Hospital

VOLUME 11 • ISSUE 3 / 2009 • €22
ISSN=1374-321X

PATIENT MOBILITY

> COMPETITION

Plus

> Waste Management
> Facility Management
> Focus: Croatia

OFFICIAL JOURNAL OF THE EUROPEAN ASSOCIATION OF HOSPITAL MANAGERS

With Breast Care Solutions: A comprehensive approach – covering every step of the way.

About every 10th woman will be diagnosed with breast cancer in her life. That's why we have bundled our strengths to help fight breast cancer worldwide: You receive everything you need from one source, so you can offer outstanding quality of care. For women. For health. For life. **www.siemens.com/healthcare +49 69 797 6420**

Answers for life.

SIEMENS

CC-Z1059-2-7600

ARE WE **EUROPE?**

Willy Heuschen

This is the inevitable question in light of the low turnout at this year's European Parliamentary elections. The reasons for this lack of motivation to participate in the democratic political structures of the EU are certainly manifold; doubtlessly the expectations that citizens place in the EU play a large part. Press commentaries and public opinion polls reported a lack of interest to the point of euroscepticism.

The expectations behind these attitudes would rather see the restriction of the radius of European politics and subsequently limit their direct influence on people's lives. Proponents of this attitude tend to see Europe as an affliction rather than something positive. Others are disappointed in the EU, as Brussels is unable to avoid economic crises or create more jobs. One proportion of eurosceptics consists of citizens whose view of the EU alternates between a panacea, a preferably free self-service centre or a rubbish dump that will dispose of their problems – again free of charge, of course. Advocates of the EU have a different mindset. They know that the largely peaceful co-existence of our continent's countries since the end of the last world war was promoted and secured by European coalescence. They know that the current economic and financial crisis would have been worse without the euro and that without a European representation of national interests the states would virtually be ignored as global players.

Admittedly these arguments do not wholly convince even European hospital managers; here too, opinions diverge. On the one hand there are those who believe their hospitals to be better served in the care of their respective national states, fearing disadvantages for their institutions by a European harmonisation of national laws and regulations. Others realise that such a harmonisation implies a current lack of political will – or one too weak – of national states. Even the democratically elected EU parliament and a European Commission, composed of European Member States, are unable to enforce new political positions against the will of the EU countries, even when political expertise is convinced of their long-term necessity.

Hospital managers are also familiar with the long and winding road of a harmonisation process, which due to the existing differences in the European hospital landscape can only be taken one step at a time anyway. But the key issue is the managers' conviction that a strong hospital lobby will actually help shape these steps. And this is also the main motivation for these players to make sure the interests of their institutions are discussed on a European level. Another incentive is getting to know one another and learning from one another. Executive functions, especially in clinics, have undergone a massive change, starting with changes of hearts and minds of our patients and co-workers – accompanied by changes in behaviour and expectation – concerning everything from advances in medical technology to national regulations of hospitals. This very often entails a drastic loss of income. Even if this change manifests itself differently from country to country the similarities are there too.

The challenges of this transitional period are often managed differently by executives, and the achieved results reflect this variety. A benchmark between hospitals would make it easier to adopt successful management methods by exchanging experiences – something already conducted on a national level. The national associations of hospital managers could also promote this approach of mutual learning for their members, as many of our members have already done with considerable success. Apart from lobbying on the European floor, this is another task that EAHM performs as the umbrella organisation of hospital managers in Europe. We do our utmost to fulfil these tasks, aided by our regular working groups, our congresses, seminars and by our journal (E)Hospital. In bringing together colleagues from different countries we are creating a forum able to mediate significant advantages for our institutions. We are also creating the basis for a larger identification with Europe that is not imposed upon us by political structures, but rather we form these structures from the foundations.

A little bit more of Europe, understood correctly and converted into daily life, is not only indispensable in the long run – it is also advantageous for all.

Willy Heuschen
EAHM Secretary General
Editor-in-Chief

The editorials in *(E)Hospital* are written by leading members of the EAHM. However, the contributions published here only reflect the opinion of the author and do not, in any way, represent the official position of the European Association of Hospital Managers.

Patient Mobility

Patient mobility is becoming increasingly relevant. Cross-border care has become a priority for the European Commission and Parliament and the phenomenon of medical tourism, more precisely travelling for lower cost or higher quality medical care, is on the rise. Our dossier on the subject begins with Michael Horowitz's analysis of medical tourism, the international medical travel marketplace. This is followed by a discussion of patient mobility and quality in healthcare; what we define as high quality care and how accreditation can ensure this quality. Oliver Groene focuses on patient safety, discussing the results from a qualitative study on health professionals' views and the dossier ends with a look at the European healthcare workforce and the many challenges it faces including the mobility and migration of healthcare workers.

Competition

Today's reality is that healthcare is a market and patients are consumers. Patients are demanding high quality, safety and also a pleasant experience; if these standards are not met today's patient will seek care elsewhere. This results in increased competition between hospitals. John Gibbons introduces "Rate my Hospital" a useful tool for both patients and managers allowing patients to rate their hospital experience and see how their hospital measures up against the rest of the country. Kevin Reed then explains the concept of DATABANK, an Internet based programme that allows hospitals to trend their performance and compare their results to other hospitals across the US by peer review. Both articles illustrate the increasingly competitive world of the hospital sector.

FOCUS: CROATIA

FRENCH

GERMAN

Focus: Croatia

Croatia is in the spotlight this issue. The Republic of Croatia has undergone the first year of its reform of the healthcare system. Dražen Jurković, the State Secretary tells us about the progress made so far and what is still to come. What is certain is that reform will only be successful with the collaboration of all actors in the healthcare system.

Tihomir Strizrep and Luka Vončina from the Croatian Institute for Health Insurance discuss the introduction of DRGs in Croatia. This article is followed by the presentation of one of the biggest hospitals in Croatia- the Clinical Hospital Centre Rijeka (KBC Rijeka). We are then introduced to the Croatian Health Employers' Association, its history, organisation and recent activities

THE MICROBIAL THREAT **TO PATIENT SAFETY IN EUROPE**

The spread of bacteria becoming resistant to antibiotics is challenging healthcare. Antibiotics are losing their clinical effectiveness at a much faster pace than could have been predicted even five years ago. This has serious consequences on morbidity and mortality and also on the length of hospital stay and increased costs.

Healthcare associated infections (HCAIs) are a constant worry, especially when combined with increased antibiotic resistance. It is estimated that they infect four million people in Europe every year, causing the death of around 37,000 people and 16 million extra hospital bed days per year. Viewed in economic terms, this amounts to some 5.5 billion euros every year. And with increased patient mobility within the EU, HCAIs and antimicrobial resistance are becoming more and more a European issue.

> Hospital management should work on removing the misconception that HCAIs are inevitable

With the organisation of the "Microbial Threat to Patient Safety in Europe" conference bringing together representatives from Member States, doctors, hospital managers and scientists, the Czech EU Presidency wants to "pave the way for political commitment." Ministers and experts called for urgent action to stop growing antibiotic resistance, which cuts the clinical effectiveness of medicines and increases healthcare associated infections.

One main objectives of the conference was to promote hospital antibiotic stewardship. As well as the infection control measures to control spread of multi-drug resistant organisms, a hospital antibiotic stewardship programme has been proposed to optimise the antibiotic usage for therapy and prophylaxis.

Furthermore, European cooperation is also needed for the research and development of new antibiotics, an objective of the coming Swedish EU Presidency.

Also emphasised was how healthcare system characteristics influence antimicrobial resistance and HCAIs. Structural, organisational, financial and managerial issues all have significant influence. These differ from country to country and the conference provided a chance to discuss strengths and weaknesses, opportunities and threats surrounding this topic.

One of the main focus points of the conference was leadership and accountability and the role they play in combating this microbial threat. During a workshop on this particular topic, led by our representative Dr. J. Scheres, several best practices from all around Europe were presented. The groups were told about strategies for reducing patient risks linked to antimicrobial resistance and healthcare associated infections as well as the roles of government, public health authorities and hospital management (the presentation of Dr. J. Scheres on "Role of hospital management" can be found on the EAHM website, www.eahm.eu.org).

It was suggested that hospital management should work on removing the misconception that HCAIs are inevitable. It was indicated that infection control is often not prioritised within hospitals as there is no direct benefit; HCAIs are costly but in many countries they do not influence the budget allocated to a hospital. Attention was also given to the support of surveillance as well as to quality management and hospital accreditation. It was suggested that quality improvement should be driven by leaders through evidence-based data. Furthermore the role of hospital management in antibiotic stewardship and surveillance should be strengthened.

The Ministers of Finland, Portugal, Slovenia and Sweden agreed that "it is necessary to strengthen the cooperation of EU Member States and the exchange of experience in implementing concrete national strategies, programmes and mechanisms of infection prevention and control."

The general conclusion from this conference was that "infections know no borders". Antimicrobial resistance is an international problem and can only be combated through an adequate cooperation, from international level to hospital level; combined with strong political support. A call was made for the prudent use of antibiotics in hospitals and a proposal for standards and measurable indicators for hospital antimicrobial programmes.

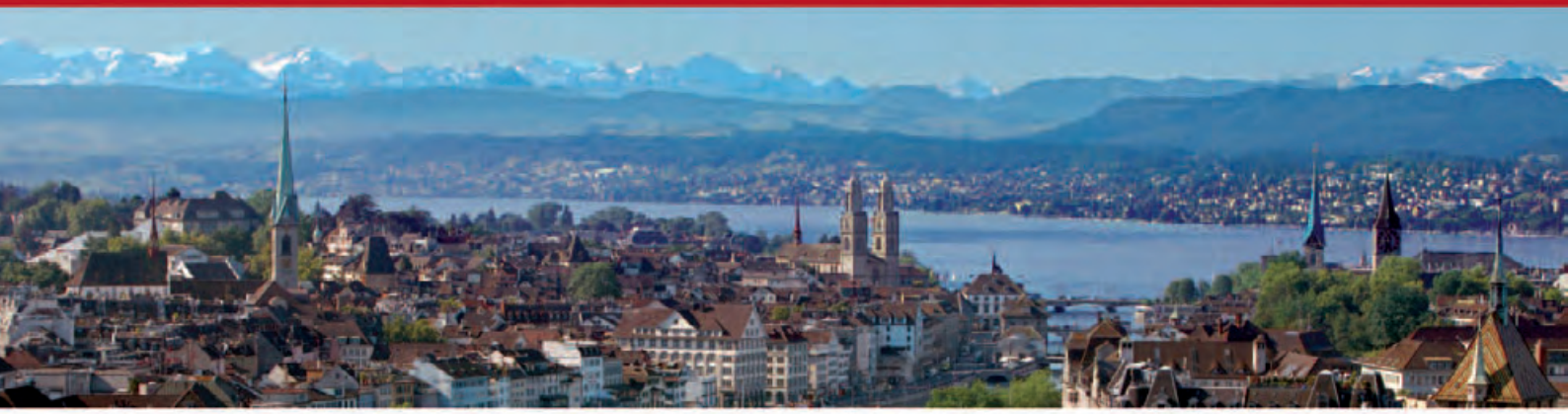
Given that this challenge will only continue to increase, EAHM calls for all hospital directors in Europe to take up leadership in fighting the microbial threat and ensure patient safety in hospitals.

congress countdown

435 days to go

meet & talk

23rd EAHM Congress in Zurich
9/10 September 2010



Roadmap to Top Quality
www.zurich2010-eahm.ch

23e Congrès AEDH
23. Kongress EVKD
23rd EAHM Congress
www.zurich2010-eahm.ch
2010 ZURICH

- Meet with top international speakers
- Learn best Practice
- Discover Switzerland

Schweizerische Vereinigung der Spitaldirektorinnen und Spitaldirektoren
SVS FSDH FSDO

zürich
downtown switzerland

IT@ NETWORKING

The IT @ Networking Awards 2009 will select outstanding European healthcare IT solutions in hospitals and healthcare facilities and bring them to the pan-European stage.

WINNING PROJECT GETS EXTENSIVE PRESS COVERAGE AND €5,000 CASH

WHERE AND WHEN

Brussels, the centre of European decision-making, will be the location for the IT @ Networking Awards 2009 *(IT @ 2009)*. It will be held from 29 - 30 October 2009 during the European Summit in October at Square-Brussels, ensuring international attention.

WHO

The event will be organised by the *European Association of Healthcare IT Managers* (HITM) and the *European Association of Hospital Managers* (EAHM), the worlds' largest interest represenation of its kind.

The attendee roster will include hospital CEOs, CIOs, CMIOs, hospital and healthcare IT managers, physicians with an interest in IT, members from European and national institutions whose mandates cover healthcare IT and members from the pan-European Press.

WHY

Behind its fragmented façade, European healthcare IT includes a number of world-class jewels: cutting edge IT solutions that meet real-world challenges, efficiently and cost-effectively, and not rarely, in an elegant fashion. Unfortunately, many such jewels remain unknown to the outside world – not just to the general public, but ironically, to the healthcare IT community as well.

So too do their designers and architects, unsung heroes who have often invested their creative talents, and dedicated months and years of hard work – to create and build something good, something better, all the way through to the very best. But many such efforts extend beyond job definitions, stretch far above the call of duty.

These pioneers need recognition! Their stories will inspire others. The lessons they have learned can help both avoid mistakes and transform healthcare IT challenges into opportunities, into "Made-in-Europe" success stories. This is the goal of *IT @ 2009*.

HOW

HITM and EAHM believe that peers will make the wisest decisions in respect to their own needs. As far as healthcare IT is concerned, the Associations consider it to be self-evident that senior healthcare professionals will know what is the best solution for them and their challenges they face.

To use familiar terminology for IT professionals, *IT @ 2009* is built on the principles of best-of-breed and peer-to-peer networking.

An on-the-spot, one-person = one-vote electronic system will be used to enable attending CEOs, CMIOs, CIOs, hospital and healthcare IT managers as well as department heads to make their choices. Only they are eligible to vote.

ORGANISERS:

European Association of HEALTHCARE IT MANAGERS

MEDIA PARTNERS:

HEALTHCARE IT MANAGEMENT

Hospital

G AWARDS 2009

ROLLOUT: FROM MINDBYTE TO WORKBENCH

FIRST DAY: MINDBYTE

All successful submissions for the *IT @ 2009* will be allocated 10 minutes for a Mindbyte (a short presentation) on what differentiates their solution and makes it special.

VOTING

Voting will immediately follow a synopsis of all presentations, and the finalists will be announced by the Chair of the Organising Committee.

SECOND DAY: WORKBENCH

Finalists of the *IT @ 2009* will be given 45 minutes to provide an in-depth presentation, followed by a 1/4 hour Q&A session with the audience.

FINAL VOTING

Final voting will commence immediately after the last presentation followed by the awards ceremony.

THE IT @ Networking Awards 2009 CEREMONY

Out of the finalists, the 3 top rated IT solutions will be awarded a prize.
The winning project will:
- receive the IT @ Networking Awards 2009 Trophy;
- have a detailed presentation of their solution in Europe's leading healthcare management media, and
- be awarded a cash prize of Euro 5,000.

WHO SHOULD PARTICIPATE

Developers of imaginative, innovative healthcare IT solutions. Solutions can be built on both COTS as well as bespoke designs. However, all entries have to demonstrate a considerable degree of customisation and show ingenuity. All entries must be already implemented in at least one site.

SUBMISSION DEADLINE

Submissions must be received by **25 September 2009** and must be entered through **www.conftool.com/itawards2009/**

*For further information on IT @ of for your project submission please visit our website **www.hitm.eu**, contact our General Secretariat via email **awards@hitm.eu** or call **+32 / 2 / 286 8501**.*

CARDIOLOGY MANAGEMENT | IMAGING Management | ICU MANAGEMENT | CyberTherapy & Rehabilitation

United Kingdom

European Working Time Directive and Junior Doctors

Health Secretary Alan Johnson has announced a review into the quality of training for junior doctors in light of the implementation of the European Working Time Directive.

