Special Anniversary Issue: A Bold Vision for Future of Hospitals and Health Services in the 21st Century
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2.1 Enabling the flexibility of organizations to adapt quickly to changes, addressing accelerated innovation adoption.
2.2 Key results that really matter: patients outcomes as the driver for better healthcare.
2.3 Health and care sustainability supported by applied research and innovation adoption.
2.4 Global Healthcare, global mobility, global access: towards a liquid borderless healthcare system.

THEME 3. People at the center of healthcare system transformations
3.1 How to put citizens at the center of health and care.
3.2 Humanistic centered care.
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Celebrating the Past and 2020 Vision for the Future: 90th Anniversary of the International Hospital Federation

In this final edition of the World Hospitals and Health Services (WHHS) Journal, we will celebrate the closing of the 90th Anniversary Year of the International Hospital Federation and reflect on the future of the State of Hospitals in the world of tomorrow.

The International Hospital Federation (IHF) was formed in 1929, as the International Hospital Association (IHA). During the Second World War, the organization ceased to function, until re-forming in 1947 under its present name, after the first International Hospital Congress in Atlantic City, New Jersey. The Congress situated the IHF Secretariat in London, UK where it would remain for over 50 years. After being moved to Ferney-Voltaire, France in 2002, the IHF was relocated, in 2011, to its current location of Bernex, within the Canton of Geneva, Switzerland.

Ninety years ago, in the same fateful year as the IHF was created, the New York Stock Exchange (NYSE) crashed, ending an eight-year bull market, fueled by unrestrained speculation and stock manipulation. The collapse of the financial market led to a 83% drop in the pre-crash value of Stocks on the NYSE and a dramatic impact on human conditions throughout the world.

But out of the ashes of destruction came reconstruction. Franklin D. Roosevelt was elected President of the United States of America. His first major accomplishment was to implement his New Deal domestic agenda in response to the worst economic crisis in U.S. history.

The State of Hospitals in 1929 was as dire as the global economy at that time. In his now legendary book The Hospitals 1800–1948, the British Economist Brian Able-Smith, provides a vivid chronicle of the conditions of hospitals at that time in the UK, which was not unlike what you would have in other part of Europe and North America. This was a little over 20 years before the creation of the British National Health Service and almost 40 years before the Medicare Act in the USA. There was no country in the world with a universal health care system. Although Penicillin was discovered in 1928 by Scottish scientist Alexander Fleming, the medical profession only began using it to treat infections in 1942. Most patients needing care still tried to avoid hospitals at all cost. Those who did enter a hospital alive during that era were often taken out in a coffin.

On December 29, 2019 Nicholas Kristof, an opinion columnist for the New York Times, wrote that although there may be plenty of things to get depressed about in the current global political situation: “This Has Been the Best Year Ever: For humanity over all, life just keeps getting better.” As evidence for this claim he notes that 2019 throughout the world was probably the year in which children were least likely to die before adulthood, adults were least likely to be illiterate, poverty was less than ever and we had found ways to prevent, treat, delay and palliate many excruciating and disfiguring diseases. He notes that “every single day in recent years, another 325,000 people got their first access to electricity. Each day, more than 200,000 got piped water for the first time.” Such advances have enormous implications for sanitation and health outcomes. Historically, almost half of all humans died in childhood. Today in most western countries under-five mortality is less than 10 percent and in middle-income countries less than 20 percent, a dramatic improvement that would have been unimaginable in 1929.

Had Isaac Asimov been old enough to write a first science fiction novel on hospitals in 1929, he would have been hard pressed to invent a story that would have captured the unimaginable State of Health service delivery today. How could anyone in 1929 imagine a world in which essential drugs were delivered to children in villages by remote controlled drones, medical staff communicate with each other and access patient medical records wherever they are wirelessly, robotic surgery and artificial intelligence, etc.

Today, hospitals matter to everyone, in ways that are complex and interdependent. Hospitals are critical assets for communities, both routinely and in response to outbreaks and emergencies. They’re part of all our lives, delivering vital services from our first moments to our last; they’re also a platform for training and research. Hospitals have a great legacy of achievement and service; and the
tertiary care model of hospitals with wards organized around medical specialties, did deliver stunning results – but the model is now showing signs of age. The time has passed for institutional and medical specialty “silos”, strict hierarchies and rigid categorization by level of care. Unlike the traditional model in which hospitals acted as self-contained institutions whose walls (both physical and administrative) both isolated them and gave them status, World Health Organization’s transformative agenda sees them as intimately interconnected with other care providers and wider society. Halfdan Mahler said in 1981 that “A health system based on primary care cannot be realized without support from a network of hospitals.” Today, as world leaders reiterated their commitment to Primary Health Care, published in 2018, and to achieving Universal Health Coverage by 2030 published in 2019, his words ring as true as ever.

In looking forward, one of the key lessons from the past is that the future is impossible to predict. To provide any 2020 Vision for the Future in this last issue of the WHHS Journal would be foolish. But it is possible to identify some of the challenges that will be shaping the future and to consider how in a world that is now considered as a global village there is a combination of similar trends and very unique specificities.

We want to reflect briefly on how health care evolution is perceived today by the leaders of healthcare and hospital associations, Ministry of health and major international organizations as well as professional association. One thing that is certain is that the battle for better health is an unfinished agenda. There is therefore a need to continue building healthy social environments and strong health systems to address these problems. Giving a full account of the various advances that are on the horizon is beyond the scope of this editorial. But the following are trends that are likely to continue.

First and foremost, hospitals are here to stay at least in the foreseeable future. But it is also clear that in most countries the days of long inpatient hospitalization are over. Instead we are seeing a strong shift to short intensive periods of hospitalization for conditions that need to be treated in a highly controlled environment by a very specialized team. Most other conditions are increasingly being treated on an outpatient and ambulatory basis – often by staff linked to hospitals or hospital networks. Both primary care and in-patient specialized care will continue to be strengthened by improvements in communication, electronic medical records and techniques in telemedicine. The concept of “hospitals without walls” is quickly becoming a reality. Even in the case of hospitals that have walls, those walls can be modular, adapting quickly to changes both needed for space and location. Countries faced with major natural disasters and epidemics often do not have the permanent reserve capacity to deal with such events. Rather than build costly and permanent infrastructure, modular and prefabricated structures can be set up for the urgent treatment of large populations in a matter of hours or days.”

Second, there will continue to be a push for technological innovation (both in new drugs and medical technology). The current emphasis is clearly on miniaturization, portability and connectivity to allow treatment to get to the patient rather than the patient coming to the health facility. Third, we are at a tipping point of potential shift between the benefits of standardization of processes and approaches bringing better quality and reducing individual cost and individualization of treatment and processes that provide better outcomes possibly with costs that can be fully monitored and controlled. This will have major consequences on the way health service provision is organized.

Fourth, the involvement of people in the community and as patients when they seek health services is fast evolving in a direction toward more responsibility for their health and for the care when needed but also in participating in the decisions at the policy and institutional level. Here differences are still very important according to countries in regard to their culture and level of development, but this trend should grow because at the end of the day for each of us our health is our greatest asset.

Finally, health care costs are almost certainly going to continue to increase as the middle-class and Gross Domestic Product grow over time in most countries. A major challenge for the future is, therefore, how to make this growth sustainable, more equitable and of higher value for money spent. Even in this area, we are seeing major progress. Better financial information systems improve our understanding of how money is being spent and to what effect. This allows adjustments to eliminate waste and allows us to realign the system as it evolves.

Historically, hospital reforms have centered on cost containment and improving quality, efficiency and productivity to do more or better of the same. However, the major trends highlighted above, call for bold transformations to make hospitals fit for purpose in this rapidly evolving environment. Increasing the contribution of hospitals to universal health coverage requires two approaches running alongside one another. Internally, hospitals need to be re-organized in ways that deliver person-centred care, strengthen clinical and administrative performance, and open their doors both to pre- and post-hospitalization partnerships. Externally, the roles and functions of hospitals need to be re-defined within renewed health and social care partnerships. The two approaches are closely intertwined: a hospital’s internal organization and ability to work across institutional boundaries are constrained by its position within the system. Similarly, a hospital that is poorly governed, does not collect good performance data, focuses on volume and profits instead of quality, and is unable to take on new roles that would benefit society as a whole.

In World Health Organization’s vision for hospitals, they are moving away from their traditional definition as physical buildings (bounded by walls and beds) and instead see themselves as flexible organizations that concentrate knowledge and technology and functions as a resource hub for patients but also for other health and social care providers. Second, they are leaving behind their isolating status as institutions uniquely responsible for individual patients requiring highly specialized acute care and are embracing joint responsibility with other care providers for population health. Third, they are broadening their focus from immediate, acute episodes, to save lives to integrated care pathways to improve health. While aligning with national health system objectives, they are responsive to local conditions and priorities. They also lead by example in sustainable development. Numerous examples across the world, in a wide variety of settings, demonstrate that this transformation is already underway and delivering stunning results.

As a result, hospitals are often becoming smaller in size (as measured by number of beds) and hybrid models are mushrooming, giving them more “agility” (with a recognition that “smaller is beautiful”). The hospital sector landscape is more varied, extending far beyond the “one-size-fits-all” technocratic models organized around 3 or 4 hospital types along a strict pyramid of care. Even in the low income countries and fragile states, hospitals are examining how they can serve as the hub for improving the health of their communities and the strength of their national health workforce.

In closing this Editorial, we would like to announce some exciting news about the World Hospitals and Health Services Journal itself. In 2020 and going forward, the traditional quarterly printed version of the World Hospitals and Health Services Journal will be replaced by a new and more dynamic on-line system of reporting. We are confident that this will be a better vehicle for keeping members and others updated on current topics, shared experiences and in-depth analysis than the traditional quarterly printed Journal. This is in keeping with current trends and we feel confident that it will be welcomed by our members and readers once they become familiar with the new approach. Providing the information and the knowledge that health service decision makers need is our goal and we will save no efforts to fulfill it including making this in a more participatory and agile format.

Wishing you a healthy and prosperous year in 2020.

Alexander S. Preker, Ed Kelley, Eric de Roodeenboke
Challenges for the Ten Years to Come and How to Tackle Them – Overview

These three pages present a summary of the challenges and opportunities presented in the various articles.

**NATIONAL PERSPECTIVES** are both similar and very diverse. Indeed, as can be seen in both charts below, the “other” category represents a third of the challenges and of the opportunities. In parallel, three challenges and opportunities clearly come out as common to many countries. This highlights the fact that, even though some issues can be explored simultaneously on a global scale, many other issues remain context-specific.

**NATIONAL CHALLENGES**
Among the 12 challenges mentioned, three seem to be of international concern:
- Demographic changes
- Human resource challenges
- Scientific and digital transformation

12 out of the 18 countries mention at least two of these among their top three challenges, and not exclusively Western nor high-income countries.

**NATIONAL OPPORTUNITIES**
As challenges are complex and often systemic issues, there is usually not a single solution for one challenge. It also happens that challenges are presented as an opportunity to improve: for instance, the response to fast digital transformation would be to embrace the opportunities of digitization. Many of the opportunities can be gathered under these three categories:
- Integrated patient-centered health services
- Potential of digitization
- Collaboration & partnerships

It is interesting to note that these are not opportunities as such, but are changes of paradigm and the way hospitals and healthcare delivery are conceived.

**INTERNATIONAL PERSPECTIVES** are less easily gathered under common categories, as can be seen below:

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| CHARLES DALTON, Senior Health Specialist | Public and Private health insurance | Optimize cost-effectiveness |
| International Finance Corporation | Digital transformation | Potential of digitization |
| | Human resource challenges | Continuous professional development |

| FRANCESCA COLOMBO, Head of the Health Division | Increasing complexity of patient needs | Re-engineering of the workforce |
| IAN BROWNWOOD, Policy Analyst OECD | Flow between ambulatory and hospital care | Integrated patient-centered health services |
| | Value assessment | Focus on improved outcomes |

| ANNA STAVDAL, President-Elect WONCA – Global Family Doctor | Human resource challenges | The opportunities and solutions depend on the ability, the will, the quality and the values of the real power structures in the country in question. |
| | Reaching the underprivileged | |
| | Organize relevant local health response | |

| MICKEY CHOPRA, Global Lead for Service Delivery Olusoji Adeyi, Senior Advisor The World Bank | Chronic NCDs | Political reforms |
| | Primary Health Care systems’ weakness | Universal health coverage |
| | Financial constraints | Reverse technology transfer |

| OTMAR KLOIBER, Secretary General World Medical Association | Increased commercialization | Rethink hospitals’ societal role |
| | From in-patient to out-patient care | Integrated patient-centered health services |
| | Anti-Microbial Resistance | Systemic response to AMR |
| | Increased violence towards/within hospitals | Preventing measures to de-escalate violence |

### NATIONAL PERSPECTIVES

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Healthcare System in Argentina

**INTRODUCTION**

Argentina is a developing country, Ranking No.24 in terms of GDP and No. 64 of GDP per capita. In the early 1990s, the country used to be 10th worldwide and 1st in Latin America according to health care service quality. Currently, although it is 1st for health expenditure, it is 6th in results.

Over the next decade, surprising innovations in drugs and medical technologies are expected. This situation will force a strong transfer of economic resources towards innovative companies in detriment of hospitalization centers. This will compel hospitals toward profound modernization and re-engineering, in spite of the undercapitalization they suffer.

