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Editorial

University hospitals

Is there a role for academic medical centers in emerging markets?

The role of public university hospitals in a globalized world

The internationalization of health care: The UZ Brussel model for international partnerships

Hospital quality management: The perspective of a Belgian academic medical center

The interdependence of productivity, cost, and outcome: Studies of service delivery in Finnish university hospitals

The university hospital as a hub for connected health: Oulu Healthworld, Northern Scandinavia

United States academic medical centers: Priorities and challenges amid market transformation

Opinion matters

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Contents volume 48 number 4

03 Editorial

Eric de Roodenbeke and Alexander S Preker

University hospitals

04 Is there a role for academic medical centers in emerging markets?

Charles M Wiener, Steven J Thompson, Sanford Wu, Mohan Chellappa and Salim Hasham

07 The role of public university hospitals in a globalized world

Slim Slama

11 The internationalization of health care: The UZ Brussel model for international partnerships

Marc Noppen

14 Hospital quality management: The perspective of a Belgian academic medical center

Nancy Vansteenkiste, Frank Rademakers and Johan C Kips

17 The interdependence of productivity, cost, and outcome: Studies of service delivery in Finnish university hospitals

Hanna Rättö, Unto Häkkinen and Risto Miettunen

20 The university hospital as a hub for connected health: Oulu Healthworld, Northern Scandinavia

Hannu Leskinen, Juha Korpelainen and Minna Mäkinen

25 United States academic medical centers: Priorities and challenges amid market transformation

Irene M Thompson and Barbara Anason

Opinion matters

28 Successfully leading change: Innovation in service delivery

Gayle Capozzalo

Reference

30 Language abstracts

33 IHF corporate partners

35 IHF events calendar

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Editorial



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The university hospital is featured in this issue of the *World Hospitals and Health Services*. Often also referred to as teaching hospitals, university hospitals are facilities that provide training for doctors, nurses, and other health professionals, in addition to delivering medical care to patients. They are usually affiliated with a medical school or university, are often owned by the university, or are a part of the wider health care system. Many university hospitals also serve as centers for research and innovation in clinical care and nonclinical services. Although most university hospitals are public or parastatal organizations (semi-autonomous but still public), some notable university hospital exceptions are nonprofit and private-for-profit. Even when publicly owned and managed, public university hospitals often have much more clinical and management autonomy than the rest of the public health care system.

Hospitals have existed for centuries, but the first teaching hospital used to train students was the Academy of Gondishapur in Jondishapur, Persia (now Iran), the intellectual center of the Sassanid Empire (6th and 7th centuries). It was the most important medical center of the ancient world, offering training in medicine, philosophy, theology, and science.

Today's university hospitals, though very different, are well known to the public from personal experience and through television shows in the United States (*St Elsewhere*, *Chicago Hope*, *ER*, *Scrubs*, *House*, and *Grey's Anatomy*), Canada (*Saving Hope*) and the United Kingdom (*Jimmy's*).

They are equally well known to policy makers and private insurance companies as the insatiable "black hole" in health care expenditure and staffed with powerful but often rebellious medical personnel. The articles in this month's journal highlight many of these characteristics.

In the lead article "Is there a role for academic medical centers in emerging markets," Charles Wiener and others highlight the fact that governments in emerging markets often face mounting

challenges in managing health spending, building capability and capacity, modernizing ageing infrastructure, and investing in skills and resources. One path to overcoming these challenges is to establish new public-private models of health care development and delivery, whose missions are to advance medical education, research, and clinical delivery.

Dr Slim Slama continues this theme of globalization by describing how international hospital partnerships aimed at expanding education or research opportunities or improving services are increasingly being shaped by the globalization processes. Marc Noppen describes how globalization also has led patients in today's world to seek abroad, both temporary and permanent health care unavailable at home. University hospitals are often the key target for such "medical tourism."

Nancy Vansteenkiste and colleagues describe how the university hospital is often a central pillar of value-based health care and the emerging quality improvement culture in providing health care today. Risto Miettinen and others look at the important and interdependent relationship between cost and productivity in understanding and assessing service delivery in university hospitals. Hannu Leskinen and co-authors emphasize that health care systems need to enhance health care delivery through innovation in order to meet future challenges.

Irene Thompson and Barbara Anason conclude by describing how United States academic medical centers (AMCs) have upheld a long-standing reputation for excellence by teaching and training the next generation of physicians, supporting medical research, providing world-class medical care, and offering breakthrough treatments for highly complex medical cases.

These articles are offered in the hope of stimulating readers to think about the role of the university hospital in their own counties and how they could be better integrated into a comprehensive health care system. □

Is there a role for academic medical centers in emerging markets?



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ABSTRACT: Governments in emerging markets face mounting challenges in managing health spending, building capability and capacity, modernizing ageing infrastructure, and investing in skills and resources. One path to overcoming these challenges is to establish new public-private models of health care development and delivery based on United States academic medical centers, whose missions are to advance medical education and clinical delivery. Johns Hopkins Medicine is a participant in the collaboration developing between the Perdana University Hospital and the Perdana University Graduate School of Medicine in Malaysia. These two organizations comprise an academic health science center based on the United States model. The Perdana project provides constructive insights into the opportunities and challenges that governments, universities, and the private sector face when introducing new models of patient care that are integrated with medical education, clinical training, and biomedical research.

On November 2, 2010, a group of collaborators – including the Malaysian government, local business leaders, and Johns Hopkins Medicine – founded a new university and affiliated university hospital on the outskirts of Kuala Lumpur. A chief goal of this collaboration is to transform the health care landscape in Malaysia by training future leaders in clinical care, research, education, and health policy. The results will likely be watched closely by various health care stakeholders around the world in the coming years because it addresses an important question: Can an adapted form of the traditional United States academic medical center model meet the needs of emerging markets?

Many emerging economies face a common set of health care challenges. They need to control rising health care costs, improve the quality of clinicians, nurses and administrators in the health care work force, and invest in upgrading and expanding health care delivery systems. Typical leadership responses in these markets include encouraging expansion of private sector involvement in financing and delivery of health care services, investing in improving facilities, backing “medical city” projects, and implementing strict budgetary controls, especially on education, training and research. However, these efforts are not universally perceived as adequately fixing the problems. Many critics claim that private sector health care expansion can exacerbate inequalities between the rich and the poor, that building projects too often lack the work-process reengineering required to improve access to quality care, that shrinking budgets stifle program growth, and, in particular, that a lack of funding for

education, training, and research infrastructure leads the country's best talent to pursue more attractive professional development opportunities in other regions.

One possible strategy for addressing these shortcomings is to create public-private partnerships aimed at creating academic medical centers that emulate models from the United States and other highly developed countries. Such centers would seek to establish a high degree of interplay between clinical care delivery, medical education, clinical training, and biomedical research activities. The desired result would be a rise in health care quality and capacity simultaneous with the development of a strong new workforce of health care professionals. These highly trained professionals could grow and improve the health sector in an environment that will retain and attract even more talented, motivated students and staff.

These are the goals of the Perdana University collaboration in Malaysia. Perdana was conceived as an academic health science center (AHSC), comprising Perdana University Hospital (PUH) and the Perdana University Graduate School of Medicine (PUGSOM).

Creating a new model of education, research, and clinical care

From the beginning, Perdana University's leaders and sponsors believed that the path to the development of a successful AHSC would involve collaboration with a leading academic medical center. The chosen center was Johns Hopkins Medicine, in part because of its reputation as one of the most prestigious hospitals and medical schools in the United States. Equally importantly,

Johns Hopkins has an established international division that is highly experienced in global collaborative health care projects. Furthermore, to establish a favorable legal and regulatory framework for the collaboration using an appropriate public-private funding model, Perdana formed a strategic alliance with the Malaysian Prime Minister's Department of Economic Planning and Public Private Partnership Units.

These collaborators collectively studied the market needs, project risks, business feasibility to achieve project goals, objectives and key success factors. Several decisions were made in this process, including that PUGSOM and PUH must offer medical education and training services for individuals at all income levels, create a clinical care and teaching model based on the United States academic health science center model, develop multidisciplinary research programs that address important Malaysian health care needs, and create incentives that facilitate technology and knowledge transfer between Perdana University, Johns Hopkins and local health care institutions and stakeholders.

Collaboration with Johns Hopkins led to the decision to adopt the Johns Hopkins' Genes to Society (GTS) conceptual framework for PUGSOM's curriculum, instructional strategies and clinical and translational research program plan. Developed by the Johns Hopkins University School of Medicine faculty, this revolutionary, multidisciplinary approach emphasizes patient variability based on emerging biomedical knowledge – in particular on the Human Genome Project, changing societal factors and the increasing demand to deliver individualized patient care.

The GTS framework allows physicians to leverage the insights provided by this cutting-edge research and knowledge. It also establishes an intellectual foundation that is equally applicable to medical education, basic science investigation, clinical and translational research and clinical care. This framework promotes an alignment of all three AHSC mission incentives, minimizing the traditional conflicts between clinicians, educators, investigators and administrators. This improved alignment can lead to more effective operational systems, management processes and metrics, all of which are needed to drive health-system-wide growth initiatives and sustainable performance improvements.

Perdana is fostering the alignment of multiple goals in another important way. PUGSOM and PUH are the first non-public university and hospital in Malaysia to make the shift from the British model to the American model of medical education and practice. The American model, in which students obtain a university degree before moving into postgraduate medical and specialty education, tends to place more emphasis on linking research and clinical care, and is more amenable to a tripartite mission emphasizing teamwork, multidisciplinary research and clinical care within an integrated operational and governance model. The British model has a stronghold in much of Asia, but there is a growing trend to move to an American model in Europe, Asia, and Australia.

From the Johns Hopkins perspective, the opportunity to work with like-minded public and private partners in Malaysia offers several rewards and benefits. This collaboration creates a catalyst for human capital development, spurring innovation in health care delivery, and several other contributions to the growth of a health and life sciences community. Building lasting connections with international colleagues creates an environment that fosters intellectual discovery, broadens knowledge, improves public health, and builds leadership capacity, which hits right at the core

of the Johns Hopkins Medicine global mission and vision. In addition, collaboration with PUGSOM and PUH enables Johns Hopkins to gain knowledge surrounding operational challenges, clinical care, and cultural expectations in a developing market that it can apply to its own health system.

Perdana is in a position to improve existing models in many ways. The collaborators are developing an AHSC governance model without traditional siloed departments, a comprehensive information technology system that integrates all missions of the AHSC in a coordinated fashion, a research program oriented to multidisciplinary approaches to health problems, a campus that promotes collaboration and communication, and a clinical operation that is patient-centered rather than provider-centered. PUH and PUGSOM have the potential to serve as a model for AHSCs throughout the developed and developing world.

Challenges to realizing the AHSC model

The Malaysian government, Johns Hopkins Medicine, and Perdana University's executive leadership have collectively set very high standards for success. This ambitious initiative seeks to establish a new model of medical education and specialty training in Malaysia that emphasizes quality and accountability, to develop internationally recognized research programs that achieve improvements in human health, and to create a world-class clinical operation attractive to local, regional, and international consumers. PUH and PUGSOM are meant to become an AHSC that is an international peer of Johns Hopkins, not an Asian branch campus of a United States institution. PUGSOM's admission standards are comparable to those imposed at Johns Hopkins, and the school's examinations are based on Johns Hopkins' challenging question banks. Johns Hopkins' programmatic design and development principles were applied throughout PUH and PUGSOM, particularly emphasizing the patient-centered hospital experience and patient safety, student-centered education and training, and integrated clinical and translational research.

The strategy and tactics to achieve these ambitious goals require navigating complex social, operational, and financial challenges. Examples of such challenges include understanding cultural standards, current physician-staffing and patient-care models, consumer patterns, beliefs in health and wellness, health care practices and standards, and existing educational and career development opportunities.

The aspirations of PUGSOM and PUH to attract international students, staff and patients amplify the challenges. To succeed, PUGSOM and PUH must communicate the value of an American-style approach to medical education, specialty training and clinical care, compared to the more globally familiar British-style approach. Research and education do not exist in private models of clinical care in Malaysia. What is more, the multidisciplinary care and professional-practice nursing models that have rapidly come to prominence in the United States and which have had a large positive impact on patient care and wellness, have not penetrated Asian health care practices.

Establishing a culture of collaboration and integration across the entire medical enterprise will also pose a challenge. Embedding a mission-driven culture requires a strong top-down commitment that emphasizes teamwork and communication. Perdana has modeled its governance and management structure on Johns Hopkins Medicine, under which a single institutional leadership

structure is responsible for balancing the tripartite mission. The institution also must unflaggingly provide resources and support to faculty leaders, residents and medical students, as well as build from scratch a professional practice nursing model under which nurses closely share responsibility for improving patient care, quality, and safety.

To sustain this culture, PUH and PUGSOM must successfully train future-generation health care professionals, including clinicians, nurses, allied health professionals, administrators, and others. The GTS framework will help PUH and PUGSOM emphasize patient-centered care through its multidisciplinary approaches.

The financial and developmental risks for such an ambitious project of this scale are significant. Challenges include managing investment expectations, obtaining adequate financing, establishing and controlling appropriate operational budgets, and achieving operational efficiency. To be successful, the stakeholders must recognize intangible value metrics including developing a prestigious health and life sciences community, increasing the availability of professional and technical jobs, fostering intellectual property development, retaining local talent and attracting opportunities for foreign direct investment.

