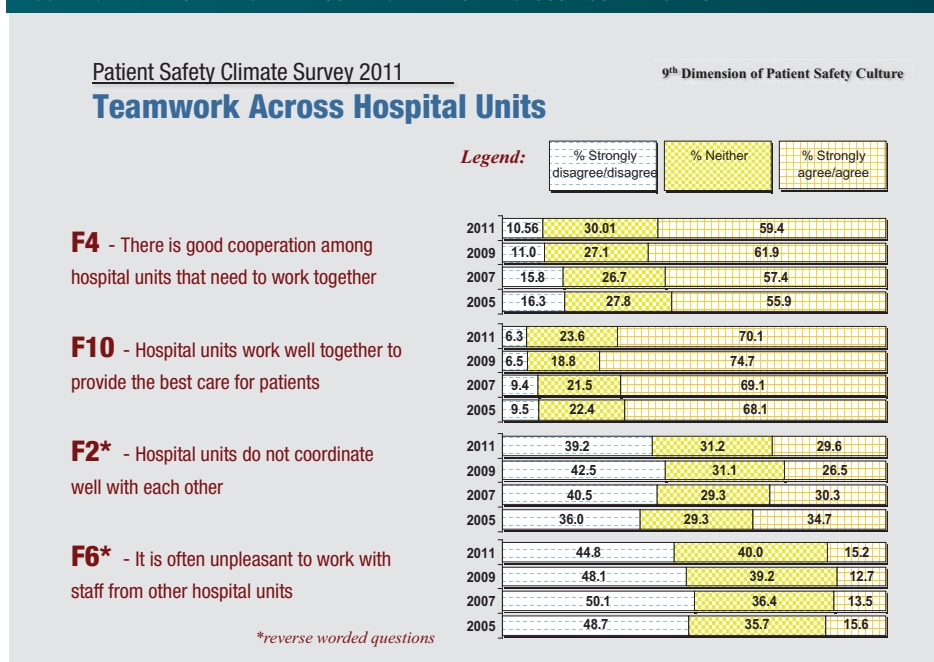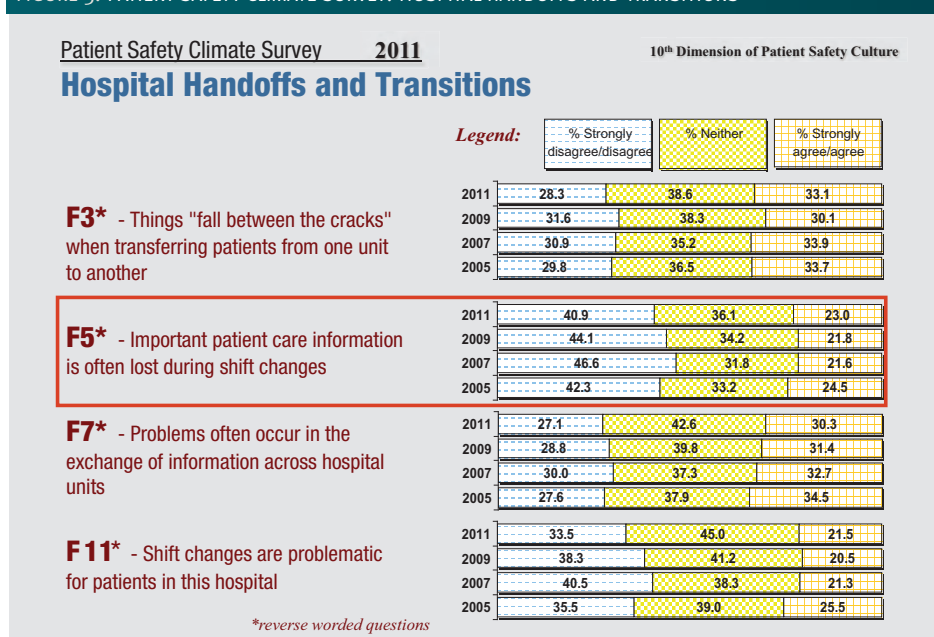FIGURE 2: PATIENT SAFETY CLIMATE SURVEY: TEAMWORK ACROSS HOSPITAL UNITS

Patient Safety Climate Survey 2011
Teamwork Across Hospital Units

9th Dimension of Patient Safety Culture

Legend: % Strongly disagree/disagree | % Neither | % Strongly agree/agree

F4 - There is good cooperation among hospital units that need to work together

Year	% Strongly disagree/disagree	% Neither	% Strongly agree/agree
2011	10.56	30.01	59.4
2009	11.0	27.1	61.9
2007	15.8	26.7	57.4
2005	16.3	27.8	55.9

F10 - Hospital units work well together to provide the best care for patients

Year	% Strongly disagree/disagree	% Neither	% Strongly agree/agree
2011	6.3	23.6	70.1
2009	6.5	18.8	74.7
2007	9.4	21.5	69.1
2005	9.5	22.4	68.1

F2* - Hospital units do not coordinate well with each other

Year	% Strongly disagree/disagree	% Neither	% Strongly agree/agree
2011	39.2	31.2	29.6
2009	42.5	31.1	26.5
2007	40.5	29.3	30.3
2005	36.0	29.3	34.7

F6* - It is often unpleasant to work with staff from other hospital units

Year	% Strongly disagree/disagree	% Neither	% Strongly agree/agree
2011	44.8	40.0	15.2
2009	48.1	39.2	12.7
2007	50.1	36.4	13.5
2005	48.7	35.7	15.6

*reverse worded questions

FIGURE 3: PATIENT SAFETY CLIMATE SURVEY: HOSPITAL HANDOFFS AND TRANSITIONS

Patient Safety Climate Survey **2011**
Hospital Handoffs and Transitions

10th Dimension of Patient Safety Culture

Legend: % Strongly disagree/disagree | % Neither | % Strongly agree/agree

F3* - Things "fall between the cracks" when transferring patients from one unit to another

Year	% Strongly disagree/disagree	% Neither	% Strongly agree/agree
2011	28.3	38.6	33.1
2009	31.6	38.3	30.1
2007	30.9	35.2	33.9
2005	29.8	36.5	33.7

F5* - Important patient care information is often lost during shift changes

Year	% Strongly disagree/disagree	% Neither	% Strongly agree/agree
2011	40.9	36.1	23.0
2009	44.1	34.2	21.8
2007	46.6	31.8	21.6
2005	42.3	33.2	24.5

F7* - Problems often occur in the exchange of information across hospital units

Year	% Strongly disagree/disagree	% Neither	% Strongly agree/agree
2011	27.1	42.6	30.3
2009	28.8	39.8	31.4
2007	30.0	37.3	32.7
2005	27.6	37.9	34.5

F11* - Shift changes are problematic for patients in this hospital

Year	% Strongly disagree/disagree	% Neither	% Strongly agree/agree
2011	33.5	45.0	21.5
2009	38.3	41.2	20.5
2007	40.5	38.3	21.3
2005	35.5	39.0	25.5

*reverse worded questions

accountability, commitment and interdependence gives the health care team a more in-depth responsibility than just a group of people working together. Gurus in the health care field consider the pit stop crew in Formula 1 car racing as the embodiment of the ideal team. In its literal sense, the Formula 1 team has little in common with the health care team. However, an in-depth analysis of the dynamics of the crew would reveal why they are arguably considered as the most efficient team around. We noted that one thing that stood out in that pit stop team was the clarity of what we shall refer to as the 4 Ps of the pit stop: (a) presider: leadership; (b) player: role of each member; (c) process: vital steps and (d) purpose: a common goal. Thus, we believe that the effectiveness of the Formula 1 team relies heavily on effective communication of these four elements, which leads to a smooth execution of the task at hand. In health care, teams, whether they are big or small, are being formed every day in each area of the workplace. To utilize the concept derived from the Formula 1 team, clarity of the 4 Ps must be achieved to execute a care task safely and to avoid an adverse event.
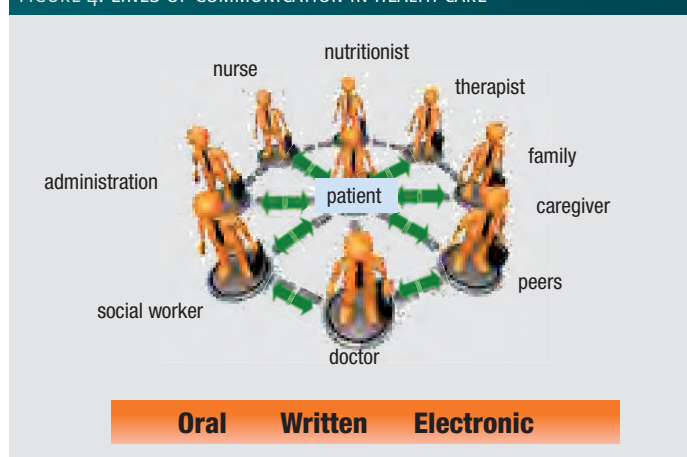
With diversity comes conflict
Effective communication is further hampered by the various lines of communication that exist between patient to health care providers, health care providers to patient and health care providers to other health care providers. The number of lines will expand proportionate to the complexity of a patient's condition and requirements. The mode of communications available – oral, written or electronic – certainly would further add to the burden (Figure 4).