The review will evaluate concerns raised by many professionals that the introduction of the 48-hour working week will have a negative effect on junior doctors training, especially the on-the-job training they receive at work.

The independent advisory board on medical training, Medical Education England (MME), has been asked to commission the Postgraduate Medical Education and Training Board (PMETB), the independent regulator of standards of training, to work with stakeholders to identify areas where changes of training might be necessary as a consequence of the reduced working hours.

Contract to Develop Patient Reported Outcome Measures

A new contract to help improve the use of Patient Reported Outcome Measures (PROMs) has been awarded to the Royal College of Surgeons and London School of Hygiene and Tropical Medicine. They have been commissioned to look at how the data, representing over 200,000 patients a year, can be best used to stimulate improvements in the quality of care patients receive.

PROMs are routinely used by the NHS when asking patients who undergo four common operations to assess how successful they felt the operation was at reducing symptoms and disability and improving their quality of life.

New ways of analysing and comparing the data will be developed and it is hoped this information will be published in a useful and coherent manner meaningful to the public, clinicians and managers. Cost- and clinical-effectiveness will also be compared, particularly regarding hip and knee prosthetics.

France

MedicFrance: the Online Information Portal on Medicine

MedicFrance is a new information portal on medicine that provides easy access to official data on medicines allowing the public to find reliable, objective and recent relevant information.

The portal will provide access to official information on medicines and health products for professionals, users of the health system and officials. The site provides information explaining the responsibilities of the various public bodies for decisions made regarding medicines. Users can be redirected to the websites of relevant institutions such as the French Safety Agency for Health Products (AFSSAPS) and the French National Authority for Health (HAS).

For more information, please visit **www.portailmedicaments.sante.gouv.fr**

Ireland

New Hospital Standards Published

In a bid to minimise and prevent the occurrence of hospital acquired infections, the Irish Health Information and Quality Authority (HIQA) has published 12 new standards. Hospitals have one year to implement the new standards to combat HAIs.

During the development of these national standards the project team conducted a comprehensive review of all available Irish and international literature on the subject, met with the relevant stakeholders and ensured the standards are person-centred, evidence-based, clear, valid and fit for purpose.

The standards include governance and management issues, hand hygiene, antibiotic resistance, staffing, medical device related infections, the physical environment and disease control. They apply to all health and social care services in Ireland including hospitals, community care services, GP and dental surgeries and primary care services.

For more information, please visit **www.hiqa.ie**

Denmark

Free and Equal Access to Healthcare

Free and equal access to healthcare was the chosen topic for the annual meeting of the Danish Society for Hospital Management held in May of this year. While the Danish government wants a health system in which all treatments of the highest quality are open to all of society, there is more and more evidence suggesting that there is a strong social bias in health.

The meeting included a wide range of presentations on topics including how the government, private and public institutions, medical industries and the regions feel about the present access to healthcare; new health law principles; privatisation and many other issues that have an effect on equality in healthcare.

For more information, please visit **www.dssnet.dk**

Croatia

DTS in the Croatian Healthcare System

The Association of Health, in collaboration with the Croatian Medical Chamber as a part of the Medicine and Technology fair in Zagreb, held a symposium entitled "DTS in the Croatian Healthcare System". The objective of the symposium was to publicise and explain the new DTS system (discussed at length in our country focus pg.36).

Presentations discussed all aspects of the new DTS system including its place in the reform of the healthcare system, an analysis of its implementation so far and a comparison with other DRG systems around the world. Problems in the practical implementation of the system was another key topic discussed from the point of view of doctors, nurses and managers.

European Parliament Commits to Improving Patient Safety

The European Parliament has adopted a report backing measures to reduce the number of infections in hospitals. These measures include support for research into this area, better education and information for both patients and staff and also the recruitment of specialised nurses.

Patient safety has always been of great concern in the hospital environment; hospital acquired infections (HAIs), medication-related events and complications during or after operations are prevalent in European hospitals. In order to combat these sometimes easily avoidable problems, MEPs are being asked to approve a draft Council recommendation on patient safety. The report was drafted by Amalia Sartori (EPP-ED, IT) and was adopted with 521 votes in favour, six against and five abstentions.

MEPs have called for a 20% improvement in patient safety by 2015. A 20% reduction of "adverse events" equates to 900,000 less cases a year. At the present moment, according to statistics from the Commission, between 8 and 12% of patients (meaning 6.7 to 15 million inpatients per year) admitted into European hospitals experience these "adverse events."

These problems stretch well beyond the hospitals. It is reported that 37 million primary care patients are also affected by these "adverse events" through the treatment they receive.

246 Million Euros to Support Public-Private Cooperation for Better Medicines

15 new research projects have been selected to receive 246 million euros within the Innnovative Medicines Initiative, a public-private partnership, also known as the Joint Technology Initiative, between the European Commission and the pharmaceutical industry. The Commission contributed 110 million euros and 136 million euros is coming from the industry.

This is the first time that pharmaceutical competitors are pooling their resources with research organisations, patient groups and other stakeholders to develop generic, pre-competitive knowledge. The research projects will focus on diabetes, pain, severe asthma, psychiatric disorders and also increasing drug safety.

150 applications were received and the best consortia were chosen to form joint project teams. 15 proj-

ects from these teams have been selected. They will address the main causes of delay or "bottlenecks" in pharmaceutical research and development processes. The overall objectives are to encourage the rapid discovery and development of better medicines, improving competitiveness within the industry, increasing the safety and efficacy of medicines and improving education and training.

The contract for the 15 projects should be finished by November 2009 and a second call for proposals is to be launched in Autumn 2009 for projects dealing with oncology, diagnosis of infectious diseases, chronic inflammatory diseases and knowledge management.

Janez Potočnik, the EU Commissioner for Science and Research has said that, "In times of crisis, such a model of cooperation is proving well suited to answering both EU competitiveness objectives and public health needs."

For more information, please visit
http://imi.europa.eu and **www.imi-europe.org**

European Ageing Report 2009

A recent European economic report has shown that the recession may prove to be a huge setback in countries' struggle to tackle the challenges of an ageing population. Countries have already put millions of euros into their failing economies in a bid to stabilise the system and promote growth. Consequently countries that had previously made good progress reducing their deficits are simply returning to square one. This will not help in preparing the system for the implications of an older population.

People are living longer, in 50 years time the population will be older but only slightly larger. The median age is expected to rise to 48 as birth rates are low and migration is slowing. This means an increase in costs for pensions, healthcare costs and long-term care for the elderly.

Figures in the report indicate that by 2060, spending will rise by an average of 4.7% of GDP and as this is only the average increase, other European countries will face much greater increases in spending. The report is not entirely pessimistic, claiming "There is still a window of opportunity." Indeed it is widely agreed that the next few years, before the baby boomers retire in large numbers, are crucial in preparing for an increasingly older population but action needs to be taken now.

For more information, please visit
http://ec.europa.eu/news/economy/090429_1_en.htm

Benchmarking Deployment of e-Health Services

The European Commission has issued a call for proposals for a study to benchmark the deployment of e-health services across Europe. The overall aim of the study is to progress towards the development of a standardised survey on the adoption of ICT and e-health solutions in hospitals.

The chosen contractor will liaise with relevant associations and international organisations and analyse similar studies carried out outside Europe, in order to overcome as many semantic and terminological differences as possible.

The study also aims to identify the main challenges and gaps in e-health services and some best practices in order to support further policy development in the e-health field in the framework of the initiative that will follow the i2010 strategy.

The study will cover EU27, Norway, Iceland and Croatia.

For more information, please visit
http://ec.europa.eu/information_society/eeurope/i2010/studies/index_en.htm

New OECD Publications on Aging, Healthcare and Obesity

Three new Working Papers have been published: "Policies for Healthy Ageing: An Overview", "Measuring Healthcare Disparities" and "The Obesity Epidemic: Analysis of Past and Projected Future Trends in Selected OECD Countries."

"Policies for Healthy Ageing: An Overview" stressed the importance of maintaining health in old age. This could in turn increase the potential labour force and supply of non-market services to others and delay the need for longer-term care for the elderly. The report promotes "active aging": delaying retirement, increased community activities and better lifestyles. Health systems must also be adapted to the needs of the elderly, cost-effective prevention should be a priority. The paper also stresses that more research on this topic is needed.

"Measuring Healthcare Disparities" recognises the general policy adopted by European and worldwide countries of reducing the inequalities in health and providing equal access to healthcare based on need. It is thought that an evidence-based approach is needed to measure progress in this area.

"The Obesity Epidemic: Analysis of Past and Projected Future Trends in Selected OECD Countries" explores the main causes and patterns concerning the current obesity epidemic and highlights possible policies to deal with negative health effects it brings.


UltraGenda®
BEST IN CLASS
In matters of appointment scheduling, only one name stands out.
UltraGenda has a distinct and innovative vision when it comes to the problems facing the healthcare industry today. In turn, our approach to potential solutions is ground-breaking. We are not content to offer only what the market demands, but strive to offer solutions the sector truly needs.
Our best-in-class, robust software for referral and appointment management, integrated with innovative portal applications for the patient and the referring physician are the ingredients for a revolution in healthcare—a revolution in which everyone wins.
UltraGenda: accelerating healthcare enterprise
ultragenda.com

SAFETY

By Rory Watson

European Union governments are giving a new priority to improving patient safety in hospitals and reducing healthcare associated infections. At their meeting in Luxembourg on 9 June, ministers from the 27 member countries adopted guidelines to help national health systems meet the twin objectives. Although the recommendation, based on a draft tabled by the European Commission last year, is non-binding, the fact that it now has formal political endorsement by health ministers will give its contents added weight.

> 8 to 12% of patients admitted to hospital suffer some form of adverse effect while being treated

Two separate assessments illustrate the scale of the problem that can arise from a range of factors: viral antibiotic resistance, high bed occupancy rate, increase in patient transfers, inadequate staff-to-patent ratio, failure to pay proper heed to hand hygiene and incorrect use of medical devices.

A technical report, "Improving Patient Safety in the EU", prepared for the Commission last year estimated that between 8 to 12% of patients admitted to hospital suffer some form of adverse effect while being treated. In numerical terms, as the European Parliament pointed out when giving its view on the draft recommendation, this could range from 6.7 to 15 million people. In addition, it is estimated that some 37 million primary care patients a year develop unexpected problems linked directly to the treatment they receive.

The Stockholm-based European Centre for Disease Prevention and Control has given a more cautious estimate. It indicates, that on average, healthcare associated infections occur in one hospitalised patient in 20 – the equivalent of 4.1 million patients a year in the EU – and lead to 37,000 deaths.

The EU initiative draws on the patient safety work being carried out by the World Health Organisation through its World Alliance for Patient Safety, the Council of Europe and the Organisation for Economic Cooperation and Development.

It emphasises the importance of developing national policies and programmes by making one or more bodies specifically responsible for patient safety, implementing user-friendly systems, regularly reviewing standards and encouraging health professional organisations to play an active role.

Patients themselves have a responsibility. The recommendation suggests patient organisations should be involved in establishing appropriate policies and that patients should be given information on safety standards that are in place and the procedures and remedies available in the event of a complaint.

The health ministers gave their backing to the use of "blame-free reporting and learning systems on adverse events". These would provide information on the extent, types and causes of errors and near misses. Health authorities are also advised to encourage their staff to actively report by establishing a reporting environment which is "open, fair and non-punitive".

The recommendation makes it clear that distinctive procedures should be in place to handle any reports of actual or alleged adverse events. "This reporting should be differentiated from Member States' disciplinary systems and procedures for healthcare workers, and, where necessary, the legal issues surrounding the healthcare workers' liability should be clarified," it notes.

Attention is given to the need for appropriate training for health professionals, not just medical staff, but also "relevant management and administrative" employees. Patient safety, say the guidelines, should be embedded in "undergraduate and postgraduate education, on-the-job training and the continuing professional development of health professionals".

To reduce the risk of healthcare associated infections, hospitals and other medical centres are advised to implement prevention programmes which address issues such as organisational and structural arrangements, diagnostic and therapeutic procedures, resource requirements, surveillance objectives, training and information to patients.

Emphasis is also placed on the need for effective national and regional surveillance systems to ensure prevalence surveys are organised at regular intervals and to establish national reference data to make it possible to target infection types. While setting out a practical set of guidelines, the ministers did not go down the route favoured by Italian Christian Democrat MEP, Amalia Sartori, who prepared the European Parliament's opinion on the recommendation. She urged national health authorities be given clear-cut targets for improving the care delivered to citizens.

"A 20% reduction in healthcare associated infections by 2015 is a desirable and feasible target, given that infection control methods are well-practised and quick to implement," she argued. Such a target would have meant reducing infections by 900,000 cases a year. The objective, she maintained, could be reached by increasing the number of nurses specialising in infection control, encouraging education and training for healthcare and paramedical workers, and supporting research to utilise the benefits of new technologies.

ECR 2010

European Congress of Radiology

March 4–8, Vienna / Austria

Virtuosity in Radiology

ABSTRACT SUBMISSION

July 4 – September 18, 2009

The annual meeting of ESR myESR.org

18,200 Participants
97 Countries
270 Scientific and Educational Sessions
1,684 Accepted Papers and Exhibits:
rejection rate: 68%
Fully Electronic Scientific Exhibition
Industrial Exhibition on 26,000 m²
285 exhibitors

ESR
European Society of Radiology

MEDICAL **TOURISM**

The International Medical Travel Marketplace

By Michael D. Horowitz

An era of fruitful scientific investigation and medical breakthroughs in the early part of the twentieth century stimulated the evolution of modern medical institutions in Europe and North America. The latest technological innovations and clinical advances became increasingly available to the citizens of industrialised countries, however, people in less developed parts of the world continued to have limited access to medical services. Accordingly, patients from around the globe who had the resources to do so began to travel to major referral centres to have medical evaluation and treatments that were unavailable in their own countries.

In the recent past, patients from industrialised nations have started to travel to developing countries to have elective healthcare, bypassing services offered in their own communities. This phenomenon, known as medical tourism, has grown particularly rapidly. Indeed, a one-way pipeline towards industrialised nations has now become a two-way highway with patients travelling bidirectionally, from countless countries to medical destinations around the world.

There are no verifiable statistics on international medical tourism, and various studies report widely disparate estimates of the magnitude of this phenomenon. It appears that somewhere between 85,000 and 750,000 patients cross international borders for medical care annually, with the number projected to grow rapidly. The global economic value of the medical tourism industry is estimated to be between 20 billion dollars and 60 billion US dollars.

A large (and growing) number of countries around the globe are entering the international medical travel marketplace by offering a wide variety of services, including cardiac surgery, joint resurfacing or replacement, bariatric surgery, gynaecological procedures, ophthalmologic care, cosmetic dentistry and surgery, gender reassignment surgery, and executive health evaluations (Table 1). Other services being offered include organ and stem cell transplantation, assisted reproductive technology, and obstetrical care and delivery. Several countries in Asia, particularly Thailand, Singapore, Malaysia and India have been very successful at attracting medical travellers.

Why Patients Pursue Medical Tourism

The reasons patients seek care in medical tourism destinations are summarised in Table 2. Attractively low cost is the major reason that patients from the United States choose to travel to developing countries for medical services. For these patients, conservation of limited financial resources is of great importance. They are willing to accept the inconvenience of medical travel and uncertainties about quality of care in order to obtain services at prices they can comfortably afford. Patients travelling from the United States will generally fit one of two profiles. The first is a middle class adult who requires elective surgical care but has inadequate or absent health insurance coverage. The other is a patient who desires a discretionary procedure such as cosmetic surgery, dental reconstruction, fertility treatment or gender reassignment.