The healthcare system in Argentina is segmented into 24 health programs (one for each province) and in almost 300 programs (each depending on a different social security coverage) that are, at the same time, fragmented (each of the financial organizations manages its own economic funds). Twenty-five years ago, the Argentine government decided that health insurance coverage would depend on work. The consequence of that decision was great inequity:

1. Official workers with social security are treated by private managed health centers.
2. Unregistered workers without ‘explicit health coverage’ are treated in public hospitals.

This picture of poverty and inequitable medical care has led to a ‘pathological delay’, including hundreds of thousands of people with low accessibility to quality medical centers. These people have to manage diseases as diabetes, high blood pressure, hernias, evictions, etc. through the years, which makes them susceptible to complications, having less job opportunities, a lower quality of life and less dignity. ‘Out-of-pocket payments’ are frequent.

If this difficult situation (people with pathologies that are partially or not medically treated) was to have profound solutions, it would imply an economic recovery of this highly deteriorated population. This population would be able to overcome important problems of health and recover their dignity and work capacity. This could turn into a great opportunity.

**Challenge 1**

To transform the inequity of the double system of care:

1. Public hospitals treating poor people (30% of the population), people without explicit health coverage (40%)
2. Private-managed hospitals in charge of those with legal employment contracts

**Solution 1**

To establish a single health system for a single population, not discriminated by type of employment, but according to the needs of the user and region, in an integrated system of public and private managed Hospitals. This was outlined in 2016 with the CUS (Single Health Coverage System) but no concrete definitions have been reached.

**Challenge 2**

The absence of integrated networks among the public and private sector, Public Private Partnership (PPP).

**Solution 2**

To structure a public – private integrated network, where every user defines where to receive medical care.

To offer a leading primary health care system, an ambulatory and decentralized coverage. Decentralization should be both vertical (different levels of complexity) and horizontal (different centers and specializations). This would result in significant savings of resources and energy. The network would be able to respond to the definition of: hospital as a center mainly for surgical and complex invasive studies, hospitalizations with intensive care units.

**Challenge 3**

There is a significant delay in the application of the most advanced concepts of quality and clinical and administrative management, especially in the public sector. Digitalization of medical files with a single standard is halfway and should be accelerated to face the essential transformations that are required.

**Solution 3**

To focus on the re-engineering of structures, freeing up spaces for new ventures. To emphasize ambulatory care, management of beds, discharges, products, etc. To promote the development of home hospitalization, speed up and add value to the processes, emphasizing the analysis of results through specific clinical and performance indices and to be able to get more efficiency in the global management.

**SUMMARY**

To work out these ambitious objectives, a political decision is essential. It is necessary to implement an independent audit and effective monitoring and management control. Training programs in health system management are essential and should be a priority.

**About the Argentine Chamber of Health Companies (CAES)**

The Argentine Chamber of Health Companies (CAES) is a non-profit organization created with the aim of representing institutions and professionals that participate in the life of the health care entrepreneur sector. It was founded on August 31st, 1994 by a group of national leaders to integrate all participants of the healthcare sector: scientific, commercial, educational and communication companies of all regions of Argentina. With this philosophy, the new entity soon received the adhesion of recognized personalities as well as institutions, universities, laboratories, suppliers and media of Argentina.
The Healthcare System of Austria in 2029

Challenges in Transformation

Austria, as many other countries, has already for some time faced general developments, which have also had a major impact on and are posing great challenges to hospitals and health systems.

These impacts include:
- The increasing proportion of the elderly and the decreasing share of younger people due to an increasing life expectancy combined with a low reproduction level.
- A growing conurbation with simultaneous lessening and aging of inhabitants in remote and/or structural weak regions.
- Ever faster scientific and technical progress.

The observed demographic shift is expected to further increase the prevalence of especially chronic diseases, such as diabetes, cardiovascular disease, cancer and dementia. While the demand for health services due to aging will grow, the proportion of those in working life will not increase. This effect will increasingly lead to bottlenecks regarding the health workforce.

The persistent decline in population density and the increasing aging of people living in remote and/or structurally weak regions makes it more difficult to ensure an evenly distributed, close to home provision of adequate health services across the country.

Due to more complex and differentiated requirements, progress in medicine is forcing and accelerating specialization. Excellence requires continuous education and the opportunity to gain sufficient practical experience through adequate patient numbers. New and better diagnostic procedures require more sophisticated equipment. New drugs are constantly being developed.

Uncertainties

Accordingly, profound upheavals for hospitals are to be expected. A multitude, as in Austria, of “tiny” hospitals that can only offer a relatively small and more or less exchangeable range of services is no longer up-to-date. The model of the future is a graduated regional network of, in relation to their tasks assigned, well-equipped health care facilities (like central and regional hospital, primary health care units etc.) that work together in a structured and close manner. Such a model demands that hospitals also increasingly rely on multi-professional and interdisciplinary teamwork and engage more in work across sectors.

An essential element to make a division of tasks and cooperation work is structured and targeted communication that ensures a continuous exchange of relevant quality-assured information. Hence, digitization will be a key to improving as well as simplifying the necessary management and exchange of data.

Moreover, information and communication technologies open up new opportunities in the field of health care itself by overcoming spatial distances. Remote diagnostics and remote treatments are no longer science fiction. This requires a remarkable degree of health-related knowledge and responsible cooperation of the patients and thus the improvement of the population’s health literacy.

However, one has as well to be aware that digitization is not just about opportunities but also bears risk. System and data security will be a constant issue.

Change is by no means automatically perceived as something positive. It needs to be made clear to the public that, for example, closing down certain wards or even entire hospitals is not about saving money, or that transparency created by digitization is not about controlling employees, it is about ensuring quality. Even if the benefits for the individual and/or the whole system are clearly and rationally comprehensible, people and systems tend toward “inertia”. Significant changes are requiring a rethinking and a reassessment of the established roles. Thus, we are facing the need of a change in culture, an era of disruption, which challenges health policy and health care providers as well as patients fundamentally and will take a generation to implement innovation in a sustainable way.

Opportunities and Solutions

To cope with the quoted challenges, new approaches must continually be considered and alternative paths be taken. To name just the most important:
- Establishing and strengthening broad primary health care.
- Increasing outpatient service provision, bundling specialized services.
- Initiating multi-professional working models in which medical tasks and competences are taken over by other health professions than doctors.
- Fostering interdisciplinary structures such as interdisciplinary wards.
- Last but not least, making the best possible use of the potential of digitization (networking, telemedicine etc.)

About the Federal Ministry of Austria, Labour, Social Affairs, Health and Consumer Protection

About the Federal Ministry of Austria, Social Affairs, Health, Care and Consumer Protection.

The Ministry was first created in 1917 as the Ministry of Social Welfare (Ministerium für soziale Fürsorge). In its modern form, it dates back to the 1987 establishment of the Ministry of Labor and Social Affairs (Ministerium für Arbeit und Soziales). As of January 2020, the Ministry’s official name is Ministry of Social Affairs, Health, Care and Consumer Protection (Bundesministerium für Soziales, Gesundheit, Pflege und Konsumentenschutz). It is responsible for welfare, senior citizens affairs, health care, care and consumer policy.
The Healthcare System in Belgium in 2029

Dr. Marc Noppen
CEO University Hospital UZ Brussels
Brussels, Belgium
Associate Professor Vrije Universiteit Brussels

Challenges
The major challenges/threats are probably similar for most if not all Western (and increasingly also global) hospitals – and by extension: healthcare systems. They include (but are not limited to) Demographic Changes (increased life expectancy with an increasing burden of chronic diseases and multimorbidity), HR challenges (elderly workforce with increasing staff shortages, work overload, burnout, etc.), and budgetary challenges (all things remaining equal, the demographic changes alone will need a 1 to 2% absolute annual increase in healthcare budgets).

Opportunities
Studies (in various countries) show that 20 to 30% of the annual healthcare expenditure is actually waste, due to inefficiencies in healthcare systems, wrong (financial) incentives, administrative burden, fraud, inadequate data sharing, etc. This is the major issue, but probably the most difficult to achieve: to overhaul healthcare systems. Hence, there is no magic bullet, and many issues have to be tackled simultaneously.

A second major (long-term) game changer might be the shift from “sick-care” to “health-care”, with increasing emphasis on keeping good health. Here, a predictive “personalized approach on a population health basis” paradigm using genet-
ics, IOT, data sensing and capitation, artificial intelligence, deep learning, etc. together with an increased emphasis on lifestyle changes are necessary.

Finally, “general hospitals” with 40+ specialties addressing at least seven different “business modes” at the same time (preventive medicine, A&E medicine, outpatient single-stop shop medicine, planned interventions, multimorbidity care, long-term care and rehab, and complex cases) are probably no longer sustain-
able.

Uncertainties
In most countries, single hospitals alone cannot change an entire system. The main challenge will be to mobilize enough political and societal power to redesign a system. And this will always be difficult, because everybody is convinced that change is needed, but nobody wants to change.

About the Belgian Hospital Association
The Belgian Hospital Association aims to contribute to the development and progress of hospital science. It particularly focuses on the improvement of the management and organization of healthcare facilities, through the dissemination of publications, the organization of study meetings and conferences.

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How and why will hospitals have changed in Colombia by 2029?

The three major challenges which will transform hospitals in the ten coming years will have a huge impact on the way in which we build and strengthen relationships with our patients, and on our ability to adapt. The first one has to do with digital evolution and transformation. It will be a totally disruptive process that will change patient experience and access to healthcare services, and their power to take control of their clinical condition and/or treatments.

The second challenge which we consider critical is management of healthcare human resources. Future organizations will have to work towards being more humane, differentiated and experiential. This means striking a balance between scientific/technical processes, patient experience, the ability of healthcare staff to serve with their knowledge but also exceed the expectations of patients and families alike, as well as to convey and create value.

Finally, rethinking infrastructure as a vital component of healthcare services. Healthcare organizations will no longer have one or several facilities, but multiple spaces with different types of infrastructure and technology. They will have to be much better organized and prepared to provide fast solutions, more homogenous clinical outcomes with no variability, always ensuring that in all environments - the home, the workplace, and public areas - services are as preventive and anticipatory as possible.

These three transformations will create great opportunities. Hospitals will have to evolve in their ability to cope with these changes. They will require all the necessary structures and the ability to adapt those structures so that they can respond to different fronts in an integrated fashion.

The challenge is to acquire the necessary capabilities in an orderly and systematic way in order to revolutionize healthcare provision, through digital transformation and a huge component of cultural adaptation. All processes will have to be redesigned, and comprehensive care will have to be ensured by focusing care flows and infrastructures on clinical conditions. Therein lie the opportunities for facing these changes.

In a country like Colombia, the main uncertainty has to do with the implementation of the right regulations and incentives in the health system to ensure that organizations are recognized for their quality, comprehensiveness of health service provision by clinical conditions, and care continuity.
JCI announces the publication of *The Joint Commission International Accreditation Standards for Hospitals, 7th Edition* on 1 April 2020.

Specific enhancements include new or revised standards in these areas:

- **International Patient Safety Goals**
- **New chapter: Patient Centered Care (PCC)** as a result of merging the Patient and Family Rights and Patient and Family Education chapters.
- **Care of Patients Chapter** that addresses the management of clinical alarm systems, patients at risk of suicide or self-harm and lasers.
- **Prevention and Control of Infections Chapter** that covers environmental cleanliness for laundry, linens and scrubs, as well as the protection of patients and staff from bloodborne pathogens.
- **Facility Management and Safety Chapter** that includes fire safety, including the use of interim measures, clarification of expectations for availability of critical utilities and hemodialysis water quality.
- **Management of Information Chapter** that reviews data access controls, protecting data and information, education and ongoing training of staff who use electronic medical records and the use of scribes.

Other enhancements include the clarification of sentinel events, adverse events and near misses, an expanded and unified glossary, and updated references and revised chapter overviews.

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Learn about the major changes to JCI’s newest standards manual by attending this two-day, interactive program. For more details, please visit: http://bit.ly/JCIAU2020
How and why will hospitals have changed in Finland by 2029?

M.S. HANNA TAINIO
DEPUTY MANAGING DIRECTOR, ASSOCIATION OF FINNISH LOCAL AND REGIONAL AUTHORITIES

The Finnish population is aging rapidly as in many parts of the world. This leads inevitably to increasing prevalence of chronic diseases and multi-morbidity. The need for health care services, including hospital treatment, increases and poses new challenges to the health care system. At the same time, the working population will get smaller and as a result the tax revenue will decrease, widening the sustainability gap. How can we deliver more high-quality health care services for our citizens with less money?

Another challenge is due to migration within Finland. The northern and eastern parts of Finland are losing their young and working-age population to the rapidly growing southern and western areas. This means that they will have great difficulties in the recruitment of health care personnel to meet the needs of their population.

The third problem we are facing is how to keep pace with medical advances and maintain the high level of medical know-how and skills in different parts of the country. This is especially difficult in the areas that are losing their population. The public health care system should be able to offer services equally to all.

The problems concerning recruiting and expertise will most likely be solved by concentrating the services and developing collaborative work patterns between hospitals. We need to evaluate which services must be available near the patients’ homes and what can be arranged more concentrated in large hospital units. It is also important for the hospitals to develop and improve cooperation with primary health care. IT innovations must be applied to modernize care delivery by electronic and mobile services. The trend is shifting towards integrated health service networks and systems.

Economic challenges call for re-thinking of service delivery. To take care of increasing demands with diminishing resources, we need to strengthen prevention and rehabilitation to enable the elderly population to get along in their own homes as long as possible.