There is also the challenge of creating a revenue model that allows the institution to attract public and private patients and treat them in the most cost-effective way. This is especially challenging since the current system pushes hospitals to serve either one or the other. The development of a clinical and translational science research enterprise requires strong governmental collaboration, investment in workforce development for all health professionals and support staff, and an outreach campaign for philanthropic support of all three components of the mission, a critical success factor for the typical United States academic medical center.

Beyond Perdana

Even if all of these ambitious goals are achieved at Perdana, the collaborators will not consider the project a complete success unless Perdana serves as a model for change elsewhere in the country and region. This will require clear communication of the advantages of the model to patients, health care professionals, investors, and government entities. If Perdana is successful in doing so, widespread reform in health care delivery and organization will be sure to follow. It is apparent that the opportunity to have such a positive, global impact on health care outweighs the risks associated with this project. ▢

Charles M Wiener graduated from Duke University and the University of Miami School of Medicine. He is board certified in internal medicine, pulmonary medicine and critical care medicine. At Johns Hopkins, he led the team of faculty, students and staff that developed the revolutionary Genes to Society Medical curriculum. He has authored numerous scholarly articles and books; most recently, Harrison's Self-Assessment and Board Review (18th edition).

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Mr Thompson founded, and leads, Johns Hopkins Medicine International as the arm of Johns Hopkins Medicine, providing a focus for all of Johns Hopkins' international activities. It is the mission of this organization to establish international programs and businesses that are consistent with and support the Johns Hopkins Medicine mission of excellence in clinical care, research and teaching. Mr Thompson has a particular interest in identifying innovative ways for Johns Hopkins to collaborate with a wide range of partners to work towards the common objective of improving health and the quality of health care delivery around the world. Mr Thompson obtained his bachelor's degree in biology from the University of Minnesota. He also earned a master's degree in business administration from Loyola College.

Subscribe to Mr. Thompson's blog, Baltimore to Beijing: Adventures in Global Health Care

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He is one of the founders of Johns Hopkins Medicine International and has been instrumental in securing and establishing various clinical, management, and enterprise developmental initiatives of Johns Hopkins Medicine globally. In addition, he is also the chief executive of Amcare Labs International, an affiliate of Johns Hopkins Medicine International.

A surgeon by profession, he is a Fellow of the Royal College of Surgeons Edinburgh and Fellow of the American College of Surgeons, in addition to holding a business degree. He has wide surgical experience, having worked in countries such as India, Malaysia, Singapore, the United Kingdom and the United States. Dr Chellappa pioneered laparoscopic gastrointestinal surgery in Asia and subsequently provided training in laparoscopic techniques to many surgeons from the Middle East and Asia-Pacific regions.

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The role of public university hospitals in a globalized world



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ABSTRACT: Globalization has increased interdependence between countries and highlighted the importance of international cooperation for improving global health outcomes. International hospital partnerships aimed at expanding education, research opportunities or improving services are increasingly being shaped by globalization processes. Focusing on public university hospitals, this article calls for a critical review of the motives, processes and impact of international hospital partnerships in a changing landscape characterized by economic uncertainty and a global power shift to emerging economies.

Globalization dynamics are shaping health, health determinants and health care provision. Whilst the overall impact of globalization on health is contentious, phenomena such as the spread of diseases risk factors and lifestyles, the mobility of people and the diffusion of ideas and technologies, is easily observable. In this context, the health of populations and the delivery of health care are, regardless of nation state, geographical position, or stage of development, increasingly being affected by the social, political and economic dimensions of globalization (Huynen, Martens et al. 2005; Lee 2005).

Occupying a central role in health systems, university hospitals are profoundly affected by globalization processes, pushing them to re-examine their social mission, academic priorities and organizational structures (McKee and Healy 2000; Cortinois and Alejandro 2003).

Globalization has also highlighted the increased interdependence between countries and the importance of international cooperation for improving global health outcomes. International hospital partnerships represent one such form of cooperation (De Roodenbeke 1994; Crisp 2010; Wernli, Landry-Chappuis et al. 2010). Aiming at expanding education, research opportunities or improving services, these loosely-defined collaborations have traditionally involved a rich industrialized institution that provides a unidirectional flow of knowledge and expertise to a Southern counterpart. Often, these collaborations are established based on the Northern partner's philanthropic effort to "do good" rather than address the request for help from the South. In some instances these partnerships are proposed and fostered through the offices of the development cooperation agency of the Northern country or from other sources of funding the Northern institution has been able to leverage, which dictates the agenda and area of collaboration.

Areas of collaborations involving hospitals are heterogeneous and context specific, but generally include cooperation and research activities revolving around:

➤ Health science education: Strengthening the capacity of

academic health institutions to create and/or adapt their educational models and curricula for the training of doctors, nurses, and allied health workers.

- Health care provision: Ranging from quality improvement programs to innovative health care delivery models (for example task sharing, patient empowerment models).
- Hospital organizational design, governance, and management programs.
- Innovation in medical technologies: Increasing the focus on ICT innovation and point-of-care diagnostics tools.
- Research: Clinical trials and large epidemiological cohorts studies, health services research.

As international hospital partnerships gain importance, they tend to diversify. They attract the interest of emerging economies eager to improve their health systems while contributing to global health progress, thus occupying a more prominent position in the global health and foreign policy arena (Dunn 2011). Furthermore, recent insights from reviews of health partnerships between developed and developing countries suggested that this unique learning process can potentially generate "reverse innovation", where innovations from developing countries allow developed countries to profit (Chen 2012; Syed, Dadwal et al. 2012). Since the evidence of the true impact and mutual benefits of hospital partnerships are insufficiently reported, these collaborative arrangements need to be discussed in light of the current global processes that shape both academic and hospital development. It should be made clear that these international partnerships are not the core business of public hospitals. Given that public sector institutions around the world in times of global financial strain are often understaffed and overburdened, a realistic assessment should be made of their abilities to seek, establish, manage, and grow partnerships.

Drawing on the University Hospitals of Geneva's (HUG) experience, the goal of this article is twofold. First, it aims to highlight some of the factors influencing the current development of both universities and hospitals as a result of globalization.

Second, it is meant to stimulate the discussion on how international hospital partnerships contribute to global health and how this could be further enhanced with a specific focus on research and teaching hospitals.

Universities and hospitals in the midst of globalization

The rapidly increased global flow of people has shown us that disease is not the only thing that can transcend borders. Created and sustained by the action of various local and global forces including social, political, economic, academic, and environmental pressures, global human mobility has reached an unprecedented degree in terms of volume and complexity. Tourism is primarily responsible for this, with an estimated 983 million tourist arrivals occurring worldwide in 2011. Beyond this tourism, migration of immigrants for labor or study purposes, or internal displacement due to conflict or environmental disasters represents a significant proportion of global mobility as well. The free movement of professionals, technical personnel and students is increasingly pervasive in the academic sector. For example, in 2009, almost 3.7 million tertiary students were enrolled outside their country of citizenship (Choudaha and Chang 2012).

Globalization has occurred in the hospital microcosm as well. Migration among the hospital workforce and patients in accordance with the rapid diversification of gender, nationality, religion, sexual orientation, and qualifications has tested our existing systems and hospital processes in numerous ways, calling for innovative solutions and adaptations.

Another characteristic of globalization relates to technology diffusion. Technology from around the world is much more easily spread than ever before, reaching now into academic institutions and hospital settings. Innovations in medical technologies, such as MRI scanners, cardiac stents or powerful new drugs, have led to both dramatic health care improvements and escalating costs. Technology has also allowed for outsourcing and off shoring of a wide range of services at hospitals and new ways of empowering patients (Chareonwongsak 2002).

Academic institutions are on the move as well. Prestigious institutions such as Harvard University and New York University have created branch campuses in the Middle East and Asia. These satellite campuses have grown from 35 to 162 between 1999 and 2009, with 78 of these branches being operated by United States universities. Interconnectedness through electronic communication technologies has revolutionized information and knowledge exchange and transfer, facilitating the establishment of satellite campuses, the development of distance courses, and the uptake of new medical technologies.

While the United States still dominates this global academic enterprise, countries such as India, China, and Brazil that are usually considered “exporters” are now engaged in a fierce and often expensive competition. These countries have opened world-class universities to build their citizens' human capital, retain their students and faculties and reap the economic benefits that come with more and better education (Wildavsky 2010).

In parallel with this, a majority of higher academic institutions worldwide are, despite different social, political, historical, and economic characteristics, engaged in reforms and/or restructuring.

Intrinsically, educational and health systems need to adapt to an

increasingly complex world that requires systems-level and cross-systems-level thinking (Thunhurst 2012). Academic institutions such as university hospitals are expected to train their health professionals to work through an evidence-based practice with an increasing need to develop various competencies (e.g. communication and cultural competency). They are also expected to train their health professionals to establish “systems thinking” and collaborate with a wide range of professions and disciplines. Issues such as the ageing population and the increasing human and societal burden related to chronic non-communicable diseases exemplify the need for health academic institutions to rapidly adapt to our changing world (*Swiss Academy of Medical Sciences Bulletin* 02/2012).

These calls for institutional and curricula reforms resonate with numerous initiatives such as the Lancet Commission of Health Professionals for the 21st Century, which has proposed a global framework to redesign medical and health sciences education which is seen as a critical element impeding health progress in many countries (Frenk, Chen et al. 2011).

Another particular concern for pushing higher educational institutions (as well as hospitals) to undertake reform is the international economic imperative of remaining competitive in the global market. The globalization of higher education is therefore an interesting illustration of the increasing integration of economies and the worldwide adoption of neoliberal policies. With the reduction of governmental financial support to higher education, public universities and hospitals are increasingly pressured to diversify their sources of revenues through competition for research funds, external contracts with the private sector, public-private partnerships, and new types of cost-recovery initiatives:

“This trend also includes an increasing presence of market values and forces in academia. Professors, departments, and faculties of public and private universities are increasingly engaged in competitive behavior similar to the one prevailing in the marketplace for funding, grants, contracts, and student selection and funding.” (Torres and Schugurensky 2002).

This further stresses a system that is not trained in managing these additional roles. Issues of ethics and conflict of interest also remain largely unaddressed in these ever-evolving scenarios of new partnerships. This exposes medical institutions to new risks.

In the same light, the expansion of the health care market responds to both growing needs and neoliberal imperatives. Growth in this sector is the result of many factors that include:

- ✦ The growth of a middle class in emerging countries with rising purchasing power and health expectations.
- ✦ A changing pattern of diseases with a shift from infectious diseases to life style-related chronic conditions resulting in an increased demand for health care services and drugs.
- ✦ Large investments in health care infrastructure, medicines and IT, especially in emerging economies like the BRICS countries, with new possibilities for investigation and treatment (Campbell and Chui 2010).
- ✦ A dramatic expansion of information and communication technology (e-health, m-health) (Doarn 2012).
- ✦ Firm government commitments to the universal coverage agenda which supports expanded access to basic health care services (recent examples include, Thailand, South Africa, China, Brazil) with the development of social health insurance reducing out-of-pocket spending.

Similar to reforms made in the academic sector, hospitals across the globe have engaged in reforms. These reforms are characterized by a reduction in the number of beds and departments, an increasing number of privatizations, mergers and adoptions of various forms of public-private partnerships in order to make economies of scale, improve efficiency and contain costs.

In parallel, the liberalization of trade in health services (along the four modalities described by GATTs, i.e. cross border delivery of health services, medical tourism, the movement of health personnel and the commercial presence of health services in a foreign country) has expanded, increasing the number of international hospital collaborations with prospects for health systems strengthening and new revenue generation (Chanda 2002).

What lessons are to be learned from those global changes?

University public teaching hospitals, through their stock of human, technical and financial capital, still maintain a unique position in the health sector and have a tremendous social responsibility, albeit locally or on a wider scale. Through the integration of academic (i.e., education and research) and care-delivery systems, public university hospitals fulfil a unique, integrative mission to provide care to all, and to teach and conduct research. Furthermore, filling the role of caring for the poor, people with chronic conditions and patients who other health care institutions do not wish to admit, public university hospitals play a unique role in contributing to health equity. This unique mission, however, requires reinterpretation due to the changing local and global constraints that shape hospitals' functions and activities.

New horizons for international hospital partnerships involving university teaching hospitals

As stated above, international activities are not the core business of public hospitals, and many do not have such activities enshrined in their mission statement. Primary accountable to the local population they serve, some public hospitals, such as the HUG, have strategically chosen to engage at a global level because they have the human and financial capacities to enter such collaborations. Also, they are increasingly pressured to show how much impact these international activities have on health systems and ultimately on the health of the population.

To make a substantial global health impact, public university hospitals should better map their assets and properly organize themselves internally before considering meaningful partnership development. In a highly competitive health care climate, public teaching hospitals should deepen their institutional understanding of the effects of globalization and its impact on health systems and markets.

Furthermore, in order to better capitalize on their triple mandate, university hospitals should build a unified global health vision with their affiliated medical schools and research institutes, moving away from current fragmented organizational structure to what Duke University colleagues have called "academic health science systems" i.e. integrated systems that align education, research and health care delivery along a discovery-care continuum (Dzau, Ackerly et al. 2010). For this to happen, strategic partnerships should start at "home", involving medical schools, health care centers, public health institutes, research and other non-medical academic centers that have a stake/interest in global health,

reviewing possible synergies and respective strengths and weaknesses.