For patients from countries where a governmental healthcare system controls access to health services, particularly Canada and Britain, the primary motivation to

Table 1. Countries of destination for international medical travellers*

Asia	The Americas	Europe	Africa	Oceania
China	Argentina	Belgium	South Africa	Australia
India	Bolivia	Britain	Tunisia	New Zealand
Israel	Brazil	Croatia		
Jordan	Canada	Czech Republic		
Korea	Colombia	France		
Malaysia	Costa Rica	Germany		
Philippines	Cuba	Hungary		
Singapore	Ecuador	Italy		
Taiwan	Jamaica	Lithuania		
Thailand	Mexico	Malta		
Turkey	Panama	Poland		
United Arab Emirates	United States	Serbia		

*Most frequently identified countries in literature and Internet search. This list is not inclusive - additional countries provide medical care to international patients.

bypass the local medical system is the desire to have timely treatment, circumventing delays associated with long waiting lists. Because government sponsored health systems generally do not pay for cosmetic surgery and similar type services, patients from countries with such programmes, like those from the United States, pursue medical tourism to benefit from lower prices. It is predictable that medical tourism will become increasingly popular among patients who lack insurance funding and for those who are impeded by waiting lists and other bureaucratic obstacles.

Patients also travel to offshore medical centres to have procedures that are not available in their own countries. Stem cell therapy, which shows promise for patients with a number of different diseases, is currently available in some medical tourism destinations, but unavailable or restricted to clinical trials in many industrialised countries. Concerns about lack of scientific rigour and patient exploitation in some destinations heighten the need for caution for all parties involved in these unproven interventions. Patients increasingly pursue international travel for various forms of reproductive treatment, including in-vitro fertilisation, commercial surrogacy, and acquisition of donor gametes. Finally, some patients travel to (and from) specific developing countries to undergo organ transplantation, unavailable to them in their own countries. Reproductive tourism and transplant tourism pose uniquely complex ethical issues and public health challenges.

Some patients choose to have medical care abroad because of the opportunity to experience travel to certain destinations and to have a vacation away from home. A business trip, tour of certain exotic destinations or a vacation may provide an opportunity to have elective health services abroad. Indeed, for people who travel for general health evaluations, routine diagnostic studies and limited surgical or dental procedures, the pleasurable non-clinical aspects of the trip may be particularly prized. The prospect of recovering from cosmetic surgery in a luxurious beachside resort is attractive to many potential medical tourists, particularly when the package can be purchased for less than the price of the operation in one's own community. Although some medical tourism facilitators and travel professionals promote sightseeing and recreational endeavours, as the complexity and seriousness of the medical circumstances increase, the importance of the tourism activities rapidly diminishes. A patient who feels compelled to travel to a distant country for major surgery for a life-threatening condition that he cannot afford in his own country will probably not be particularly interested in visiting the local tourist attractions.

Table 2. Reasons patients seek care at medical tourism destinations

1. Affordability
- Patients with no insurance / inadequate insurance
  - – Particularly patients from United States
- Plastic and cosmetic surgery
- Cosmetic dentistry / extensive dental reconstruction
- Bariatric surgery and associated body contouring
- Gender reassignment procedures
- Infertility treatment

2. Timeliness
- Patients from countries with governmental health services and long waiting lists

3. Availability
- Newly developed procedures and other therapies not approved for general use by regulatory agencies in country of origin
  - – Stem cell therapy
- Procedures unavailable or restricted by society and/or legal system in country of origin
  - – Organ transplantation
  - – In-vitro fertilization with donor eggs

4. Tourism and vacations
- Luxurious accommodations and excellent service
- Exotic vacation destinations

5. Privacy and confidentiality
- Particularly cosmetic surgery, gender reassignment, and alcohol or drug rehabilitation

It is noteworthy that some patients seek offshore medical care to protect their privacy and confidentiality. In a distant country, patients can maintain anonymity with less concern that their privacy will be violated or that medical records will be viewed by any of the parties who may have access to such in their own country.

Impact of International Medical Travel

The movement of patients across international borders for medical care potentially impacts the public health of both the country of origin and the destination. Industrialised countries that have nationalised health systems with long waiting lists for certain procedures can clear backlogs by directing patients to low-cost offshore medical destinations without the difficulty, delay and expense of expanding local capacity. Britain and Canada have been able to reduce the queue for health services by utilising foreign providers in some situations. It is likely that there will be an increase of travel for medical care between member nations of the European Union.

The impact that serving foreign patients may have on developing nations is highly variable. In the best situations, providing healthcare to foreign patients generates substantial revenue, benefiting the healthcare facilities directly and the local community indirectly. This export trade can support jobs and may have a favourable impact on the healthcare workforce. Nevertheless, in poor developing nations, there are concerns that providing medical services to international patients may undermine local healthcare and exacerbate existing healthcare disparities. In addition, there are fears that service to foreign patients adversely impacts workforce distribution by creating an internal brain drain. Formulation and enforcement of appropriate macroeconomic redistributive policies are essential for developing nations to derive benefit from the medical tourism industry.

Author:
Michael D. Horowitz, MD, MBA
Medical Insights International
michael_horowitz@mac.com

Full references available upon request (English@hospital.be)

INDICATORS OF QUALITY FOR INTERNATIONAL HOSPITAL PATIENTS

By Tricia J. Johnson, August Österle

With the increased number of international patients travelling for medical care comes an increased demand for information about the quality of care provided by a hospital. This article will discuss the relevant indicators of quality for international hospital patients and how they can be communicated. International patients have become a lucrative base for some hospitals, since these patients generally pay out-of-pocket at the time that services are provided. As hospitals assess, first, whether to dive into the medical tourism market, and if so, how to attract patients to seek care at their organisation, it is critical to understand the underlying factors that motivate consumers to travel abroad for medical care rather than obtain services within their home country.

Motivations to Travel Abroad for Medical Care

Three distinct, but inter-related, factors motivate consumers to travel to other countries for medical care – cost, access and quality. Individuals have a motivation to search for lower cost alternatives outside of their home country when they bear a relatively large portion of healthcare costs out-of-pocket and healthcare costs within their home country are relatively high. Cost is an important driver of medical travel in countries with a large private health insurance market, such as the United States. In countries with national health service or social insurance coverage, such as European healthcare systems, consumers are more likely to travel for improved access, waiting times for certain elective procedures may be so long within one's home country that some consumers are willing to pay out-of-pocket and travel to another country for treatment if the treatment can be delivered more quickly than at home.

While care is provided at home with either no or low out-of-pocket costs for consumers in countries with national health service or social insurance coverage, long wait times or specific treatments not offered in the home country may drive these consumers to search for care in other countries that have shorter wait times or that provide that treatment. Waiting times are a major concern in countries such as Canada, but also in many European countries. Within the European Union, according to European Court of Justice decisions, national health services must refund hospital treatments in another member state if patients waited longer than medically acceptable.

Finally, and most importantly for our discussion, quality of care plays a key role in any decision to travel abroad for healthcare. Travel specifically for care that is of a higher quality than available at home typically occurs by consumers in countries with developing healthcare systems who are able to pay out-of-pocket or have government-provided insurance coverage that pays for care in another country.

Quality remains an important factor in selecting a healthcare provider, even for people travelling abroad who are motivated primarily by cost savings or improved access. Consumers searching for quicker access to a healthcare service are likely to demand care that is at least equivalent to the quality they would receive at home. Likewise, those searching for lower cost care would have some quality expectations. Hospitals must ask themselves, how do consumers identify "high quality" healthcare providers abroad, and how can hospitals signal that they deliver a high quality healthcare experience?

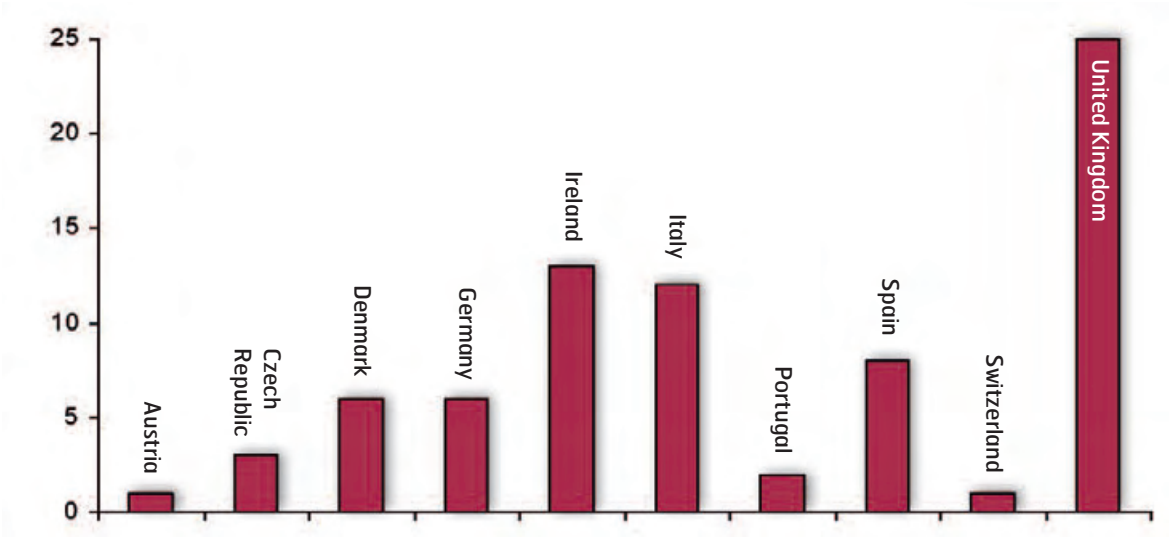
Quality of Hospital Care

High quality hospital care consists of at least three major categories; quality of medical treatment, communication and broader logistical quality. Quality of medical treatment refers to the effectiveness of the treatment and the technical quality of the care itself. This includes, e.g., pain control while the patient is hospitalised, or the absence of mistakes or medical errors. A recent Eurobarometer report showed substantial variation in the perceptions of medical errors by citizens across European Union (EU) countries. People were asked about how important a problem they thought medical errors were in their home country and where they were worried about suffering a medical error. Overall, 78% of the respondents indicated that medical errors were a problem in their country, however, nearly all Italians (97%) thought medical errors were an important problem while only 49% of Danish citizens thought they were an important problem.

A second bundle of quality indicators is communication in the treatment process. This includes clear pathways from hospital admission to discharge, starting with patient informed consent, clear and unambiguous provider-patient communications about the treatment plan and post-discharge care coordination with the patient's general practitioner, and patient-centred care by involving the patient in the decision making related to the care provided during the patient's hospital stay.

The third bundle of quality indicators relates to the broader service quality. This includes logistics (e.g. support in making travel plans for the prospective patient and kin travelling with the patient), language skills on the provider side, and reception in the hospital

Figure 1. Number of Internationally Accredited Hospitals in the European Union, 2009



Sources: Joint Commission International. 2009. Joint Commission International (JCI) Accredited Organizations, Accessed on 04 April 2009 from http://www.jointcommissioninternational.org/JCI-Accredited-Organizations/. Trent Accreditation Scheme, England, UK 2009. Accessed on 27 April 2009 from http://www.trentaccreditationscheme.org/. Accreditation Canada. International Successes. Accessed on 27 April 2009 from http://www.accreditation-canada.ca/upload/files/pdf/Other/2008%20International%20Accred%20List.pdf.

environment. Well-organised logistical processes for international patients may be the differentiating factor between hospitals with equivalent medical quality and communications about the treatment.

Signalling High Quality Hospital Care

Hospitals providing treatment to patients from other countries are not a completely novel development. With a few exceptions, however, it is only a small fraction of their entire treatment volume. Apart from acute and emergency care for non-residents staying in a country for reasons other than to obtain medical care, these exceptions include some private hospitals aimed at international patients, some specific treatments such as aesthetic surgery and hospital cooperation in border regions based on bilateral agreements. If hospitals on a larger scale attempt to move into the medical tourism market they will have to signal that they deliver a high quality healthcare experience.

Signalling includes various information tools including an on-line presence of the provider organisation, presence on websites promoting medical tourism, the provision of electronic and printed materials in multiple languages, the establishment of an international patient department within the hospital, and having providers who are proficient in multiple languages or seamless availability of interpreters that cater to the languages of the international patients.

In recent years, hospitals have also begun to use international accreditation as such a signal of high quality to international patients – as a "stamp of approval," so to speak. Accreditation is often a voluntary process of certification to ensure a minimum level of quality in a hospital, where hospitals must meet certain specified standards of care. There are at least four organisations that accredit hospitals in multiple countries, but only one has been active across Europe. These international accrediting bodies include Joint Commission International, based in the United States; Accreditation Canada, based in Canada; the Australian Council for Healthcare Standards International (ACHSI), based in Australia; and Trent Accreditation Scheme, based in the United Kingdom. JCI has 50 accredited hospitals in the EU, and Trent Accreditation Scheme has 25 accredited hospitals (Figure 1).

Conclusions

Hospitals competing for international patients must not only provide an exceptional patient experience that includes high medical quality, excellent patient-provider communications and outstanding service quality, but must also market their hospital internationally. Information on medical, communication and service quality must be easily accessible to international patients via the Internet. Potential international patients often rely on a handful of signals provided by hospitals to judge their quality – international accreditation, simplicity of the logistics required to travel to the hospital, and ease of communicating with the healthcare team. In the international patient market, providing a high quality patient experience is insufficient – hospitals must also market their patient experience to the potential patients.

Authors:

Tricia J. Johnson
Department of Health Systems Management
Center for Health Management
& Policy Research
Rush University Medical Center
Chicago, Illinois U.S.A
Tricia_J_Johnson@rush.edu

August Österle
Institute for Social Policy
Research Institute for Health Care
Management and Health Economics
Vienna University of Economics
and Business, Austria
august.oesterle@wu.ac.at

PATIENT MOBILITY AND PATIENT SAFETY

Results from a Qualitative Study on Professionals' Views

By Oliver Groene, Paula Vallejo, Rosa Suñol

The provision of cross-border care is a phenomenon that has received considerable policy attention in the last few years. Nevertheless, knowledge on patient-safety and patient-centeredness issues related to patients crossing borders to obtain care remains rather scarce until now. There is remarkably little systematic information on the volume and scope of cross-border care, and in particular on the perspectives and outcomes of cross-border care at patient level. Likewise, evaluations of the needs and quality and safety outcomes of different types of cross-border patients (temporary visitors, long term residents, people living in border areas, referrals abroad for specialist services and people seeking treatment themselves) so far are rare.

The aim of this study is to seek the views of health professionals on potential quality and safety concerns for this group of patients.

Material and Methods

We carried out qualitative interviews to collect information on the views of patients, professionals and financers on the safety and patient-centeredness of cross-border care. In this paper we only present the results of the interviews with health professionals. To guide the identification of issues, we used a simplified service delivery model reflecting a functional perspective of hospital services and following the patients' pathway. A semi-structured interview guideline was developed based on the conceptual model and existing literature on cross-border care issues. The professionals' perspective was studied by interviewing managers and health professionals (doctors and nurses) from facilities with a high volume of cross-border patients. Interviews were held on the phone, transcribed and then reviewed for themes and emergent issues.

Results

Overall, 30 health professionals from 14 hospitals in six European countries (Belgium, Czech Republic, Ireland, Poland, Spain and the Netherlands) participated in this study. We analysed the safety and patient-centeredness issues for cross-border care and four transversal themes emerged from this analysis (see Table 1 pg.20).

> A particular problem for cross-border patients is that the discharge date may be influenced by previously made travel arrangements

1. Communication and Information
Communication and information needs of cross-border patients are present at all stages of the care process - admission, diagnosis/intervention and discharge- and are not limited to clinical issues but rather address the whole healthcare process and scheduling of tests and procedures for which communication is very important. The issue of informed consent both relates to communication needs and administrative and clinical procedures. In many cases, informed consent forms are only available in the local language. Moreover, what constitutes informed consent varies substantially between countries (ranging from the 'patient being orally informed' to 'signing in presence of witness that he/she was provided with and understood the [long-term] implications of the procedure'). Similar issues exist for discharge information.