There can also be conflicts in staff's personality, gender or culture, which may lead to a communication breakdown. Nurses and doctors vary in communication styles due to different training backgrounds. Nurses are generally narrative and descriptive, while doctors generally prefer brevity in communication.

Good and effective communication does not come easily to all, but it is believed that communicating effectively in a health care setting is an art that can be promoted through creating awareness, training and practice. Effective communication skills form part of the patient safety workshops in NUH. These workshops teach doctors, nurses and allied health staff how to overcome common barriers to achieve effective teamwork and communication. In addition, tools are provided to assist doctors and nurses in doing this. Appropriate assertion, setting the appropriate tone, adapting to various communication styles, using critical language, flattening

800 patients, 81% of patients and 71% of doctors agreed that communication made a difference in "whether a patient lives or dies" (Weise, E 2010).

Patient safety was made a priority by NUH leaders. They recognized the link between patient safety and communication and teamwork, thus, paving the way to implementing tools designed to improve these areas. No single tool can reduce communication failure, as a result, a combination of tools and strategies were implemented.

Communication strategies
Mind your Ps
The businessdictionary.com defined "team" as a group of people with a full set of complementary skills required to complete a task, job or project. In a complex health care scenario, the interplay of

Figure 4: Lines of Communication in health care

the hierarchy, the role of body language when communicating are some of the key highlights of the module. Flattening the hierarchy by creating a sense of familiarity and camaraderie within the team helped to instill confidence in the junior staff to voice safety issues that may otherwise be discouraged by the presence of an authority figure. The module emphasizes the role of empathy. We believe that this is one of the most important components of communication with patients and families.

"Empathy is the door that opens your voice to the information that you want to communicate. So if people can perceive that you actually care about them in a genuine, human way, I think they're much more willing to listen to anything else that you have to say. If you don't do that, you have really lost your audience because people won't listen to you" (Gerberding, J 2003).

NUH has utilized, tried and tested programmes to mitigate these problems such as the use of Situation-Background-Assessment-Recommendation (SBAR), readback/teachback, and TeamSTEPPS for brief-huddle-debrief models and conflict resolution. These are frameworks for communication that can be applied in any clinical situation.

Hospital leaders also conduct an annual risk assessment of quality and safety problems and act on these issues based on the

priority ranking. In the past years, communication failure during clinical handover and delayed or missed critical results were identified as high priority projects. The Rapid Improvement Event (RIE) project on improving clinical handover by doctors implemented the following: active involvement of senior clinicians, provided dedicated time and venue for a focused handoff, a common communication framework (iSBAR) and a tier-based handover protocol based on the clinical condition of patient and the corresponding mode of communication required (mandatory face to face handover, phone or SMS). After six months post-implementation, 80% of handover meetings were completed according to the new process, while 87% of handovers were supervised by senior clinicians. The project on improving critical results notification resulted in zero incidents of delayed or missed results after the implementation of the centralized results notification system. Doctors are notified of critical results within 16 minutes for inpatients and 9 minutes for outpatients.

Story telling

We found that the power of cautionary tales cannot be underestimated. Evoking the emotions of people through hearing about real medical errors obtained from incident reports makes for a better recall. Furthermore, making the stories anonymized sent the message that it was not personality driven but learning from incidents through a system-based approach.

Common communication gaps identified from incident reports include inadequate relaying of vital information or none at all, inappropriate remarks and behaviours, inconsistent communication by different doctors, delayed or missed communication and miscommunication among team doctors, nurses and/or paramedical staff.

NUH has multiple platforms to highlight these cases such as the Quality Forum, Clinical Directors' Meeting, Grandround, Patient Safety Briefings, Nursing Quality Meeting and the monthly publication of Safety Watch (Figure 5). On the other hand, the publication of Service With A Thought (SWAT) uses patient's feedback either to learn from a complaint or celebrate good patient care rendered by staff (Figure 6).

Figure 5: Safety Watch newsletter

Time is of the essence

Lack of time has been cited by physicians as one of the most common barriers to good communication with patients (Point of Care Survey 2011). However, allocating more time may not necessarily equate with effective communication. Strategies in place to optimize time include: how to conduct or organize patient interviews, substitute medical jargon with layman terms, the importance of non-verbal communication, recognizing the signs and symptoms of a communication breakdown, teachback and readback by asking patients to recount information or instructions and providing/ coordinating translator services. These are taught to staff at orientation and at patient safety workshops and briefings.

Leadership visibility to staff and patients

Patient Safety Leadership WalkRounds in NUH

FIGURE 6: SERVICE WITH A THOUGHT PUBLICATION

communication in relation to patient-centred (patient satisfaction scores) and staff-related outcomes (staff attrition/retention rate). ❏

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She also has a rich experience in similar research fields from other hospitals in Singapore. She has won many awards for her quality and safety improvement projects both at the national and the international levels.

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were started in 2004. Senior leaders visit two patient care areas a month. This is to demonstrate their commitment towards developing a patient safety culture and it gives the frontline staff an opportunity to highlight the safety issues they face on the ground. The common issues identified are related to policy, facilities, security, communication and support services. Action items are tracked until resolved. The leader's reassurance of the non-punitive approach at WalkRounds generated confidence among staff, which contributed to the increased reporting of incidents.

Leadership presence was also evident in activities which aimed to improve the patient experience. The hospital actively gathered feedback from patients and their families through patient focus groups. Patient and family were invited for lunch in the hospital on Saturdays to give their feedback on the care and service provided. These sessions were chaired by the CEO and attended by senior management and clinicians.

Establishing such lines of communication with staff as well as with patients has been an effective tool for NUH to gain the confidence of our staff and patients. The effect is obvious when staff open up to freely communicate about patient safety issues and report incidents and errors.

Conclusion

The literature and hospital experience have adequately demonstrated that ineffective communication among team members is a major contributing factor to negative patient outcomes. As we learned from our own experience, due to a host of interrelated dynamics within the health care environment, a multi-pronged approach is necessary to mitigate the risks of communication failure. Some methods are definitely not new concepts, but due to various factors it will take time and persistence to be acculturated.

One measure cannot adequately show the improvement in communication but it would be interesting to measure effective

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Are clinical audits enough to bring about improvement in overall health care delivery?

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ABSTRACT: This study was conducted to explore the entire spectrum of initiatives that have evolved globally over time in health care delivery mechanisms. The quality improvement initiatives that have been reviewed were undertaken at the department of radiology at a tertiary care teaching hospital in the developing world. This article reveals that conducting only clinical audits is not enough to bring about improvements in the health care delivery processes. It also illustrates examples of other initiatives that combine to enable sustainable, safe and high quality health care services for the patients whom we serve.

Since the beginning of time, the only feature that has remained constant is change. The same applies to the health care industry, where the quest for perfection continues with its most recent trend of a person-centric approach. This innovation has been proved to produce better health, care and professional development, affecting the numerous actors from health care professionals to patients, families, researchers, planners and educators (Batalden, PB and Davidoff, F 2007).