To conclude, here are some final considerations on how to strengthen the impact of hospital partnerships.

"Partnerships" is a buzzword that needs a reality check

The traditional development discourse which sees partnerships lead by rich Western countries as indispensable and necessarily beneficial should be critically challenged. In a multipolar world, where South-South collaborative approaches are at times more effective than North-South partnerships, collaborations are likely to have more impact if they incorporate knowledge of local conditions and needs (Kolars, Cahill et al. 2012). Limited in scope and time and focused on a narrow agenda imposed by the donor country, too many partnerships still claim to strengthen health systems without being able to measure and evaluate the true impact of the institutional links. If "co-development" has to replace traditional forms of international development, a critical review of the motives, processes and impact of hospital partnerships should be a key research component of this new endeavour (Crisp and Ndwapi 2012).

The evidence base for mutual benefits brought by partnerships need to be strengthened

The increasingly prevalent assumption is that partnering with health care providers in developing countries is not only beneficial for the recipient, but highly valuable for both partner institutions. While this assumption has sometimes been verified, the amount of evidence to support these claims of "reverse innovation" is still scarce and rarely reported.

International hospital cooperation should find viable sources of funding and administrative support

Often undertaken on their own funding, international hospital cooperation activities do not internalize the loss of activity and operations costs related to the absence of health professionals involved in such programs. This limits institutional buy-in, staff motivation and the ability to maintain programs over time. For big programs funded by external donors, the lack of administrative support is a common plague that often impedes program implementation, and does not allow hospital staff to expand their portfolios beyond a limited number of projects.


Based on various experiences, a flexible matrix-organizational structure or a shared platform possibly involving a government or a non profit subsidiary body, could be adopted to undertake strategic overview of global health issues and partnerships, provide administrative support, and facilitate the diffusion of knowledge and expertise among the partners (Mordelet 2010). A global health web portal, like the one HUG established for its cooperation activities, could facilitate the sharing and learning among partners and foster thematic collaborations through the creation of communities of practice. (Global Health Forum Platform).

International hospital partnerships should be part of the country foreign health aid strategy

States, foreign aid agencies and local authorities should make better use of the expertise within university hospitals and the financial support they have in developing their cooperation strategy. This strategy should incorporate the establishment of

global health partnerships involving hospitals in high income countries with their counterparts in low and middle income countries (e.g. Health Links funded by DFID in UK or the ESTHER network, a French government led initiative). (ESTHER (Network for Therapeutic Solidarity in Hospitals); Tropical Health and Education Trust (THET); Bachelot-Narquin 2010).

Last but not least, partnerships require human dedication and nurturing time

Establishing trust, understanding local political and social contexts, limitations and cultural codes of communication is a long, learning process that goes both ways. Strategic partnerships can take partners far ahead once a common vision is articulated and the objectives of the partnership are crystallised. From there onwards it is a complex journey of nurturing and learning, just like any other relationship we deeply care for. 

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The internationalization of health care: The UZ Brussel model for international partnerships



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ABSTRACT: Globalization of health care, flat medicine, cross-boarder health care, medical tourism, are all terms describing some, but not all, aspects of a growing trend: patients seeking health care provision abroad, and health care providers travelling abroad for temporary or permanent health care delivery services. This trend is a complex, bilateral and multifaceted phenomenon, which in our opinion, cannot be sustained in a single, comprehensive description. Individual hospitals have the unique opportunity to develop a model for appropriate action. The specific model created by the university hospital UZ Brussel is presented here.

Although the increased globalization of health care and medical travel has received much attention during the last decade, the current market is not as large as conventional wisdom suggests. McKinsey & Company estimated gross medical travel revenues at US\$40 billion worldwide in 2004 and 60 billion in 2006, and projects a US\$100 billion market in 2012 (Ehrbeck et al. 2008).

A recent report showed that only 1.5 percent of all hospitalizations in Belgium are for international patients, with the majority of these patients originating from surrounding countries including The Netherlands and France. However, this number has increased by 60 percent over the past five years, and wide interhospital variability exists (hospitals located at the borders receiving proportionally more cross-border patients) (De Mars et al. 2011).

At UZ Brussel, almost 3 percent of current patients are international, which is double the national average. This has to do with the relatively large international community residing in Brussels and the presence of specific centers of expertise, such as the *Centrum voor Reproductieve Geneeskunde* (CRG, our internationally renowned center for reproductive medicine), where 26 percent of patients are international.

This observation illustrates the very different reasons why patients may seek health care abroad. The largest reason, accounting for 40 percent of all medical travellers, is to seek the world's most advanced technologies, and best quality, giving little attention to proximity or cost. This aspect is certainly present in the CRG/UZ Brussel situation, although the specific case of "reproductive" or "fertility" tourism includes many other reasons for expatriation (Pennings 2002 and Inhorn and Patrizio 2009). These fertility-specific reasons may include the following: prohibition in certain countries of a specific service for religious or ethical reasons, the unavailability of expertise, equipment, or donor technologies, the unavailability of services because of a perceived safety or risk issues, the prohibition of certain services because of

reasons of age or sexual orientation, the unavailability of treatment because demand outstrips supply leading to waiting lists, high local costs, individual wishes for privacy.

Other reasons for medical travel include better quality care for medically necessary procedures (32 percent), quicker access to medically necessary procedures (15 percent), cheaper care for medically necessary procedures (9 percent), and cheaper care for discretionary procedures (4 percent).

The UZ Brussel case

UZ Brussel was one of the founding members of Health Care Belgium (www.healthcarebelgium.com) in 2007, a nonprofit organization established for the international endorsement of Belgian health care. Within this framework, efforts have been made to attract foreign patients to the hospital, such as creating an International Patients desk, establishing bilateral agreements with various international patient service providers, etc, and, developing new formats of international service provision, like teleradiology and endorsing internationally accredited teaching and training programs in various disciplines (e.g., heart rhythm disorder management, disaster and emergency medicine and reproductive medicine). UZ Brussel is convinced that attracting international patients, if done properly, represents an opportunity to fuel both business and clinical growth, and increase academic value in terms of teaching and training opportunities, especially new scientific knowledge and production.

Prior to these endeavors, UZ Brussel had already designed a particular model of international partnerships in reproductive medicine, leading to the start-up of two UZ Brussel annexes abroad using a unique joint-venture model, in Kuwait in 2009 and Abu Dhabi in 2012.

The Gulf states are a typical example of emerging economies with increasing standards of living, life expectancy, health consumers with the means and willingness to pay out of pocket for medical services, and with governments endorsing treatment

FIGURE 1: PROPORTION OF INTERNATIONAL PATIENTS VISITING UZ BRUSSEL (UZB) AND THE UZ BRUSSEL CENTRE FOR REPRODUCTIVE MEDICINE (CRG)

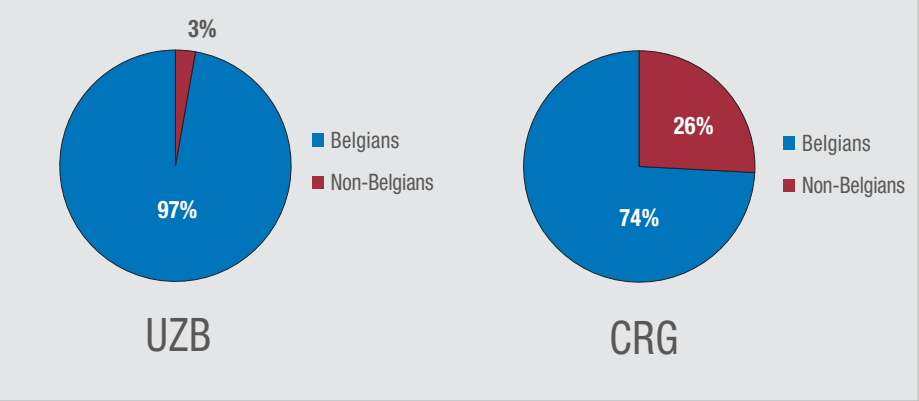


FIGURE 2: EVOLUTION OF OVUM PICK-UPS AT UZ BRUSSEL CRG (GREEN BARS) AND AT UZ BRUSSEL-ROYALE HAYAT HOSPITAL'S FERTILITY CLINIC IN KUWAIT (ORANGE BARS)



abroad for specific treatments unavailable or still underdeveloped locally (Crone 2008). Patient flow emerging from these countries is also particularly susceptible to geopolitical events. For example, the events of September 11th, 2001 drastically reduced the number of Middle Eastern patients admitted to United States' facilities for care, dropping from 44 to 8 percent by 2003 (Ehrbeck et al. 2004). Finally, reproductive health in these countries is influenced by specific cultural (DeJong 2005) and medical issues, like increasing fertility challenges as a result of higher incidences of obesity and diabetes, and proportionally high incidences of consanguinity and certain genetic disorders.

All of the reasons described have lead to an increasing number of Middle-Eastern patients seeking treatment at UZ Brussel, augmenting clinical and logistic pressure on our fertility centre through growing waiting lists for all patients, and increasing needs for Arabic-speaking translators. Governments need to develop their own in-country fertility services (Inhorn and Shrivastav 2010) in order to effectively reduce the very high costs of fertility treatments abroad for large number of patients.

UZ Brussel annexes abroad

In December 2008, a preliminary visit was performed in Kuwait,

and various hospitals and health authorities were contacted. This was repeated in Dubai in January 2009 and in Kuwait in March 2009. It was at this time that a Memorandum of Understanding was established between the Royale Hayat Hospital (RHH) in Kuwait and UZ Brussel. RHH is a privately owned mother-and-child hospital, where a small fertility centre (50 to 100 cycles/year) is active with local medical and technical staff. RHH and UZ Brussel recognized soon after their partnership began that there advantages in joining together. UZ Brussel did not have the means nor the culture to engage in large-scale, "whole hospital" collaborative agreements that large university hospitals like Johns Hopkins, Harvard, and Cleveland Clinic regularly engage in. Instead, UZ Brussel specifically chose a small-scale, bilateral collaboration that promotes high quality without the need for large upfront investments. Also, UZ Brussel found the need for the permanent presence of a comprehensive team of Belgian specialists, paramedical and lab staff responsible for the medical management of the unit; a permanent focus on medical quality; the parallel start-up of a scientific, evidence-based approach and attitude and a long-term relationship, as well as permanent training of local staff in Brussels and in Kuwait. Also, the model needed to include genuine respect for local cultural, business and religious traditions.

In October 2009, activities of the new "RHH/UZB Fertility Centre" started. Within two years, the number of yearly cycles increased from 100 to 700 with similar quality output measures, such as healthy pregnancies, complication rates, etc, as the original center in Brussels


Whereas the activity level at UZ Brussel remained constant during the last two years (mainly because of important construction activities at CRG), the Kuwait partnership contributed to the further expansion of total activities.

Furthermore, this successful partnership has led to the development and start-up of a number of other UZ Brussel clinical activities in Kuwait, in areas of genetic counselling and diabetes. Other than the positive financial cash balance of these activities, this venture has also attracted staff searching for international experience.

In view of the success of this model, UZ Brussel has been contacted by other health care providers in the GCC area. In August 2011, a second agreement was signed between UZ Brussel and the Lifeline Group's Burjeel Hospital in Abu Dhabi, which was endorsed by the Health Authority of Abu Dhabi and the Belgian embassy to the UAE. UZ Brussel has acted as a consultant in the construction of the IVF unit at the new Burjeel Hospital, and implemented a business and medical model comparable to their own in September 2012. Other applications

from other GCC countries are currently under review for even more potential partnerships.

Conclusion

Internationalization of health care is a growing global phenomenon. It is complex and multifaceted, and therefore cannot be easily translated into a unidimensional business model. Every country's health system will have to collaborate to form original models, partnerships and activities with one another. The case of UZ Brussel proves that individual university hospitals can find successful and creative answers in this field. 

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Hospital quality management: The perspective of a Belgian academic medical center



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ABSTRACT: In this article, we explain why from our perspective as the largest academic medical center in the country, we consider it to be part of our mission to contribute to the elaboration of a value-based health care organization system. We describe our hospital quality management system and how we think that this can deliver added value by introducing lean principles in the care process. We also reflect on the importance of hospital accreditation and external benchmarking in the continuous quality improvement culture within the hospital.

Belgium is a federated state that consists of three regions with approximately 10.5 million inhabitants. Curative care is largely organized at the Belgian federal level, whereas preventive care is a regional competency. Curative Belgian health care is in essence a social security based system. It is currently characterized by a very high degree of accessibility, with no form of gate keeping or echelons, coupled to extensive coverage of health services through the compulsory and centrally organized health insurance system. Payment of health care providers is on a fee for service basis. This overall combination results in a high volume, relatively low unit cost health care system that appeals to Belgian citizens. The degree of satisfaction with the system is high, as is the perceived quality of care. All Belgian hospitals are nonprofit. The University Hospitals Leuven (UZ Leuven) are the largest Academic Health Service System (AHSS), with a total bed count of 1,955 beds and 8,500 employees. Its mission consists of the characteristic triad, namely patient care, translational research and the education of health care professionals.