2. Administrative Procedures
Interviewees confirmed that administrative requirements can pose problems in individual cases, such as when patients do not carry the forms or use them fraudulently. Moreover, it was mentioned that pre-authorisation should be more strongly based on specialist and not administrative criteria, and that selective contracting between countries should be facilitated by health system level agreements.

3. Clinical Procedures
Differences in clinical procedures have been found between countries with regard to transplantation procedures (related to the use of organs from non-heart beating patients), quantity of rehabilitation services or caesarean section on demand (not uncommon in some countries). A particular problem for cross-border patients is that the discharge date (either too early, or after excessive length of stay) may be influenced by previously made travel arrangements, rather than medical criteria.

4. Hotel Services and Physical Structure
Cross-border patients have higher demands on the hotel services of hospital. The most common requests related to issues such as timing and scope of meals and privacy; other main issues were respect for families or carers' needs, accommodation, information about the patient's situation and purchasable items.

When you need a live interpreter in a hurry

On the spot interpreting services wherever you go

Dial up LifeLinks™

LifeLinks™ on-demand video interpreting is now available on mobile devices

- Reliable interpretation of sign language and most major foreign languages.
- Reach an interpreter in minutes, 24 hours a day, 7 days a week

Contact LifeLinks™ today to arrange a free live demo.

Toll Free
001-866-LANGUAGE
001-212-563-5000

www.lifelinks.net
e-mail: info@lifelinks.net

LIFELINKS™
VIDEO INTERPRETING SERVICES
"Bridging the Language Gap"

Communication and information issues	Administrative criteria	Clinical issues	Hotel services and physical structure
"There are a number of difficulties in assessing [cross-border] patients, e.g. that the patient does not carry required information/clinical records, or brings medication that can not be clearly identified so it is difficult to know what to provide. Many patients come alone and this brings along further difficulties as there is no-one to provide answers. There are obvious problems in evaluating symptoms if the patient does not speak English." (Professional PRO 1). *" [Cross-border patients] are usually more critical and have higher information requirements, but in the end they are even more satisfied than local patients because they compare the care they received with what they would have got in their own country."* (Professional PRO 9) *" ... a pregnant woman [...] could not speak any language apart from her mother tongue, [she] did not understand what was going on , and the woman dit not understand the basic rules of hospitalisation like switching off of mobile phone in the night and visiting hours. This caused some problems to the other patients in the room."* (Professional PRO 3)	*"Before the patient arrives I have had contact already, they send file, I need to agree, everything is managed before, the patients that are referred to me never come by hazard. Patients need the E-112, but sometimes the country is reluctant - there is no free movement of patients. [Movement of patients] should not only be an administrative process, there should be recommendations by [the specialist] to provide surgery"* (Professional PRO-6) *"Sometimes there may be problems to discharge patients. [...] Some patients need to stay in a hospital but not in this one (sic) and then sometimes it is difficult to find an ambulance to transport the patient to his country, especially on Fridays."* (Professional PRO-1) *"A serious issue is the organisation of back-transfer. We needed to transfer a patient [across the border] and when he arrived [at the hospital], there was no ICU bed available. They brought him back to our hospital, but he died on the way. There is lack of information systems to check the availability of beds."* (Professional PRO-22)	*"Differences exist in type, name and dosage of drugs; this is a potential patient safety issue."* (Professional PRO-5) *"In our hospital we have more than 200 consent forms, depending on the pathology and we considered translating them, but of course, with so many forms that need to be updated, this is not feasible."* (Professional PRO-1) *"One important example [for differences in clinical procedures] would be transplantation medicine. For kidney transplants the waiting list is very long, but we have found a way to use kidneys from non-heart-beating patients. Although there are some minor differences in the quality of the organs, we have achieved some really good results. I have now experienced (sic) that it is forbidden in Germany to use organs from non-heart-beating patients and I have tried to introduce to my German colleagues our experiences. But there was a major reaction: "This will never be done in Germany!". The response was that this is never going to happen in Germany, there seem to be major cultural differences with regard to the use of organs from non-heart-beating patients."* (Professional PRO-14) *"Many foreign patients set a time limit for the in-patient stay: "I can stay until Sunday, then I have to take my plane!". Even if we tell them that it is not safe, they sometimes insist. There is a form for voluntary discharge to be signed."* (Professional PRO-15)	*"Patients from Nordic countries that are used to quiet environments and everything being in order are sometimes scared when they arrive at our hospital because everything is much more busy, noisy and does not seem to be so organised to the Nordic patients. Also, the times when meals are served and our working times are strange to these patients. Patients from other Mediterranean countries are closer to our culture, for them there is no major difference."* (Professional 10)

Table 1. Comments from health professionals on potential quality and safety issues

Professionals also pointed out that cultural differences exist in the way patients from the North, South and East of Europe, respectively, collaborated in the care process.

Discussion

There appear to be some potential quality and safety issues for cross-border care due to the information requirements and complexity of the care process, especially when follow-up care is required. The various comments from health professionals illustrate the different priorities and expectations people have concerning healthcare and how this can cause complications. It needs to be emphasised, however, that the legal framework under which cross-border care is provided may have an implication on administrative and quality requirements. Given the explorative nature of this research, further work is required to better understand some of the quality and safety issues that we identified in this project. But the study does serve to illustrate the actual and potential problems hospital workers are faced with concerning cross-border care and can be used as a starting block by healthcare establishments to find their own solutions.

Author:
Oliver Groene
Director of Research & Education,
Avedis Donabedian University
ogroene@fadq.org
References available upon request

EU GREEN PAPER SHEDS LIGHT **ON HEALTHCARE WORKFORCE**

Summary of Key Issues

By Dervla Gleeson

The cover story so far has focused on patient mobility but there is another element in the equation: the mobility and migration of healthcare workers. It is not only the patients who are free to move around the European Union. This is both an asset and a challenge. Indeed it is one of the many challenges the facing health systems and the healthcare workforce in Europe.

Launched officially in December 2008, the European Commission's Green Paper on the EU Workforce for Health officially recognises these challenges including the mobility and migration of the healthcare workforce. In this article, we summarise the key points of interest.

The Green Paper aims to describe the challenges faced by the EU health workforce common to all Member States. The second objective is to help identify where the Commission believes further action can be undertaken and to launch a debate on it.

What are the Main Issues?

1. Demography and the Sustainable Health Workforce

Life expectancy has increased consistently since the 1950s by around 2.5 years per decade. This is expected to continue. As the population ages, so does the workforce. Between 1995 and 2000, the number of physicians under 45 in Europe dropped by 20%, whilst the number aged over 45 went up by over 50%. As these staff approach retirement age there need to be sufficient recruits to replace them.

Possible Action Areas

- Assessing levels of expenditure on the health workforce;
- Ensuring better working conditions for health workers;
- Considering recruitment and training campaigns, in particular to take advantage of the growth in the proportion of over-55s in the workplace;
- Organising chronic disease management practices and long-term care provision closer to home or in a community setting;
- Providing for more effective deployment of the available health workforce;
- Considering "return to practice" campaigns to attract back former health workers;
- Promoting social and ethnic diversity in recruitment, and
- Raising awareness in schools of careers in health sectors.

2. Public Health Capacity

A range of diverse activities are needed to protect and improve the health of the general population, tackle inequalities, and address the needs of disadvantaged and vulnerable groups. Tasks include carrying out health impact assessments for service planning, prevention of diseases, health promotion and education, securing the blood supply, epidemiological surveillance, etc.

Possible Action Areas

- Strengthening capacity for screening, health promotion and disease prevention;
- Collecting better information about actual and potential population health needs in order to plan the future development of the public health workforce;
- Promoting scientific vocations in schools by highlighting lesser known public health jobs;
- Giving the Agency for Safety and Health at Work (OSHA) more visibility in the Member States, and
- Promoting the work of occupational health physicians and giving incentives to doctors to join this area.

3. Training

Training capacity is an issue crucial to workforce planning. If more doctors and other staff are needed, more university places will need to be created and more staff to train them. This will require planning and investment. Member States will have to assess what types of specialist skills will be needed.

Possible Action Areas

- Ensuring that training courses take into account the special needs of people with disabilities;
- Focusing on health professionals' continuous professional development (CPD);
- Developing training courses to encourage the return to the workforce of mature workers;
- Providing management training for health professionals;
- Fostering cooperation between Member States in the management of numerus clausus for health workers and enabling them to be more flexible;
- Providing language training to assist in potential mobility, and
- Creating an EU mechanism on the health workforce to assist Member States in planning future workforce capacity, training needs and the implementation of technological developments.

4. Mobility of Health Workers Within the EU

Free movement of persons provides for the right of EU citizens to work in another Member State as an employee or civil servant. Directive 2005/36/EC provides for the

recognition of professional qualifications in view of establishment in another Member State and in the provision of cross-border services. The Directive has also introduced a requirement for the competent authorities of the host and home Member States to exchange information regarding disciplinary action or criminal sanctions taken or any other serious, specific circumstances.

ment to, or the intention to practice, in another Member State covered by the sectoral systems of recognition: (http://ec.europa.eu/internal_market/qualifications/regprof/index.cfm.)

However, since there is no further information on whether the professional actually took up that post, these data can be used only as a proxy in the absence of more detailed information. Other data collected by EUROSTAT on numbers of health professionals relies upon what different Member States collect: (http://ec.europa.eu/health/ph_information/dissemination/echi/echi_en.htm.)

The EU will develop a code of conduct for ethical recruitment of non-EU workers

Possible Action Areas

- Fostering bilateral agreements between Member States to take advantage of any surpluses of doctors and nurses;
- Investing to train and recruit sufficient health personnel to achieve self-sufficiency at EU level;
- Encouraging cross-border agreements on training and staff exchanges;
- Promoting "circular" movement of staff (i.e. staff moving to another country, and then returning to their home countries with additional knowledge and skills), and
- Creating an EU-wide forum or platform where managers can exchange experiences.

5. Global Migration of Health Workers

The EU has made a commitment to develop a Code of Conduct for the ethical recruitment of health workers from non-EU countries and to take other steps to minimise the negative impacts on developing countries resulting from immigration of health workers to the EU. A common immigration policy will include approaches to avoid undermining development prospects of third countries through, for example, exacerbating "brain drain", by instead promoting circular migration.

6. Data to Support Decision-Making

Data is needed on migration of healthcare workers. For example, the European Commission collects data on the decisions on recognition of qualifications that show move-

In addition, an EU-supported OECD project on the migration of doctors and nurses in the OECD/EU-25 countries is underway and will in future look also at other health professionals.

Possible Action Areas

- Harmonising or standardising health workforce indicators;
- Setting up systems to monitor flows of health workers, and
- Ensuring the availability of data on the health workforce to determine the precise movements of particular groups.

5. New Technology & The Workforce

The introduction of new technology requires that health workers are properly trained, to use it. The Commission communication on "Telemedicine for the benefit of patients, society and the economy" proposes a European framework to tackle some of these challenges.

Possible Action Areas

- Ensuring suitable training to enable health professionals to make the best use of new technologies;
- Taking action to encourage the use of new information technologies;
- Ensuring interoperability of new information technology, and
- Ensuring better distribution of new technology throughout the EU.

6. The Health Professional as "Entrepreneur"

Some health professionals work as entrepreneurs running their own practices or medical centres and employing staff. Commission policies to improve the business environment in Europe and to support and encourage entrepreneurship have an impact on these activities. The Small Business Act (SBA) is a key element in the EU's Growth and Jobs Strategy (Commission Communication "Think Small First –A Small Business Act for Europe" – COM(2008)394).

Possible Action Areas

- Encouraging more entrepreneurs to enter the health sector to improve planning of healthcare provision and create new jobs, and
- Examining the barriers to entrepreneurial activity in the health sector.

7. Cohesion Policy

Development of the EU health workforce is also linked to Cohesion Policy. Under the current legal framework it is possible to use Structural Funds to develop the health workforce. The Community Strategic Guidelines for Cohesion, which defines the priorities for the Structural Funds for the 2007 - 13 period, contains a section describing the aim to "Help maintain a healthy labour force". Some Member States plan major investment in the education and training of health professionals by using the ESF. In addition, some 5.2 billion euros will be invested in health infrastructure by the European Regional Development Fund.

Possible Action Areas

- Making more use of the support offered by structural funds to train and re-skill health professionals;
- Improving the use of the structural funds for the development of the health workforce, and
- Enhancing the use of structural funds for infrastructures to improve working conditions.

"RATE MY HOSPITAL" **AN ONLINE RATING SITE FOR IRISH HOSPITALS**

By John Gibbons

Ireland has this year been rocked by the publication of a shocking report into neglect, abuse, cruelty and violence against children who were incarcerated in institutions operated by the all-powerful Catholic religious orders. The Ryan Report revealed a systemic culture of institutional secrecy behind which serious abuse and violence could fester.

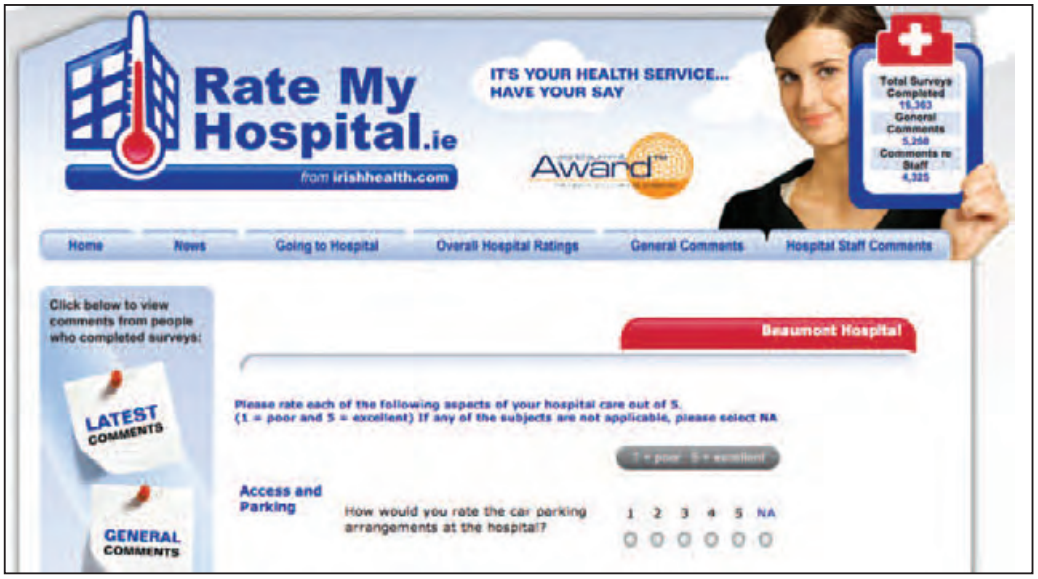
The cloak of secrecy in Irish public life extends well beyond just the church-controlled institutions. The country's civil service is routinely furtive, and this culture has dominated the health system for decades. Institutional reputation and the self-interest of powerful religious, medical and trade union groups meant that patients were far down the list of priorities for the Irish health service, much of which is still directly controlled by the Catholic Church.

One of the first serious challenges to this healthcare hegemony occurred around three years ago, with the launch in September 2006 of the website 'Ratemyhospital.ie'. Its objective was to place the patient firmly at the centre of healthcare delivery. Its mechanism is a comprehensive 23-part online questionnaire. To date, some 16,500 fully completed forms have been submitted, covering almost 70 public and private hospitals.

Who better, after all, to say how well a hospital is performing than the people whose taxes are paying for it and who depend on its facilities? As expected, 'Rate My Hospital' received an icy reception from the health authorities.

The Irish Health Service Executive (HSE) put out numerous statements to the effect that 'Rate My Hospital' could not be trusted. Many individual hospital managers and staff reacted with indignation at the cheek of patients actually having their say.

In a system with no culture of transparency or accountability, this was to be expected. We knew however that 'Rate My Hospital' was starting to make a serious difference when, in January 2007 – just four months after its launch, the



< Picture 1.
Screen shot of "Rate my Hospital" 23 part online questionnaire

HSE rushed out a facility called 'Your service – your say', purporting to invite the public to tell them directly about their hospital experience.