We are presently living in an age of rapid globalization and information – a consumer-driven era where quality has become a focal point in almost every industry. This has led to the development of new systems, processes and forms of standardization that have ignited higher levels of demand, quality and value in almost every industry (Merry, MD and Crago, MG 2001). The United States Institute of Medicine's report on *Crossing the quality chasm: A new health system for the 21st century* recommends improving quality in health care by identifying core needs for health care such as safety (US Institute of Medicine 2001; The Health Foundation 2013).

Both public expectations and delivery patterns of health care services have changed over the last few decades, causing a restructuring and improvement of such systems. In the United States, medical education underwent dramatic transformations in response to the mounting concerns of the state. This occurred after a 1910 report from educational expert Abraham Flexner who stated that:

"Touted laboratories were nowhere to be found, or consisted of a few vagrant test tubes squirreled away in a cigar box; corpses reeked because of the failure to use disinfectant in the dissecting rooms. Libraries had no books; alleged faculty members were busily occupied in private practice. Purported requirements for admission were waived for anyone who would pay the fees" (Starr, P 1982; Luce, J M et al 1994; Flexner, A 1972).

In the same year, surgeon Ernest Codman began highlighting and discussing topics relating to patient safety and care. In 1912, he stated that the only way to measure efficiency is by reviewing sufficient records and proposing a "hospitalization standardization programme". Finally, the first document *The Minimum Standard* was put into action by the American College of Surgeons in 1917 (Chasin, MR and O'Kane, ME; Joint Commission). This document can rightly be termed as the foundation of the health care quality journey setting and documents for the first time the standards related to hospitalization.

A brief history of the quality journey from industry to health care

In the manufacturing sector of the industrialized world, the craftsmanship model was in practice from the thirteenth to early nineteenth century; it simply relied on the skills of the individual. This lasted until the 1750s when the industrial revolution led to the period of mass production with Henry Ford's assembly line standards and end of line inspection. What followed was the era of Walter Shewhart's statistical process control techniques. The real revolution in quality, however, started in Japan with the concepts and teachings of Joseph M Juran and W Edwards Deming on Total Quality Management and Strategic Quality Management (improve.org.au). On the other hand, the process of standardization of hospitalization, as referred above, started in 1917. This took the shape of the Joint Commission Accreditation of Healthcare Organizations (JCAHO), which provides accreditation to hospitals on pre-set quality standards.

Objective

The objective of this study is to explore whether clinical audits are enough to create improvements in overall health care delivery. This question is explored keeping in mind both institutional as well as departmental initiatives.

The AKU quality journey

The Aga Khan University Hospital in Karachi, Pakistan was established in 1985 with a commitment to quality embedded in its vision and mission. Its institutional vision statement is:

"Aga Khan University Hospital (AKUH) will be recognized as one of the best health care institutions in Pakistan and the developing world. We will achieve this:

+ By providing compassionate, ethical, accessible and high quality care that meets or exceeds the needs and expectations of our patients, their families and others whom we serve.
+ By providing an outstanding work environment that fosters motivation and commitment in our staff.
+ By enabling leadership in education and research that improves the health of the people in the region."

The Aga Khan University Hospital (AKUH) is the extended arm of The Aga Khan University (AKU), the first private sector chartered university in Pakistan. Commitment to quality improvement initiatives is reflected throughout its development. From initiation of quality improvement training in collaboration with the Juran Institute in 1993, the AKUH took a leading role in the country's health care industry.

Radiology dynamism

In addition to compliance with institutional initiatives of accreditation and certification from international bodies, the department of radiology at AKUH has also been conducting regular clinical audits to evaluate clinical practices. In order to ensure the holistic effectiveness of the care delivery process, however, the department has also initiated many different projects focusing on quality improvement and patient safety. These projects focus on improvement in the following areas:

+ credentialing validation;
+ radiation safety;
+ inventory management;
+ patient satisfaction;
+ critical results communication;
+ monitoring of key performance indicators;
+ digitization, report turnaround times;
+ management and financial controls through the "Radiology Dashboard".

In order to optimise efficiency and effectiveness, our quality improvement approach focuses on addressing basic challenges including:

+ credentialing;
+ correct reporting;
+ correct identification of patients;
+ controlling costs;
+ reducing waiting times;
+ timely communication of critical results;
+ keeping patient's and employee's safety as a top priority;
+ efficient and effective use of available technology.

Keeping in view the above challenges, the department of radiology has embarked upon quality improvement projects that have yielded better service delivery and satisfied patients. Some examples of projects undertaken recently are shown below in Table 1 and Figures 1–4:

TABLE 1: SPECIAL PROJECTS

- Campus wide PACS access
- Teaching files - integrated with PACS
- PACS access via tablets and smart phones
- Remote radiology report signoff
- Radiology report search engine
- Global radiology search portal
- Teleradiology, video conferencing
- Voice Recognition System for reporting

- Moving towards a filmless and film-lite environment
- Wifi connectivity throughout radiology
- Logging initial findings - integrated with PACS
- Dynamic reporting workflow management system
- Resources for evidence-based radiology through Intranet portal
- Radiation dose tracking and management system
- Radiology electronic physician order entry
- Real time tracking of delayed patients

Role of radiology informatics in bringing change in radiology

We at the AKUH department of radiology, extensively use information technology applications in our daily workflows. The objective is to improve productivity and deliver safe and high quality care to our patients at optimum costs in a timely manner. Our department is well-equipped with modern radiology-specific information technology solutions; examples include a home-grown Radiology Information System (RIS), a world class Picture Archiving and Communication System (PACS) and a state-of-the-art Voice Recognition System (VRS). Following are few examples of the technology initiatives leading to safe and high quality health care delivery, undertaken by the radiology department in recent years:

TABLE 2: EXAMPLES OF TECHNOLOGY-BASED INITIATIVES IN THE DEPARTMENT OF RADIOLOGY

- Critical results communication
- Image retake analysis
- Discount system
- Inventory management
- Customer satisfaction survey
- Incidents and complaints

- Credentialing validation
- Digitization of radiology films
- In-house radiation exposure monitoring of radiation workers
- Safe use of perma cather in interventional radiology
- Teleradiology for Kabul, Afghanistan
- Online radiology requests (physician order entry)

Achievements at ground level

The dynamic inventory management helped us achieve a 100% fill rate; now we have timely alerts of near expiry and appropriate stock levels. The customer satisfaction survey in the ultrasound section revealed 87% satisfaction overall. One area of improvement highlighted in the survey was patient interaction with reception staff, leading to initiatives to improve soft skills (i.e. caring and attitude). The Radiology Dashboard indicators that were chosen are now used to track performance and identify trends to trigger appropriate corrective actions. Automated data capturing mechanisms minimize the risk of misreporting and ensure continuous validation of data sources, greater patient satisfaction and timely reporting of radiological exams, enabling more timely interventions.
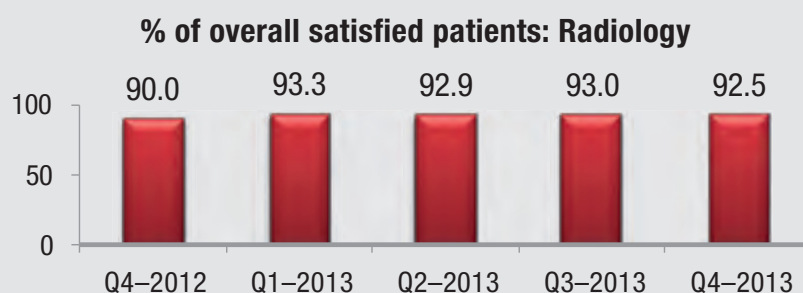
FIGURE 1: INVENTORY MANAGEMENT

The dynamic inventory management system helped us achieve a 100% fill rate; now we also have timely alerts of near expiry.

Reference: Radiology Information System (RIS)

FIGURE 2: PATIENT SATISFACTION TRENDS

% of overall satisfied patients: Radiology

	Q4–2012	Q1–2013	Q2–2013	Q3–2013	Q4–2013
	90.0	93.3	92.9	93.0	92.5

Overall
The department has usually been up and above the institutional target of 90% despite increasing volumes and acuity.