As in many other countries, the current Belgian health care system faces several challenges. These obviously include the well known effects of technological innovation and demographic evolution, with on the one hand an ageing population and associated need for patient centered chronic care models, and on the other hand a predicted shortage of health care workers. Of additional concern is the financial sustainability of the current health care system. The overall cost has increased over the past few years, now reaching 10.3 percent of gross domestic product, which is higher than the OECD average (OECD 2010). Of particular importance is the increase in out of pocket expenses for the patient which stand at 29 percent, above the OECD average.

This change can threaten accessibility and equity, two essential aspects of our health care system, if this is not accompanied by a similar evolution in the willingness to pay for the system by those who contribute. Citizens are not willing to pay for what is perceived of as waste due to bad management. In other words, in order to

safeguard solidarity, an essential cornerstone in our health care system, the efficiency of the system indeed needs to be increased.

Quality of care is also an important aspect of the organization of the health care system. In order to be of high quality, care not only has to be safe and effective, but amongst other aspects also efficient (Institute of Medicine 2011). Hence, engrained in the definition of quality is the notion of outcome versus costs. This notion is even better coined in the concept of value (Porter 2010). Too often, both elements of the value equation namely outcome versus cost are looked upon separately, focusing either on improving outcomes without taking cost into account or, and arguably more so, on reducing cost without considering the effect on outcomes. What the health care system needs to deliver is added value, which means better care at the same cost or the same care at a lower cost. Instead of “bending the cost curve” a more appropriate phrasing might be to “augment the value curve”. This also should be the focus of innovation in health care, which encompasses not only new diagnostic tools and treatment modalities, but also new models of patient centered integrated health care especially in relation to chronic disorders.

This notion applies to all actors involved in health care, but in particular to us as an AHSS whose mission it is not only to deliver patient care but also to invest in translational research thus contributing to innovative care that subsequently is passed on to health care professionals during their training and thus spread throughout the community. This obviously does not mean that less innovative fields should be neglected. Indeed, an important element in our mission both from a patient care and teaching prospective is to implement current evidence-based therapeutic approaches aimed at delivering the best value for all patients, irrespective of their pathology.

Adapting this concept implies that the standards of safety and outcome that are to be met in the health care system need to be clearly defined as a first priority. The question of whether and how the health care delivery system should or should not be

reorganized is the second priority. In terms of quality of care and patient safety, the Belgian health care administration imposes a number of requirements that are largely structural. As yet no compulsory accreditation system exists, nor the obligation of public reporting of medical outcome measures.

To date, objective measurement of outcomes of care has received little attention in our health care system. Although the perceived quality is high, little or no formal quality control of delivered care exists that is based on validated process and outcome indicators. International benchmarking exercises, such as the one performed by the European Health Survey (Health Consumer Powerhouse 2009), would however suggest that based on the data that was available and could be included, there was clearly room for improving the outcome of health care in Belgium.

That the objective outcome of care is not necessarily as good as the perceived quality is increasingly gaining attention amongst those that are concerned about our future health care system. This issue is a key aspect in any discussion on undue variability in health care practices and the related issues on willingness to pay for the system.

Approach in UZ Leuven

That process improvement can improve the outcome and at the same time reduce costs by reducing its variability is widely accepted, including in medical care. Tools to achieve process improvement are also well known. As an example, the principles behind Lean Six Sigma are increasingly being quoted and promoted for adoption in hospital management (Young and al. 2004). It would indeed seem relatively straightforward to apply these principles to the organization of processes that are in support of delivery of care; the improvement of which can result in both enhanced patient services and cost effective input of staff. A more important, and as yet not fully developed challenge, in our opinion is how to implement the Lean Six Sigma principles in the proper care process with the primary aim of increasing value. Which to us means, defining in first instance the desired outcome and from there, determining how to achieve this goal in the most cost effective way. We are currently trying to introduce and imbed such value oriented concepts in UZ Leuven which includes objective outcome description and measurement in addition to cost containment. In this process we actively involve all the clinicians as we are convinced that hospital performance works together with the level of physician involvement. We have started by delineating the portfolio of conditions that we treat or wish to treat within our hospital. We have then asked the clinicians to structure the care that we wish to provide in disease-specific care programs. To date, approximately 250 of these care programs have been listed.

Each of these care programs is championed by a staff member, who uses evidence-based descriptions whenever possible, in a multidisciplinary approach with other colleagues, the diagnostic and therapeutic modules required for optimally treating a specific condition. The primary goal is to describe from a strict clinician perspective what the desired outcome of the medical process should be and how this quality aspect can be measured.

At the same time from the operational perspective, these detailed care programs allow us to visualize the optimal use of diagnostic procedures and therapeutic approaches, avoiding both over- and underuse, and thus increasing the overall efficiency of

the care process. Through the electronic patient record, which is part of the overall hospital information system, patients can be attributed to specific care programs, which in turn are linked to a number of possible applications such as a pre-programed diagnostic work up for complex diseases or detailed clinical paths, primarily for elective surgery. As part of chronic disease management, we are also extending these care programs in collaboration with general practitioners to ambulatory care. The care program labeling also allows us to track the patient throughout their hospital stay at the different medical services and wards and thus to calculate costs and revenues for each care program. Linking these data to the well defined quality outcome measures allows us in dialogue with the clinician to improve efficiency and thus offer added value at the level of the care program.

It is believed that this type of detailed and balanced care cost analyses appeal far more to the physician treating the patient and are a better substrate for continuous quality improvement review than more generalized overall quality data such as mortality figures, overall number of nosocomial infections or general trends in medication use.

Implementing these principles also means that an appropriate organizational structure and culture exist within the organization. In order to stress the importance of process-oriented care programs and to endorse BPO thinking, we have embedded this concept in our governance structure that functions as a matrix with medical management on one axis and operational management on the other, both geared towards outcome and efficiency.

In addition, in order to strengthen a culture within the organization of continuous quality improvement, based on objective outcome measures followed by repeated cycles of process improvement if possible, we sought accreditation by the Joint Commission International on a voluntary basis. Complying with the range of standards that are included in the accreditation survey both with regard to the clinical process and facility management, that covers all issues which impact on safety, both for patients, visitors and staff, in our opinion stimulates value-based thinking in the organization and should therefore help the adoption of the principles behind the care programs. At management level, we have included the outcome of some of the care programs in our integrated quality management scheme that we adopt in our hospital and which is largely based on the well known EFQM model.

Obviously, outcome data should ideally be complemented by an external benchmarking that would allow learning from other potentially better practices. Reliable benchmarking is however frequently hampered by differences in methodology, exact outcome parameters or differences in data collections (Mohammed and al. 2009). Moreover, data derived from administrative hospital discharge sets such as standardized mortality ratios, although to some extent interesting, do not offer much detail. Therefore to solve these shortcomings, we are building a more detailed balanced score card approach to hospital performance in a network of 19 hospitals throughout Flanders. This Flemish Hospital Network KU Leuven has approximately 10,000 beds, which is roughly 40 percent of all hospital beds in Flanders. Our aim is to identify and show best practices within these hospitals at all levels of hospital performance and therefore we include indicators of financial performance, human resource

management as well as the main indicators of patient safety and quality of medical care. We hope that by offering valid benchmarking, this exercise can act as a tool for increasing efficiency with respect to the same quality goals throughout the different hospitals within the network.

Conclusion

The aim of hospital quality management is to provide added value, starting with the desired clinical outcome as the primary objective, to which principles of Lean management are added so as to achieve this goal in an optimised cost effective way. This requires active physician involvement. We believe that an accreditation process based on internationally defined standards of patient safety can be of substantial use in stimulating a hospital wide CQI culture, but this needs to be complemented by disease specific quality of care measures. Benchmarking within a trusted network can have added value by defining and learning from best practice. □

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The interdependence of productivity, cost, and outcome: Studies of service delivery in Finnish university hospitals



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ABSTRACT: The relationship and interdependence between cost and productivity plays a significant role in understanding and assessing service delivery in university hospitals. This article shows some of the elements and factors, highlighting the further need for studies such as EuroHOPE and others. A broad and consistent data comparison in the Nordic region and Finland especially is presented, based on common DRG criteria. Expanding the Nordic data comparisons to other European countries is also discussed, with notice of further work to be published.

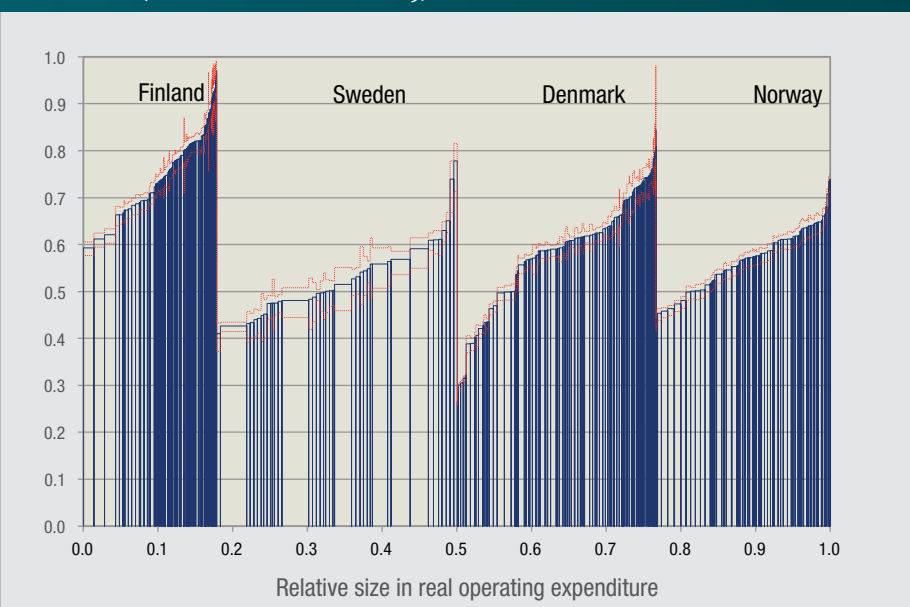
The governance structure for the Finnish health care and social welfare system will be reformed. This is taking place in conjunction with a structural change in municipalities, who will retain their general responsibility for organizing health care and social welfare services. This change process is being led by the respective ministries, and the timeline for implementation will start in 2015.

A key element is integration, both horizontally between social welfare and health care and vertically through primary to tertiary level health care service providers. In the light of this process, the assessment of performance characteristics has gained increased prominence in university hospitals. This is necessary not only for benchmarking purposes, but also because the free movement of patients will be introduced according to the principles of the EU patient directive, which puts hospitals to some extent in a competitive position with each other. Here we compare Finnish hospitals with hospitals in other Nordic countries. In addition, we will analyze the performance of five university hospitals in Finland.

Productivity and cost

Productivity is the ratio of a measure of output to a measure of input (Street and Häkkinen 2009). In hospital comparisons input is usually measured by cost and output by activity measures such as admissions and outpatient visits. A patient classification such as

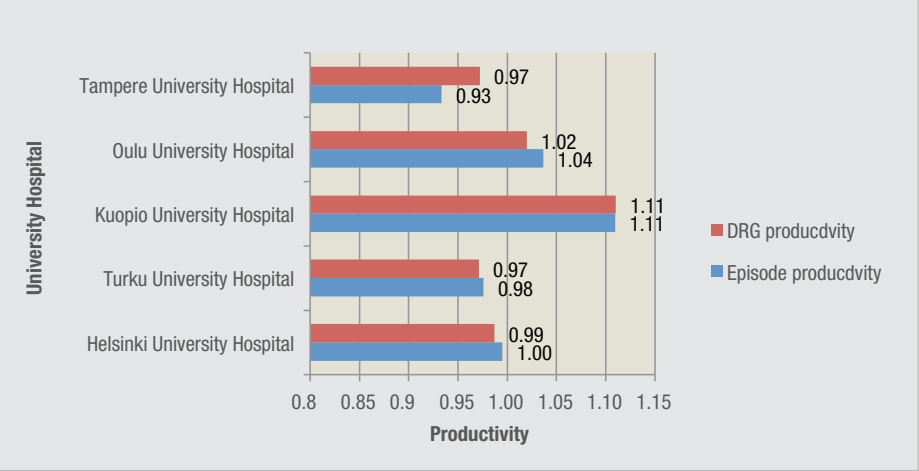
FIGURE 1: RELATIVE PRODUCTIVITY OF NORDIC HOSPITALS. THE HIGHER SCORE INDICATES HIGHER PRODUCTIVITY (SOURCE KITTELSEN ET AL. 2009)



DRG (Diagnosis Related Groups) allows the measurement of hospitals in a way that takes into account differences in patient characteristics. Each Nordic country applies similar DRG grouping systems (based on a common Nordic NordDRG grouping system) which allows the measurement of outputs from inpatient and day care in a comparable way.

Nordic comparative studies by Kittelsen et al. (2009) have shown a higher productivity of Finnish hospitals in terms of operating expenditure and outputs. Thus services of specialized somatic care have been produced in Finland with significantly

FIGURE 2: DRG AND EPISODE PRODUCTIVITY IN 2010 IN FINNISH UNIVERSITY HOSPITALS. 1.00 IS THE AVERAGE OF ALL UNIVERSITY HOSPITALS



2011). However, a productivity study focusing on Nordic university hospitals finds no country differences after controlling research and teaching activities (Medin et al 2011).