We also need to improve hospital efficiency. New medications and other treatment technologies are being developed. They are usually more effective but also more expensive than the old. Before introducing new medications and other treatment methods in routine use, we need to evaluate their cost-effectiveness and value to the patients. It is important to ensure the most cost-effective use of financial resources invested in health care by the society.

The developing role of hospitals in Finland is a part of the social and health care reform in preparation. It is widely agreed that the reform is necessary, but it is still politically very difficult to perform. Reorganizing the tasks and roles of the hospitals is being opposed in many areas, because there will be winners and losers. Some hospitals may receive new responsibilities, and others may lose some of their tasks. A hospital has great significance to its location. It is important for the population’s feeling of security and also plays an important role as a significant employer in its area. Therefore, it is understandable that especially small municipalities are afraid of their hospital losing its status. The necessity of the social and health care reform and the changes that are needed in the hospital system must be properly introduced to the citizens.

About the Association of Finnish Local and Regional Authorities

The Association of Finnish Local and Regional Authorities is the representative of municipal health care providers. The Association brings the voice of municipalities and the entire local government sector to social debate and decision-making. The Association’s core tasks are to advance the interests and development of municipalities and their partner organizations and to provide services for them. The Association has multidisciplinary competence and a broad understanding of all aspects of local government work. It employs a staff of about 230 people, who are mostly in expert positions. The main office, the House of Municipalities, is located in Helsinki.
How and why will hospitals have changed in France by 2029?

M.S. ZAYNAB RIET
CEO
FRENCH HOSPITAL FEDERATION

In 2040, 14.6% of the French population will be 75 or more. They were only 6.6% in 1990. The rapid growth of the elderly and the consequent increase of chronic diseases require an important adaptation of the health system. Hospitals are in the front line: they will have to adapt their way of working to provide care to older patients who need fewer hospitalizations but more home-based care or day admissions. The ambulatory shift is going to change hospitals for years to come: adaptation of technologies in hospitals, reduction of the length of stay, etc. Moreover, hospitals will have to consider that they are only one step in the pathway of the patient – an important step but not the only one. This requires considering all the previous and the following steps in the patient’s pathway and thus to reinforce the dialogue with ambulatory care.

Linked to the previous one, the second important challenge for French hospitals is to contribute to overcoming the different gaps: between hospitals and independent general practitioners, between care and prevention, between healthcare and social care... As a result, there was until recently still limited cooperation between all players of the patient’s care pathway. The hospital of 2029 will be in permanent contact with ambulatory care, with many bridges with organizations providing care for the elderly and for disabled people, and with many prevention activities. The introduction in 2016 of “territorial hospital groups”, which are regrouping one large hospital with several smaller ones, including nursing homes, long-term care facilities, etc. is an important step forward.

The third crucial challenge French hospitals have to face is the issue of medical demography. Most French regions face medical workforce shortages since the number of active general practitioners has been diminishing for several years. As a result, “medical deserts” are becoming a reality in the country, creating important disparities between urban and rural areas. Local hospitals in remote rural areas are struggling to attract medical and non-medical staff, thus creating important geographical inequalities in the access to safe, equal and efficient care. As a result, they must fall back on temporary jobs, which affect their budgets. The hospital of tomorrow will promote new forms of practice, shared with ambulatory care.

Opportunities

Several solutions already exist: telemedicine is now for instance reimbursed by social security as a medical act, thus contributing to better access to healthcare in rural areas. Moreover, in several areas hospitals and independent doctors have started to work together to improve the coverage of the territory (continuity of healthcare, the participation of independent structures in the territorial hospital groups, presence of ambulatory structures within hospitals’ premises...) and the way they address patients’ needs. To go further, two important laws should be mentioned. The French Hospital Federation regrets the division in two different laws, thus reflecting the scission between healthcare and social care that affects patients’ pathways. But there are enough elements to move forward.

The first law is on “the organization and the transformation of the health system” was adopted in July 2019. It offers some very expected tools and solutions that the French Hospital Federation had been, such as the end of the numerus clausus for doctors, the creation of a “healthy digital space” and the introduction of a “territorial health project”, in order to better coordinate all the players in the patient’s care pathway. A new labeling system of “proximity hospitals”, mainly based on polyvalent medicine and geriatric network, should strengthen the territorial grid of community hospitals. This measure is very welcomed but discussions concerning the future missions and financing of these proximity hospitals are still ongoing. In any case, the law lacks new modalities of governance, of concertation and lacks measures regarding the attractiveness of medical and paramedical careers in public hospitals.

The second one is about the elderly and autonomy. It should be presented by the Government in the summer of 2020. This law could lead to important changes, notably with a restructuring of public nursing homes.

Uncertainties

Of course, all these opportunities come with uncertainties. Building tomorrow healthcare also needs to consider today needs. In a survey commissioned by the French Hospital Federation in February 2019, 85% of French people declared themselves satisfied with public hospitals, but 90% of them believe that public hospitals are in danger. Financial issues are clearly the most important uncertainty for public hospitals and they already face it. From 2005 to 2019, healthcare facilities have suffered saving plans of more than 8.6 billion euros; including 960 million only for the year 2018. These budget cuts have important consequences regarding daily functioning but also regarding investment, research and innovation. More than ever, hospitals are willing to participate in the mutations of the society but they need to be sure that they will have the means to reach their ambitions.
How and why will hospitals have changed in Germany by 2029?

Mr. Georg Baum
CEO
German Hospital Federation

The German Hospital Federation is the representative organ of all German hospitals. We advocate the interests of all of the 1,951 (2018) German hospitals, regardless of the kind of ownership on the national, European and international level. Today, German hospitals are already confronted with multiple challenges, which will continue to shape the hospital and healthcare landscape in the coming years: an increasing nursing shortage problem, the challenge of integrated care restructuring, and the digital transformation process.

First of all, German hospitals are experiencing a nursing shortage. Today, there are already about 12,000 vacancies in this sector. Demographic change will aggravate this situation. With the gradual aging of society comes the need for more healthcare and the increased demand for skilled workers, which further exacerbates the nursing shortage. Secondly, hospitals challenge the integrated care restructuring, for example, in emergency care. Thirdly, the digital transformation process of our society does not stop at the hospital and healthcare sector. Hence, the development and implementation of digital tools in the healthcare sector will continue to be an important task at hand in the coming years.

Reacting to the nursing shortage, the German Hospital Federation is engaged in getting more people interested in the nursing profession and participating in health policy initiatives to recruit personnel in Germany and abroad. Besides this, we deal with several political initiatives aiming to strengthen the nursing profession, such as the implementation of a restructured general nursing education, the application of nurse-to-patient staffing ratios and the restructuring of the German DRG system. It is vital that politicians, stakeholders, and hospitals work hand in hand on the valorization of the nursing profession. Nevertheless, it is also crucial to strengthen the nursing profession without weakening the financial situation of hospitals to ensure that hospitals can remain attractive workplaces and reliable employers. That is why the ongoing restructuring of the German DRG system – the removal of nursing care costs from the existing billing structure - must not be a financial burden on hospitals.

Concerning integrated care, the German care system has already moved from a traditional inpatient-centric and outpatient-centric system to a system where both work closely together. In the future, the importance of coordination will continue to progress. As a core idea of well-functioning cross-sectoral care, the possibilities for hospitals to participate in outpatient care should be expanded. It could be worthwhile to consider the creation of common specialist medical care structures. In Germany, hospitals are currently challenged by the political idea of restructuring the emergency care coordination between the sectors. On the one hand, there could be the creation of common emergency control centers, which will evaluate emergency calls and decide on the directing of the patients: sending ambulances, directing to office-based sector or to hospital sector. On the other hand, hospitals could face the creation of ‘emergency care centers’ which will be in charge of the ‘triage on the ground’. In every case, it is important that hospitals will have the lead in the reorganization of integrated care restructuring in emergency care.

Both the strengthening of the nursing profession and the integration of a care system are directly linked to the last great challenge to be mentioned here: the digital transformation. Digital technologies are considered to have the potential to improve care, to change working conditions of caregivers and to advance the exchange of information between the health sectors. New technologies will therefore take an increasingly important place in German hospitals. After having implemented the electronic health insurance card in 2015, Germany currently is dealing with the framing of the Electronic Patient Record (EPR). Beside these opportunities, we are also observing tensions between digital innovations on the one hand and patient safety, data protection concerns and user-friendly application on the other hand. In order to maintain confidence in the new digital technologies, it is important to involve all stakeholders in their development and implementation. At the very least, it is absolutely certain that the ambitious plan of digitalizing healthcare sector requires important financial support from the governments.

The German hospitals hope that the nursing shortage problem is taken seriously and is countered by a wide variety of measures. It remains uncertain if these measures will be successful. Therefore, we will closely follow the implementation and results of the engaged measures to react, and readjust if necessary. Uniform remuneration structures are an important prerequisite for deepening cross-sector care. The success of the digital transformation process largely depends on financial support admitted to the hospitals. There might be doubts about the willingness of large financial support as we already see a lack of investment in the maintenance of ordinary structures. Calling for enough money for modern healthcare structures was in the past and will be in the future our main task – well-equipped hospitals are the best for the patients.

About the German Hospital Federation

The German Hospital Federation (DKG – Deutsche Krankenhausgesellschaft e.V.) is the representative organ of all German hospitals. It bundles and advocates their interests regardless of the kind of ownership. Public, private for profit and private not-for-profit, or charity-based hospital owners are unionized in DKG via its member organizations: 16 associations on the Federal States level (Bundesländer) are providing special services to the hospitals in their region, e.g. negotiating hospital plans and prices. The other type of DKG’s members are the twelve national associations, dedicated to each type of ownership which bundle the special interests of their hospitals. On this broad basis, DKG represents the whole range of interests of the providers of hospital care. Since its founding in 1949, DKG established itself as the representative of hospital interests and is itself a private not-for-profit organization. DKG is not only a key player in German healthcare politics but also got and gets provided with a continuously growing list of responsibilities with regard to the principle of self-governance, inherent to the national healthcare system. In addition to its political and administrative responsibilities, DKG is dedicated to maintaining public dialogue on hospital policy, the exchange of knowledge and the support of scientific research, also cross-border and on an international level.
Strategic Planning towards 2029 by the Hong Kong Hospital Authority

DR TONY KO
CHIEF EXECUTIVE
HONG KONG HOSPITAL AUTHORITY

CHALLENGES TO MEET

While recognized as one of the best public healthcare systems in the world, Hong Kong’s public hospital services are facing daunting challenges. The Hong Kong Hospital Authority (HA), being the statutory organization responsible for managing all public hospitals in Hong Kong, is in the forefront fighting against multiple challenges, striving to sustain our high volumes of healthcare services under the mission of helping people stay healthy.

Escalating Demand on Healthcare Service

The rapidly aging population, combined with the rising trend in prevalence of chronic diseases, has generated and will continue to generate huge demands on healthcare service. Multiple comorbidities are also associated with disability, mobility, morbidity and decreased quality of life, posing formidable threats to the healthcare system.

Rising Healthcare Costs and Global Shortage of Healthcare Workers

The HA is spending more to meet the demand and continually improve quality of care. The increased pressure on healthcare services is being exacerbated by a global shortage of healthcare workers. The HA is also facing a major issue of manpower shortage, especially for doctors due to limited local medical graduate supply, as well as staff turnover in various job groups against keeping competitions in the economy and the private medical market.

Complexity of Healthcare Processes

Healthcare processes, particularly for patients with chronic diseases, have become more complex, requiring an approach that involves a multidisciplinary professional team for continuity of care. The increasing complexity of healthcare for patients is compounded by variations in service delivery and organizational arrangements in healthcare systems. With these, inadequacy or lack of coordination of care may lead to fragmentation of healthcare services, compromising quality and cost-effectiveness.

OPPORTUNITIES TO EMBRACE

To tackle these challenges, HA has been developing robust strategic plans to guide its planning and development in the coming years.

Building Up Infrastructure to Increase Capacity

To cater to the growing healthcare demand, the Hong Kong Government has worked with the HA to devise two ten-year Hospital Development Plans (HDPs) for phased implementation from 2016 onwards. These visionary HDPs lay out the blueprint of public hospital development for the coming two decades, aiming to dramatically increase its capacity and improve facilities through new hospitals, expansion and redevelopment of existing hospitals. With the connected structures of primary, secondary, tertiary and quaternary care, and coordinated rehabilitative, palliative, community and social care, the service demand projected up to 2036 can be largely met.

Advancing Technology for Service Transformation

With a “Smart Hospital” vision in mind, the HA ambition is to enhance its information technology solutions with new strategic enablers, including mobile computing, telecare, and data analytics. In the past few years, HA has been developing advanced electronic architecture to facilitate improved effectiveness in information sharing, communication and coordination across hospitals and community settings, as well as to bridge the public and private healthcare information gap. In the future, HA envisions digitalizing and revolutionizing its healthcare through the use of “big data”, driving for an era of technology-driven healthcare system.

Innovating for Continuity of Care

Integrated care is at the heart of HAs planning. All along, HA strives to connect healthcare workers through the approach of multidisciplinary professional teams and enhance the healthcare processes to deliver integrated care via care protocols/pathways/case management. In reinforcing coordination of healthcare services, HA embraces the importance of innovation and is dedicated to developing new service models by leveraging technology and through service transformation so that the healthcare needs are managed in more efficient and effective ways.