Reference: Institutional Customer Satisfaction Survey Report

FIGURE 3: SERVICE EXCELLENCE RATINGS TREND

CARR standard	Radiology questions	Q3 -2013	Q4 -2013
Communication	The receptionists were courteous	87	87
	Radiographer interacted positively		
	Radiologist interacted positively		
Attitude	The receptionists greeted warmly and thanked for our services	79	82
Responsiveness	The receptionists were efficient	90	88
Respect and Caring	The receptionists gave good instructions prior to the test/procedure	83	86
Overall service excellence for radiology		85	86

Overall
This is a new initiative and results are good.

Reference: Institutional Customer Satisfaction Survey Report

FIGURE 4: MONITORING KEY PERFORMANCE INDICATORS (DASHBOARD)

Overall
Management indicators:
Report turnaround time, E-signature, internal and external audit reports, patient satisfaction.
Financial indicators:
Average monthly volume, revenue, expenses, surplus.
Clinical indicators:
Panic results, VIR complication rate, neurological deficit, permanent deficit, PTC, PBD, PICC
success rate.
Safety indicators:
Wrong patient, site, procedure, patient fall, radioactive material disposal, radiation protection.

Achievements at national and international level

While the quality improvement projects, regular audits and system reviews not only help in improving the quality of services to patients, they also contribute to a more positive organizational culture. Another motivating aspect is that the quality of our projects received approval at international quality forums. We also won the "World's Best Poster" awards on two occasions – first at the International Society for Quality in Healthcare (ISQua) at Geneva in 2012, and more recently at International Hospital Federation's World Hospital Congress in Oslo in 2013.

Results

The quality improvement committee (QIC) of the radiology department, which has been tasked with overseeing the department's quality improvement and patient safety aspects, regularly discusses both clinical as well as non-clinical initiatives. Members of QIC have reached a consensus that the review has helped steer the department towards improved health care services to its patients.

Conclusion

This study proves that clinical audits are not enough to improve the standard of services; one must adopt a comprehensive approach encompassing all dimensions related to continuous improvement and patient safety. Although located in the developing world, The Aga Khan University Hospital pursues international standards and offers safe and high quality patient care services to its customers in a differentiated manner. In this way, it is comparable to other health care centres in the developed world. ❏

Amin Rajani is an imaging technologist with a MBA in hospital administration. He presently works as an adviser and is responsible for supervising the interventional radiology section. He is also coordinating the two-year On-the-Job Traineeship Programme for Imaging Technologists and plays active role in quality initiatives taken at departmental and institutional levels.

Syed Mohammad Sohail is currently the Senior Manager (Senior Administrator) in the department of radiology, responsible for the overall operational management and administration of the department. In addition to his regular responsibilities, he is a key member of hospital operational group and contributes to all the hospital quality forums and expansion/project-management initiatives.

Other contributors:
Abdul Hameed Tasneem provided support in collection of the data from various sources.

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Muhammad Akbar Khan provided support in the review and revision process at poster development stage.

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Assessment of changes in health care needs

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ABSTRACT: By 2020, the population of Ulaanbaatar will reach 1,522,400 inhabitants. In addition, estimates show that relative to 2010, there will be 13.1% more outpatient registrations and 11.6% more inpatients by 2020. This study, conducted by descriptive design based on demographic and morbidity data, analyzes whether current health care facilities meet the demands and needs of the Ulaanbaatar population. It also assesses health care needs and accessibilty in Ulaanbaatar by 2020.

Both data analysis and qualitative interviews with different sub-groups of the population reveal the neccesity to both reorganize primary level health care facilities and adjust resources in accordance with changing morbidity patterns.

The health care system of Mongolia is divided into three levels of services: primary, secondary and tertiary health care. Primary health care consists of health centres in rural areas and family clinics in cities. In contrast, secondary health care is characterized by provincial health centres in rural areas and district hospitals in cities. Finally, tertiary level health care is composed of national hospitals that provide health care services to the entire population of Mongolia. The population of Mongolia, however, is growing rapidly due to absolute growth and to rural–urban migration, especially in the capital city of Ulaanbaatar. As a result, health care needs, disease patterns and demand for health care services are changing in response to such trends. In order to properly assess these changes, this study is conducted on the primary and secondary levels of Ulaanbaatar City's (UBC) health care system to describe and assess rates of morbidity and mortality as well as current health care resources. This data is then compared to projections on morbidity patterns and human resources profiles.

Goal

This study aims to assess the modifications in UBC's health care system and evaluate whether current conditions meet changing health care needs.

Objectives

+ To evaluate the current situation of primary and secondary levels of health care facilities in UBC using current morbidity patterns and projections.
+ To estimate the demands of and need for human resources for the two lower levels of health care in Mongolia.

Study design and data collecting methods

This research was completed through descriptive analysis methods using morbidity and demography data as well as time series analyses. Demographic projections are estimated using both birth rates and assumptions of mortality and migration (rural to urban, inter-district). As for morbidity projections, the estimates are based on population perspectives and structured along with morbidity tendencies. Statistics programmes such as SPSS-17, STATA, Minitab and Dematra are used for descriptive and detailed analysis of the data.

In order to define the need for health care services, qualitative studies were conducted using a set of interviews (15 sucessive interviews with 4 general practitioners from 10 family clinics as well as 11 residents from selected 6 central districts of UBC).

Results

The number of residents of Ulaanbaatar is expected to reach 1,391,600 inhabitants by 2015, a figure 55.2% and 26.6% larger than numbers from 2005 and 2010 respectively. The average annual growth rate is thus 4.5%. Moreover, this study shows that the 2020 population of UBC should reach 1,522,200 inhabitants which is 38.4% more than the 2010 figure. This population growth demonstrates the need for assessment of and planning for health care demand.

No	District	2000	2005	2010	2015	2020	Increase 2020/2010
	TABLE 1: GENERAL POPULATION GROWTH RATE OF ULAANBAATAR						
1	Bayangol	141,044	160,479	185,104	212,543	256,392	38.50%
2	Bayanzurkh	149,647	196,132	265,997	301,485	337,869	27.00%
3	Songinokharkhan	158,558	204,587	252,264	281,612	330,529	31.00%
4	Sukhbaatar	95,491	117,233	136,917	160,024	196,364	43.40%
5	Khan-Uul	72,556	87,912	112,055	147,042	191,839	71.20%
6	Chingeltei	108,741	130,501	147,438	172,714	209,252	41.90%

Outpatient morbidity data and its projections

The total number of outpatient visits in UBC is steadily increasing. This rise may be associated with factors like larger city populations (rural–urban) and population density as well as environmental factors such as air, soil and water pollution. The number of outpatient visits in 2020 is projected to be approximately 364,233 cases, a 13.0% increase from 2010. In addition, the estimated number of outpatient visits in 2020 should steadily increase by 12.3–13.6% from 2010.

If one looks at the outpatient visits by pathology, the number of cancer, cardiovascular, respiratory, gastrointestinal, endocrinology, metabolic, neurological and congenital disorders should increase annually.

The gender and age group structure of outpatients are as follows. Morbidity in children aged 0–14 is expected to increase by

Table 2: Outpatient visits at the district hospital in Ulaanbaatar City (2010 data and its projection)

No	Districts	2006	2010	2015	2020	Change (2020/2010)
1	Bayangol	41,092	75,349	84,767	86,580	13,1%
2	Bayanzurkh	34,899	63,188	66,990	70,548	13.8%
3	Songinokhairkhan	40,746	80,003	86,058	90,056	12.4%
4	Sukhbaatar	19,060	30,672	32,478	33,971	12.3%
5	Khan-uul	16,936	28,938	31,353	32,951	13.3%
6	Chingeltei	18,160	44,256	47,638	50,127	13.6%
	Total	**170,893**	**322,406**	**349,284**	**364,233**	**13.0%**