In Finnish hospital productivity analysis (available by web) outputs are measured in two alternative ways. The first is based on DRGs as in Nordic studies. The second is an episode generating algorithms based on case-mix classification to combine a patient's relevant contacts to a single care process (Linna and Häkkinen 2008). Thus the episode-based measure of output will combine all the different ways a patient uses a hospital based on same health problem.

In Finnish university hospital comparisons, Kuopio has maintained its position over the years as the most productive hospital. In 2010, Kuopio University Hospital was the most productive university hospital measured both in DRG productivity and episode productivity (Figure 2). Using both measures Kuopio can provide hospital services 11 percent more cheaply than the university hospital average.

The total cost of health care and care of the elderly per capita are highest in the Pohjois-Savo hospital district, where Kuopio is the main hospital (Figure 3). The high per capita costs disappear when costs are adjusted to take into account the morbidity and age structure of the population covered. Pohjois-Savo (Kuopio) region has a higher than average morbidity, and the number and volume of episodes is therefore greater. If adjusted by this higher regional need for services, the differences balance out and the Pohjois-Savo hospital district performs well.

The comparison of different cost and productivity measures shows the significance of understanding the underlying parameters when discussing efficiency, productivity, and cost. Different measures can give a different view of hospital performance, and if that is not taken into account, the picture of hospital performance can be quite insufficient. If used together the various measures can give a balanced picture of the sector.

Outcomes

In addition to costs and productivity, the outcomes of care offer an important perspective on hospital performance. Various studies have been conducted on the service delivery and outcomes in Finnish university hospitals with clear differences.

In Pirkanmaa hospital district (Tampere), joint surgery has been incorporated legally as a company, with the pre- and postoperative processes streamlined together with local and regional health care service providers. This has resulted in a shortening of the treatment periods in the hospital district but the length of stay in uninterrupted institutional care is also about two days lower in Helsinki and Uusimaa and Pohjois-Savo district compared with the two other hospital districts (Figure 4.)

Pohjois-Pohjanmaa hospital district (Oulu) has been able to lower mortality in ischemic stroke over several years. This has

FIGURE 3: PER CAPITA COST OF HEALTH CARE AND CARE OF THE ELDERLY IN FINNISH UNIVERSITY HOSPITAL DISTRICTS

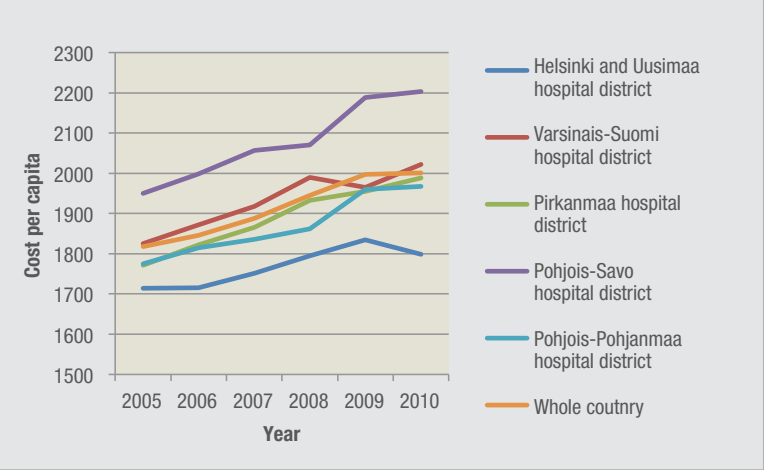
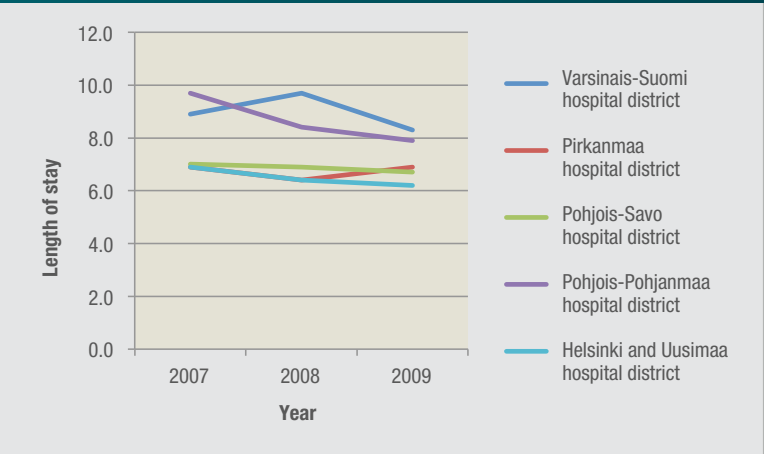
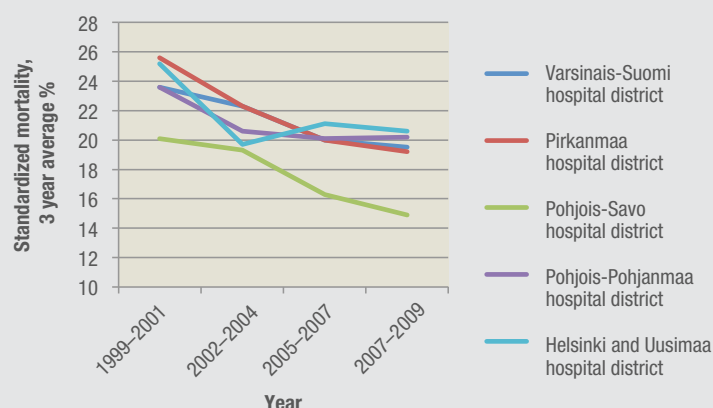


FIGURE 4: THE LENGTH OF UNINTERRUPTED INSTITUTIONAL STAY IN KNEE ARTHROPLASTY IN UNIVERSITY HOSPITAL DISTRICTS. UNINTERRUPTED INSTITUTIONAL CARE IS DEFINED AS THE COMBINATION OF THE SURGICAL TREATMENT PERIOD AND THE HEALTH CARE PERIODS IMMEDIATELY FOLLOWING



lower costs than in other Nordic countries (Figure 1). Differences in wage levels are taken into account in the comparison and do not explain all of the differences between countries. A detailed analysis shows that differences in hospital productivity in Nordic countries arise especially from differences in health care systems and cannot be explained by hospital level factors (Kalseth et al.

FIGURE 5: ONE YEAR MORTALITY FROM ISCHEMIC STROKE IN UNIVERSITY HOSPITAL DISTRICTS ADJUSTED FOR AGE, SEX, AND COMORBIDITES



been taking place through process improvement without increasing cost (Figure 5).

Conclusion

The reasons behind the above examples are not completely understood, and coverage of comparative studies is still limited. The studies above show the need to understand the complexity in assessing service delivery in university hospitals. In order to better understand the terms, a clear definition base should be created. This should include the description of parameters and their methodology to allow true benchmarking between centers.

In Perfect (PERformance, Effectiveness and Cost of Treatment episodes) – a project at the Center for Health and Social Economics at National Institute for Health and Welfare in Finland – several indicators for hospital performance and effectiveness of treatment have been developed and published (Häkkinen 2011). The aim of the project is to systematically follow treatment episodes and their costs and effectiveness. This will help to give a more varied picture of specialized health care.

In the EuroHope project (www.eurohope.info) – led by the Center for Health and Social Economics – measures like the Finnish Perfect-measures are developed and tested in seven other European countries. The project helps to shed light on the relationship between costs and effectiveness in hospital care. The Nordic hospital comparison is ongoing within the EuroHope project and new measures of Nordic hospital productivity, up to 2009, are to be published. □

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The university hospital as a hub for connected health: Oulu Healthworld, Northern Scandinavia



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ABSTRACT: Health care systems need to enhance health care delivery through innovation in order to meet future challenges. To accomplish this, technological expertise and research were combined to form an innovative health care system called “Oulu Healthworld”, which allows SMEs, the public and the third sector to cooperatively implement new technology solutions. The use of existing know-how, competencies and synergies can generate high quality and cost-effective health services and products to meet future demands on health care systems.

The challenges that the social and health care sector face today are global in nature. Cost demands, patient expectations and an ageing population are all prevalent trends in the health care sector. The need for health care systems to change is recognized and there is increasing pressure to identify innovations that can enhance health care delivery. Developers and innovators need environments conducive to planning, designing and testing products and services in cooperation with researchers and the health care system. In addition to these global challenges, Northern Finland is faced with unique characteristics including severe weather conditions, sparse population and long distances, which increase the burden on the health care system and service provision.

Finland's expenditure on research and development has been among the highest in the European Union (Figure 1). In Oulu, the Capital of Northern Scandinavia, the regional R&D expenditure per capita has been the highest in Finland. In the late 1990s, *Wired Magazine* ranked Oulu as one of the few “Silicon Valleys” in the world. The high technology industries and ICT have a strong foothold in region and many ICT companies, including Nokia, have an R&D unit in Oulu. Also the education system has always had the objective of responding to the needs of a changing society. Tertiary level education is above the EU27 average in all of the Nordic countries, and in northern Finland the work force is highly skilled: 30-50 percent of the population has a tertiary level of education (Figure 2). A strong emphasis on research, technology and education has attracted numerous professionals from different fields to the Oulu region. This technological expertise together with top level research has allowed SMEs, the public and the third sector to cooperatively implement novel technology solutions to meet the ever increasing future demands on the health care system.

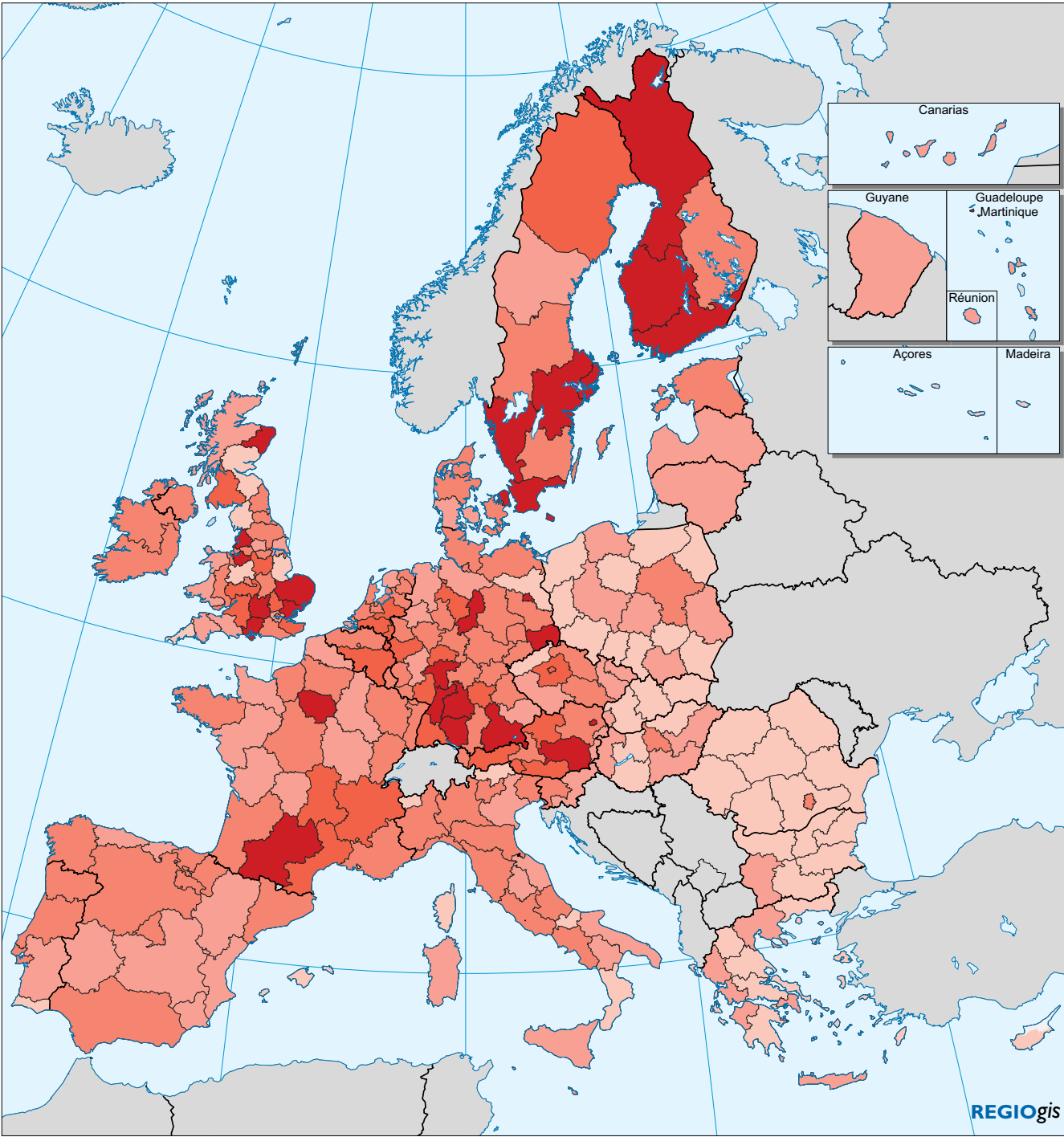
Oulu Healthworld is a unique environment for the development

and testing of novel innovations and solutions. It is a center of competence which brings together research organizations, service providers, SMEs, and the life science and ICT sectors. The idea is to use existing know-how, competencies and synergies to generate high quality and cost-effective health services and products.