Fostering Collaboration and Promoting Partnership

With Hong Kong’s population of over 7.4 million as of mid-2018, its public healthcare sector is under immense pressure which HA alone cannot resolve. Proactive engagement and in-depth collaborations with various stakeholders are the key to breaking through substantial challenges. The HA has been working closely with different Government departments, the private sector and non-governmental organizations to extend collaborations within and across health and social care, with the overarching aim of delivering a personalized healthcare system that is both of high quality and good value.

MOVING ON

Looking ahead, HA will continue to work closely with stakeholders at different levels, and stand firm in meeting new challenges and safeguarding our patient-centred public healthcare system in Hong Kong by developing a more connective healthcare system.

About the Hong Kong Hospital Authority

The HA is a statutory body established under the HA Ordinance (Cap. 113) of Hong Kong in 1990 and is responsible for managing the entire public hospital system in Hong Kong, which is primarily funded by Government subvention. HA now manages 43 public hospitals and institutions, 49 SOPCs and 73 GOPCs throughout Hong Kong. GOPCs offer general healthcare and medical services to patients in need, while SOPCs strive to provide ever-better standards of treatment by keeping pace with the latest medical and scientific advances.
Major challenges and opportunities for hospitals in the upcoming 10 years in Indonesia

DR. KUNTJORO ADI PURJANTO, M.KES
CHAIRMAN
PERSI (INDONESIAN HOSPITAL ASSOCIATION)

This brief article will give an overview of local challenges and trends for hospitals in the ten coming years perceived across the world, including Indonesia.

The major challenges that will transform hospitals in Indonesia in the ten coming years are coping with:

I. Rapid transformation in digital technology (more focus on this area)
II. Rapid growth of the elderly population
III. Non-Communicable Diseases
IV. Universal Health Coverage (not a challenge in the long run)

Digital Disruption
Ongoing revolution in Digital Technology changes in all social order in society such as:

- In the business platform: getting better customer satisfaction, easy access, faster, cheaper, direct interaction between consumers & sellers, and easy to collect consumer feedback regarding if the services are very good, good, bad or very bad
- Transparency for customers to access a lot of information, so that they can compare good products
- Customer emancipations
- New consumer behavior (design, marketing, delivery)
- Etc.

This Rapid Digital Reformation also improves the mode of hospital services, such as:

- Medical Sciences due to easy access to health information via internet
- Increased patient knowledge regarding the diseases that they suffer, because they could also easily access health information via internet
- Development in diagnostic-areas:
  - Biosensor, Genome structure in laboratories
  - MRI, PET-Scan, and Citi-Scan in the radiology unit
- New-Treatment:
  - Transformation in Pharmaceutical Industries
  - New Medical Procedures (Robotic, etc.)
- Hospital Information System improving performance in services: faster, more efficient, more effective and more accurate hospital services, easily accessed by patients, and more interaction between health professionals and patients
- 3 D medical printing can create a Bio-Technology Industry
- Etc.

This rapid transformation will challenge hospitals to continuously improve their ability, using modern technology to be competitive amid the disruption era. This requires a lot of investment while it on the other hand will escalate performance of services and treatments.

So, hospitals must adapt to the disruption transformation based on the resources they have.

What uncertainties remain regarding hospitals’ response?

- High cost investment: not all hospitals can afford to adapt to new technology innovation.
- Decreased direct contact between patients and doctors, since doctors will monitor patients by Telemedicine.
- Patient depersonalization: doctors prefer to use more Diagnostic Technology than seeking the data from patient examinations.
- Trend to use technology for diagnosing will increase the healthcare cost.

Rapid growth of the elderly population:

This rapid reform in healthcare services will affect life expectancy of the population. Data from the Indonesia Population Projection 2010 – 2035 (BPN/BAPPENAS/UN Population Fund, 2013) demonstrated that, between 2020 – 2029, populations will increase by 8.56% from 271,006.4 capita to 294,274 capita, whereas elderly will increase by 41% from 5,120,600 capita to 7,140,600 capita.

This rapid growth of the elderly population will absolutely be related to cases of Degenerative Diseases; both existing cases and new ones will emerge. As a consequence, this change will shift illness patterns from Infections to Non-Communicable Diseases.

Hospitals must adapt to this situation with a strong Geriatric Unit integrated with nursing home and home care, beside National Family Planning Program, which will take a big part in restricting the escalating number of populations.

Non-Communicable Diseases:

Rate USD 1 = Rp 14,200 — (1 Aug 2019)

As mentioned above, rapid growth of the elderly population is related to Non-Communicable Diseases and followed by high escalating healthcare cost.

Data from the Social Insurance BPJS (Dec 2018) showed that groups of Catastrophic Diseases: Heath Disease, Renal Failure, Cancer, Cerebral-vascular Disease, Thalassemia, Cirrhosis hepatis, Leukemia, and Hemophilia consumes 25% of total healthcare costs.

It increases 124% from Rp 9.13 Trillion in Dec 2014 (8,116,535 cases) to Rp 20.43 Trillion in Dec 2018 (19,243,141 cases). The highest cost is Cardiovascular disease which consumes Rp 10,56 Trillion (increase of 66% compared to Dec.2014).

This data does not include costs from Commercial Insurance and Out of Pocket payments.

To cope with this shift of disease patterns, the Ministry of Health promotes the Promotion and Prevention Program named “GERMAS” (Healthy Life Style in Community).

Hospitals are encouraged to support this program financed by the Government.

On the other hand, innovative technology will improve services to NCD patients with early diagnosis, faster and more accurate treatment, procedures, and rehabilitations including palliative treatment.

Universal Health Coverage:

Universal Health Coverage will still create problems for providers due to low economic tariff values. However, this challenge will soon be over thanks to negotiations among the stakeholders. So, we do not need to further discuss this subject.

About the Indonesian Hospital Association

PERSI (Perhimpunan Rumah Sakit Seluruh Indonesia) or the Indonesian Hospital Association is an independent, not-for-profit and non-governmental organization. PERSI is an umbrella organization for all hospitals in Indonesia. There are eighteen hospital associations under PERSI, these are ARSADA, PELKESI, MKIKSI, PERDHIKI, ARSPI, ARSSI, Asosiasi TNI/POLRI, BMJN, ARVI, ARSABAPI, ARSAWIKOI, Gigi Mulut, ARSANI, Mata, Bedah Islam Nahdatul Ulama, Aisyiyah Muhammadiyah, and APSPTN.
New World of Medical Tourism
Caucasus Medical Centre, medical tourism hub of CIS countries

Caucasus Medical Centre ("CMC") is a multi-profile Hospital located in the charming city of Tbilisi. CMC is part of a large healthcare group Evex Hospitals, which owns and operates 18 referral hospitals in Georgia. Evex Hospitals is a member of Georgia Healthcare Group ("GHG"), listed on premium segment of London Stock Exchange. The hospital mainly serves patients from neighboring countries and is considered to be a medical tourism hub in the region. Georgia had the highest number of medical tourist arrivals in recent years and the reason is that we offer patients superior care at affordable prices, absence of language barrier and they can also benefit from visa-free travel opportunity.

Caucasus Medical Centre was renovated and opened in March 2018, with total investment of more than USD 50 million, spent for upgrading infrastructure and building up the best in class quality of our clinical and customer service. 306-bed hospital serves as a flagship hospital, being the hospital of choice for high-quality elective medical care countrywide. To ensure patients receive highest quality of medical care, we recruited the best teams of doctors working in Georgia as well as in leading hospitals abroad.

Since March 2019, Caucasus Medical Centre cooperates with the Association of Leading Israeli Medical Professors ("ALIMP"), under which the association member professors are providing their service at CMC, for Georgian as well as for international patients. Members of the association, a group of internationally recognised Israeli doctors, are specialists in different medical fields including cardiac surgery, orthopaedic surgery, thoracic surgery, bariatric surgery, oncology, urology and gynaecology. The partnership is a unique opportunity for both local and international patients to receive the highest quality treatment at an affordable price.

This year the hospital was filmed by CNN for the “New World of Medical Tourism”, popular TV programme, which highlights the highest standards of the hospitals and evaluates its infrastructure and recommends them to medical tourism patients from all over the globe. Second part of the program was dedicated to Georgia’s great tourism potential and fast growth in this direction. The country is also highly price competitive compared to other medical tourism destination countries and possesses unique natural resources such as climate and mineral waters, making it attractive for medical tourism travellers.

„We were extremely excited when we learned that Evex Hospitals was selected to be a part of The New World of Medical Tourism series, which was seen on CNN International. In fact, patients who are looking for a world-class care, in a beautiful location, with a critical component of quality, price and experience converge will surely find it in the beautiful town of Tbilisi, in the ancient country of Georgia.“ – said Anri Kapanadze, Director of International Department.

With the best possible healthcare infrastructure CMC is now serving patients from all around the world. Best-in-class human capital recognised internationally, enables the hospital to provide citizens with access to high-quality treatment without leaving the country and to attract more international patients."
2029 Vision: System of Medical Care Delivery in Japan

DR. SATORU KOMATSUMOTO
VICE PRESIDENT
JAPAN HOSPITAL ASSOCIATION

Japan is now experiencing a declining birthrate and an aging population, unparalleled in other countries. While there may be some regional differences in the rate of decrease, the population of Japan as a whole is decreasing and the increase of the senior population in metropolitan areas is significant. At the same time, it has been suggested that seniors seeking medical care will not be able to receive it and this will result in the creation of so-called medical refugees.

By specifying the functions of respective hospitals in various communities in Japan, we are attempting to develop a medical care delivery system that can be completed within each community. To create such a community-based system in accordance with the hospital bed function reporting policies, we introduced a comprehensive medical system under the slogan “from the hospital to the region”, and this includes specification of hospital bed functions among advanced acute phase, acute phase, sub-acute phase, recovery, and home-care by 2029.

Today, Japan faces a new problem of the scattered and uneven distribution of medical resources. In urban areas, hospitals with overlapping functions are rampant, and the utilization of medical resources is inefficient. On the other hand, in areas where the availability of doctors is limited, the burden on doctors has increased unfortunately along with concerns for patient safety.

The Ministry of Health, Labour, and Welfare and Japan Hospital Association held multiple meetings and together proposed the following reform measures. Firstly, patients must be able to receive necessary medical care wherever they are in the most optimal way. By implementing a community-based integrated care system with the purpose of deploying limited medical resources in the most efficient and fair manner, a regional system of medical care, including a plan to secure doctors, will be realized. In addition, in order to further secure the home-visit system, we are planning the creation of an information network with the central hospital in the community at its core. New regulations are also being legislated to improve provision of team-based medical care using telemedicine. Secondly, the measure to improve the quality, safety, and efficiency of medical care is being taken by reforming the work style of doctors and other medical providers.

Japan Hospital Association has listed the following three items that should be realized in the short-term:

1. Meetings concerning the community-based medical system are currently held to advance it and reorganization and consolidation of public medical institutions is also promoted. It is difficult to reorganize and consolidate hospitals with different parent organizations; however, this merger will make medical records of all hospitals available for analysis. With respect to public medical institutions that have limited medical records, a consolidation plan of hospitals within the same community-based medical system is considered. Now, public medical institutions are in the process of integration, reorganization and consolidation with other hospitals.

2. We are promoting reforms on the work style of doctors and other medical providers. The legislation limiting doctor’s overtime to 960 hours per year became effective this year.

3. We are promoting achievable measures in resolving the uneven distribution of doctors. We are working on a plan to secure doctors using the uneven doctor distribution index. We have started calculating the number of doctors required for future medical treatment in response to changes in population composition of each prefecture.

In summary, we will promote and push forward the foregoing three measures – the realization of a community-based medical system, work style reform of doctors and other medical providers, and the promotion of feasible measures to solve the uneven distribution of doctors.

As we look towards 2029 while facing the various challenges, we find that Japan’s hospitals, which have always grappled with issues surrounding free access and high-quality medical care and universal healthcare coverage, are situated in a unique position to solve these various challenges. Japan Hospital Association is working to create an era where hospitals and local communities collaborate more than ever by focusing on the specific needs while also focusing on Japan’s medical system as a whole.

About the Japan Hospital Association

Established as the Japan Hospital Association in June 1951, the Japan Hospital Association has conducted its activities by working in conjunction with all employees under the direction of former presidents from Dr. Shusuke Karnjo, the first President, to Dr. Shuzo Yamamoto the tenth President, with the aim of “improving hospitals and fulfilling their mission, as well as contributing to the promotion of social welfare”. Throughout this period, the Japan Hospital Association had continually aimed at “establishing medical ethics” and “improving the quality of medical services in hospitals.”
How and why will hospitals have changed in Kenya in 2029?

DR. CHRISTOPHER ABEID
CEO
THE NAIROBI HOSPITAL

Three major challenges that will transform hospitals in Kenya

Kenyan hospitals are privileged to have a geographical vantage in Eastern Africa. It is supported with infrastructures that allow linkages not only with the region but extending to Central Africa and Southern Africa, north of South Africa by both road and air. In addition, it has been credited with having the most specialized healthcare workers in the region, thus allowing it an opportunity to offer superior services.

However, it is fraught with challenges that make this difficult. Despite having a heritage of health facilities from the colonial period which have increased in number to cater for the Kenyans and the region, the human resources for health care remain few. This is due to the unequal distribution which concentrates mainly in the towns in search of quality education for their children and themselves.

Secondly, supply chain excellence has been evasive due to government legislation. In 2019, the health sector has suffered shortages in medication, consumables and certain implants and devices due to implementation of extended COC. This has improved the hospital relationships since they have had to borrow from one another. However, there are many times when there has been service failure which has led to disillusioned patients and frustration of the doctors.