Table 3: Trends in outpatient visits by disease area

ICD–10	2006	2010	2015	2020	2020/2010	
I Certain infectious and parasitic diseases	11,608	12,716	11,850	11,598	8.8%	
II Neoplasms	4,247	14,439	15,562	16,804	16.4%	
III Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	569	502	549	609	21.3%	
IV Endocrine, nutritional and metabolic diseases	1,913	6,904	8,026	8,789	27.3%	
V Mental and behavioural disorders	5,588	6,569	6,852	7,164	9.0%	
VI Diseases of the nervous system	5,621	14,885	15,676	18,061	21.3%	
VII Diseases of the eye and adnexa	6,041	15,486	15,506	15,323	-1.0%	
VIII Diseases of the ear and mastoid process	3,183	6,323	6,417	6,530	3.3%	
IX Diseases of the circulatory system	8,479	22,521	23,554	25,982	15.4%	
X Diseases of the respitory system	23,169	48,846	59,340	62,319	27.6%	
XI Diseases of the digestive system	21,427	40,126	48,309	50,649	26.2%	
XII Diseases of skin and subcutaneous tissue	8,899	30,012	30,397	30,377	1.2%	
XIII Diseases of musculoskeletal system and connective tissue	1,450	5,543	5,597	5,692	2.7%	
XIV Diseases of the genitourinary system	18,682	28,488	29,535	30,002	5.3%	
XV Pregnancy, childbirth and the puerperium	85	35	34	33	-7.1%	
XVI Certain conditions originating in the perinatal period	452	354	355	352	-0.6%	
XVII Congenial malformations, deformations and chromosonal abnormalities	632	1,102	212	1,346	22.2%	
XVIII Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	172	60	60	60	-1.2%	
XIX Injury, poisoning and certain other consequences of external causes	48,676	67,496	70,452	72,544	7.5%	
Total	**170,893**	**322,406**	**349,284**	**364,233**	**13.0%**	-10.0% 10.0%
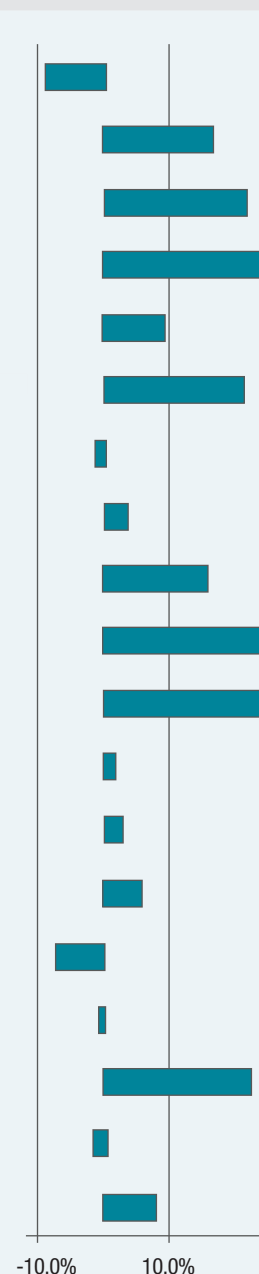
Table 4: Inpatient incidence forecast by type of department

No	Department	2006	2010	2015	2020	Change 2020/2010
1	Internal organs	60,476	70,789	77,900	86,439	22.1%
2	Surgical	13,447	17,208	19,123	20,697	20.3%
3	Obstetrics	10,057	12,779	11,798	11,353	-11.2%
4	Gynaecological	6,969	8,018	7,665	7,475	7.3%
5	Paediatric	25,032	35,916	35,423	35,822	-0.3%
6	Infectious disease	10,013	7,785	7,152	7,018	-9.9%
7	Dermatological and venerological	5,281	5,428	6,085	6,505	19.8%
8	Phthisisiotrical	156	1,601	1,843	1,804	12.7%
9	Phychiatric	12,353	14,693	15,474	17,833	21.4%
10	Neurological	4,922	4,549	4,950	5,077	11.6%
11	Traumatological	9,662	10,007	10,194	10,260	6.2%
12	Nefrological	2,453	3,575	3,605	3,705	3.6%
13	Urological	1,079	1,464	1,566	1,789	22.2%
14	Intensive care	2,245	1,275	2,343	2,820	25.6%
15	Ophthalmological	2,451	3,380	3,660	4,081	20.7%
16	Otolaryngological	3,070	4,809	4,963	5,127	6.6%
17	Stamatological	571	1,380	1,776	1,701	23.3%
18	Oncological	1,772	2,537	3,221	3,617	42.6%
19	Traditional medical	12,437	9,780	9,545	8,969	-8.3%
20	Light treatment		165	192	201	21.8%
21	Other	3,062	3,726	3,988	4,155	11.5%
	Total	**187,508**	**220,865**	**232,467**	**246,448**	**11.6%**

Table 5: Family clinics medical staff and corresponding population (2010 data)

No	District	Number of family clinics	Officially registered		Actual number of registered population	Number of medical doctors	Number of nurses
			Target population	Number of households			
1	Bayangol	21	185,104	47,043	194,083	81	79
2	Bayanzurkh	23	265,997	70,063	296,457	121	107
3	Songinokhairkhan	24	252,264	58,214	268,975	110	101
4	Sukhbaatar	18	136,917	36,165	137,422	67	58
5	Khan-uul	12	112,055	30,678	113,167	37	42
6	Chingeltei	17	147,438	35,033	149,893	75	61
	Total	**123**	**1,158,138**	**293,386**	**1,221,302**	**491**	**448**

health care units are going to have more outpatient cases, foreshadowing a potential issue of making accessible the primary level health care facilities' workforce, location and provisions.

Inpatient morbidity data and its projections

In order to project the total number of inpatient incidents, calculations are based on population growth tendencies and inpatient incidence trends.

The number of inpatient incidences is increasing. They will reach 246,448 in 2020, 11.6% more than in 2010. In 2010, the internal medical, paediatric, surgical, obstetric, psychiatric and orthopedic departments received 73% of all inpatients; this figure is estimated to be similar in both 2015 and 2020. By 2020, inpatients incidences within the internal medicine and oncology departments are projected to increase, whereas departments for obstetric and infectious diseases are projected to receive a reduced number of inpatients.

The number of inpatients in departments for surgery, intensive care, ophthalmology, urology, dermatology and allergology is expected to increase by 19.8–25.6%.

In 2020, the number of inpatient incidences across the population of UBC in the departments of obstetrics, paediatrics, infectious diseases and traditional medicine is projected to decrease.

Inpatients registration is projected to increase at district level hospitals, demonstrating a need to adjust human resources and bed numbers of district hospitals.

Current situation of human resources

There are presently 491 family doctors, 448 nurses and 388 assistants registered in UBC's primary health care services. In 2010, there were 597 medical doctors and 570 nurses registered in UBC.

The table below displays the total number of family clinics along with the corresponding population, the number of family doctors and the number of nurses who provide primary health care services.

Out of the 218 family clinics registered in Mongolia, only 123 of them provide primary and

10.8–11.2%; in economically active age groups (15–64), it should increase by 10–10.1%; in those aged 65+, it should increase by 9.1–9.4%. So as one can observe, outpatient growth in UBC is stable and independent of age group and gender differences.

Estimates show that primary level health care units should register 18.6%, translating to about 60,000 outpatient incidents by 2020. On the other hand, outpatient incident registration for the top level health care facilities is expected to decrease by 62.8%, while secondary level health care units or district hospital registrations will stay stable at 18.7% by 2020. This suggests that primary level

Table 6: Number of population per family doctor in Mongolia (2010 data)

No	District	Population of corresponding area	Current number of doctors	Current number of nurses	Population number per doctor	Doctors needed additionally	Difference
1	Bayangol	185,104	81	79	2,285.23	103	-22
2	Bayanzurkh	265,997	121	107	2,198.32	148	-27
3	Songinokhairkhan	252,264	110	101	2,293.31	140	-30
4	Sukhbaatar	136,917	67	58	2,043.54	76	-9
5	Khan-Uul	112,055	37	42	3,028.51	62	-25
6	Chingeltei	147,438	75	61	1,965.84	82	-7
	Total	**1,099,775**	**491**	**448**	**2,239.87**	**611**	**-120**

public health services in UBC, a city of approximately 1,151,400 residents. A total of 491 medical doctors, 448 nurses and 2,265 staff members are working at these 123 family clinics.

Table 6 compares persons per family doctor to the standard number. According to the national standards of health care personnel, there should be 1,500 people per family doctor; Table 6, however, shows that one family doctor is serving 2,239.87 people on average. To avoid overloading primary health care services in UBC, it is estimated that 120 doctors and 120 nurses are required.