The heart of Oulu Healthworld is located on the Campus Kontinkangas, which is a major hub of research and education for health and welfare service providers and SMEs (Figure 3). Professionals from the fields of medicine, nursing, biotechnology, and life sciences work in the Campus area. The center of the campus is Oulu University Hospital and the Faculty of Medicine. Oulu University Hospital covers all specialized branches of medicine and employs a total around 6,000 highly trained professionals. A new wing to the hospital was recently added, a modern surgical outpatient care unit, in response to years of testing and piloting of new operational concepts. One of the key concepts was the use of wireless technology and the integration of a wireless network. The network is used for ubiquitous access to the hospital information system regardless of place, time or user interface. Additionally, a new self-registration system was launched, which 90 percent of the unit's 600 patients use daily. This registration system is linked to a tracking system, which enables better management of patient flows. The unit has eight new operating theatres, a separate anesthesia induction room with three beds, 21 recovery beds, a rheumatology center, and X-ray and MRI units. Inpatient care days have decreased as a result of efficient surgical care processes.

Social and health care professionals are also trained at the Oulu University of Applied Sciences and Oulu Vocational College, both of which are located in close proximity to the hospital. Two other health care units, Oulu City Hospital and a multidisciplinary outpatient department for clinical training are also located in the

FIGURE 1: R&D EXPENDITURE



1.24 Total expenditure on R&D, 2007

% of regional GDP

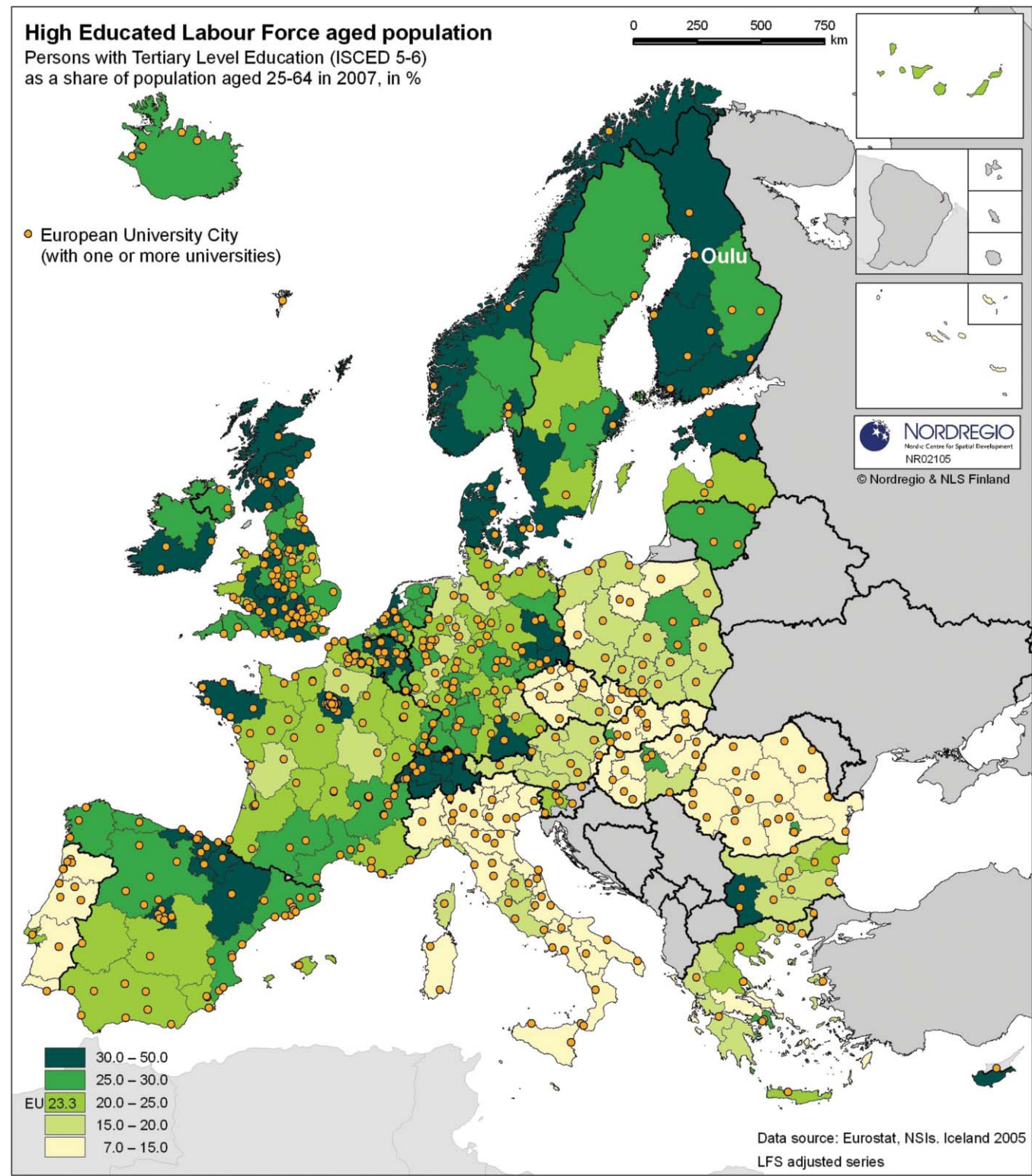
- < 0.5
- 0.5 - 1
- 1 - 2
- 2 - 3
- >= 3

EU-27 = 1.85
EL, IT: 2005; FR: 2004; NL: 2003
The Europe 2020 R&D target is 3%

Source: Eurostat

0 500Km

FIGURE 2: PEOPLE IN EUROPE WITH TERTIARY LEVEL EDUCATION



area. Numerous research organizations are based on the campus premises such as Biocenter Oulu, the Oulu University Hospital Clinical Research Centre (CRC), Welltech Oulu Research Unit, and the Kastelli Research Centre, which includes the National Institute for Health and Welfare (THL), the Finnish Institute of Occupational Health and a number of other smaller research organizations.

In addition to educational institutions and organizations, the

campus also includes several private and third sector service providers for social services, health, and wellness. Many pharmaceutical, biomaterial, medical technology, diagnostic, and other ICT companies are also located in the campus area or in the Medipolis Center. Altogether, the campus area provides employment opportunities for around 8,400 professionals from various fields.

FIGURE 2: OULU HEALTHWORLD



The current health care systems need to evolve into a new generation of systems which are based on a network of social, health, and welfare service providers that are citizen centered and use e-services and technologies that can generate added value. Reform or renewal of existing systems is challenging, as it requires simultaneous and synchronous development input from several providers. A Connected Health Forum was established to provide development opportunities by bringing together business representatives and highly trained professionals from different fields and sectors. The Forum will be one of the core building blocks of the Oulu Healthworld innovation system, as it promotes the creation of new solutions and the establishment of a joint innovation process. Workgroups and workshops will focus on specific themes, such as e-health, electronic health records, self-care service networks and assisted home care. Development will continue through the establishment of business and research consortiums. The aim is to transform the area into an ecosystem of development and a test site for the health and well-being sector.

Limited public funding and financial resources, radical demographic changes, sparse population and long distances require new ways to increase service efficiency and effectiveness. Increased efficiency can be reached through more effective care processes and seamless care chains from primary care to specialized care. Oulu University Hospital provides highly specialized medical care across all of Northern Finland, but some patients have to travel almost 700 km from the northernmost corner of the region, Nuorgam, to reach the hospital. A patient hotel is available for patients who need accommodation and a day-care unit for patients who need ongoing care are currently being planned. However, current legislation and investment in the Finnish ICT infrastructure offers new possibilities to use the eDimension through novel eHealth services and to achieve “death-of-distance” in service provision. This includes, the use of video-technology and

remote consultations that can extend the service to the patient at home. The hospital already uses video-technology for training medical professionals, which is an effective and sustainable alternative to on-site training that saves time and costs.

The existing IT systems need renewal, so that they can allow integration and implementation of new products and services and enable a better flow of information. The focus is shifting from local to regional service solutions. In the Northern Finland, we use a regional electronic patient record (EPR) which has an integrated electronic referral/consultation and discharge letter. e-Referrals and e-discharge letters can be transferred between the referring physician and a hospital directly from EPR to EPR. The IT system has 100 percent coverage and is used by both the public sector (the University Hospital and four regional hospitals) and the private sector. There is also a regional information system for radiology (RIS) and for laboratories (LIS).

Innovations and significant medical breakthroughs that generate cost-effective solutions to patient care can be achieved through the integration of EPR with research data from biological samples. Northern Finland offers unique patient data for the research of hereditary disease and genetics because of its geographical isolation, homogeneous population, and high quality, evenly distributed health care. We are currently in the process of establishing a Biobank of Northern Finland, which enables efficient use of this material in research and development. It can also serve as a catalyst towards personalized medicine, tailored decision-making, and practices according to genetics or other information. Collaboration between the Finnish and European biobank networks enables an even wider use of the biological material.

Collaboration between the University Hospital and Oulu University is also being strengthened on many levels. The recently established Centre for Health and Technology (CHT), which is a regional research and business-driven innovation centre focused

on the development of next generation health care technologies. Both the University Hospital and Oulu University are stakeholders in this multidisciplinary organization. The latest initiative includes the establishment of an umbrella organization for clinical and translational research, the Medical Research Centre (MRC). MRC will offer a multidisciplinary research environment composed of professionals from different faculties, such as technology, economics, and the humanities that will boost further clinical, translational and health care socioeconomic research. With these initiatives, we hope to be well prepared to meet the future challenges that face us. □

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United States academic medical centers: Priorities and challenges amid market transformation



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ABSTRACT: United States academic medical centers (AMCs) have upheld their long-standing reputation for excellence by teaching and training the next generation of physicians, supporting medical research, providing world-class medical care, and offering breakthrough treatments for highly complex medical cases. In recent years, the pace and direction of change reshaping the American health care industry has created a set of new and profound challenges that AMC leaders must address in order to sustain their institutions.

University HealthSystem Consortium (UHC) is an alliance of 116 leading nonprofit academic medical centers and 276 of their affiliated hospitals, all of which are focused on delivering world-class patient care. Formed in 1984, UHC fosters collaboration with and among its members through its renowned programs and services in the areas of comparative data and analytics, performance improvement, supply chain management, strategic research, and public policy. Each year, UHC surveys the executives of its member institutions to understand the issues they view as most critical to sustaining the viability and success of their organizations. The results of UHC's most recent 2011 member survey, coupled with a 2012 Strategic Health PerspectivesSM Harris Interactive presentation, based in part on surveys of major health care industry stakeholders reveal the most important and relevant issues and opportunities that hospital leaders face today, as the United States health care delivery system undergoes a period of unprecedented transformation.

For decades, the United States health care system had been on an unsustainable trajectory of rising costs, with fewer and fewer Americans able to afford health care insurance coverage. It had been clear for quite some time that the world's costliest health care system was in need of fundamental change. American medical centers (AMCs) leaders understood the need to make high quality patient care more accessible and affordable. As a result, AMCs across the country advanced various strategies for best practices in the delivery of quality, accountable and efficient care for patients. Given the highly complex United States health care system, politicians, academics and industry experts have had varying opinions, ultimately leading to heated debates regarding the scope and type of change required to bring about lasting, necessary improvements. Intervention eventually came with the creation of the Patient Protection and Affordable Care Act (PPACA). The PPACA was passed by the United States Congress and then signed into law by President Obama on March 23, 2010. On June 28, 2012 the Supreme Court gave a final decision that upheld almost all of the provisions of the health care law (<http://www.HealthCare.Gov>).

AMC challenges

UHC, an alliance of 116 leading nonprofit United States academic medical centers and their affiliated hospitals, annually surveys the leadership of its member institutions to understand the challenges they face and the resources they need to sustain their organizations (UHC 2011 Member Survey).

The UHC 2011 member survey asked AMC leaders to describe what they thought would be the most pressing challenges facing their organizations over the next two years. While responses were sought from various C-suite administrators, this review focused primarily on feedback received from CEOs, who hold ultimate accountability for the long-term success of their organizations.

The key issues most frequently identified by the CEO survey respondents can be broadly classified into four categories:

- + Finance and operations;
- + Care delivery system;
- + Academic mission;
- + Market dynamics.

A summary of each of these issues is as follows:

Finance and operations

Given the growing deficit in budgets at the federal and state levels in the United States, the primary concern voiced by respondents was related to reductions in reimbursement for services, particularly Medicare and Medicaid, which account for a sizeable proportion of most AMCs' payers mix. Furthermore, administrators expect declining reimbursement from commercial insurance sources which have traditionally offset lower reimbursement levels from government.

CEOs understand how vital it is for them to rethink the way their institutions manage costs and core processes. New approaches are needed to gain the efficiencies that will allow their

organizations to not only breakeven on reduced reimbursement levels, but earn the margin necessary to sustain their operations and fund future investments. The ongoing challenge faced by CEOs to build and reinforce the need for changing long-held status quos is also of particular note.

Another major concern for many AMCs is the reduced access to capital that has been experienced across most industries as a result of the global economic downturn. Many institutions with ageing facilities struggle to remain competitive in markets where newly constructed inpatient units have set a higher standard for private patient rooms with improved aesthetics and amenities for patients and family members alike. At the same time, changing market reimbursement incentives are creating greater demand for outpatient services located within community settings versus the complex maze of facilities that comprise many AMC campuses. These factors, in addition to balancing ongoing demands to fund new medical technologies and research initiatives, place additional pressure on AMC institutions to identify available sources of capital funding.