That same month, the HSE appointed a director of consumer affairs and also announced plans to train hundreds of complaints officers for individual hospitals. It is almost beggars belief that this hadn't been done prior to this.

Not all reaction was negative. The manager of Wexford General Hospital, Theresa Hanrahan said: "Sometimes people feel more comfortable making a complaint on an impersonal level than bringing it to us face-to-face, but that doesn't make it any less valid". The web-based service, she added, "could be of great use to us as a tool in spotting weaknesses in the running of the hospital".

That observation was not untypical. We were approached confidentially by a number of hospital managers, and co-operated with them in providing additional data beyond that published on the website, which they wished to use as part of their internal QA process. One manager described the feedback on the site as "gold dust" as they knew it was more objective and honest than their own patient 'exit questionnaires'.

National media reaction was extremely positive. In one article headlined: 'The website that forced the HSE to listen', the author commented: "It might not suit hospitals or the HSE, but the RateMyHospital website is the injection of transparency the health service badly needed...the unbiased online rating site has kick-started a new chapter in Irish healthcare. If it wasn't patient-centred before, it is now".

So what has 'Rate My Hospital' actually found? As expected, results have been mixed, but overall, there are relatively high levels of satisfaction with the care being provided within the system. Many complaints relate to issues such as privacy, hygiene and staff courtesy – these may seem relatively minor to hospital administrators, but they have an enormous bearing on patients' overall experience and strongly colour their attitude to a given institution.

Again, while much focus within hospitals is on doctors and nurses, patients' perceptions are informed by all staff they come into contact with, including porters, caterers and cleaners. Hospitals that neglect this fact may be shocked to find that their best efforts go unappreciated, because some 'non-front-line' staff have not been adequately trained. Also, small kindnesses go a long, long way. Many patients and their relatives speak of a smile or a cup of tea at a difficult moment as making all the difference.

'Rate My Hospital' was never intended to be a stick with which to beat the Irish health system. All comments are manually screened to block unfair or slanderous statements. Individuals are entitled to their good name. We also have a separate channel with nearly 5,000 postings that allows people to single out staff for praise.

For many, especially the very young, attending hospital is a stressful, even frightening experience, yet for staff, it is their workplace. Better awareness on both sides leads to mutual understanding and an overall more positive experience. 'Rate My Hospital' has, we believe, helped build that bridge.

The project received international recognition in 2007, in the UN-sponsored World Summit Awards in Venice – the only Irish healthcare project ever to receive such an accolade. 'Rate My Hospital' was one of 40 winners globally, selected from some 24,000 projects the judging panel reviewed.

'Rate My Hospital' is operated by MedMedia Group, a wholly-owned Irish healthcare publishing organisation which also runs the successful website, Irishhealth.com, which today has around 135,000 registered members.

Author:
John Gibbons
Publisher 'Rate My Hospital',
founding director of MedMedia Group
Email: john.gibbons@medmedia.ie

THE DATABANK **PROGRAMME**

A Timely Data Source for Hospital Management

By Kevin Reed

During last autumn's economic crisis, the American Hospital Association (AHA) turned to the Colorado Hospital Association's (CHA) DATABANK Programme for timely data not available from any other sources in the country. The database of monthly hospital information helped the national trade association publish two executive briefs on the impact of the worsening US economy on community hospitals across the country. Without the timeliness of the DATABANK Programme, AHA would have had to rely solely on an ad-hoc survey.

The story was quite similar in the mid-1980's, but certainly more on a local scale. CHA advocates on behalf of all the hospitals in the state of Colorado but again, we did not have as much information about our members as we needed, to effectively talk to state legislators about the issues affecting Colorado hospitals.

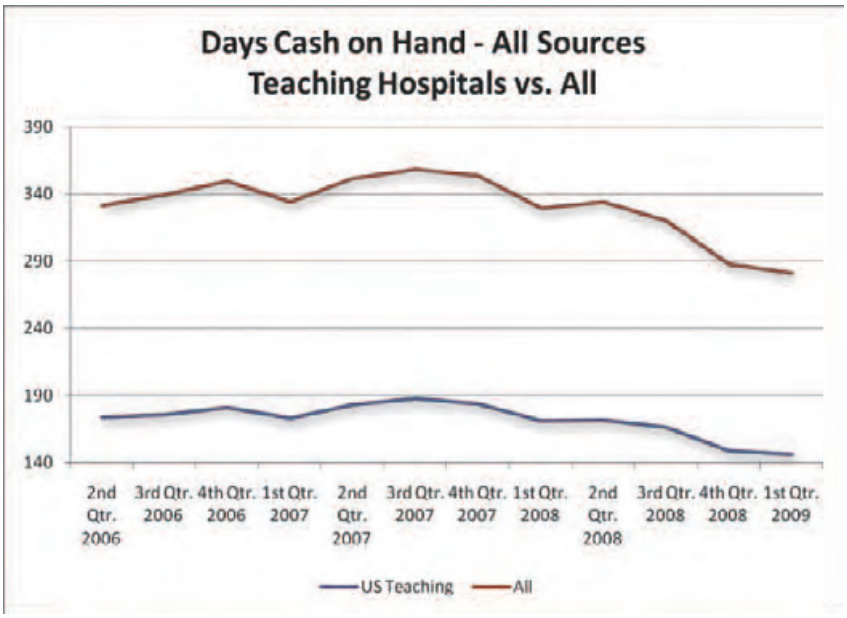
The genesis for the DATABANK Programme was born, vetted with councils and finally the Board of Trustees. Data collection from Colorado hospitals began in 1985, starting very simply with discharges, patient days, a few outpatient data elements, charges, contractual allowances, charity care, expenses and gross patient accounts receivable. By 1988, three state hospital associations were using the database for management of their hospitals. One of the main stumbling blocks for data programmes during that period was lack of timeliness. Hospital administrators and their staff were often frustrated when they received reports that were months old. One of the driving goals for DATABANK was to be timely and give hospital managers as much relevant, current and complete data as possible.

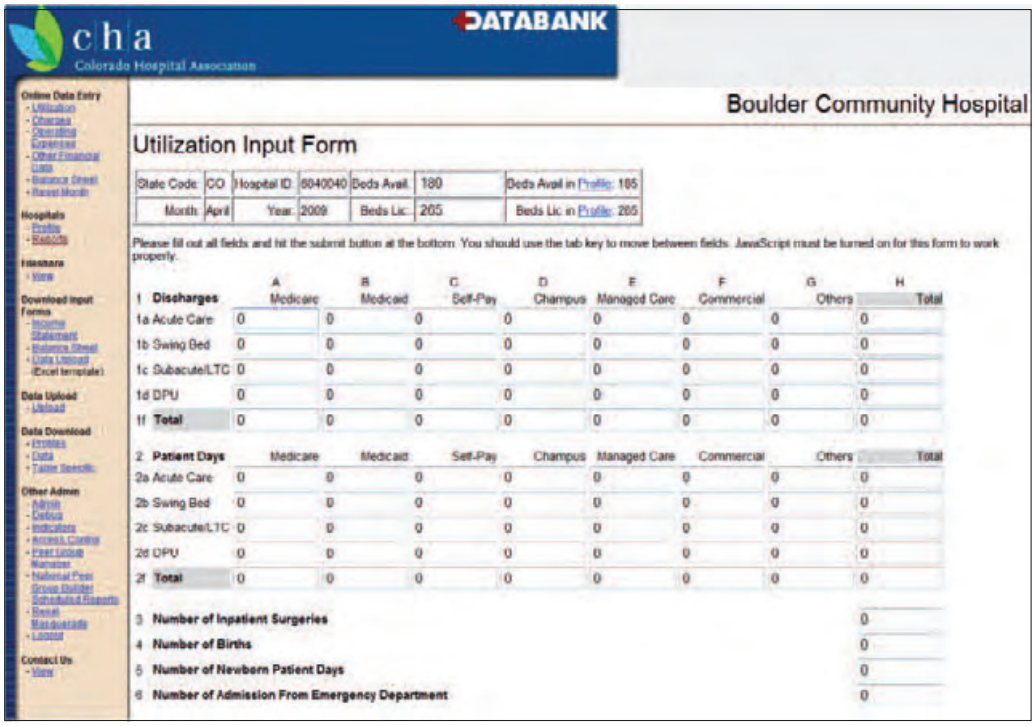
Other states with similar issues soon found DATABANK to meet their needs. By the end of the 90's, DATABANK was in 17 states. However, acquiescing to states' individual needs had compromised uniformity. In 1998, CHA presented a case to the state members to standardise on a common data set and move the platform to the Internet. The group was enthusiastic about the advantages of what the Internet could offer them and their member hospitals.

Along with the move to the Internet, AHA and CHA formed a partnership to move the database in a new direction where more US hospitals and state associations could take advantage of DATABANK's virtues. By 2001, more than 30 states were using the web-based programme.

Many of the initial issues were solved by moving the database to the Internet; the hospital administrations were then able to design their own reports with their own peer comparisons, the information was available as soon as hospitals entered their data and hospital associations had more information at their fingertips in which to advocate on behalf of their members, the number one reason a hospital pays association dues.

Hospital administrations, primarily the Chief Financial Officers have found the DATABANK information to be especially effective when comparing their hospital's performance with other "like" hospitals. DATABANK not only offers hospitals a tool for creating local peer groups but also a cross-state search tool that builds peer

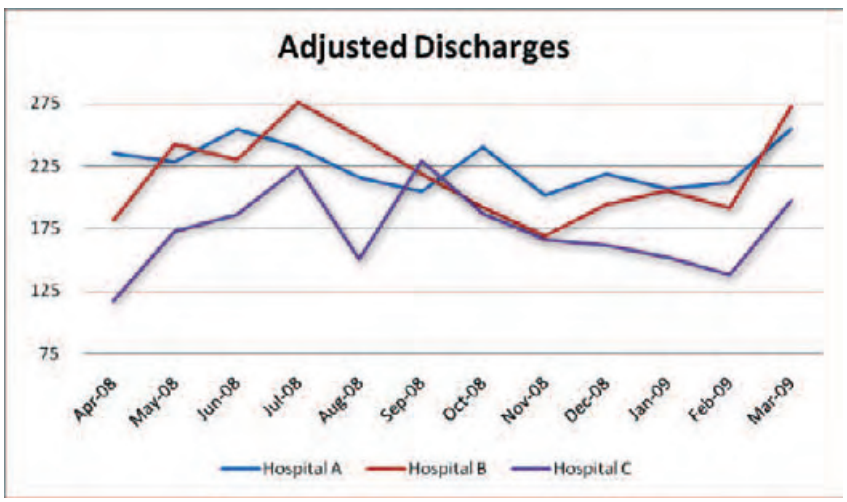




< Picture 1.
A DATABANK Screen shot of the utilisation data entry page prior to the hospital entering its own data for April, 2009.

groups from the entire national database. A manager can search for large urban,teaching hospitals with beds between 500 and 750. Or, a small rural hospital can build a group of hospitals with an average daily census between 16 and 30 days. Then, that peer group can be used instantly in a variety of reports.

Online DATABANK reports are accessible to hospitals that submit monthly data. If a hospital falls behind, they only have access to the time periods they have entered data for; the DATABANK philosophy is "you get what you give". If a hospital participates in the Balance Sheet module, introduced in 2003, they get 18 financial ratios.



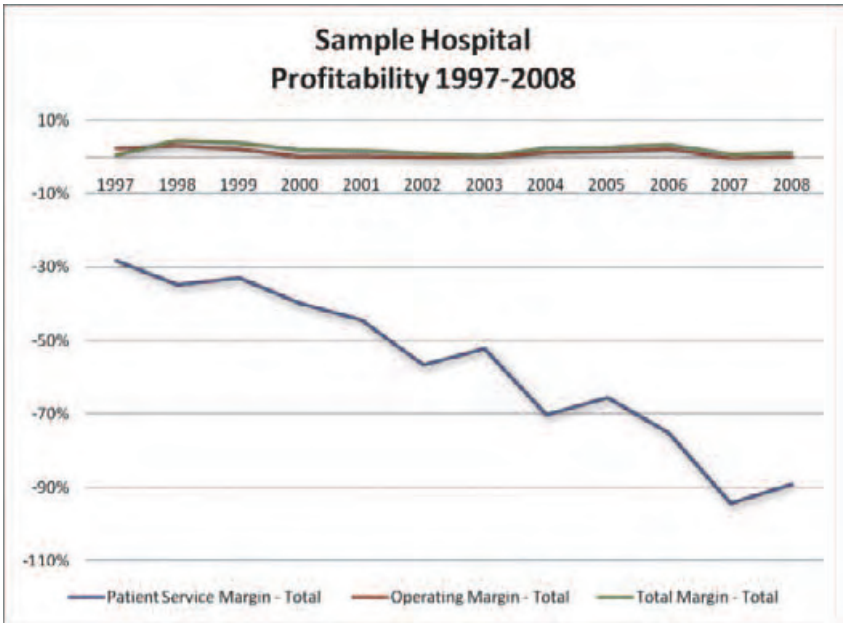
The above graph is an example of a typical DATABANK use for hospital managers to demonstrate utilisation trends of hospitals in their immediate service area. The programme allows managers to chart their hospital performance on many utilisation and financial trends. Monthly, quarterly and annual graphs can be produced on one entity and multiple variables or multiple entities and one variable as shown above.

CFOs and their staff use the data at their monthly board meetings to present various cases on a variety of issues. Board members depend on their hospital managers to apprise them on how their hospital is performing compared to peer hospitals.

The hospital managers of the sample hospital already know they don't make money on patient care. What DATABANK can tell them is where they've been so they can map a strategy as to turn their patient service margin around.

Data confidentiality has been a mainstay of the programme throughout the years. It should be noted that certain states share data amongst hospitals. Other states keep it strictly to peer group comparisons of five hospitals or more. DATABANK allows the hospital association to set the confidentiality rules for how the programme operates in their state and how the hospitals will be able to access data.

One rather extreme example is a hospital association that does not allow their members to access data unless 100% have reported for the time period. However, most states allow their hospital managers to not only create their own comparisons but they also encourage them to give feedback about what they'd like to see from the programme.



The benefits of participating in the DATABANK Programme far outweigh the time required to collect and enter the data on a monthly basis. A few of these benefits for the hospital managers are:

- Timely data;
- Comparable data;
- Custom peer group creation;
- Scheduled reports, graphs sent right to their email every month;
- Requires 1-2 hours of work every month;
- Enables hospital associations to use current, accurate and complete data for advocacy.

The DATABANK programme has been a success in the states that have committed the resources and made a concerted effort in making sure their state is represented in any national debate using current healthcare data.

Not participating has been compared to not voting in an election. DATABANK has always been an easy programme to participate in and reaps many benefits, either at local and state level or even in the nation's capitol.

Author:
Kevin Reed
Senior Director
Colorado Hospital Association
Kevin.Reed@cha.com

How it Works

The DATABANK programme is a web-based database of hospitalisation and financial performance indicators. The programme is licensed in 28 states with each state able to customise the programme to their specific needs.

It provides comparable information on average length of stay, outpatient statistics, charges and expenses per day and per stay, uncollected charges, number of days in accounts receivable, gross profitability and a number of personnel statistics. 28 balance sheet data elements and two supplemental data elements are also reported to the programme with corresponding output.

Hospitals submit their monthly data on the secure DATABANK website www.databank.org. Data submission takes less than an hour and once submitted on the web, member hospitals are able to run their facilities' reports and graphs. The data is used by hospitals for budgeting, marketing and internal management and can also be used on the association level for public policy decisions.

One DATABANK contact person per hospital is selected to collect and enter the aggregated hospital level information 25 days after month's end. If the data is not submitted by the 25th then no reports can be made.