Thirdly, Kenya has experienced digital growth in both telecommunication and banking. This has transformed the citizenry to independence, entitlement and empowerment since they are in control of their transactions and have visibility of their portfolios in both sectors. However, hospitals and the healthcare payers have lagged in digital transformation, thus leading to lack of shared data, lack of standardization, no predictive analysis and hence a reactive system with long waiting times. This has edged the Kenyans who can afford it and those who can raise funds out of the Kenyan health sector, resulting in 7500 people leaving the country annually for medical tourism.

Opportunities and solutions to the challenges

In order to address the challenge of inadequate human resources for health, training of rare yet necessary cadres, has been ongoing to fill the gap. The cadres are focused on including health records information officers and emergency medicine technicians (EMTs). Substitution has also been adopted to ensure each Kenyan receives medical attention. This involves the training of nurse and clinical officer specialists to deploy them where doctors are lacking or too few. Utilization of retired nurses and mid-wives as community health care workers and birth attendants. Ensuring equitable social amenities across the country to reduce the rural-urban migration.

Supply chain excellence can be achieved through increased capacity of local pharmaceutical manufacturers, making has made medication accessible, affordable and available. However, we are still dependent on overseas manufacturers for more complex molecules, implants and devices.

Agile adoption of technology will be useful in the digitization of hospitals. In addition, collaboration, coordination and communication between hospitals and with payers would be useful towards shared health information, continuity of patient care and utilization of big data for decision making. Currently, the District Health Information System is in place and tracks the parameters that have been prioritized by the Ministry of Health.

Uncertainties regarding hospitals’ response (leadership and governance)

The political environment keeps changing legislation that affects supply chain management, thus leading to poor service delivery. The current guidelines on human resource recruitment and deployment are also affected by the political priorities. Leadership will also play a crucial role in sense-making and building teams that are motivated by emergence and innovation even in challenging situations. Therefore, inclusion of leadership training of residents in the medical school and mentoring and coaching of current leaders will be useful in this. Moreover, recruitment for competence and not for ethnicity is encouraged.

Governance which rewards good and shuns evil will also be crucial in turning the tide for hospitals. This would include good stewardship of public resources such as the Managed Equipment Services, which included the equipping of government facilities with equipment like ventilators, dialysis machines, CT scanners and MRI scanners. This can be extrapolated to value-based compensation of providers in order to promote ethical practice and good outcomes within the stipulated guidelines while financially protecting patients and stretching the few resources diverted to private health insurance.

About the Nairobi Hospital

Opened in 1954, the Nairobi Hospital has excelled in medical expertise and services provision and has deservedly earned recognition throughout East Africa and beyond as an advanced diagnostic, treatment and referral center. Explan- sive investment in the latest technology and medical equipment has enabled us to establish leadership in medical procedures both in Kenya and outside.
How and why will hospitals have changed in Korea by 2029?

DR. YOUNG-JIN LIM
PRESIDENT
KOREAN HOSPITAL ASSOCIATION

The major challenges that will transform Korean hospitals over the ten coming years are predicted to be aging population, urban concentration, digital transformation and infectious diseases.

South Korea currently has a total fertility rate of 1.052, and is expected to enter a super-aged society in 2025. To prepare for the aging population, the government and hospitals are making efforts in geriatric medicine, rehabilitation medicine, hospice program, managing chronic diseases, and health promotion. At the same time, hospitals can’t overlook acute care and it is a double burden to many of the hospitals.

Infrastructure for workplaces, schools, businesses and leisure are limited in rural areas and therefore population is concentrated in large cities, which is causing difficulties in operating local medical institutions. Unlike the Seoul metropolitan area, private hospitals in small and medium-sized cities will lose their patients due to the decreasing population of provincial and small cities, which will pose a serious threat to local residents’ health rights. For local hospitals to survive, the healthcare delivery system should be reformed, and policies and incentives should favor the local hospitals. Though, the problem remains hiring doctors and nurses in local areas, as they want to work in large cities.

Industry 4.0 has brought a new wave in healthcare industry and a genetic scissor, 3D printing, telemedicine, non-invasive target therapy, brain science research and early health models are already being used in some leading hospitals. A digital transformation is taking its shape, but detailed policy and implementation is still at a starting point. It is necessary to identify what digital transformation will bring to healthcare through joint research with global IT and AI businesses.

Infectious diseases such as Influenza A and MERS are a common international issue. One infected patient can cause mass death on the other side of the globe. Cooperation between countries and individual countries should be enhanced together with their ability to respond to infectious diseases. Government finances should be injected into major medical institutions to maintain infection control facilities, and international cooperation for vaccine and therapeutic research and development. Korea also faced national difficulties by experiencing the new flu and MERS, but has overcome it through cooperation with WHO and concentration of internal capabilities.

About the Korean Hospital Association

Founded in 1959, the KHA has accompanied the nations’ adversities and glorious moments with its medical services, and it has advanced the development of the healthcare industry in the areas of medical research, education for healthcare leaders, and as a source of information on healthcare issues and trends.
HEALTHCARE COMMUNICATIONS SOLUTIONS

NURSE CALL SOLUTION FOR HOSPITALS AND AGED-CARE FACILITIES
• Advanced IP-based nurse call system
• Pulse Mobile: SmartPhone App
• Simplified workflow
• Open API for integrations

DELIVERING THE RIGHT INFORMATION TO THE RIGHT PEOPLE AT THE RIGHT TIME
• Improve patient care
• Improve communications
• Increase staff efficiency
• Increase patient satisfaction

SOPHISTICATED NURSE CALL SYSTEMS, ENTERPRISE REPORTING AND ANALYTICS TOOLS
How and why will hospitals have changed in Oman by 2029?

Oman is a young nation which has taken monumental steps in social development. It witnessed a period of rapid population and infrastructure growth that saw remarkable improvement of the population's health indicators. Rapid and astonishing change was brought about by a combination of increasing resources, determined leadership, stable policies and a responsive culture within the society. The health and hospital sector in Oman experienced a rapid expansion phase both quantity and quality-wise, resulting in the decline of communicable diseases and increase in life expectancies.

The main challenges facing the hospitals in Oman, which will result in their transformation, are related to the same factors that contributed to the boom described above: resource constraints, demographic changes and disease pattern changes.

Hospitals are costly institutions. They require high capital investment to construct them and similarly high operational costs to sustain them. In Oman, costing and emphasis on efficiency and productivity of hospitals has not yet been adequately addressed and we find it difficult to accurately calculate fundamental things like unit costs and rate of returns. Introducing these concepts will be a challenge and hospital administrators will have to strive to sustain and improve their hospital's operations using innovation and performance-improvement strategies.

The second most important challenge hospitals will face is related to the demographic shifts and changes within the population. What was once a typical young population's age pyramid has transformed into a more mature population age pattern, resulting in less youngsters and more middle-aged population. The increase in life expectancy introduced a whole new set of challenges for hospitals and their role is no longer limited to the provision of health care to a young population, but to an aging population with geriatric health care needs.

The third important category of challenges is related to the changes in disease patterns of the population. Oman witnessed a significant change in lifestyle, from foods consumed to the jobs people do. The sedentary lifestyle and increased consumption of unhealthy foods paved the way to the current lifestyle and non-communicable diseases. These diseases are chronic and result in significant comorbidities that have to be addressed by the hospitals, resulting in greater costs.

Challenges are opportunities in disguise and there are multiple opportunities available to overcome the challenges faced by the hospitals in Oman. These can be short-term solutions and long-term solutions that fall within the categories of promotive, preventive and better curative health services. The surge in obesity and non-communicable diseases like diabetes could be controlled by the control of access to fast foods to increasing the access to walkways and healthy neighborhoods. The health promotive services are important in ensuring healthy aging of the population and a reduction in the need for health care services provided by the hospitals.

Preventive health care programs like programs for quitting smoking, weight control programs, universal health screening programs have all been introduced in Oman and will be incorporated further into the social and health systems.

Oman has established a well-equipped and planned health care delivery system that is based on extensive and readily-accessible primary and secondary health services. These primary and secondary health care services are managed in a decentralized manner and all of them refer patients to the regional hospitals when needed and receive them back when done. The regional hospitals can refer the patients to the tertiary central hospitals for specialized care. From the smallest primary health care center to the tertiary specialized center, the institutions contained within the matrix of health care service providers operate as paperless and connected services allowing access to information from any point. Integration of the hospital's role to go beyond its walls and into the community is a realistic and achievable target that can overcome the challenges described earlier and will result in a better health care system.

Oman relies heavily on a hydrocarbon economy (>80% of total revenues). Income from hydrocarbons is finite, fluctuates and is practically the main source of current wealth. It places the country's economy in critical uncertainty of its financial public funding. Hospitals are known to have economic, political and social weight to drive change. Hence, to tackle the economic uncertainties, Omani hospitals will have to participate and influence economic diversification through branding and becoming hubs for medical tourism.

About the Ministry of Health, Sultanate of Oman

The Ministry of Health (MOH) is responsible for ensuring the availability of health care to the people of Oman. In the course of implementing its health development plans, the Ministry's organization was adapted to synchronize with the strategies and objectives which were formed in 1990. These can be summarized broadly as:

1. Governing realization of health services and decentralization of decision making in specified technical, administrative and financial affairs
2. Emphasizing the role and importance of planning
3. Development of Education and Training in health
4. Emphasizing the importance of health systems research
5. Emphasizing the importance of governorate and international relations

Ministry of Health
Sultanate of Oman

TOP EXECUTIVE DIRECTOR GENERAL
MINISTRY OF HEALTH, OMAN

DR. QASEM AL SALMI

Emphasizing the importance of governorate and international relations
How and why will hospitals have changed in Portugal by 2029?

PROF. CARLOS PEREIRA ALVES
PRESIDENT
PORTUGUESE ASSOCIATION FOR HOSPITAL DEVELOPMENT

It’s about time for hospital changes

I believe that the three major challenges that will transform hospitals in the ten coming years are:

1. Changing conventional hospitalization into either outpatient surgery or home hospitalization
   Both alternatives to conventional hospitalizations, already up and running, will increase in the future, due to clinical studies proving they reduce hospital complications and infections and allow a faster post-operative recovery (earlier onset of daily activities, family life and working activity) and smaller changes in patients’ daily lives. Besides, they have a direct impact on hospitals as well, by allowing better bed management for acute patients’ treatment, reducing surgical waiting lists and allowing a significant increase in hospital efficiency. Finally, they allow a strong rationalization of health expenditure.

2. Implementing integrated and patient-centered health care
   Establishing integrated health care services, reflecting the patients’ pathways in the system, is becoming the main key. Due to factors like the aging population, increasing chronic diseases and multimorbidity among patients, there is a need for integrated health care services (primary, specialized and continuing) that will allow a global, patient-centered care, instead of a fragmented one with unnecessary appointments, especially in emergency departments. On one hand, it is important to give patients a guarantee of a smart referral, and to offer them timely access to health services and, where necessary, easy communication or transport between services without obstacles, delays or losses of information. On the other hand, it is necessary to improve health literacy through prevention and promotion, and therefore improve patients’ ability to make informed decisions about their health throughout their life span.

3. Implementing value-based health care
   Starting implementation of the “Value-Based Health Care” methodology at the hospital level and thereby adopting the payment mechanisms based on value will promote general health improvement, strengthen patient-centered health care, as well as contribute to a higher quality and a more efficient access to health services.

There are many opportunities and solutions to address all three challenges that are already being implemented. The very basis of it all is a digital transformation that will connect health care providers, increase patients’ interactive use with up-to-date information and therefore active participation in their own care process and also shift medical services out of hospital. To this end, it is necessary to provide multiple digital service platforms which allow information access and sharing and introduce cutting-edge technology and devices.

Another key solution, common to all challenges, is to involve all NHS stakeholders (health professionals, managers, technology and pharma ceutical partners, decision makers and patients) and to ensure their effective participation in all the processes.

This involvement will only be possible through the following solutions: qualitative and effective promotion of new projects and implementations in order to convince and motivate people, developing new instruments and tools for managing, informing and communicating and introducing incentive mechanisms. These could be achieved in a different way. Regarding outpatient surgery or home hospitalization, it’s very important to first encourage payment mechanisms, or at least not to discourage them. Concerning the “Value-Based Health Care” methodology, strengthening the incentive mechanisms is essential to encourage hospital performance, based on this methodology and benchmarking, hence demonstrating the added value, sharing good practices and reaching better efficiency.

The integration of new processes is usually difficult due to different technical, cultural, behavioral and managerial aspects of the involved parts, and due to the complexity of changes. So, I see three main uncertainties regarding the hospitals’ response:

1. Resisting changes
   Since by rule health professionals, patients and hospitals have a tendency to resist big changes, it is very important to perform implementations slowly and in phases, taking actions in order to involve all and promote the importance of new ideas, as I already mentioned. It’s also very important to demonstrate the gain, and to measure results. To this end, the best way would be to develop pilot projects first.

2. Financial limitations
   Hospitals and NHS itself face financial limitations, so – once again – the implementation of all solutions should be done in phases.
   Regarding the “Value-Based Health Care” methodology specifically, we face the problem of how and who measures the costs and – essentially – who measures the results and health gains. It’s not enough just to have a “disease free” approach, but a broader approach of health and well-being of the population.

3. Regional inequalities
   As there are some regional differences and specific problems, it’s significant to involve local authorities and health organizations - not only governmental, but also non-governmental.