In Mongolia, the proportion of family doctors among total medical doctors is about 30%, suggesting a need for additional family doctors.

Discussion

Canadian researchers note that planning and forecasting play essential roles in the deployment of human resources in the health sector (Gail Tomblin Murphy, Linda O Brien-Pallas. Health human resources in Canada. Canadian Institute for Health Information, 2005). We have estimated population growth reaching 1,275,000 by 2015, 1,522,000 by 2020, and have divided these results by age group, district, and dominating morbidity patterns. This has provided the neccesary information for adjusting human and non-human resources of the Mongolian health sector.

Conclusion

Health care demand in UBC today is changing tremendously, and the structure and human resources in health care facilities cannot satisfy these trends in demography and morbidity.

By 2020, UBC's population will grow by 38.4%, outpatient cases will increase by 13.1%; in turn, respiratory, digestive and cardiovascular diseases will increase by 26–27.6%. Tendency of outpatient cases will increase by 11.6%, cancer diseases will increase by 42.6%, ICU incidences will increase by 25%. Thus, there is a need to adjust human resources by profile and number to meet this evergrowing demand.

Compared to what is required, the current numbers of medical staff, particularly family doctors, are not sufficient; there are approximately 319 extra family doctors and 319 extra nurses needed. ❏

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Résumés en Français

Maher – Créer un esprit d'ouverture à l'innovation: le défi des dirigeants

On reconnaît que les services de santé sont confrontés à des pressions accrues sur les coûts dans un climat de demande et d'attentes croissantes de la part des patients et de leurs proches. La capacité d'innover importe beaucoup pour la réussite future de tous les établissements de soins de santé. Grâce à des changements simples mais profonds des comportements et des processus, tels qu'illustrés sur sept dimensions, les dirigeants peuvent fortement favoriser un esprit d'ouverture à l'innovation. En conséquence, ceci peut faciliter la transformation des services de santé par une innovation accrue.

Sahin – La clé pour les services de santé en Turquie: nouvelles perspectives sur le leadership et la gestion de l'hôpital

Les services de santé sont l'un des critères les plus importants pour mesurer les indicateurs d'un pays. La Turquie a mobilisé toutes ses ressources pour fournir des services de haute qualité, facilement accessibles et confortables pour sa population. Pour atteindre cet objectif, le système de soins de santé turc a subi une transformation importante grâce à son Programme de transformation de la santé commencé en 2005. Les réformes portent sur l'introduction d'un système d'assurance de santé générale, l'évolution des services de santé de l'hôpital, des améliorations dans la gestion de l'hôpital et les compétences de leadership transformationnel.

Tout d'abord, tous les hôpitaux publics du pays ont été regroupés sous une même structure, donnant à des millions de personnes couvertes par l'agence nationale de la sécurité l'accès à l'ensemble de ces hôpitaux. Deuxièmement, tous les médicaments et les équipements médicaux utilisés par les patients sont offerts gratuitement. Merci à ces développements, les hôpitaux ont été modernisés, et ce processus de modernisation dans le secteur de la santé se poursuit rapidement.

D'autre part, pour que les hôpitaux turcs puissent survivre, ils doivent continuer la modernisation, se rapprocher des modèles européens et produire de nouveaux dirigeants avec de nouveaux paradigmes.

Dans cette nouvelle évolution du système de santé, les directeurs des hôpitaux et les dirigeants doivent être des visionnaires et des stratèges prêts à conseiller quand le vent change de direction. Suite à cette doctrine, la plupart des hôpitaux turcs sont maintenant dirigés par deux dirigeants : le directeur de l'hôpital et le CEO qui est en charge de fonctions de l'entreprise. Ces cadres doivent clairement être les leaders des organisations de soins de santé de haute qualité.

Gyani – Programme d'accréditation du NABH

En matière de soins de santé, la qualité importe beaucoup car la sécurité du patient en découle. La qualité telle que nous la connaissons est motivée soit par des réglementations, soit par la demande du marché. Dans la plupart des pays en développement, les règlements sont inefficaces, car par suite du manque d'agents de santé, les gouvernements sont obligés d'être assez souples. Dans ces circonstances, la qualité passe au second plan. L'accréditation symbolise l'encadrement de la gouvernance de qualité d'un hôpital et repose sur des critères optimums. Non seulement l'Inde construit de multiples hôpitaux ultra-modernes, mais encore elle observe une augmentation de la demande en qualité et du tourisme médical. L'Inde a lancé son propre programme d'accréditation en l'an 2006, se conformant aux normes accréditées par ISQua. Cet article relate l'historique de l'accréditation en Inde et décrit les problèmes rencontrés par les hôpitaux ainsi que les bénéfices acquis pour ce secteur et les patients.

Wilson – L'accréditation hospitalière, base de fiabilité

Les personnes qui travaillent dans les établissements de santé s'engagent à assurer les meilleurs soins possibles à leurs patients. Dans le milieu de santé actuel, cet engagement est très difficile à tenir. Pour les gens qui y travaillent, les soins de santé n'ont jamais été aussi complexes et exigeants. Cet article décrit deux méthodes différentes mais complémentaires pour améliorer la qualité et la sécurité des soins de santé. L'accréditation fournit une base qui permet de créer des systèmes de soins pour un vaste éventail d'institutions de santé. Un haut niveau de fiabilité incite les personnes et les organisations à viser les plus hauts niveaux de performances. Ces méthodes combinées offrent aux personnes qui travaillent dans le domaine de la santé la possibilité de tenir leurs engagements vis à vis de leurs patients.

Podolinsky – Rentabilité de l'hôpital: Tuer ou créer un cadre hospitalier productif

Productivité n'est PAS qualité. La productivité est la valeur ajoutée que nous apportons à notre travail, à chacune de nos tâches, à chaque jour. Créer un cadre hospitalier productif, c'est bien plus que d'acheter l'équipement adéquat ou de recruter une combinaison harmonieuse de personnel. La productivité consiste à investir dans nos employés et à leur donner les moyens et l'autorité nécessaires pour mener efficacement leurs tâches. Accumuler les "programmes de qualité" peut aboutir à tuer la productivité en détournant les gens de leurs tâches principales. Ajouter une liste de contrôle à l'ergothérapie peut abaisser de moitié les taux de mortalité en éliminant la moindre erreur.

Mujumdar – Travail d'équipe et communication: approche efficace de la sécurité des patients

Les défaillances du travail d'équipe et des communications sont les principales causes des problèmes de sécurité des patients en matière de soins de santé. Bien que les prestataires de soins de santé doivent travailler en équipe, ils ne sont pas formés aux

compétences requises pour le travail d'équipe et les communications. Les soins de santé sont exposés à des problèmes dus aux différences de styles de communications, aux échecs de communications et à un mauvais travail d'équipe. Il est amplement démontré dans la littérature que les défauts de communication sont préjudiciables à la sécurité des patients. On estime que dans le monde entier, 80% des erreurs médicales graves sont dues au défaut de communications entre les prestataires médicaux.

Le NUH reconnaît que des communications efficaces et un travail d'équipe sont indispensables aux prestations de soins de haute qualité en matière de sécurité des patients, en particulier dans une organisation complexe. Le NUH en est un bon exemple, étant donné la richesse de mélange de nationalités et de races chez le personnel comme chez les patients, dans un environnement médical sans cesse croissant. Le NUH a dû affronter ces problèmes en adoptant une approche pluridimensionnelle. Les essais et les tribulations du NUH dans ce parcours ont été encourageants car les scores de sondage sur le climat de sécurité des patients se sont améliorés au fil des années.

Sohail – Les audits cliniques suffisent-ils à apporter des améliorations aux prestations de soins en général ?

Cette étude a été menée pour examiner tout l'éventail d'initiatives qui ont évolué dans le temps à l'échelle mondiale en matière de mécanismes de soins de santé. Sur cette base, les projets d'amélioration de la qualité ont été examinés dans le service de radiologie d'un des CHU de soins tertiaires de pays en développement. On a constaté qu'il ne suffit pas de procéder à des audits cliniques pour améliorer les processus de prestations médicales. Des exemples d'autres initiatives sont donnés, qui se combinent pour permettre d'assurer des services médicaux durables, sûrs et de haute qualité aux patients et aux personnes que nous sommes appelés à servir.