Data is entered for the following areas:

- Discharges by payer and level of service, patient days by payer and level of service;
- Other statistics including outpatient data in total;
- Gross charges by payer and levels of service;
- Contractual adjustments by payer;
- Charity care in total;
- Operating expenses, other operating revenue, operating margin, net nonoperating gains, tax subsidies and total margin;
- Gross patient accounts receivable;
- Balance sheet data.

The reports display financial and utilisation data in the following categories:

- Utilisation
  - Inpatient and Outpatient;
- Financial Data;
- Uncollected Charges;
- Operating Revenue;
- Operating Expenses;
- Profitability Other Financial Data;
- Personnel Data, and
- Days in Accounts Receivable Gross.

Peer groups for comparison range from standard peer groups such as geographic, congressional districts, trauma levels, etc to customised peer groups created and maintained by the user. Another facility of the programme is the national peer group builder (NPGB) allowing the creation of peer groups across state lines. These groups can be created using criteria such as licensed or available beds, teaching status and trauma levels. For this tool the identities of the hospitals are not revealed due to confidentiality issues.

CLINICAL WASTE HAZARDS: **HAS SCIENCE BEEN REPLACED BY PERCEPTION?**

By Karl Dalton

Imagine the public alarm and local authority response if you discovered a bag of clinical waste lying in the street where you live. Most people would be terrified to come within 10 metres of the bright yellow bag with its official-looking "UN3291" text and biohazard symbol that conjures up the same fear as the familiar radioactive symbol. These images and legal controls are in place to protect us, but really, how dangerous is clinical waste both absolutely and in comparison to household waste? Is the money spent on treating this waste justified? And how much fear is based upon perception rather than scientific research?

Instinctively and subconsciously, we assume that all clinical waste has originated from patients with pathogenic infectious diseases and that contact with any of it poses the high probability that we will fall victim to such. However, for waste to be infectious there must be pathogens of adequate virulence and number to infect a potential host. Since this cannot be readily measured in a given volume of waste, unlike say measuring pH in a liquid volume, the subjectivity of this assessment has led to conflicts between state agencies in the US and an over-emphasis on the mere potential presence of pathogens.

Real or Perceived Hazards?

It runs against common perception that the quantity and virulence of pathogens in ordinary municipal waste is up to several orders of magnitude greater than clinical waste. Collins and Kennedy (1992) cite studies carried out by Althus et al (1983), Kalnowski et al (1983) and Trost & Philip (1985a) that all demonstrated that human clinical waste contained considerably less pathogens than domestic waste; in one study the bacterial load of hospital waste was 10 to 100,000 times less than household waste. Studies have so far indicated that clinical waste is not a very good culture medium for pathogens and disease transmission, and that modern, properly managed landfills provide a great deal of protection. At this point we should take into account an interesting aspect that prior to entering hospital the patient with an infectious illness has been infectious in the community and generating waste for a relatively long period of time and also consider the various incubation periods of diseases. Their waste at home has mostly been handled by standard waste services personnel and entering conventional engineered landfill. Yet there is no public or official alarm to the relatively higher risk of infection.

In the "Letters to the Editor" section of the Journal of Hospital Infection, Borg M (2005) addresses several of the points mentioned above. He questions the apparent inconsistencies of European regulation. In St Luke's Hospital Malta it was calculated that blood contaminated content of their clinical waste amounted to 20 litres per 1,000 national population whereas the blood content of the sanitary towels landfilled in Malta equated to 160 litres per 1,000 population. He questions why clinical waste cannot be landfilled once occupational safety precautions are used by the handling personnel, especially for sharps, given the lack of evidence that anyone has ever been infected by clinical waste. He strongly recommends that microbiologists need to be involved in microbiological and epidemiological investigations to clearly define for the authorities what waste needs special requirements to prevent infection. A clear example is waste or tissue contaminated by a patient suspected of having Creutzfeld Jacob Disease.

However Borg's position is rebuked by Blenkharn J (2006) who calls Borg's approach as a "hole-in-the-ground". He ignores the advantages of modern engineered landfills with much improved leachate control over old style dumps, the volume reduction of mechanical shredding and the relatively more mobile and insidious environmental effects of incineration compared with landfill leachate. Furthermore he ignores the natural biocidal conditions within a modern landfill of high temperature (~60^{o}C), low pH and metal content.

Treatment Technologies or Just Changing the Problem?

Incineration

There are many advocates of this technology but there is a growing shift away from this as a viable option essentially due to the toxic emissions produced. In 1994 medical waste incineration was identified as the single largest source of dioxin air pollution in the US including the most carcinogenic 2,3,7,8-Tetrachlorodibenzo-p-dioxin. Medical waste incinerators also emit

heavy metals, fine dust particles, sulphur dioxide, carbon monoxide, nitrous oxides and dioxins contained in the bottom ash residue. In 2001 the international Convention on the Elimination of Persistent Organic Pollutants (POP) was signed with most European countries committing to eliminate POP emissions.

Various attempts have been made at reducing these emissions but no abatement plant is totally efficient at capturing them. Even when the fly-ash is captured it still must be treated as hazardous waste due to its dioxin and other fractions. The segregation of medical waste and therefore the waste type feeding the incinerator influences the dioxin emissions. Therefore the segregation and removal of non-infectious items such as PVC IV drip lines would help lower dioxin levels since the major source of dioxins in the environment is the combustion of organic matter in the presence of chlorine and metals. The evidence is very much counter to Blenkharn (2005) when he states that a case can be made to co-dispose all healthcare wastes through incineration as an effective, non-polluting and all embracing technology. Despite the perceived gold standard status of incineration destroying microbial life, tests have shown that it offers only 10-6 reduction of B. stearothermophilus as achieved by other alternative treatments.

Tests have been carried out to contain incinerator ash in cement based materials. Assessment of the effects of the ash's heavy metal content on the final material needed to be determined. The experiment assessed the physico-mechanical properties, leaching, chemical analysis and material behaviour on different atmospheres. The results showed leaching of metals, lower material density, chemical reaction between the ash and mortar, aesthetic changes in surface appearance but overall it concluded a material suitable for masonry block production. However how would the market place respond to a block with such a recipe remains to be seen.

Medical waste incinerators in China emit dioxin levels as high as 4000ngTEQ/Nm3. This has led to research into modifying and developing the incinerator process. The Chinese have produced a pilot plant that combines drying, pyrolysis, gasification, combustion and ash vitrification. Results have shown a significant reduction over conventional incinerators across the range of measurement including a dioxin level at least a factor of 5 below the USEPA legal limit due to more complete combustion. This does not seem from the literature to be at commercial stage yet.

Alternative technologies

Alternative technologies exist but there is very little extensive scientific research into the environmental impact of these and their comparative performance of inactivating micro-organisms. Autoclaves and retorts are sealed vessels using steam for a predetermined time period to be effective, and typically place a spore culture in a container as a test during processing. Mi-

Clinical Waste

Clinical waste is defined as as any waste that consists wholly or partly of:

- Blood or other bodily fluids;
- Drugs or other pharmaceutical products;
- Excretions;
- Human or animal tissue;
- Swabs or dressings, and
- Syringes, needles or other sharp instruments which, unless made safe, may be hazardous to anybody who comes in contact with it.

Some examples of clinical waste include:

- Any item which is or may be soiled by blood or body fluids;
- Colostomy and urine bags;
- Empty IV bags and administration sets;
- Human tissue;
- Incontinence bags;
- Pharmaceutical waste;
- Vomit bowls and sputum pots, and
- Waste arising from treatments using cytotoxic drugs.

This waste is potentially dangerous as it can transmit diseases and cause cuts and needle-stick injuries.

crowave technology renders the clinical waste biologically inactive by generating steam from the moisture in the waste. Chemical disinfection can have its effectiveness diminished by the pH, temperature and other compounds in the waste. In addition a different environmental hazard is created through the use of toxic chemicals such as formaldehyde and ethylene oxide. Tests carried out on a microwave unit showed that decontamination temperatures were sustained to achieve reliable microbiological decontamination.

Maceration and direct landfill as another alternative treatment

As mentioned earlier in this review, the focus of management of clinical waste in Western countries has been on biological inactivation. This has almost placed as secondary the environmental impact of the process residue from each treatment technology which historically has been predominantly incineration and more recently steam sterilisation. However, by and large the waste mass inevitably ends in landfill as toxic dioxin rich bottom ash or a sterile shredded material. As already discussed earlier in this paper, research has shown that there is less pathogenic and virulent microbial content in clinical waste than in landfilled household waste raising the question whether the waste is a real or perceived hazard. With some humour Collins and Kennedy (1992) quote Taylor (1998) who considers "that even clinical waste was no more dangerous than the kitchen dishcloth".

Conclusion

There is a clear need for up-to-date research to determine the true risks posed to the environment and human health by clinical waste. This needs to be assessed in absolute terms but also in relation to the risks associated with municipal waste and human burial so that more energy consuming and polluting treatment technologies can be determined as excessive or not. It would be the ultimate irony if our healthcare facilities were generating future "customers" by creating environmental health problems with inappropriate waste treatment, for example the dioxin release from incineration.

The engineered landfill where the waste ultimately is disposed of may well act as an adequate treatment plant for pathogenic microbes until a more sustainable and environmental treatment method is found. Current practice is not just a potential overkill use of technology. If scientific evidence can demonstrate that we are acting beyond safe requirements then the possible cost savings are enormous. Each year our health services spend millions of euros sterilising clinical waste which may be better spent on direct patient care, enhanced facilities or supply chain management systems which focus on improving the materials from which products and services are derived.

Author:

Karl Dalton
Environmental Department,
Connolly Hospital, Dublin
karldalton@o2.ie

Full references available upon request (English@hospital.be)

FACILITY MANAGEMENT COSTS IN THE OR — A PROCESS MODEL

By Karin Diez, Kunibert Lennerts

Through the implementation of the German Diagnosis Related Grouping (DRG) system and the resulting cost pressure, the need for optimised use and operation of the spatial resources in hospitals is growing. The link between primary processes and facility management services however, appears to be missing. In the framework of the research project OPIK – optimisation and analysis of processes in hospitals, at the Institute for Technology and Management in Construction, Facility Management at Karlsruhe Institute of Technology, the interdependencies between facility management performance and costs, and primary processes in the hospital have been analysed.

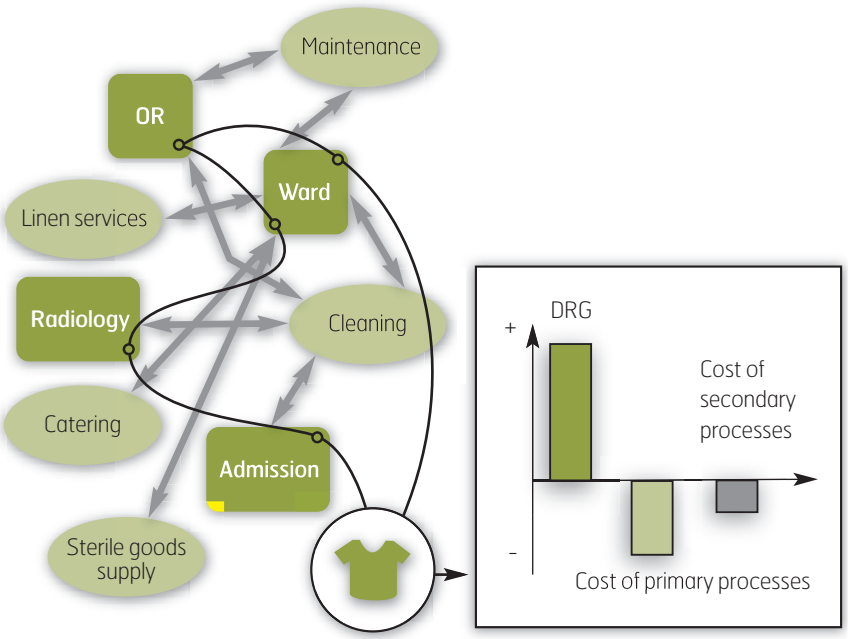
A Process-Oriented Cost Model

The treatment of a patient in the hospital can be described as a clinical path that is interpreted in terms of space. Figure 1 illustrates such a clinical path. The patient's journey through the hospital follows a certain path, symbolised by a black line. Along this path the patient is using the specific functions of the different facilities in the hospital. In relation to the function of each facility, infrastructure services are used to a certain extent, symbolised by the grey circles. On a spatial level, primary and infrastructure processes are linked through the functional units (the facilities). The focus is set on the patient and his presence in the functional unit. Any performance is related to the patient. This relationship between FM (Facility Management) services and primary processes can been described in a mathematic process model.

The defining feature of the model is how it describes the relationship of all core infrastructure processes to a primary process profile. Thus a value from the primary process has been assigned to each relevant main facility management process.

One of the most important functional units of the hospital is without doubt the OR (or operations unit). In the OR the dominant cost process is the sterile goods supply which is discussed in the example below. The results are based on the analysis of empiric data of four German hospitals.

Figure 1. Patient's path through the hospital



Sterile Goods Supply in the OR

Figure 2 shows the average cost shares of the facility management processes for the operation unit based on a sample of four German hospitals. 39% of the cost is related "sterile goods supply". This is the dominant process in the operation unit.

Cost Driver

The relationship between primary and FM processes can be separated into fixed and variable costs. The product "sterile goods supply" is at variable cost. When increasing the operation time of the operation unit from one shift to two shifts per day and assuming that there is a similar workload, it may be assumed that these costs will double in a linear manner.

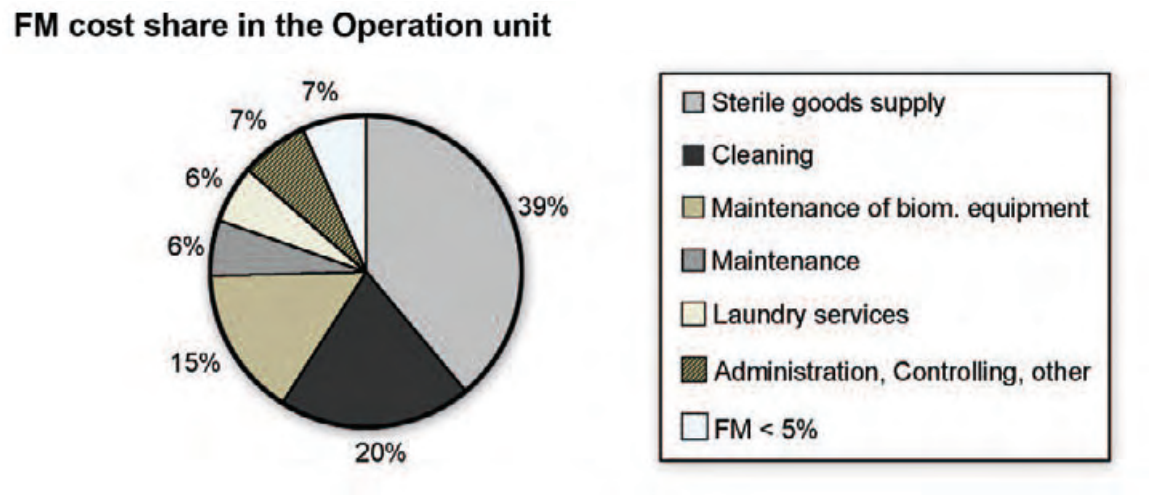


Figure 2. Average facility management cost share for the functional unit operation of four hospitals

According to the standard set by the German Institut für das Entgeltsystem im Krankenhaus (InEK) the allocation base and therefore abstract cost driver of the cost of the medical and non-medical infrastructure in the operation unit is the time between first incision of the skin and last suture, plus the setup time for each operation (DKG 2002, appendices S.20).