About the Portuguese Association of Hospital Development (APDH)

The mission of the Portuguese Association of Hospital Development (APDH) is to have an active participation in all activities that may promote hospitals and contribute to their development.

To fulfill its mission, APDH participates actively in all the reflections, working groups and actions that are inserted in this context, independently of political or commercial interests. In addition, it establishes cooperation protocols with public and private institutions deemed necessary and convenient, aiming to promote and organize the activities that will meet the interest of its members, whether individual or collective.
How and why will hospitals have changed in Spain by 2029?

M.S. ROSER FERNANDEZ
DIRECTOR GENERAL
LA UNIO

We are not talking about mere changes, but actual transformations. This is a full-blown revolution, if we define revolution as the need to provide a comprehensive response to a whole range of deep, fast-paced changes.

These changes do not affect hospitals alone. They have to be addressed in the wider framework of a revolution in how we understand the model of care and how we organize resources.

The main challenges in this process of hospital transformation must deal with the following issues:

Financial sustainability and adequate staffing in a context of public budgets which do not suffice to meet the growing costs of care and I+D, compounded with inadequate planning in the training of healthcare professionals, which simply does not meet present and future needs. These are issues that health authorities cannot simply transfer to the health organizations.

Tailoring services and resources to the new role of the hospital in this framework of global transformation: the traditional hospital model is not suitable anymore. Changes are needed in the model of service delivery. Hospitals need to focus increasingly on surgery, while also standardizing processes, as well as addressing a broader range of services, personalized medicine and healthcare, in a context of growing complexity. Modalities of health service delivery are multiplying, with primary and community care, intermediate care replacing hospital in-patient care, home care, mobile health opportunities and non-presential healthcare, all taking on an ever more central role. Values and strategies to attract and retain talent are also changing, and networking and partnership alliances are becoming crucial to provide comprehensive, patient-focused care, as well as tackling I+D.

The strategic integration of the digital transformation and its impact on work organization, professional roles, skills and competencies, and the relationship model between professionals and patients.

What is key to meeting these challenges successfully? First, understanding the need for leading and anticipating these changes not as a burden, but as an opportunity to improve the quality and efficiency of service providing. From this starting point, design a strategy, in close collaboration with the main client (the health authority, if dealing with a public healthcare system), and incorporate the voice of the professionals and the patients, to guide the decision-making process towards the factors that bring true value. It is key, therefore, to talk in terms of assessment and results, which is what ultimately lends legitimacy to such changes.

To tackle transformational, even disruptive changes, we need a sound knowledge of future trends. Based on this knowledge, we can design a strategy, pair it with a viability plan, and generate a stable consensus. Uncertainty in financial and political areas is a hindrance, especially when it comes to questions of strategic model, healthcare policies, and funding. Short-term decisions based on the electoral cycles and populism prevent organizations from daring to embrace change. La Unió’s +FUTUR Project aims to identify trends and priority action areas, and then support organizations in this process, by sharing good practice know-how and creating synergies. It aims to contribute to improving the national healthcare system by looking into the future with a worldwide view, by becoming a reference in projects that show the way of change, and by promoting regulatory and functional changes. In short, to make things happen.

We believe that the 44th WHC of the IHF, meeting in November 2020 in Barcelona under the slogan “People on board: Transforming Healthcare,” will be a momentous opportunity to share experiences in this process of hospital transformation, and push for a greater, deeper, collective commitment.

About La Unió Catalana d’Hospitals

La Unió Catalana d’Hospitals is a membership association of health and social care services providers, gathering more than 100 healthcare organizations, integrating mostly health providers of the public Catalan healthcare system, but also private healthcare organizations. It was created in 1975 as a healthcare providers’ association, to work together and promote a quality healthcare and social model to benefit the Catalan society.

Its key strategic areas are the defense of its members’ legitimate interests, and strengthening the Catalan healthcare and social model.

As a health and social services providers association, La Unió defends a public healthcare system, built with the contribution of civil society, on the basis of an autonomous management of the health providers, a strict ethical performance, and promoting excellence in healthcare management through professionalization and supporting innovation for its members.
Dubai Health Authority (DHA) was created, in June 2007, by Law 13 issued by His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE, Ruler of Dubai. The President of the DHA is His Highness Sheikh Hamdan Bin Rashid Al Maktoum, Deputy Ruler of Dubai and His Excellency Humaid Mohammed Obaid Al Qutami is the Director General of DHA.

The DHA’s aim is to provide an accessible, effective and integrated healthcare system, to protect public health and improve the quality of life within the Emirate of Dubai. DHA focuses on providing services through DHA healthcare facilities including hospitals, specialty centers and primary health centers. In addition, DHA oversees the Public Health Protection Department, Medical Fitness Department and Health Insurance & ROM Department.

DHA actively plans for the future of care delivery in the Emirate. We believe the three major challenges confronting DHA in the coming 10 years are 1) Work force recruitment and development, 2) Transformation of the care continuum to ensure high quality, efficient and innovative delivery of care, and 3) Rapid access to and adoption of new technologies.

Healthcare delivery is a service industry and, as a result, 60-80% of the costs of care are labor. Identifying, orienting, and developing human talent is difficult locally especially in a highly competitive international market with an overall low unemployment rate for highly skilled workers. The UAE market is very complex with the multitude of languages and different home country training programs of professionals, making licensing and privileging very difficult. The DHA response to the continual and increasing need for highly skilled labor is the development of local professional schools for physicians, nurses and clinical support services (pharmacy, laboratory medicine, physical therapy etc.). Furthermore, we are developing tools to support our professionals to improve productivity through the implementation and optimization of the electronic medical records and creating automated tracking of labor productivity. We are also examining the use of trained professional support personnel like nurse practitioners, optometrists, and professional technicians like anesthesia technicians or for physical therapy to increase physician productivity. We believe the combination of local high-quality training programs and increased labor productivity will enable us to grow in the future. The major risk in achieving our goal is the speed of implementation of professional training programs and the ability to retain top talent once recruited in this highly competitive environment.

A second major challenge confronting DHA is the need to transform the care continuum to ensure high quality, efficient care that is adaptive to the changes in healthcare. Currently our primary care does not have patient continuity of care (a patient sees the doctor assigned that day and not a personal physician), our length of stay in the inpatient environment is longer than expected and our OP/ post-acute care options are limited. DHA is confronting these challenges by working on Patient Centered Medical Home in our primary care, enhancing outpatient options (day surgery) and enabling innovations like teledermatology. Further to reduce the cost of care, we are developing clinical care maps to prevent duplication and ensure volume-based competency. Our Regulation Sector is exploring “certificates of need” to improve the quality of care especially in our Centers of Excellence. The risk for this challenge is again the speed of implementation and the impact of change on our labor force.

The third major challenge is rapid access and implementation of new technologies (pharmaceutical and device) to ensure DHA is delivering the most current therapies. Healthcare is rapidly changing especially in the field of personalized medicine and biological drug and stem cell therapies. Early access to these technologies is often dependent on access to basic research and clinical trials often through affiliation with major universities. As we develop improved educational systems, we plan to attract and partner with international universities, enabling new therapies for our patients. Our risk to enabling innovation may partially be cultural acceptance but is also heavily dependent on cost and budget.

All in all, DHA is very optimistic in our understanding of the healthcare challenges of the future and our willingness and ability to address these challenges to provide the highest quality of care comparable to our international colleagues.

About the Dubai Health Authority:

The Dubai Health Authority (DHA) was created in June 2007, by Law 13 issued by His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE, Ruler of Dubai, with an expanded vision to include strategic oversight for the complete health sector in Dubai and enhance private sector engagement.

Prior to the establishment of the DHA, the Department of Health and Medical Services, which was established in 1973, was the functioning authority that almost exclusively focused on health service delivery.

In May 2018, H.H Sheikh Mohammed issued Law No. (6) of 2018 of the DHA. The new Law further enables the DHA to achieve its objectives including regulating medical services in Dubai, enhancing competitiveness and transparency, improving medical services and products based on international best practices and achieving the sector’s objectives according to approved strategic plans.

H.H Sheikh Mohammed also issued Decree No. 17 of 2018 establishing subsidiaries of the DHA, the Dubai Healthcare Corporation and Dubai Health Insurance Corporation, to further enhance healthcare services in Dubai and enable DHA to fulfill its responsibilities and obligations.

Three new strategic sectors were also added as part of the decree; they include Strategy and Corporate Development, Health Regulation, and Shared Support Services.

In addition to overseeing the health sector for the Emirate of Dubai, the DHA also focuses on providing services through DHA healthcare facilities including Latifa, Dubai, Rashid and Hatta Hospitals, its 12 primary healthcare centers, 17 medical fitness centers and its 6 specialty centers.
How and why will hospitals have changed in England by 2029?

The National Health Service in England is now attempting to implement a ten-year plan which is designed to transform the efficacy and efficiency of its services (https://www.longtermplan.nhs.uk/). The ambition is to bring about major reform of a comprehensive state-funded system which offers free care to a population of 55 million. Without this radical change there is a widespread acceptance that it will be impossible to keep up with demand and that the service will become unsustainable.

At the heart of the challenge ahead are changing needs, demographics and expectations. As in so many developed countries, the population is aging more rapidly than ever with an explosion in the number of patients living with multiple chronic conditions. The proportion of over 65s in the population has increased by 2.2% from 15.8% to 18% over the last 25 years and is projected to increase to 26% of the population by 2066, whilst the incidence of multimorbidity currently stands at 75% and 82% for the over 75s and 85 years old, respectively.

At the same time, again as in so much of the world, there are significant staff shortages – the NHS in England already has more than 100 000 vacancies, with around 1 in 11 posts unfilled.

A long term approach

The Long Term Plan has been fueled by a significant funding boost over the next five years which will bring to an end ten years of severely constrained resources. The result of this decade of austerity has been struggling hospitals who now cannot meet national standards for access such as the requirement that all patients should be treated with 18 weeks of referral from primary care.

And even with the extra money, immense pressures remain - thus far there is no long-term injection of cash into public health, capital or staff training. Meanwhile social care, which is separately funded, has seen severe cuts which inevitably have had a knock-on impact on hospital services, evident not least in the thousands of patients who have been stuck in hospital beds because of the lack of resources to look after them in the community.

Capital funding in England is a major headache for hospital leaders. The level is currently half that of the OECD average and, as a result, hospitals are already struggling to maintain basic infrastructure, let alone make the investments required in technology to harness the digital revolution.

In spite of all this, NHS leaders are determined to address the challenge of converting a 20th century healthcare system into something that starts to meet 21st century needs.

The solutions focus on three areas: the integration of services within the community and between primary and secondary care; the development and diversification of the workforce; and the use of new technologies to drive efficiency and change the nature and mode of delivery of front-line services. Overall there is no expectation that we will see fewer hospital services (some argue that has gone too far already), but traditional outpatient services will be reduced and transformed and more of the additional NHS funding will go into community-based services rather than hospitals, on the basis that only by doing this will demand for hospital care be mitigated.

Integration

Like many healthcare systems, the NHS in England is rather fragmented. The result can be that patients are not always treated in the most appropriate setting and opportunities to prevent illness or to manage chronic conditions effectively are missed. The ambition then is to move to a population health model based on communities of 30 to 50,000 in which multi-disciplinary teams including primary, community and social care professional will work together to deliver services that will seek to keep patients as independent and healthy as possible. It will also involve using secondary and formerly hospital-based professionals operating in the community as well as in their institutions. Just how far this will affect demand and over what timescale is not clear but the early signs of pilot sites as well as the experience of other systems around the world are encouraging.

Workforce and technology

Healthcare is a people business and there is recognition that unless we use our staff more effectively, and support them to work in new style services, the ambitions will not be realized. England now has an interim People Plan (https://improvement.nhs.uk/resources/interim-nhs-people-plan/) which argues that multi-professional clinical teams will be the foundation of the future workforce. It calls for a new leadership culture, moves to tackle an immediate nursing shortage and an ambition to grow the workforce, but with a more varied and richer skill mix, new types of roles and different ways of working.

The role that digital technology will play in the new NHS is seen as critical. A review (https://topol.hee.nhs.uk/) published earlier this year argued that it had the potential to reshape the patient-NHS relationship with a renewed focus on workforce development with new roles and specialized education and training. The aim is to make the NHS the world's largest learning organization. The vision in hospital services as well as elsewhere will be more efficient, data-driven care, with significant advances in fields such as artificial intelligence which will enable professionals to focus in those areas that require human intervention.
Continued Uncertainties

The ambition for a new set of relationships between hospitals and the rest of the system as well as new ways of working and a different leadership culture is of course easier to envisage than implement. The funding challenges to bring this about will be considerable and there will still be enormous political pressures on the whole service including hospitals which are often the focus of political and media attention.

The hospitals of the future will have to be more plugged into their local health systems, reliant on close working relationships across professional, organizational, sectoral and financial boundaries. The engagement of many groups that have not traditionally worked closely together will create its own challenges. Much of the integration agenda is dependent on relationships and trust, and there is some uncertainty about how quickly and effectively institutions can adapt and adopt new ways of working. The accountability of the new arrangements is also not entirely clear, with many hospital leaders concerned that they are being held to account not just for their own organization, but also for the system as a whole. They are being required to operate within new Integrated Care Systems which will cover the whole of England by 2021 – again there is support for this direction of travel but apprehension about what can be delivered with next five years.