Lastly, having already heavily invested in information technology infrastructure, some CEOs remain concerned about the cost associated with sustaining and advancing these systems as a prerequisite for maximizing future reimbursement.

Care delivery system

As the United States health care system transitions from a fee for service reimbursement model to an accountable care model, reimbursement will eventually be tied to the quality and outcome of patient care, cost management optimization, and overall population health. This evolution requires tight integration between all those who influence the continuum of patient care, with physician and hospital alignment being a primary component. In this instance, AMCs may face greater challenges than many general acute care hospital providers given the complexity of their organizations and the longstanding referral patterns that exist among their affiliated physicians.

One of the greatest challenges AMCs face is how best to manage through the tipping point of these fundamental changes in care delivery and reimbursement models. AMCs and other providers across the United States must carefully steer their organizations' course of action so that they are not putting their short-term financial performance at risk while making the fundamental changes required for long-term success.

Given the emerging United States payment model, AMCs are striving to achieve greater clinical integration by aligning the incentives between their organizations, affiliated physicians, and other providers throughout the entire continuum or episode of care. The objective behind these varied efforts remains the same:

realize high quality, low cost care with superior patient outcomes and satisfaction levels. Incentives tied to the Health Information Technology for Economic and Clinical Health (HITECH) Act enacted in 2009, spurred AMCs to take the lead in promoting the adoption and meaningful use of health information technology to better manage patient care and clinical outcomes. While these significant changes and improvements are taking place, hospital executives are keenly aware of the need to carefully straddle two distinct realities: Both the existing and emerging care delivery and reimbursement models must be managed, knowing that fee-for-service care delivery still plays a significant role in financial performance for the time being.

A 2012 Strategic Health PerspectivesSM Harris Interactive presentation also identified several transformational trends taking shape:

- + Significantly larger, more complex health care organizations;
- + Moving from caring for "sickness" to maintaining "wellness" and viewing admissions as a failure of the ambulatory model;
- + Laser-focused effort to weed out over-utilization;
- + Use of comprehensive data that captures information from the entire continuum of care in order to redefine the delivery model.

Presently, AMC administrators and their physician partners are working with a "shared savings" model that aligns incentives, so that both the institution and affiliated physicians have the opportunity to realize margin potential with limited risk by providing the right care, at the right time and in the right setting for their patients. This approach, however, is largely viewed as transitional until providers and systems find a better way to be organized around a model where full risk is managed.

Academic mission

AMCs are unique among health care provider organizations in their three-fold mission: providing excellence in patient care, conducting medical research, and training the next generation of physician leaders. Being able to adequately fund these missions is particularly challenging for AMC executives given the existing uncertainty on how and when the new care delivery and reimbursement models will be fully established. Managing through this transition and the resulting economic consequences weighs heavily on the minds of AMC chief executives who must find ways to align their medical center with their schools of medicine so that both can be adequately funded. Given that AMCs have undergone a period of generally strong financial performance, the anticipated market changes will require leaders to accelerate from a standing start as historic pressures to actively reduce costs that have largely been absent. In particular, schools of medicine will be increasingly accountable for their share of the academic mission and reduce their dependence on AMC funds flow. This may require difficult decisions to be made regarding consolidation and restructuring of academic programs to reduce expenses (2012 UHC Research Report). The health care industry will require revisiting longstanding institutional priorities in the light of new market realities, challenging organizational culture and calling for significant rethinking of historic frames of reference. AMCs and their affiliated schools of medicine will need to give serious thought and consideration as to how they will rationalize and modify their funds flow based on emerging market dynamics.

Given that AMCs have undergone a period of generally strong financial performance, the anticipated market changes will require leaders to accelerate from a standing start as historic pressures to actively reduce costs that have largely been absent

Market dynamics

As health care providers across the United States anticipate the delivery system's transformation, ongoing consolidation is disrupting historical AMC referral sources and patterns. Yesterday's competitor may likely become tomorrow's partner, requiring an integration of differing cultures, processes and systems to effectively and efficiently manage patient care.

Many AMCs are aggressively expanding their regional presence in an effort to increase their scale and better leverage the resources that are required to form an accountable care model. The changing market paradigm has already resulted in heightened competition, making it ever more difficult to maintain brand awareness and preference among the physicians that AMCs may wish to recruit and retain, the patients they aim to serve, and the payers on which they rely.

Effectively managing these evolving provider entities, their affiliated physician practices, and associated business partners through the health care system's migration is a clear priority for AMC administrators during this dynamic period of change.

Concluding thoughts

Recognizing the unprecedented changes sweeping the United States health care industry, AMC CEOs understand the imperatives at hand. Transitioning from a volume-based delivery system to a value-based model focused on providing the highest quality patient care in the most efficient manner will require tremendous foresight, focus, fortitude and risk-taking. Those institutions that successfully adapt to the market's transformation will look radically different in ten years' time. Throughout this transition, it is critically important for AMCs to remain flexible within the context of their missions and adapt their strategic plans and organizational cultures to reflect the demands of the market's emerging new reality. □

Irene M Thompson is president and chief executive officer of UHC. Under her leadership, UHC's membership has grown significantly to 116 academic medical centers and more than 270 affiliated hospitals, representing the majority of United States nonprofit academic medical centers. Prior to joining UHC in 2007, Irene Thompson served as president and chief executive officer of The University of Kansas Hospital Authority.

Barbara Anason is vice president and chief marketing officer for UHC. She leads UHC's marketing communications functions and is responsible for strategic planning. Prior to joining UHC, Barbara Anason held leadership positions at a national preferred provider and utilization review organization and at The Joint Commission.

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Successfully leading change: Innovation in service delivery



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Undoubtedly, there have been hundreds, if not thousands, of books, forums, conferences, and classes centered around core principles of leadership. For every concept, theory or brazen boast about what drives leaders to lead, there is wide ranging diversity, characterized by elements of anecdote, fact or pure mystique. Many cling to a concrete recipe of factors that are fundamental to our perception of exceptional leadership while others simply “know it when they see it.”

The real truth seems to lie somewhere between. Ultimately, however, leadership defies simple constructs. It can emanate from the weak or the strong, from the silent or the bold, from the organized or the unscripted. Yet, leadership most often emerges when chaos injects itself into a vacuum created by rapid change. In that sense, leadership is situational. True leadership comes to the fore when the environment tests us to be better.

So, as leaders we must be prepared to meet the onslaught of chaos that can shift our world within a moment's notice. Experience, preconscious thought and perhaps a modicum of fear – translated into humbleness – serve as important predictors of performance, but understanding what drives the chaos is essential to understanding active, sustainable change.

As health care in the United States and throughout the world evolves rapidly, more is expected of those who serve in leadership roles. It leads to key questions. What style of leadership needs to be present to successfully implement innovation? How do leaders step outside of the false constructs of current environments in order to adapt to evolving challenges?

This is particularly important as it relates to the United States health care delivery system. Even as the system of care continues to evolve, core components of our structure have remained unchanged for too long.

This has been true throughout history. Findings emanating from medical research on men were routinely applied to the clinical

treatment of women, and failed to note the baseline of inherent differences between genders. How women were treated in areas such as heart disease, cancer, and mental illness were not differentiated for far too long. It took landmark approaches, such as Harvard's Nurses' Health Study, to shift the patterns of clinical care. At that time it was innovative to consider gender differences. Today it is essential to best practice.

A modern day equivalent that requires specific focus in health care, as we consider innovative service delivery, is caring for diverse groups of patients. It is easy to say that our organizations need to reflect the communities we serve and we can debate the fundamental ability of health care providers to meet this goal. However, as we dig deeper into the issue, the ability to truly care for all people in a way that strengthens the trust between patients, caregivers, and health care organizations depends in large measure on the ability of the individual and organization to lead on the basis of respect.

Organizations need to work to foster an inclusive environment that recognizes everyone's contribution and supports the advancement of all, regardless of race, ethnicity, gender, religion, age, sexual orientation or disability because an inclusive environment can enhance the quality of health care, improve hospital-community relations and positively affect the health status of society.

This requires a new form of leadership. It requires challenging assumptions and sometimes challenging our colleagues to do better.

While there are myriad opportunities for change, I would like to focus on our collective need to direct more attention to the needs of the lesbian, gay, bisexual and transgender community. If we are to truly embrace the concept of cultural competence, we must develop inclusive steps for this population through important patient-centered care guidelines that are centered upon respect.

Respect starts with treating our patients with compassion and empathy. Regardless of age, class, race, religion or gender, we should strive to provide exceptional outcomes. But, to do so, we must listen and we must be responsive to the needs of the individual.

Coretta Scott King once said that “Homophobia is like racism and anti-Semitism and other forms of bigotry in that it seeks to dehumanize a large group of people, to deny their humanity, their dignity and personhood.”

The Healthcare Equity Index Survey of 2012 found that nearly 75 percent of responding United States health care organizations had “explicitly inclusive” visitation policies which granted equal access for same sex couples, up from just under 53 percent in 2011.

Organizations need to work to foster an inclusive environment that recognizes everyone's contribution and supports the advancement of all, regardless of race, ethnicity, gender, religion, age, sexual orientation or disability

We must continue to challenge ourselves and our colleagues to re-examine our longstanding notions. We must assess the underlying assumptions that drive the care we provide

That's excellent progress, but there is still room to improve.

We are at an important moment in time. As our industry is undergoing an extraordinary transformation, it is imperative that we use this as an opportunity to further our goals around cultural competency and diversity. This is a goal that the American College of Healthcare Executives expects to promote in the future.

In order to effectively manage the care we provide to the patients we serve, we must understand that there is far more to advancing quality than new technology and innovative interventions. Without doubt, they are critically important. But no surgical robot, no breakthrough in genome sequencing, will ever guarantee the comfort we extend to the patients we serve more thoroughly than a basic understanding of human need.

After all, that is at the core of our profession.

We must continue to challenge ourselves and our colleagues to re-examine our longstanding notions. We must assess the underlying assumptions that drive the care we provide and the talent we seek out. We must continually ask if these assumptions are helping to shape an accurate our view of our world – and if not, we must be prepared to reconsider them as we advance health care to the next level of competence.

All of this requires a unique perspective on leadership. In her book, *Multipliers*, Liz Wiseman delves into the components of this new style of leadership which allows individuals to demonstrate the need to challenge assumptions, reframe problems, and create a starting point for change (Wiseman et al. 2010). It is leadership through empowerment and not restraint. In this environment of rapid change and innovation, pulling the best from people requires that sense of liberation.

Collaborative leadership

This new health care environment will demand more of us as leaders. It will challenge our ability to motivate and engage our physicians, our nurses our staff and employees. A new style of collaborative leadership will need to emerge, less focused on hierarchy and more focused on developing the next generation of health care leaders. We must be better prepared to listen than to dictate and we must understand the value and strength of diversity among our employees and the patients we serve.

Now that does not mean that we need 100 percent consensus on everything we do – nor does it require that dreaded term of “buy-in” by all audiences. That would only lead to paralysis. Instead we need to foster input, cultivate information and encourage different perspectives. Then – and only then – can reasonable decisions be reached... and while engagement is essential, full agreement may never be possible given the complexity of the issues.

Health care anywhere in the world is mission driven, but it is also complex and requires creativity and innovation. Such creativity can

only be developed and sustained in a leadership model that encourages engagement and does not penalize failure.

The challenges presented by our new environment strongly suggest an evolution of leadership. It demands more collaboration and less hierarchy. It demands more risk taking and less reliance on true and tested methodologies. It requires a foundational expectation that we cannot be bound by existing priorities and focal areas – that we must look beyond the horizon of current issues to anticipate the waves of change beyond our current sight and enhance health status and not focus on illness. ▣

Gayle L. Capozzalo received a Master of Science degree in public health services management from the University of Missouri-Columbia. She joined the Yale New Haven Health System in 1997. Her experience includes senior corporate development and strategic planning positions, most recently with Sisters of Charity Health Care System based in Houston. She is vice chair of the board of directors of the Institute of Healthcare Improvement, a member of the editorial board for Quality Management in Health Care and a fellow in the American College of Health Care Executives.

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World Hospitals and Health Services 2012 Volume 48 Number 4

Résumés en Français

Les centres hospitaliers universitaires ont-ils un rôle à jouer dans les marchés émergents ?

Les gouvernements des marchés émergents doivent faire face à des difficultés croissantes pour gérer les dépenses de santé, développer les expertises et renforcer les capacités, moderniser des infrastructures vieillissantes et investir dans les compétences et ressources. Une façon de résoudre ces difficultés consiste à créer de nouveaux modèles publics/privés de développement et de prestation des soins de santé basés sur les centres hospitaliers universitaires américains, dont les missions sont de favoriser l'enseignement et la recherche médicale et les services cliniques. Johns Hopkins Medicine est membre du partenariat chargé du développement du CHU de Perdana et de l'Ecole de médecine de Perdana en Malaisie. Ces deux organisations comprennent un centre universitaire de sciences de la santé basé sur le modèle américain. Le projet Perdana fournit un point de vue constructif sur les opportunités et obstacles que rencontrent les gouvernements, universités et le secteur privé lors de l'introduction de nouveaux modèles de soins des patients intégrés à l'enseignement médical, la formation clinique et la recherche biomédicale.