German DRG System

"Diagnosis related groups (DRGs) are a patient classification system, which relates in a clinically relevant and traceable way, the type and number of patients to the consumption of resources in the hospital."
(Definitions handbook G-DRG 2006, Band 1, S.1)

Patients are grouped by main diagnosis and other factors (i.e. age, gender, operative procedures) and then classified. A hospital is remunerated for a patient according to a cost relation by a fixed lump sum based on average costs. Since the introduction of this system, the average length of stay of patients has diminished from above 12 days to less than 8 in Germany. Growing competition led to a shrinking number of hospitals from about 2,340 in 1994 to nowadays less than 2,100. The share of private hospitals grew in this period to nearly 30%.

This approach is simplifying in assuming that all infrastructure costs are in linear dependency to the length of the operation. Time is the only cost driver. For a transparent analysis of costs and for the purpose of benchmarking and optimisation of FM products, the relation between cost and cost driver has to be examined in more depth.

Does an operation of double the length really mean a doubled effort for sterilisation and packing of the surgical kits? The cost driver for sterile goods supply is rather the number and the content of surgical kits, i.e. the kind of operation, than the procedure time. A problem is when large surgical kits are being opened for the use of just one or two pieces. The unused content has to be sterilised and repacked nevertheless. To avoid this unnecessary effort there has to be good communication between surgeons, medical personnel and the sterilisation department. For standardised operations standardised surgical kits should be not only available, but also frequently used, and the documentation should be made available for facility management purposes.

The average cost for sterile goods supply for the operation of a hip joint in 2005 based on the data of four hospitals was about 190 euros with an average number of sterile goods entities of 5.5. The average cost for sterile goods supply for any operation is only 58 euros. This cost difference can be related to the average operation time including set up times for a hip joint: the reference time is about 190 minutes. The average operation time for the different operation portfolios in the hospitals of this research's sample varies between 72 and 165 minutes. Considering the possible time span of operations and the cost differences for sterile goods supply for a relatively short but complex kind of operation, as it is in case of a hip joint surgery, the need for transparent, realistic cost allocation becomes apparent.

The researchers at Karlsruhe Institute of Technology are developing a model that allows a realistic cost allocation for FM processes in relation to the primary processes. Thus the model can be used to simulate consequences of changing primary process portfolios on the hospital infrastructure. According to a portfolio profile, utilisation times of the different functional units can be derived, as well as the need for function specific secondary services. Thus, capacities may be planned and optimised. The model is an important step towards cost transparency and gives a very important basis for strategic planning of space and resources in the hospital.

Author:
Karin Diez
Karlsruhe Institute of Technology
Institute for Technology
and Management in Construction,
Facility Management
Research Project OPIK
Karin.Diez@fmk.uni-karlsruhe.de

IT AND MEDICAL TECHNOLOGY
PULLING TOGETHER

The Klinik am Eichert in Göppingen (Germany) Breaks New Ground

By Joachim Hiller and Timo Baumann

Information technology and biomedical technology are subject to constant adaptation. This is particularly clear in the field of biomedical technology with its orientation on the narrow level between natural sciences and medicine. Reduced to a common denominator: "The patient should benefit as soon as possible from a technological advance". This therefore calls for an interdisciplinary team consisting of IT and biomedical technology to implement the rapid leaps in technology that industry requires of us in the health sector.

Biomedical Technology in Changing Times

From classic precision engineering, the orientation of this specialist discipline has changed totally and is today found more in mechatronics. At the latest, the absolute necessity to open up to IT came about concurrently with the use of standard IT components such as PCs, network technology and database applications, etc., in nearly all areas of medical technology.

IT in the Patient Environment

Classic IT components automatically become medical technical components when used in the health sector and especially if used in close connection with the patient. Marketing, operating and using these IT components suddenly came under the rules of EN 93/42, in Germany, the MPG (the Medical Products Act) and the MP-BetreibV (the Medical Products Operators' Ordinance) as the legal basis and IEC 60601-1-1 with regard to electrical safety. This requires an enormous amount of specialist knowledge that de facto can only be understood and implemented by biomedical specialists.

Specialist Departments Link Up

The Klinik am Eichert in Göppingen is breaking new ground. Originally separate specialist branches and departments are working on projects in a dynamic interaction with clearly defined parameters.

A Few Figures

Both organisational units in the Klinik am Eichert distribute the tasks as follows: Approx. 4,700 active medical products from approx. 250 different producers are supplied mainly by the medical technical service centre.

Approx. 40 software applications with 1,500 IT appliances and their 2,100 users and 42 current IT projects represent the remit of the SCIO (Service-Center Informationstechnologie und Organisation [Service Centre for Information technology and Organisation]).

Organisational Measures

Service Level Agreements form the basis of the organisational cooperation for joint projects. In these, functional and administrative activities and responsibilities are set out in writing in an object-related manner.

The user will receive this SLA for his application or modality on putting the system into operation and will be able to communicate objectively with the correct department.

The Teams Grow Together

It is not possible to bring together colleagues from both disciplines in a purely organisational context. This is a question of personal identity. An IT employee will never become a medical technician or vice versa. The greatest challenge is consequently creating human harmony that enables interdisciplinary team building. A 14-day "Jour Fix" on a performance level has been implemented. Here, subjects that need to be dealt with top-down are on the agenda, e.g., the collection of current themes and their prioritising or the distribution of employee resources among the actual projects.

Staff from both departments rotate for the daily briefings, twice a week. This already makes for an enormous exchange of experience! Joint training sessions complete the specialist further instruction in a bottom-up manner.

Conclusion

Medical products and information technology are merging ever faster and inseparably with one another. A rethink is necessary. Only together can complex, networked medical products, installations and IT systems be set up and operated in the future.

Authors:
Joachim Hiller, Head
of Biomedical Department
Timo Baumann, Head
of Department Service
Centre IT and Organisation
Klinik am Eichert in Göppingen, Germany
joachim.hiller@email.de
baumann@kh-it.de

FIRST YEAR OF HEALTHCARE SYSTEM REFORM IN THE REPUBLIC OF CROATIA

By Dražen Jurković

Introduction

In 2008, immediately after the election and establishment of the Croatian Government, at the very beginning of his mandate, the Minister of Health and Social Welfare initiated and supported the model of structural innovative reform. In so doing, the ''re-reform'' idea was dismissed (that is to say ''reverting to the old but maintaining positive solutions''), and the new reform model, was created based on science and knowledge, experience and positive solutions from developed healthcare systems worldwide. The fundamental reason for initiating this reform was the aggregation of debt in healthcare with the constant increase of costs that did not result in adequate quality of protection and work improvement, nor indicators on increased life expectancy and quality of life for citizens/insured persons.

Modified Modus of Collecting Money for Health

Given that money for the healthcare system in Croatia is collected exclusively from contributions from employed persons, with an insignificant amount coming from the budget, one of the most important chapters of the reform was finding new sources of funding through the broad introduction of supplementary health insurance, special contribution from tobacco products, contributions for unemployed, pension fund contributions, charging treatment costs in traffic accidents from insurance companies instead of healthcare funds, charging and introducing participation, and increasing the share of personal consumption for healthcare.

Rationalisation of Consumption – Modified Payment System

Instead of a payment system that consisted of paying hospital capacities and capitation system for primary healthcare, the payment system for provided services, that is, the system of paying delivered health, through DTS (DRG - Diagnose Related Groups) for payment of hospital was introduced as was a performance payment system for payment in primary healthcare, and new mechanisms of intensive treatment payment (SAPS II score) . In the field of consumption of medications, an array of measures is being introduced, a "Pay-back" system, utilisation of electronic guidelines in prescribing medications for most frequent illnesses, international competition for procurement of especially expensive medications, public procurement for vaccines and so on. Also contracted was the delivery of an integral healthcare information system, which, inter alia, should enable the monitoring of healthcare consumption and implementing reform.

Other Reform Interventions

Reduction of sick-leave rate, unification of procurement for expensive equipment, establishment of national waiting lists, standardisation of orthopaedic aids (introduction of ISO 9999) etc... Proposals of structural changes penetrate into all forms of work organisation and present replacement of many current solutions for work organisations with new contents and economic and organisational solutions.

What Has Been Achieved so Far

Reduction of sick-leave rate from 4,2 to 3,69 in first four months, reduction of physical volume of drug consumption by 7%, reduction of number of references for consultative - specialist healthcare. Prescribing permanent prescription for chronic patients, simplified manner of prescribing orthopaedic aids were introduced, and consultative examination in the same institution was provided to specialists in secondary and tertiary level. Competition for the informatisation of primary healthcare system project and for equipment procurement was finished, new sources of financing were ensured, transferring to new evaluation systems and work payment for hospitals, D.T.S. system, etc.

Conclusion

In order to have a real, inventive reform and not a bureaucratic, and formal one, essential changes in management and organisation must be followed, and not only for standards, norms, rules and obligations. The basic aims of the healthcare reform: reduction of (irrational) consumption of medicines, hospital and specialist- consultative healthcare, reduction of inequalities, upgrading preventive activities, improving patients' and medical doctors' satisfaction level, improving the quality of protection and overall effect on health, etc, are achievable and likely to be maintained only through changes to the overall attitude of all participants in the healthcare system.

Healthcare system reform is a process which takes several years of changes, and well-designed and implemented reform in the healthcare system represents a great opportunity for insured persons to receive improved and wider care, for doctors to receive improved evaluation of their work and for it to be recognised by the community, and for the healthcare system to achieve better results in healthcare for the population with equal resources. Accepting the aforementioned principles already applied in business and redesigning work worldwide is one of the fundaments on which the Croatian healthcare system reform is based.

Author:
Dražen Jurković, M.D.,
State Secretary
Republic of Croatia,
Ministry of Health and Social Welfare
e-mail: drazen.jurkovic@mzss.hr

CROATIA'S PREFERRED PARTNERS:

CROATIAN MANUFACTURER OF MEDICAL DRESSINGS AND SANITARY MATERIAL

MORE INFO ON:
www.lolaribar.hr

LOLA RIBAR d.d.
Rijecka 97, 47 000 Karlovac
CROATIA
Tel: +385 47 432 331
Fax: +385 47 432 341
e-mail: info@lolaribar.hr

YOUR RELIABLE PARTNER

Medic Ltd.
Wholesale
Export - Import Agency
10000 Zagreb
Trg Drazena Petrovica 3/VI
CROATIA

Tel: + 385 (01) 48 00 111
+ 385 (01) 48 43 661
Fax: + 385 (01) 48 43 626
Email: medic@medic.hr
Web: **www.medic.hr**

Since 1991 Medic Ltd. has been acting as a successful Croatian company in distribution and representation of world-known producers.

Our programs:

Diagnostics: consumables for laboratory analysis, intrumental methods, chromatography, microbiology, cytology; radiology (films, digital equipment, PACS); contrast media; drug standards

Medical products: interventional cardiology, pacemakers, cardial surgery, neurosurgery; hemodialysis

Medical equipment: sterilization, endoscopy, ophtalmology

PANON Trade d.o.o
Rakitska cesta 43
10437 Rakitje

Telefoni:
(01) 33 25 968
panon-trade@zg.t-com.hr

For nearly 15 years Panon Trade d.o.o. has built up its reputation through the quality of its products, saling medical equipment for hospitals, Social Institutions,Clinics,Retirment homes,Gynecologists, etc.

We represent the bigest world producers for :
- Hospital beds (intensive care,standard care, home care)
- Birthing beds
- Gynecologycal examination tables
- Examination tabbles
- Stretchers, transport chairs
- Equipment for sterilisation
- Hydrotherapy and therapy equipment
- Devices for treatment infective waste

THE INTRODUCTION OF DRGS IN CROATIA

By Tihomir Strizrep & Luka Vončina

In Croatia, hospitals are funded by monthly payments from the state healthcare budget, controlled by the state health insurance fund (Croatian Institute for Health Insurance, HZZO). Funds have to be accounted for through the issue of bills for medical services. These bills are a combination of fee-for-service (FFS) payments for outpatient services and charges levied under a Diagnosis Related Groups (DRG) system referred to as the DTS (in Croatian "Dijagnostičko terapijske skupine") for inpatient services.

Furthermore, hospitals have hard budgets. If a hospital exceeds its annual budget, it will not receive additional funding for any bills levied for further services provided. Conversely if hospitals do not provide enough services to account for all of their budgets in a given year, then, in accordance with their contracts with the HZZO, in the subsequent fiscal year their budgets should be reduced by an amount equal to these unspent funds.

The hospital payment reform was initiated in 2002 with the introduction of case based payments that used broad case groupings referred to as the PPTP (in Croatian "Plaćanje po terapijskom postupku") for certain diagnoses. Interventions for these diagnoses were either costly or numerous and the prospective payment system was intended to provide hospitals with incentives to increase the technical efficiency of service provision. By 2006, the number of services reimbursed via the PPTP system had grown to 118 selected diagnoses, with the remainder being paid for by the historic point-based FFS schedule. Both the use of broad-based case groupings in the PPTP system, as opposed to more detailed DRGs, as well as the prices set for particular PPTPs, have made them quite unpopular with providers. This system has on occasion been accused of underestimating the intensity of resource use for more complicated medical cases.

Nonetheless, encouraged by reports of efficiency gains arising from the implementation of the PPTP schedule, including reductions in length of stay, the government has decided to gradually move towards a comprehensive prospective case-adjusted payment system based on DRGs.

As in some other European countries, such as Ireland, Romania, Germany and Slovenia, Croatia has decided not to develop its own DRG system from scratch, but rather to import and modify the Australian Refined-DRG (AR-DRG) system (specifically, version 5.2), as mentioned already known locally as Dijagnostičko terapijske skupine (DTS). Croatia has developed its own DTS Grouper software, which has been piloted in four Croatian hospitals since February 2006.

As of April 2007, the DTS system has been introduced by the HZZO into all Croatian hospitals, initially running in tandem with existing billing systems. Until January 2009, all hospitals continued to account for their budgets according to the old two-tiered FFS and PPTP schedule, but were also obliged to keep track of cases according to the new DTS schedule.

During this period, the HZZO carried out extensive work with hospitals to ensure the appropriateness and quality of coding practice. As of 1st January 2009 all inpatient hospital services in Croatia have to be accounted for by bills issued according to the DTS system.

One of the greatest challenges to the introduction of the Australian DRG system in Croatia was the difference in DRG costing between the two countries. The original ARG-DG system unsurprisingly made use of Australian data on resources use, clinical practice and the monitoring of hospital billing. For this reason Croatia implemented a detailed costing study to establish local prices for its DTS groups. Table 1 displays the results of the costing study for DTS 060C (Vaginal delivery without complicating diagnosis) in three Croatian hospitals. The price for DTS 060C is set at 4.595,86 kn.

The Government expects that the full implementation of the DTS system will have a profound positive effect on the provision of hospital services in Croatia; shortening length of stay, increasing quality and rationalising cost of treatment.

Hospital	ALOS	Average cost in Croatian Kuna
A	4,89	5.780,65
B	4,00	4.659,10
C	4,07	3.562,74
Croatian average	**4,45**	**4.782,87**

Table 1. Cost of DTS 060C Vaginal delivery without complicating diagnosis in 3 Croatian hospitals

Authors:
Tihomir Strizrep, MD,
Croatian Institute for
Health Insurance,
Managing Director
Luka Vončina, MD, MSc
Email: tihomir.strizrep@hzzo-net.hr

HOSPITAL FOCUS

CLINICAL HOSPITAL CENTRE RIJEKA, CROATIA

By Herman Haller & Andjelko Djirlic

Clinical Hospital Centre Rijeka (KBC Rijeka) is a teaching and patient-centered hospital, providing clinical and empathetic care mostly for patients from Western (Costal) Croatia. The owner of the hospital is the Ministry of Health and Social Welfare, the usual form of organisation for teaching hospitals in Croatia.

As an academic medical centre, Clinical Hospital Centre Rijeka is dedicated to improving the health of the community it serves. A wide variety of clinical specialties is administered among three locations: Rijeka, Sušak and Kantrida.

The medico-technological concept is a regional hospital that will provide treatment to patients with acute diseases, a referral centre for specialised medical care including organ transplantation and a teaching base. The University of Rijeka School of Medicine educates healthcare professionals in various disciplines providing new knowledge and transfer that will define the clinically focused and ethically appropriate healthcare of tomorrow.