A major task ahead

Hospitals in England are currently facing significant challenges. To meet these, they will have to undergo significant changes in the way that they deliver care over the next ten years. These changes are designed to make sure they can meet the needs of future patients by becoming more efficient, accessible and working in new ways. Achieving all this will require clarity of vision, a step change in clinical engagement, and adequate funding.

About the NHS Confederation

The NHS Confederation is the membership body that brings together and speaks on behalf of the whole NHS. We represent over 500 members across health and social care, including hospitals, community and mental health providers, ambulance trusts, independent sector organisations providing NHS care, and clinical commissioning groups. We have three roles:

- to be an influential system leader
- to represent our members with politicians, national bodies, the unions and in Europe
- and to support our members to continually improve care for patients and the public.

All of our work is underpinned and driven by our vision of an empowered, healthy population supported by world-class health and care services; and our values of voice, openness, integrity, challenge, empowerment.

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1. https://www.longtermplan.nhs.uk/
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International HOSPITAL reports on medical technology news and solutions for the modern hospital and targets hospital directors, healthcare IT specialists, biomedical engineers, senior physicians and medical department heads in Europe, Middle East, Asia/Pacific and Latin America.

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Hospitals and Health Systems in the United States: Challenges for Today and Opportunities for Tomorrow

MR. RICHARD J. POLLACK
PRESIDENT AND CEO
AMERICAN HOSPITAL ASSOCIATION

As we gathered in November for the World Hospital Congress in Muscat, Oman, and looked at how hospitals and health systems may change in 10 years, we were reminded that what unites us as members of the International Hospital Federation is our shared vision for a world of healthy communities where all individuals reach their highest potential for health.

We all have similar goals, and we all are working to be more efficient, to manage the total cost of care, improve quality, save lives, and advance health in our countries … and across the world.

Another quality we share: we all face a number of challenges in delivering care in our respective countries … some similar and some different.

In the United States, consumer preferences are continuing to transform our field. Individuals want affordable, convenient, personalized, high-quality care that provides more value. They want to engage in ways that make sense in today’s digital world.

Innovations such as technological advancements and data analytics have the opportunity to reduce costs, improve care and reduce friction for the consumer. This will require us to expand our digital infrastructure, including broadband internet access, to make sure all our patients can benefit from these advancements.

Moreover, chronic disease management continues to challenge our health care system, including addiction and the opioid crisis, as well as an aging population.

As we look out over the next ten years, we recognize that these challenges are actually opportunities to improve care, and America’s hospitals and health systems are seizing them so we can build an even better health system — and a brighter future — for our patients.

This means a system that focuses on promoting wellness … but also provides the best care in the world when you are sick. This means a system where care is convenient — where everyone can get care when and where they want it — with same day appointments and prompt walk-in care, without having to wait in emergency departments for minor ailments and injuries.

This means a health care system that is seamless — with people to guide handoffs and provide coordination — where medical records and information flow easily, with appropriate protections for privacy. This means a system that allows patients to get test results as rapidly as possible to reduce worries and anxiety. And this means a system where patients are taken care of by people who operate as teams … and have pride and joy in the work they do.

America’s hospitals and health system are working to create a system that looks just like this…for today and ten years from now.

Some are partnering to use new technologies to better manage data, expand access to care and make it easier for providers to spend less time on paperwork and more time with patients. Others are partnering directly with local employers and other community organizations to provide care. And some are creating organized networks of caring to ensure and even expand access in the community, outside their four walls, through increasing access points, mobile services and even home visits. Some are doing all of the above.

While the future looks bright, we will always face challenges.

This is why the IHF is so important: it brings us all together to share knowledge, expertise and experiences so we can improve health across the world. We all have the chance to contribute our learnings and to learn from each other so we can all meet the challenges we face as health care changes.

The good news is these changes do not scare us. In health care, “change” means the opportunity to improve. “Change” means better care for our patients. “Change” is just what hospitals and health systems do — and have been doing — for far longer than any of us have been around.

We will keep innovating and adapting to changes in health care; keep working to help our members transform for the future; and keep working with IHF and our partner countries to address challenges so we can continue to advance health in the United States … and across the world.

About the American Hospital Association

The American Hospital Association (AHA) is the national organization that represents and serves all types of hospitals, health care networks, and their patients and communities. Nearly 5,000 hospitals, health care systems, networks, other providers of care and 43,000 individual members come together to form the AHA.

Through our representation and advocacy activities, AHA ensures that members’ perspectives and needs are heard and addressed in national health policy development, legislative and regulatory debates, and judicial matters. Our advocacy efforts include the legislative and executive branches and include the legislative and regulatory arenas.

Founded in 1898, the AHA provides education for health care leaders and is a source of information on health care issues and trends.
An Insight into the Future of the Healthcare and Hospital System

M.R. HOWARD CATTON
CEO
INTERNATIONAL COUNCIL OF NURSES

The present healthcare and hospital system is essentially a ‘sick-care’ system, built in the middle of the last century. Although there has been tremendous progress in the areas of medical diagnosis and treatments, care delivery hasn’t structurally changed much at all. It is still largely based on bricks and mortar, where people who are sick or acutely ill come to be seen and treated by medically trained people. Funding models are based on short episodic consultations that are specifically designed for quick turnover. It was never designed to deal with the huge growth of chronic disease which now represents well over 80 percent of all healthcare spending.

So, there needs to be a paradigm shift from hospital-based disease intervention to community-based management. Changing health needs and an aging population mean we need to reorientate health systems towards prevention of illness and supporting people with multiple chronic and long-term conditions. It is increasingly common for people to present with multiple conditions, such as diabetes, cancer and early stages of dementia. These complex needs are hard to address in a system that operates in silos with little interaction between hospital and community services.

Hospitals will still be an important part of healthcare provision for some patients some of the time. Generally, however, we should stop thinking about hospitals, beds and buildings, and instead think about the reality of people’s lives. Health services should be integrated and coordinated to support people living their lives as normally as possible at home, or as close to their homes as possible.

This will have a profound and long-lasting effect on the workforce and how it is trained, educated, developed and supported to deliver care in new ways that meet the needs of the people that healthcare staff serve. Hospitals, as employers, will have to step up their performance in these areas if they are to retain the nursing staff they so desperately need.

Healthcare systems need to be much more integrated, with hospitals working closely with community and social care services to keep people out of the hospital, if possible. When people are admitted to the hospital it should be for the shortest period possible: hospitals are expensive and just about everyone prefers to be at home whenever possible.

Staffing is a vital element in this process and better use of existing staff by investing in them through training and upskilling will be vital. Nursing roles can be developed so that they can work across the whole system to ensure that prevention, coordination, maintenance and early detection of deteriorating patients receive the priority attention that they deserve. Whenever such changes are anticipated, it is important to involve staff in the process so that their experience and ideas can be incorporated into any new regime.

One of the challenges that hospitals face is their financing systems. If payments and incentives are all about doing more and more inpatient work - which effectively is an illness-based system - it is going to take a step change to shift processes from a hospital-centric system to one that is focused on the health of the patients and the whole health system.

It will be increasingly important that patients are supported in navigating their way around and through this new type of system to ensure that they can access the right care at the right time at the right place from the right provider.

One important aspect of hospital work that must be addressed is care of the dying. No one wants to be stuck in the hospital or be in and out of the hospital in the last months of their lives. A big challenge will be to make sure that everyone who wants to die comfortably at home is able to do so.

New technology will help with many of these challenges, especially in improving access to services for rural populations and vulnerable groups. The application of technological innovations can also improve the quality of patient care, the safety of healthcare delivery and the working conditions of healthcare workers.

It goes without saying that the nursing workforce is critical at all stages of these necessary developments. Nurses will always be at the patients’ side providing hands-on care in whatever setting, whether at home, in the workplace or school, in the hospital or on the street.

Nurses in advanced practice roles are able to lead innovative services that can be shaped to meet the changing needs of patients, and independently manage their long-term conditions. Such services are efficient, effective and well-liked by patients, who get a high-quality service that is local, approachable and convenient.

Nurses will have an increasing role in shaping future health services, and their unique knowledge and approach to patient care will be invaluable to the success of the hospital of the future and its place within an integrated, prevention-oriented health service.
Most western developed countries offer universal access to healthcare through mechanisms that provide financial protection against its high cost, either through insurance or government subsidy programs.

In most middle- and low-income countries, financing is often at the center of reforms in the healthcare sector. Success or failure of these reforms can have major impact on the political survival of governments that get involved, and major implications for the dynamics of the healthcare industry and overall economy.

With this series, World Scientific will contribute knowledge about a policy area which is still poorly-understood. The series merges policy and practice, exploring the economic underpinnings of real trends in health investment and financing.

The series will appeal and be accessible to investors, the health insurance industry, healthcare actuaries, business schools with healthcare tracts, healthcare management programs, researchers, graduate students, policy makers and practitioners working in the health sector worldwide.

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Prior to his current work, Mr. Preker had a distinguished career, working at different times for International Bank of Reconstruction and Development (IBRD), International Development Association (IDA), International Finance Corporation (IFC) and World Health Organization (WHO).

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The Next Decade for Hospitals

M.R. CHARLES DALTON  
SENIOR HEALTH SPECIALIST  
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In mature and emerging markets, hospitals will continue to play a key role in strengthening and shaping health systems of the future. Hopefully, with stronger thinking on how systems work, we will move away from all-too-common silo-orientated thinking that negatively impacts how health services are planned and delivered across all levels of care. There is a need to adopt a mindset of integrated care that places the patient at the core and plans services accordingly across multiple levels of care in which the hospital will still be a linchpin. A decade is not long in terms of health service planning and realignment. With continued growth of non-communicable diseases in many countries, especially in emerging markets where IFC’s health care investments and advisory services are focused, requirements for hospital-based care will remain and most likely will increase. But hospitals will need to adapt. Increasingly they will need to become a pivot point of coordinated care management.

The following are the key challenges and how to address them:

**Challenge 1 – More efficient use of public or private health insurance.** There will be a strengthening and increased utilization of health insurance over the next decade. Public and private hospitals must adapt how they work with insurers, for example, by coding the care delivered correctly, billing for care accurately, and working more closely with insurance entities in analyzing data. Fee-for-service models are not efficient. There will be an increased push for purchasing health services using packages of care and, in more sophisticated markets, most likely bundled payments with risk-sharing. Hospitals lacking the right systems and operational structures may struggle to compete or engage with payers correctly, leading to slower payments or greater questioning of the care.

**Challenge 2 – Embracing digital technology.** Innovation is widespread across the health sector. Hospitals and their health professionals must embrace the adoption of technologies that improve care coordination and management of patients, while responding to the increased expectations of consumers. Embracing digital technology will, if implemented correctly, lead to better access to, and utilization of, data. Aligning with the growth in health insurance, it is likely that hospitals will become a pivot point in a system where digital technology drives better coordination of care and there is more systematic use of data to plan, shape, and pay for services.

**Challenge 3 – Skills shortage.** There is no magical fix to the shortage of health professionals. It will impact many countries for decades. Hospitals will be hit hard and must plan accordingly. But this presents opportunities too such as embracing telemedicine when appropriate, encouraging skills transfer between health professionals, increasing training for staff and developing career pathways, more multidisciplinary working, and sharper focus on quality processes and measurement to maintain standards at a high level. Some of this may require enacting or updating legislation to support these ideas.

Implementing the above will require active change management. Health service delivery and health system evolution can be held back by resistance to change, which is why managers and health professionals must:

- Understand that business-as-usual cannot be the norm.
- Appreciate that there is no endless pot of increased funding so getting better value for money is required (cost, quality, and outcomes).
- Embrace technology and innovation as many industrial sectors have.
- Recognize that the consumer and patient have higher expectations when it comes to value, services, and quality.
- Move away from outdated thinking on the roles and responsibilities of hospital staff and organize things in a smarter, more efficient way.

The overarching challenge is to embrace change positively. Hospitals comprise micro ecosystems of people, processes, and technology that should be seamlessly integrated and should be capable of evolving and managing necessary changes.
The Future of Hospitals: a Perspective from OECD

M.S. Francesca Colombó
Head, OECD Health Division

Can you think of three major challenges that will transform hospitals worldwide in the ten coming years?

- Increasing complexity of patient needs
  Specialization and delineation of roles between hospital doctors and other hospital-based care professionals, coupled with the more complex needs of people living with multiple chronic conditions, is generating the need for greater workforce flexibility, coordination and integration within hospitals and community-based care.

- Managing patient demand: channeling of demand for chronic care through local provision and of acute care through concentrated sites of care
  On the one hand, concentration of high cost technology and skills in specialized facilities in metropolitan locations to maintain scale efficiencies and high quality and safety will increasingly drive demand for new ways to facilitate access to acute services for people in peri-urban and rural areas.

  On the other hand, many care needs of people with chronic conditions are now provided locally, or in a person’s home, rather than requiring travel to a hospital. The lack of an effective flow of patient information and efficient local access to care professionals often makes it difficult for this new care model to work effectively, resulting either in unmet needs at local level, or in avoidable hospital admissions for chronic conditions.

- More effective assessment of value
  The scope of care is being constantly expanded through new technologies and practices, which offers opportunities to improve care but also challenges the sustainability of funding for hospital care and may result in disparities across geographies. More effective measurement of outcomes, including those resulting from combinations of in-hospital and out-of-hospital care is needed to generate greater transparency on value, for patients, government and payers.

What are the opportunities or solutions to address these challenges?