Rôle des Centres hospitaliers universitaires dans la mondialisation

La mondialisation a favorisé l'interdépendance entre les pays et mis en lumière l'importance de la coopération internationale dans l'amélioration des résultats médicaux à l'échelle mondiale. Les partenariats hospitaliers internationaux qui visent le développement de l'éducation, les opportunités de recherche ou l'amélioration des services sont de plus en plus influencés par les processus de mondialisation. Cet article axé sur les CHU publics demande un examen critique des motivations, processus et impacts des partenariats hospitaliers internationaux dans un contexte de mutation qui se caractérise par l'incertitude économique et un changement du pouvoir mondial qui s'oriente vers les marchés émergents.

Internationalisation des soins de santé: Le CHU UZ de Bruxelles comme modèle de partenariat international

La mondialisation des soins de santé, la médecine internationale, les soins médicaux transfrontaliers, le tourisme médical, sont autant de termes parmi d'autres qui décrivent certains aspects d'une tendance croissante : les patients qui vont se faire soigner à l'étranger, et les prestataires de santé se rendant à l'étranger pour

assurer des soins de santé de façon provisoire ou permanente. Cette tendance est un phénomène complexe, bilatéral, à volets multiples, qui à notre avis, ne peut pas être défini par un seul descripteur exhaustif.

Des hôpitaux individuels ont la chance unique de pouvoir élaborer un modèle de mesures appropriées.

L'auteur présente le modèle spécifique créé par l'hôpital universitaire UZ de Bruxelles.

Gestion de la qualité hospitalière d'après un centre hospitalier universitaire belge

Dans ce rapport, nous expliquons pourquoi, en tant que plus grand centre hospitalier universitaire du pays, nous estimons qu'il nous incombe de contribuer à l'élaboration d'un système de gestion des soins de santé orienté sur la valeur. Nous expliquons notre système de gestion de la qualité hospitalière et la façon dont à notre avis, cela peut procurer une valeur ajoutée en introduisant les principes de production sans gaspillage (« Lean ») dans le processus de soins. Nous réfléchissons également à l'importance de l'accréditation hospitalière et des repères de comparaison externes dans la politique d'amélioration continue de la qualité au sein de l'hôpital.

L'interdépendance de la productivité, des coûts et des résultats – Etudes des prestations de services dans les hôpitaux universitaires de Finlande

Les relations et interdépendances entre les coûts et la productivité jouent un rôle essentiel dans la compréhension et l'évaluation des services assurés dans les hôpitaux universitaires. Ce rapport montre certains des éléments et facteurs qui entrent en jeu, et souligne qu'il conviendrait de mener d'autres études comme EuroHOPE ou autres. L'article présente une comparaison générale cohérente de données dans les régions nordiques et en Finlande en particulier, fondée sur les critères DRG communs. Il discute également d'une extension à l'échelle européenne, faisant état d'éléments de nouveaux travaux à publier.

Les CHU comme pivots de santé interconnectés – l'exemple de Oulu, la capitale de la Scandinavie du nord

Les systèmes de santé doivent tabler sur l'innovation pour améliorer les prestations de soins de santé pour répondre aux défis de l'avenir. Pour ce faire, nous combinons l'expertise technologique et la recherche du plus haut niveau pour créer un système novateur, "Oulu Health world", qui permet aux PME, au secteur public et au

sector terciario de trabajar ensemble à la mise en œuvre de solutions technologiques de pointe. Faire appel au savoir-faire, aux compétences et aux synergies actuelles peut générer des services et produits de santé économiques et de haute qualité pour répondre aux futurs besoins du système de soins de santé.

Centres hospitaliers universitaires américains: Défis et priorités dans le cadre de la transformation du marché

Les Centres Hospitaliers universitaires américains (CHU) ont bien soutenu leur longue réputation d'excellence par l'enseignement et la formation de la nouvelle génération de médecins, leur appui à la recherche médicale, des prestations de soins médicaux de classe mondiale et l'offre de traitements tout nouveaux pour les cas médicaux très complexes. A cours de récentes années, le rythme et l'orientation des changements qui transforment l'industrie médicale américaine ont donné naissance à de nouveaux défis majeurs que les dirigeants de CHU doivent affronter pour assurer la durabilité de leurs établissements.

Le consortium universitaire du système de santé (University Health

System Consortium, UHC) est une alliance de 116 CHU réputés, sans but lucratif, et 276 de leurs hôpitaux affiliés, qui ciblent tous la prestation de soins de classe mondiale. Créé en 1984, l'UHC favorise la coopération réciproque entre ses membres grâce à ses programmes et services renommés en matière de données et analyses comparatives, d'amélioration des résultats, de gestion de la chaîne d'approvisionnement, de recherche stratégique et de politique publique. Chaque année, l'UHC procède à un sondage au sein des dirigeants de ses établissements membres pour mieux comprendre les questions qu'ils considèrent comme les plus importantes pour assurer la viabilité et le succès de leurs organisations. Les résultats du plus récent sondage UHC de 2011, s'ajoutant à une présentation en 2012 de Strategic Health Perspectives SM Harris Interactive reposant en partie sur des sondages des principaux acteurs de l'industrie des soins médicaux, mettent en évidence les questions et opportunités les plus pertinentes et les plus importantes qui se présentent actuellement aux dirigeants d'hôpitaux, alors que le système américain de soins de santé subit une ère de bouleversements sans précédent.

World Hospitals and Health Services 2012 Volume 48 Number 4

Resumen en Español

Hay un papel para los centros médicos académicos en los mercados emergentes?

Los gobiernos de los mercados emergentes enfrentan crecientes desafíos para gestionar el gasto en salud, crear capacidad y eficacia, modernizar las viejas infraestructuras, e invertir en mejoras y recursos. Uno de los caminos para superar estos desafíos es establecer nuevos modelos de prestación y desarrollo sanitario de carácter público-privados a través de los Centros Médicos Académicos de los Estados Unidos, cuyas misiones son promover la educación médica, la investigación y la asistencia clínica. Johns Hopkins Medicine es miembro de la alianza para el desarrollo del Hospital Universitario de Perdana y la Escuela de medicina de la Universidad de Perdana en Malaysia. Estas dos organizaciones conforman un centro de ciencias de la salud basado en el modelo de los EE.UU. El proyecto Perdana proporciona una visión constructiva sobre las oportunidades y desafíos que los gobiernos, las universidades y el sector privado afrontan al introducir nuevos modelos de atención integrada del paciente con la educación médica, la formación clínica y la investigación biomédica.

El papel de los hospitales públicos universitarios en un mundo globalizado

La globalización ha aumentado la interdependencia entre los países

y ha destacado la importancia de la cooperación internacional para mejorar los resultados de salud mundial. Las asociaciones internacionales de hospitales destinadas a ampliar las oportunidades de educación, de investigación o mejora de los servicios están siendo cada vez más influenciadas por los procesos de globalización. Centrándonos en los hospitales universitarios públicos, este artículo, sugiere una revisión crítica de los motivos, los procesos y el impacto de asociaciones con hospitales internacionales en un contexto de mutación, caracterizado por la incertidumbre económica y el cambio de poder global a las economías emergentes.

Internacionalización de la atención de salud: el Hospital Universitario UZ Brussel modelo de colaboración internacional

Globalización de la salud, medicina plana, atención médica transfronteriza, turismo médico, son todos términos que describen algunos aspectos, pero no todos, de una tendencia creciente: los pacientes que buscan atención médica en el extranjero, y los profesionales médicos que viajan al extranjero para prestar sus servicios de forma temporal o permanente. Se trata de un fenómeno complejo, bilateral y multifacético que, en nuestra opinión, no se puede plasmar en un marco único y completo.

Cada hospital tiene así la oportunidad única de desarrollar un modelo de acción apropiada.

Presentamos aquí el modelo específico creado por el hospital universitario UZ Brussel.

Gestión de la calidad hospitalaria desde la perspectiva de un centro académico médico belga

Desde nuestro punto de vista, siendo el mayor centro médico del país, consideramos que es parte de nuestra misión contribuir a la elaboración de un sistema de atención médica basado en valores. Describimos nuestro sistema de manejo de la calidad hospitalaria y por qué creemos que esto puede ofrecer, mediante la introducción de los principios Lean, un valor añadido en el proceso de cuidados. También reflexionamos sobre la importancia de la acreditación y el análisis comparativo externo en la cultura de mejoramiento de la calidad continua en el hospital.

La interdependencia de productividad, costo y resultados – estudios de prestación de servicios en los hospitales universitarios finlandeses

La relación y la interdependencia entre el coste y la productividad juegan un papel significativo en la comprensión y la evaluación de la prestación de servicios en los hospitales universitarios. Este informe muestra algunos de los elementos y factores, destacando la necesidad de estudios adicionales tales como EuroHOPE y otros. Se presenta una comparación de datos amplia y coherente en la región nórdica y especialmente en Finlandia, con base en criterios comunes DRG. También se discute una expansión en la escala europea, con los elementos de la futura labor que se publicará.

Los hospitales universitarios como un centro de conexión de salud – el ejemplo de Oulu, capital del norte de Escandinavia

Los sistemas de salud deben mejorar la prestación de sus servicios a través de la innovación para afrontar los retos del futuro. Para lograr esto, estamos combinando los conocimientos tecnológicos y la investigación de primer nivel para formar un sistema innovador, "Oulu Mundo de la Salud", que permite a las PYME, al público y al

sector terciario poner en práctica nuevas soluciones tecnológicas de forma cooperativa. La utilización de los actuales conocimientos técnicos, las competencias y sinergias pueden generar unos servicios y productos más rentables y de alta calidad para satisfacer las demandas futuras del sistema de atención de salud.

Los Centros Médicos Académicos de los Estados Unidos: Prioridades y desafíos en medio de la transformación del mercado

Los Centros Médicos Académicos de los Estados Unidos (CMA) han sostenido su larga reputación de excelencia enseñando y formando la próxima generación de médicos, apoyando la investigación médica, brindando atención de calidad mundial, y ofreciendo tratamientos innovadores para los casos de alta complejidad. En los últimos años, el ritmo y la orientación del cambio que ha remodelado la industria de la salud estadounidense han creado una serie de nuevos y profundos retos que los líderes de los CMA deben enfrentar para mantener sus instituciones.

En 1984 el University Health System Consortium (UHC) formó una alianza de 116 centros médicos académicos líderes, sin ánimo de lucro y 276 hospitales afiliados, todos ellos centrados en brindar una atención al paciente de clase mundial. El UHC fomenta la colaboración entre sus miembros a través de sus programas y servicios en las áreas de datos comparativos y análisis, mejora del rendimiento, gestión de la cadena de suministros, la investigación estratégica y las políticas públicas. Cada año, el UHC encuesta los ejecutivos de las instituciones asociadas para entender los problemas más críticos que han visto para sostener la viabilidad y el éxito de sus organizaciones. Los resultados de la más reciente encuesta del UHC entre sus afiliados de 2011, junto con el estudio Perspectiva de Salud EstratégicaSM 2012 de Harris Interactive, basado en parte en las encuestas de los principales actores de la salud revelan los aspectos más importantes y relevantes y las oportunidades que los líderes de los hospitales enfrentan hoy en día, ya que el sistema de salud de los EE.UU. enfrenta un período de transformación sin precedentes.

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



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2013

IHF

38th World Hospital Congress*

June 18-20, 2013

Oslo, Norway

Theme: Future health care: The Opportunities of new technology

Email: Sheila@ihf-fih.org / kine.martinez@nsh.no

Website: <http://oslo2013.no>

MEMBERS

FRANCE

Les Salons de la Santé et de l'Autonomie

May 28-30, 2013

Porte de Versailles, Paris

For more information: <http://www.salons-sante-autonomie.com/fr/accueil>

USA

American College of Healthcare Executives: Congress on Healthcare Leadership

March 11-14, 2013

Hilton Chicago & Palmer House Hilton, Chicago, Illinois

For more information: <http://ache.org/Congress>

American Organization of Nurse Executives' Annual Meeting and Exposition

March 19-22, 2013

Convention Center, Denver, Colorado

For more information: <http://www.aone.org/education/NMF.shtml>

American Hospital Association's Annual Meeting

April 28 - May 1, 2013

Hilton Washington, Washington, DC

For more information: www.aha.org

American Nurses Credentialing Center (ANCC) National Magnet Conference

October 2-4, 2013

Orlando, Florida

For more information: <http://www.anccmagnetconference.org/>

NETHERLANDS

HOPE Exchange Program 2013

May 13th – June 16th, 2013

The Hague

For more information: <http://www.hope.be/04exchange/exchangeprogramme2013.html>

For further details contact: IHF Partnerships and Project, International Hospital Federation, 151 Route de Loëx, 1233 Bernex, Switzerland; E-Mail: sheila.anazonwu@ihf-fih.org or visit the IHF website: <http://www.ihf-fih.org>



The voice of the international health care community

2013-2014 Corporate Partnership Programme



Who We Are

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

Our vision and objectives

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

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

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

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

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

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

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(For the 2-year option, payment can be made on annual basis)

- ✚ **Letter of Agreement**

The Corporate Partnership is established upon signature of a letter of agreement by representatives of both the International Hospital Federation and an authorised signatory of the Corporate Partner organisation.

Application

For additional information, please contact:

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