Nanjid – Evaluation des changements en matière de besoins en soins de santé

D'ici 2020, la population de Ulaanbaatar aura atteint 1.522.400 habitants. Qui plus est, d'après les prévisions à 2020 par rapport à 2010, il y aura 13,1% patients de plus inscrits en consultation externe et 11,6% de plus de patients hospitalisés. Menée par des paramètres descriptifs basés sur les données démographiques et la morbidité, cette étude détermine si les conditions des établissements de santé actuels répondent aux demandes et aux besoins de la population d'Ulaanbaatar. Elle examine aussi les besoins en soins de santé et leur accessibilité à Ulaanbaatar d'ici 2020.

L'analyse des données, de même que les interviews sur la qualité menées sur différents sous-groupes de la population, révèlent la nécessité de réorganiser les établissements de santé primaire et d'adapter les ressources pour répondre aux changements des tendances de la morbidité.

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Resumen en Español

Maher – La construcción de una cultura de la innovación: Un desafío de liderazgo

Se reconoce que los servicios de salud se enfrentan a crecientes presiones de costos en medio de un clima de aumento creciente de la demanda y las expectativas de los pacientes y las familias. La capacidad de innovar es importante para el éxito futuro de todas las organizaciones de atención de salud. Haciendo algunos cambios simples pero profundos en el comportamiento y los procedimientos que se ilustran a través de siete dimensiones, los líderes pueden tener gran éxito en la cultura por la innovación. Esto a su vez puede apoyar la transformación de los servicios de salud a través del aumento de la innovación.

Sahin – La clave de los servicios de salud en Turquía: Nuevas perspectivas sobre el liderazgo y la gestión de los hospitales

Los servicios de salud son uno de los criterios más importantes para medir los indicadores de un país. Turquía ha movilizado todos sus recursos para proporcionar servicios de alta calidad, fácilmente accesibles y cómodos para su población. Para lograr este objetivo, el sistema de salud de Turquía ha sido objeto de una transformación importante a través de su Programa de Transformación de la Salud iniciado en 2005. Las reformas se centran en la introducción de un sistema de seguro de salud en general, el cambio de los servicios de salud del hospital, las mejoras en la gestión de los hospitales y en las habilidades de liderazgo transformacional.

En primer lugar, todos los hospitales públicos del país se fusionaron bajo una misma estructura, dando a millones de personas, cobijadas por la agencia nacional de seguridad, acceso a todos estos hospitales. En segundo lugar, todos los medicamentos y equipos médicos utilizados por los pacientes se ofrecen de forma gratuita. Gracias a estos avances, los hospitales se han modernizado, y este proceso de modernización del sector de la salud aún avanza rápidamente.

Por otro lado, para que los hospitales turcos puedan sobrevivir, necesitan modernizarse aún más y acercarse más de los modelos europeos, y producir nuevos líderes con nuevos paradigmas.

En este nuevo y evolutivo sistema de salud, los directores de los hospitales y los funcionarios ejecutivos deben ser visionarios y estrategas y estar atentos para advertir sobre los cambios de dirección. Siguiendo esta doctrina, la mayoría de los hospitales turcos están ahora a cargo de dos altos ejecutivos: el gerente del hospital y el director ejecutivo que se encarga de las funciones de negocio. Estos ejecutivos deben ser claramente los líderes de las organizaciones de atención de salud de alta calidad.

Gyani – Programa de acreditación NABH en la India

La calidad en la atención de salud es importante, ya que está

directamente relacionada con la seguridad del paciente. La calidad como sabemos está impulsada por la regulación o por medio de la demanda del mercado. La regulación en los países en desarrollo no ha sido efectiva, ya que hay escasez de profesionales de la salud y los gobiernos tienen que ser flexibles. En tales circunstancias, la calidad ha pasado a segundo plano. La acreditación simboliza el marco para el manejo de la calidad de un hospital y se basa en los estándares óptimos. No sólo la India está construyendo numerosos Hospitales ultra modernos, si no que también está experimentando un aumento en la demanda de calidad así como el turismo médico. La India lanzó su propia acreditación en el año 2006, conforme a las normas acreditadas por ISQua. En este trabajo se realza el camino de la acreditación en la India y se describen los problemas encontrados por los hospitales, así como los beneficios que esta ha generado para la industria y los pacientes.

Wilson – acreditación hospitalaria– una base de alta fiabilidad

Las personas que trabajan en organizaciones de atención médica están comprometidas a proporcionar la mejor atención médica posible a sus pacientes. En el entorno sanitario contemporáneo es un compromiso muy difícil de mantener. Para las personas que trabajan ahí los cuidados de la salud nunca ha sido más complicado o exigentes. Este artículo describe dos métodos diferentes pero complementarios para mejorar la calidad y la seguridad de la salud. La acreditación proporciona una base para la creación de sistemas de atención a través de muchos tipos de organizaciones de atención médica. Un alto nivel de fiabilidad inspira las personas y organizaciones para luchar por los más altos niveles de rendimiento. Juntos, estos métodos dan a las personas que trabajan en la atención sanitaria la oportunidad de cumplir su compromiso con sus pacientes.

Podolinsky – hospital productividad: Cómo matar o crear un entorno hospitalario productivo

La productividad no es lo mismo que la calidad. La productividad es el valor agregado que nosotros aportamos al trabajo, a cada labor, cada día. El crear un entorno hospitalario productivo, es mucho más que comprar el equipo adecuado o emplear una harmoniosa combinación del personal. La productividad consiste en invertir en nuestra gente y en darles las herramientas y la autoridad para hacer su trabajo eficazmente. Agregar más "programas de calidad" en realidad puede acabar con la productividad porque alejamos a las personas de sus trabajos fundamentales. Agregar una lista de control en el OT puede cortar las tasas de mortalidad por la mitad mediante la eliminación de los errores más pequeños.

Mujumdar – trabajo en equipo y comunicación: un enfoque eficaz para la seguridad del paciente

Las fallas de comunicación y del trabajo en equipo lideran la causa de incidentes de seguridad de los pacientes en la asistencia sanitaria. Aunque los proveedores de salud deben trabajar en equipo, no están bien entrenados en habilidades de comunicación y trabajo en equipo. Los servicios de salud se enfrentan a los problemas de diferencias en estilos de comunicación, fallas en la comunicación y la falta de trabajo en equipo. Hay suficiente evidencia en la literatura para demostrar que la falta de comunicación es perjudicial para la seguridad del paciente. Se estima que 80% de los graves errores médicos en todo el mundo ocurren debido a la falta de comunicación entre proveedores de servicios médicos.

NUH reconoce que el trabajo en equipo y una comunicación eficaz son esenciales para una prestación segura al paciente de alta calidad, especialmente en una organización compleja. Es un buen ejemplo, donde hay una rica mezcla de nacionalidades y razas, de personal y de pacientes, y un ambiente de cuidado en rápida expansión. NUH tuvo que superar estos retos mediante la adopción de un enfoque múltiple. Las pruebas y tribulaciones de NUH en este viaje valieron la pena ya que los resultados de la encuesta del clima de seguridad de los pacientes mejoran con los años.

Sohail – Son suficientes las auditorías clínicas para mejorar la atención sanitaria en general?

Este estudio se realizó para explorar todo el espectro de iniciativas que han evolucionado con el tiempo en materia de mecanismos de atención sanitaria a nivel mundial. Sobre esta base los proyectos de mejoramiento de la calidad se revisaron en el departamento de radiología de uno de los hospitales universitarios de atención terciaria en los países en desarrollo. Se ha establecido que el solo hecho de realizar auditorías clínicas no es suficiente para lograr mejorar los procesos de atención sanitaria, se dan ejemplos de otras iniciativas que se combinan para asegurar servicios de salud seguros, de alta calidad y sostenibles a los pacientes y a todos aquellos a quienes estamos llamados a servir.