- Re-engineering of the workforce to align with new models of care
  New models of care are required to address these challenges; models that embrace new technologies and bring greater coordination and movement of care between hospital and community-based care. Re-engineering of professional education and regulation, along with clinical leadership, is required to bring workforce models and practices in line with these new models, including shared competencies, broader employment arrangements and the building of collaborative cultures.

- Bringing hospitals into broader models of governance
  Individual hospitals often operate in a network of hospitals, and are now increasingly being encouraged to become part of a broader system of care involving primary care and community care and support services. Realignment of accountability and authority for care provision, that encourages responsibility for broader outcomes and for providing better value across the continuum of care, will require hospitals to participate in integrated system of governance and funding, rather than remain stand-alone entities.

- Harnessing technology that enables care closer to home
  Innovations such as mobile technologies, point of care testing, electronic health records and enhanced digital imaging are releasing the potential to provide services closer to where people live and access advice from care professionals remotely. Investment in infrastructure, re-engineering of reimbursement models and legislation to support the safe flow of patient information across care settings and professions will greatly facilitate the workforce and care models for the future.

- Focus decision-making for service provision on improved outcomes
  The routine capture of patient reported outcomes of care, coupled with mortality and other valued clinical outcomes of care, will enable greater assessment of the quality of care. Data linkage across hospitals, primary care and community care and support and the enablement of the safe flow of patient data between these settings will allow greater understanding of performance and inform decisions about in-hospital and out-of-hospital service configuration.

While there might be opportunities or solutions to tackle these challenges, what uncertainties remain regarding the hospitals’ response?

- Sustained political support for change
  Public support for hospitals remains strong, with many people seeing a vital and robust local hospital as a cornerstone of their health care. Medical research is concentrated in large university hospitals and clinicians are socialized throughout their education and professional life to value the status of hospitals. Changes to the location and the role and function of hospitals are often met with resistance, making hospital reform a highly challenging political issue.

- Evidence that reforms are worthwhile
  Health care is complex and measurement and monitoring systems are often inadequate to clearly evaluate and identify where care improvements are made and service efficiencies are being generated through reforms. The current body of evidence for many of the changes required to transform the role of hospital outlined here is not developed enough, reducing the attractiveness and confidence for the large-scale change required.

- Slow response to the changing role of patients in their care
  Moves towards greater patient activation in better understanding their care and being able to participate in their own self-care has the potential to change the scope and nature of care provided by hospitals and other services, including moves to shared care models and co-creation of care plans and processes. But the rate and magnitude of change in the role of patients and their families is not met by a similar rate and magnitude of change in policies and in health systems structures.
The hospital is a city that never sleeps. In the middle of the night, nurses hurry down the fluorescent-lit halls, bleary-eyed visitors look for coffee from a vending machine, lab machines work with the background whirr, pharmacies dispense and clinical staff exchange notes in the emergency department.

This constant activity is necessary, but it often goes on without much regard for patients and their needs. As healthcare becomes modern and driven by machines and AI, the human touch is lost, patients feel alienated, confused and lost.

**Challenge 1** - To be seen and treated in hospitals that are patient-centered, moving away from monumentalism to patient-centered hospital design

When in 1198 Pope Innocent III created the Order of the Hospitallers, he clearly was marking out a space within our community’s environment that would distinctly and primarily be used to build structures that would be reserved to cure the sick and care for the dying. The resultant edifice is one of the oldest and most ornate hospitals in the world. It celebrated the benefactor more than the patient - thankfully, it is a conference center now.

In contrast, the 2020 London Design Biennale marks and celebrates St. Olav’s Hospital in Trondheim whose architects turned away the approach to create a distinct and exclusive space in which to treat and cure, and came up with a universal design to fit the hospital into the lives of the community and its needs. It was a people-centered approach to design so that architecture permeates life, business and society. It is an approach to design and composition that makes sure that the environment can be accessed, understood and used by the whole community and that does not discriminate and exclude users because of their age, size, ability or disability. It is a design philosophy that mirrors universal health coverage: leave no one behind. Integrated and people-centered healthcare is what we want.

**Challenge 2** - Have the hospitals design care plans and pathways that fit with the patients’ lives so that patients’ lives do not rotate around the hospital. Moving away from bricks and mortar to healthcare and personalized healthcare apps and clicks

Digital disruption has affected every aspect of our lives. It is now reshaping healthcare. Brick and mortar retail and other commerce have gone. Today, Health Apps and Medical Devices are being integrated with the patients’ smart phones and moving healthcare away from large, centrally located hospitals to small, easily accessible clinics and even into the home. Recently, NHS England trialed Chemotherapy Ambulatory Delivery Device (CADD) pumps, ‘chemo backpacks’, linked into the main hospital IT network to ensure chemotherapy rotates around the patient and their lives and frees them from spending long hours confined to a chemo-ward.

By adopting a digital approach, we can create personalized healthcare that fits with the patient from diagnosis, treatment, rehabilitation and even palliative care. The hospital becomes a virtual hospital with remote support.

**Challenge 3** - Lastly, move hospitals away from the current perception and mistrust that they are dangerous places where patient safety is compromised every day. If the incompetent and demotivated health professional and the treatment errors don’t get you, then the hospital-based infection most definitely will!

The WHO’s Global action on patient safety and the subsequent WHA Resolution 72.6 has prioritized improvement of patient safety globally. The evidence points out that hospitals remain one of the most significant and single points in our health systems where major patient harm begins and ends.

Patient harm compromises and even undoes the progress made in extending universal health coverage. It is a quality control nightmare as you spend more in correcting, litigating and compensating patient harm than on covering more people with innovative services.

Unsafe structures and mechanical and electrical systems harm not only the patients, but also the workforce. The operating theaters have become points of no return for many patients. The lighting, anesthetic gas lines and the overall infection-free environments are all compromised. Lastly, the whole hospital houses infectious agents, many that have developed antimicrobial resistance. We need to control nosocomial infection through better hospital design and use of positive pneumatic pressure seals, traffic and circulation and antibacterial surface finishes and paints.

Hospitals need to move from “Care of the Sick” to Holistic healthcare offering preventive, promotive services along with Acute Care to be able to survive and sustain.
The Future of Healthcare in the Next Decade

Major Challenges in Healthcare Transformation

A. Increasing commercialization: due to privatization or the inability of public owners to invest in hospitals, there is growing pressure to optimize hospitals for profit, rather than to serve the medical needs of its patients and the communities they are in. Certain reimbursement methods for hospital stays or treatments facilitate this trend.

B. Shifting in-patient care to out-patient care will bring hospitals in competition with specialized practices and polyclinics, especially with an ongoing concentration of hospitals (hospitals may no longer be locally available) and at the same time an increasing patient demand for on-time services.

C. Anti-Microbial Resistance, AMR.

D. Hospitals (and not only) will be confronted with more violence (verbal and physical) and intrusion, especially cyber-attacks.

Opportunities and Solutions

A. Defining the societal role of health care and hospitals and shifting the financing of hospital care to serving the health needs of the population and the patients.

B. Taking a lead in developing out-patient services and staying relevant and reachable in the region.

C. Improving hospital design, infection control, and political action to avoid AMR in hospitals and other sectors of health care, but more important (quantitatively) in farming and food production.

D. Undertaking measure to avoid violence, to de-escalate it and to protect staff. Keeping IT systems up-to-date and proactively prepare for attacks with appropriate strategies.

Uncertainties

A. Commercialization and financing structures are not in the hands of the hospitals. This is a political decision that has to be made.

B. Hospitals that do not deliver the services that are in need and which have less patient demand will vanish.

C. If prevention and mitigation strategies are not taken seriously, AMR will remain a real threat to patients, and hospital success will be reduced, if not set back.

D. Hospitals are already difficult and not necessarily attractive workplaces. Increasing violence may make them even more unattractive.
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All delegates attending the 43rd World Hospital Congress were invited to try CERCA this past November. CERCA allowed delegates to “Shape the Congress” with interactive in-app input and helped facilitate “Meeting of the Minds” sessions to illustrate how CERCA excels at bringing the right people together.

Thanks to the IHF, delegates are still eligible to download CERCA through the end of December and maximize their networking efforts through 2020. CERCA isn’t an event app and therefore continues to find and connect you to people who move you forward throughout the year.

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How and why will hospitals worldwide have changed by 2029?

Coming from and representing primary care and family doctors of the world, I see the hospital sector from a cooperative, consultative, and referral and coordinating services point of view.

An overarching challenge is to make sure that we select the right patients for hospitalization. To achieve that, the hospital sector and primary care should work hand in hand. A well-functioning primary health care can take care of 95% of medical issues in the population.

Needless to say, one size, shape or form pertaining to hospitals and health services does not fit all locations and situations. And, as we are living in times when change comes at an ever increasing pace, health services must be ready for adapting to change, whether it is more or less foreseeable due to epidemiological, demographical or economic factors - or due to abrupt events like the occurrence of epidemics, conflicts and wars, famine and natural disasters.

As I see them, the three main challenges on the rise, for health services in general and for hospitals in particular are:

1. To train, obtain and contain adequate and appropriate professional staff, qualified for handling health problems particular to the location and the situation,
2. To deploy health services in general and hospitals in particular within reach for people with the heaviest disease burden - the underprivileged, the poor - paying due attention to logistics, transport, cooperation, coordination, task sharing between levels, between hospitals and within hospitals - the services must work in concert. They must be accessible, affordable, acceptable and available for people in need in the location and in the situation,
3. To define the health problems of the location and the situation and to design and organize appropriate and relevant services to be included in the portfolio and the mandate for the public health services to deal with, and fund, supply and equip the system with adequate, relevant and appropriate technology, affordable and sustainable within the limits of the economy.

The opportunities and solutions depend on the ability, the will, the quality and the values of the real power structures in the country in question. Are they market-driven, dominated by the quest for profits, or are they driven by a will and values seeing health services, along with education, as a common public good, to be accessible and affordable for everybody in need of health services?

A capitalist economy and thinking is dominating most countries in the world, whether they are rich or poor. Partly due to the main factors fueling the capitalist system, supply and demand, partly to the introduction of new technology, new diagnostic and treatment procedures, the expansion of health services in the rich part of the world has been way beyond what one would expect to be “the real need” of the people.

So, the main challenge for the poorer countries where the burden of ill health and disease is the heaviest, is to be left and aided to design health services in accordance with their needs, sustainable within their economic, social and political limits. They should be warned not to let their services fall for the temptation of leapfrogging into a hyper-specialized, hyper-technological western type healthcare system exclusively available for the rich, draining resources from the poor.

A serious crux for many poor countries is observing how nationally-trained health professionals tend to seek greener pasture in the western world - the rich countries saving the cost of training wanted professionals, and the poor, suffering from an ongoing brain drain.

The rich countries should engage in a process of decommodifying health services defined as “basic”, securing that those services be accessible and affordable for all in need. Hospitals merging into big corporates, behaving like hi tech businesses in a competing market, should be reminded of their role and their main mandate, as tailor-made health institutions for the country, for the location and the situation, to deliver health services in concert with primary care, funded by public money - some of them also having teaching and research obligations within the same mandate and framework!
Forecasting the future of hospitals in low- and middle-income countries

Introduction: more of the same?

At first glance the future trajectories of hospitals in Low-and Middle-Income Countries (LMICs) appear very different from those presently in High Income Countries (HICs). After all, the scourges of communicable diseases such as AIDS, TB, and malaria are still responsible for a significant burden of disease and, along with the widespread and persistent shortfalls in the number and distribution of critical skilled health workers, makes it difficult to imagine an alternative future. For example, the Lancet Commission on Essential Surgical Care estimates a minimum of 143 million additional surgical procedures are necessary each year to save lives and prevent disability. Therefore, whilst the discourse in HICs is dominated by the opportunities that disruptive technology brings to the future of hospitals, in the rest of the world there appears to be a resignation to a state of perpetual catch up. This default setting could be a serious misreading of the LMIC trajectory.

Dysfunctions and funding challenges

Health care financing and delivery systems in LMICs have multiple dysfunctions that directly impact hospitals. The epidemiologic and demographic transitions are causing proportionately higher burdens of chronic non-communicable diseases. Primary health care systems in LMICs are chronically weak; over the period 2005 to 2015, for example, only 17 percent of mother-and-child pairs in the poorest wealth quintiles received at least six out of seven basic health interventions. Consequently, hospital care has become the default setting for treatment. As countries transition from LIC to LMIC status, much of the increase in total health expenditure per capita comes from neither public financing nor Development Assistance for Health (DAH), but from increased private out-of-pocket expenditure. Without purposeful and successful policy reforms to ensure pre-payment schemes like insurance or general taxation, and to contain cost escalation, the treatment of chronic NCDs is likely to be on a high-cost trajectory, available disproportionately to the upper income quintiles, and thus inequitable. Regardless, financing of hospitals in LMICs will remain far behind those in HICs. In 2016, total per capita health spending averaged $40 in LICs, compared to $135 in LMICs, $477 in UMICs and $3,135 in HICs.

Inevitable reforms

In summary, hospitals in LMICs have no option but to reform and rationalize their business models if they are to cope with the massively increasing demand in the context of limited resources. We are already witnessing the future of hospitals not in New York or London but across India where hospitals such as the Aravind Hospital Group and Narayana Health are providing examples of what has been called reverse technology transfer. The advent and increased use of stationary and mobile digital technology will provide further opportunities for significant shifts in approaches to clinical diagnoses, provider-client communications, and treatment. This is especially so for the package of services in primary care that includes basic out-patient care at the first referral or “district” hospital; this is similar to that adopted by the Lancet Commission on

References

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