Nanjid – La evaluación de los cambios en materia de necesidades de atención de salud

En 2020, la población de Ulaanbaatar alcanzará 1.522.400 habitantes. Lo que es más, las estimaciones muestran que en relación con 2010, habrá un 13,1% más de pacientes inscritos en consulta externa y 11,6% más de pacientes hospitalizados para 2020. Realizado mediante un diseño descriptivo basado en los datos demográficos y de morbilidad, este estudio analiza si las condiciones de los centros de salud de hoy en día satisfacen las demandas y necesidades de la población de Ulaanbaatar. También evalúa las necesidades de salud y accesibilidad en Ulaanbaatar para 2020.

Tanto el análisis de datos como las entrevistas cualitativas con diferentes sub-grupos de la población revelan la necesidad de reorganizar los centros de salud de nivel primario y ajustar los

International Hospital Federation

The voice of the International health care community

2013-2014 Corporate Partnership Programme

Supporting collaboration, ideas and innovation in global healthcare

Who We Are

Founded in **1929**, the **International Hospital Federation** (IHF) is the leading global body representing **public and private national hospital and healthcare associations**, departments of health and major healthcare authorities; with **members** from some **100 countries**.

Our vision and objectives

The founding philosophy of the IHF is that it is the right of every human being, regardless of geographic, economic, ethnic or social condition, to enjoy the best quality of health care, including access to hospital and health care services. By promoting this value, the **IHF supports the improvement of the health of society**.

The objective of the IHF is to develop and maintain a spirit of cooperation and communication among its members and other stakeholders so as to create an environment that facilitates the **cross – fertilization and exchange of ideas** and information in healthcare policy, finance and management.

The role of the IHF is to help international hospitals and healthcare facilities work towards improving the level of the services they deliver to the population regardless of the ability of the population to pay. The IHF recognizes the **essential role of hospitals and health care organisations** in providing health care, supporting health services and offering education.

The IHF is a **unique arena** in which all major hospital and health care associations are able to address and act upon issues that are of common and key concern.

What IHF Accomplishes

- **Projects** aimed at supporting and improving delivery of hospital and healthcare services.
- Regular and extensive **collaboration** with governmental and non-governmental organizations in developing health systems.
- Creation of "**knowledge hubs**," through its international conferences, education programmes, information services, publications and consultations.
- In official relations with the World Health Organization (WHO) and the Economic and Social Council of the **United Nations** (ECOSOC), it is strategically positioned as a bridge between IHF members, the United Nations.
- Acts as a **global facilitator for health care delivery** among and between key governmental and non-governmental stakeholder organisations.

What Is the Corporate Partnership Programme?

The IHF Corporate Partnership Programme, launched in 2009, is an **opportunity** presented to major corporations seeking to join IHF members in working to improve hospital and **healthcare performance** around the world.

Partnership is open to a limited number of companies who are fully engaged in the **global health sector** and have a **good reputation** as providers. Affiliation with this Partnership Programme gives a strong signal to the global community that the Corporate Partner is a major world player in the hospital and healthcare sector.

The Partnership package provides **access to hospital and healthcare decision makers** from around the world. The Progamme provides an exclusive opportunity for relationship building and sharing of ideas and experiences between corporate leaders and executives in the hospital and healthcare sector. **Dialogue** through this platform will ultimately introduce new ideas and expand knowledge in the healthcare market.

The benefits of the Programme are designed to maximise interaction between actual and potential clients through a **"one-stop shop" approach**.

Opportunity to ultimately create a **corporate leadership body**, to act as a neutral platform for wide-ranging intra-industry discussions on issues of mutual concern beyond and outside of traditional parameters of marketing in order to **foster collaboration** and **enhance confidence** in commercial relations in the health sector as well as **performance** and quality of services and **life** to the **community** at large.

Becoming a Corporate Partner

Contract Terms

- *Payment* covers a calendar year period of:
  1January – 31 December
  (For the 2-year option, payment can be made on annual basis)
- *Letter of Agreement*
  The Corporate Partnership is established upon signature of a letter of agreement by representatives of both the International Hospital Federation and an authorised signatory of the Corporate Partner organisation.

Application

For additional information, please contact:
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2013 Corporate Partners

Meet IHF corporate partners

Bionexo is the center of a community comprised of over 15,000 players of the hospital business. Through our web platform, we integrate hospitals throughout the supply chain sector, focusing on business development and relationships. Established in 2000, in just 10 years, Bionexo was structured in Brazil, becoming the largest marketplace reference to the hospital industry and contributing significantly to the professionalization of the purchasing sector and growth of the healthcare market. The success of this innovative business model has led to Bionexo for Latin America and Europe, where also attained leadership in addition to export technology and implement a new concept in commercial transactions of organizations. Everything happened in a short time, just like businesses are made between the companies that integrate our platforms. This makes Bionexo the largest core of the hospital sector in Brazil. Pioneering and innovation, helping thousands of companies and hospitals.

www.bionexo.com.br

Esri is the world leader in GIS technology. Esri software promotes exploring, analyzing and visualizing massive amounts of information according to spatial relationships. Health surveillance systems are used to gather, integrate and analyze health data; interpret disease transmission and spread; and monitor the capabilities of health systems. GIS is a powerful tool for identifying health service needs. Esri software is extensively used by health organizations throughout the world, including the US Centers for Disease Control and Prevention (CDC), the World Health Organization (WHO), 127 national health ministries, and over 400 hospitals.

For more information, contact Christina Bivona-Tellez, CBivona-Tellez@esri.com. www.esri.com/health

DNV Business Assurance, a world leading certification body, is part of the DNV Group; an independent foundation whose purpose is to safeguard life, property and the environment. With over 140 years' experience in developing safety standards in high risk industries, we work with hospitals, healthcare organizations and other businesses to assure the performance and safety of their organisations, products, processes and facilities through accreditation, certification, verification, assessment and training. Within healthcare we are recognised as a leader in identifying, assessing and managing risk to mitigate harm to patients. Our 1,800 employees worldwide help customers build sustainable business performance and create stakeholder trust.

IHF events calendar

2014
IHF

IHF Group Purchasing – Special Interest Group Conference
Transforming purchaser/supplier cooperation to improve health care efficiency: A global challenge
4–5 November 2014, Paris, France

4th IHF Hospital and Healthcare Association Leadership Summit (By invitation only)
Seoul Korea For more information, contact
sheila.anazonwu@ihf-fih.org

2015 IHF 39th World Hospital Congress
6–8 October 2015, Chicago, USA
For more information, contact sheila.anazonwu@ihf-fih.org

2016 IHF 40th World Hospital Congress
Durban, South Africa For more information, contact
sheila.anazonwu@ihf-fih.org

2017 IHF 41st World Hospital Congress
November, Kaohsioung City, Taiwan
For more information, contact sheila.anazonwu@ihf-fih.org

2014
MEMBERS

Hong Kong
Hospital Authority Convention 2014 *7–8 May 2014, Hong Kong Convention & Exhibition Centre* More information at http://www.ha.org.hk/haconvention/hac2014/ en_index.html

Columbia
IV Feria Internacional de la Salud, Meditech 2014
12–15 August 2014, Bogotá, Columbia

XI Congreso Colombiano de Hospitales y Clínicas
13–14 2014, Auditorio Corferias, Bogotá, Columbia
More information: www.achc.org.co

Australia
The Australian Healthcare and Hospitals Association's 2014 Congress "The Quantum Leap: Innovation - Making Quality Count", in collaboration with the Australian Council on Healthcare Standards

8–10 September 2014, Sydney, Australia
This Conress will focus on quality improvement in the healthcare sector.
More information is available by contacting: swright@ahha.asn.au
We welcome the interest and participation of IHF members in this Congress.

Austria
17th European Health Forum Gastein
1–3 October 2014
More information http://www.ehfg.org/home.html

Korea
2014 Korea Healthcare Congress
12–14 November 2014, 63 Convention Center, Seoul, Korea
Organized by The Korean Hospital Association
More information http://koreahealthcarecongress.com/eng/inv/

2014
COLLABORATIVE

22nd International HPH Conference
23-25 April 2014, Hotel Fira Palace, Barcelona, Spain
More information http://www.hphconferences.org/

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The Hyatt Regency Chicago—the program site—is a prime location with breathtaking skyline and Lake Michigan views.

More information will be forthcoming at **www.ihf-fih.org**, but for now, save the date!

International Hospital Federation

American Hospital Association

American College of Healthcare Executives
for leaders who care ®