KBC Rijeka consists of 43 buildings on 16 ha of land, with a capacity of 1191 beds. The staff of 3.300 employees includes 450 doctors and 1200 nurses. In the last year there were 768.000 outpatients, 367.000 inpatient days and 46.900 admissions. The average length of treatment was 7.8 days, with bed utilisation of 85%.

Almost half of our medical staff is included in the teaching process at the University Of Rijeka School Of Medicine. With over a thousand students, we are the second most important institution for medical education in our country. Our high-ranking comes not just from a modern programme of study; it comes from our commitment to people.

The organisation of the hospital is as follows:

- Management
- Treatment sector
- Medical supply
- Education sector
- Science and research
- Technical and economic sector

Management

The Chief Executive Officer is the highest-ranking official at the Clinical Hospital Centre Rijeka responsible for all aspects of the hospital's operation and financial performance. His high performing team is the Deputy /Medical Director, the Director of Nursing, the Chief Financial Officer and other officials.

The responsibility of the Medical Director is to manage hospital medical operations, assure compliance with hospital policies and by-laws, with decision-making and policy enforcement responsibilities for handling matters within relevant management groups. The Director of Nursing is in charge of hospital nursing, related units and procedures for the nursing staff, provides oversight and management of clinical care processes in compliance with healthcare and hospital regulations, all in cooperation with the head nurses and chief physicians of departments. The responsibility of the Chief Physician is to manage the clinical Department of his/her specialty and serve as liaison between physicians and administrative personnel. The Chief Physician is required to evaluate and optimise the care management approach, the process of disease management, patient satisfaction, and patient safety, and develop processes to assure appropriateness of care including length of stay and ancillary resource utilisation. And finally, assure compliance with hospital and healthcare policies and by-laws.

Healthcare services:

- Outpatient care
- Diagnostics, therapy and rehabilitation
- Day hospital
- Emergency
- Medical Departments

As a teaching base of the University of Rijeka School of Medicine, the Clinical Hospital Centre consists of following departments: Internal Medicine, Surgery, Neurosurgery, Urology and Kidney transplantation surgery, Pediatrics and PICU, Otorhinolaryngology and Cervicofacial Surgery, Gynecology and Obstetrics, Infectious diseases, Maxillofacial and Oral Surgery, Dental medicine, Neurology with ICU and Acute Stroke Management, Dermatology, Ophthalmology, Psychiatry, Orthopedics, Anesthesiology, Central ICU and Pain Management, Radiology, Nuclear Medicine, Physical medicine and Rehabilitation, Laboratory, Microbiology , Radiotherapy and Oncology, Transfusion Medicine and Emergency.

The future organisational concept is integrating all dislocated hospital locations into one – Sušak, situated near the new University campus and the School of Medicine. This location is optimal for the new and modern hospital because it is less than 1 km from the main highway and has best possible transport connections with the entire region, whole country and neighbouring countries.

Because of our medical and hospital heritage, favorable geographical position in the Northern part of the Adriatic region, one of the most attractive tourist regions in Europe, we believe that we have the potential to build a high quality University hospital that will draw patients, students and teachers not only from our region, but also from the entire country and the neighbouring countries.

Authors:
Chief Executive Officer,
Prof. Dr. sc. Herman Haller, Dr. med.
Medical Director, Mr.sc. Andjelko Djirlic
KLINIČKI BOLNIČKI CENTAR RIJEKA
E-mail: ravnateljstvo@kbc-rijeka.hr

CROATIAN HEALTH EMPLOYERS' ASSOCIATION

By Ivan Lukovnjak

There is a long held tradition of mergers of healthcare institutions in Croatia. In 1952 pharmacies merged, followed by the merger of medical spas in 1954, and the merger of hospitals and out-of-hospital institutions in 1957. In 1962 the three above mentioned associations joined and formed the Association of Health Institutions. In 1996, after the legislation on mergers in healthcare had been introduced, the Croatian Health Employers' Association was founded and it undertook the legal responsibilities of the Association of Health Institutions.

The Croatian Health Employers' Association is a non-governmental, non-profit and voluntary association of both public and private institutions. At the moment the Association has 205 health institutions as its members. Apart from hospitals, the members of the Association are primary care institutions, institutions for treating medical emergencies, polyclinics, public health institutes, and pharmacies. The work of the Association is organised and carried out by a number of bodies and committees.

Since the Association represents a variety of health institutions, there are special interest groups (SIGs) reflecting the work and the needs of particular institutions. Thus, the Association has SIGs for Hospitals, Primary Care Institutions, Polyclinics, Public Health Institutes, Home Care, and Pharmacies. Each SIG elects its Executive Committee that acts as its executive body and deals with relevant issues pertaining to the SIG members' work and activities. Considering the complexity of issues related to its work, and in order to increase its efficiency and nurture its professionalism, the Association has formed the following committees: the Economic Committee, the Legal Committee, the Committee of Hospital Engineers, and the Committee for Hospital Nutrition.

According to the present legislation, the employer in healthcare is an institution. Hence, the employers' representatives in the Association's governing bodies are mostly the heads of member institutions.

The Association's activities are regulated by its bylaws, and they include the following:

- Monitoring and analysing the financial and social position of its members;
- Preparing and carrying out programmes and projects designed to improve the conditions of work and business activities;
- Fostering cooperation among members pertaining to concrete issues related to their work and activities so as to increase their efficiency in providing healthcare services and improve their work and work organisation;
- Improving the members' legal matters and providing legal assistance in enforcing laws and professional regulations;
- Improving management in healthcare and providing education in management;
- Publishing professional journals in order keep its members informed about relevant business matters and matters related to healthcare services provided by other institutions;
- Negotiating collectively with the employers' associations in healthcare and participating in signing collective agreements dealing with and related to terms and conditions of employment;
- Providing advisory and other assistance for all its members in order to promote their rights and interests, and
- Representing its members in court or before arbitral tribunals, employers' associations and state authorities in cases related to labour relations.

The bylaws also regulate the possibility of joining other organisations as members or merging with another domestic or international organisation whose aim is the protection and promotion of healthcare providers' rights and interests. In accordance with this regulation, the Association made its first contact with the European Association of Hospital Managers in January 1992. Croatian representatives were invited to attend its Executive Committee's meeting held on 14 April 1994 where the Association's application for membership was discussed. It was decided unanimously that the Croatian Health Employers' Association would become a full member of the EAHM at their General Assembly in Berlin. On 1 September 1994, the General Assembly, following the recommendation made by the Board from Berlin, unanimously accepted the Croatian Health Employers' Association as their full member. Since then the Association has participated actively in the work of the EAHM. A significant contribution to their work was made in 2000 when the Association organised their 18th Congress held in Opatija, Croatia.

As for hospitals, it is important to stress that that all public hospitals are members of the Association, which means that they have found their own interest in being its member, and that their joint participation in its work brings certain benefits. The overall capacity of hospitals that are members of the Association is 21, 905 beds (73% for acute patients, and 27% for chronic patients). Furthermore, it has 1,803 offices for specialists and 1,336 diagnostic rooms. The Association's hospitals have a total of 45,827 employees, out of which 70% is medical staff and 30% non-medical employees.

In order to understand the issues related to the hospitals' work, it is crucial to know

that in 2008 the hospitals' total revenue was 1.5 billion euros, whereas their expenses totaled 1.4 billion euros. Since 87% of the total revenue comes from the Croatian Institute for Health Insurance (the HZZO), it is understandable that a significant number of the Association's activities are related to the cooperation with the Institute so as to ensure the best possible conditions for the work of member hospitals. The head of the Association regularly attends the Institute's Board meetings where s/he he expresses the Association's members' views, thoughts, proposals, and objections related to the acts and documents discussed and regulated by the Institute. The members of the Association are also members of various work groups in which they, together with the representatives from the Institute and medical chambers, work on designing proposals related to documents regulating the work of hospitals.

These activities have been particularly intensive since 1 January 2009 when the DRG system was introduced instead of the old system. In the first stage of its implementation, the purpose of the DRG system is to justify the amount of hospital budget, whereas in the second stage the system should be used as the basis for distribution of finances for healthcare provided by hospitals.

Since the expenses for hospital employees make from 70% to 85% of the total expenses, it is logical that all the activities related to monitoring these expenses are in the focus of attention of healthcare institutions, including the Croatian Health Employers' Association. The Association has limited influence on the level of these expenses because they are determined by the agreement between the Croatian Ministry of Health and Social Welfare and healthcare unions. Even though the Association was part of the negotiating team on the side of the Croatian Government in the process of drafting the latest Healthcare and Health Insurance Collective Agreement, it was not one of the signers of the Agreement. We certainly hope that in the process of drafting a new agreement, the Association will be one of the signers, which means that it will participate in both discussing the agreement's content and the process of its implementation, which will significantly affect the level of expenses for employees.

In the last eight months the Association has cooperated intensively with the Ministry of Health and Social Welfare. The reason for that is new legislation which serves as the basis for the project dealing with Croatian healthcare reform. The Association's representatives participated in work groups and their activities and workshops organised by the Ministry and related to drafting new laws as well as their implementation.

Every year the activities of the Association are defined by the Programme of Activities decided by the Association's Assembly at its annual meetings. The Programme is related to the previously described activities defined by the bylaws. The responsibility of the Directorate of the Association is continual monitoring of financial and social status of healthcare institutions and reporting on it regularly every three months and at the end of every year. Special attention is paid to the financial instruments related to the Croatian Institute for Health Insurance. In order to ensure the best possible conditions for the member's work and business activities, the Economic Committee and the Directorate communicate with the Institute concerning the financial instruments proposed by the Institute. Unfortunately, most proposals made by the Association are not accepted. The rejection is justified by the fact that the budget of the Institute is part of the State Budget which is limited.

In 2009 the Association has been particularly active in improving legal matters due to the new Healthcare Law. Having considered the new Law, the Directorate drafted a new version of the bylaws and distributed its samples to all healthcare institutions. Furthermore, this year the Association has worked intensively in the area of advisory and assistance activities, primarily by organising various professional conferences as well as individual meetings with the representatives of particular institutions.

The Association has also contributed by publishing professional journals. Pharmaca has been published since 1962, and the catalogue of medicines since 1963. The fact that these publications have been published for 46 years proves their quality as well as the healthcare community's need for such publications.

The activities of the Association are financed by membership fees, income from selling professional publications, income from projects and income from organising conferences. The total yearly income of the Association is around 700,000 euros.

This article does not to give a comprehensive account of all the activities performed by the Association. We have managed to present and describe just a few of them. For more details and information about the Association, please contact our website: www.upuz.hr.

Author:
Ivan Lukovnjak
Deputy General Manager
Croatian Health Employers' Association
info@upuz.hr

Correction Volume 11 Issue 2 2009

"Postponing is Poison: Conflict Resolution Patterns in Hospitals" (pg.28-29) We failed to mention that the conducted analysis of the European NEXT-Study was sponsored by WOQUAL Health and Safety for Work Quality, Université Catholique de Louvain, Brussels and funded by the European Union (QLK6-CT-2001-00475 / PIIF-GA-2008-220641).

Willy Heuschen

SOMMES-NOUS L'EUROPE?

La participation limitée des citoyens de l'UE à l'élection du nouveau Parlement européen impose la question. Les origines de ce manque de motivation sont nombreuses. Les attentes des citoyens vis-à-vis de l'Union européenne jouent certainement un rôle important. Les commentaires de presse ont parlé de manque d'intérêt allant jusqu'à l'euroscepticisme de la part des citoyens européens.

Le signal serait alors de limiter le champ d'action des politiques européennes et de limiter leurs conséquences sur la vie des citoyens. Les défenseurs de cette attitude voient plutôt l'Europe comme nuisible. D'autres sont déçus par l'UE, puisque Bruxelles ne peut ni éviter les crises économiques ni créer des emplois indispensables. Certains citoyens voient l'Europe comme une panacée universelle, un espace de libre-service gratuit ou une décharge pour leurs problèmes, sans frais bien sûr. Les champions de l'UE ont un autre point de vue. Ils savent que la coexistence largement pacifique des pays de notre continent a été soutenue et consolidée par la croissance européenne depuis la fin de la dernière guerre mondiale. Ils savent que sans l'euro, la crise économique et financière actuelle aurait été un désastre encore plus grand. Ils savent que sans représentation de leurs intérêts au niveau européen, les états souverains auraient été exclus du processus de mondialisation.

Je l'admets, ces arguments ne sont pas toujours convaincants pour les instances dirigeantes des hôpitaux européens. Les uns préfèrent voir leurs établissements sous la protection de leurs autorités nationales. Ils craignent les inconvénients de l'harmonisation. D'autres cadres hospitaliers savent que cette harmonisation présuppose avant tout la volonté politique, actuellement absente ou trop faible, des états nationaux. Même le Parlement européen et une Commission composée par les états-membres peuvent difficilement poursuivre de nouvelles orientations politiques contre la volonté des pays de l'UE, même si la situation politique l'exige à long terme.

Ces gestionnaires hospitaliers connaissent également le long parcours d'un processus d'harmonisation qui, vu les différences existant dans le paysage hospitalier européen, ne peut progresser que par petits pas. Un lobby hospitalier fort contribue à façonner ces étapes. Une autre source de motivation est d'apprendre à connaître et surtout d'apprendre les uns des autres. Les missions de gestion des hôpitaux sont soumises à de profonds changements, dont la modification des relations et attentes de la part de nos patients et de nos personnels par rapport aux progrès de la technique médicale et à la réglementation des hôpitaux, qui entraîne souvent des pertes de revenus importantes. Même si de pays à pays, et souvent de région à région, ce changement se profile différemment, de nombreuses similarités existent.

Les défis de ce changement sont souvent gérés différemment. Un benchmark entre hôpitaux offre une incitation à adopter des méthodes efficaces de management. Cela se fait déjà au niveau national. Les associations nationales peuvent promouvoir cette approche d'apprentissage mutuel. Beaucoup de nos membres le font déjà, avec succès. Un benchmark entre hôpitaux européens peut transmettre plus d'expériences utiles. A côté du travail de lobbying, ceci est une mission pour l'AEDH, en tant qu'organisme chapeautant les directeurs d'hôpitaux des pays européens. Grâce à nos groupes de travail, nos congrès et séminaires, et bien sûr grâce à Hospital, notre magazine, nous essayons d'être à la hauteur de notre mission. Nous créons aussi une base d'identification plus poussée avec l'Europe, que ne nous est pas imposée par la structure politique, mais par notre propre organisation, depuis la base.

Un peu plus d'Europe, bien comprise et traduite dans les faits, n'est pas seulement indispensable à long terme, mais comporte aussi des avantages pour nous tous.

Willy Heuschen
Secrétaire Général de l'AEDH - Rédacteur en chef

Les éditoriaux d'*(E)Hospital* sont rédigés par des membres des instances dirigeantes de l'AEDH. Les contributions publiées ici ne reflètent cependant que l'opinion de leur auteur et ne représentent en aucune façon la position officielle de l'AEDH.

LES MICROBES MENACENT LA SÉCURITÉ DU PATIENT EN EUROPE

La prolifération de bactéries résistantes aux antibiotiques représente un défi pour les soins de santé. Les antibiotiques perdent leur efficacité clinique à un rythme plus rapide que prévu jusqu'il y a cinq ans, et cela entraîne des conséquences sérieuses sur la morbidité et la mortalité mais aussi sur la durée et le coût des séjours hospitaliers.

Les infections associées aux soins de santé (Healthcare Associated Infections ou HCAIs) sont un souci constant, surtout quand elles se doublent d'une résistance accrue aux antibiotiques. On estime qu'elles infectent quatre millions de personnes par an en Europe, causant la mort d'environ 37.000 personnes et augmentant les séjours hospitaliers de 16 millions de journées par an. Leur coût économique se monte à 5,5 milliards d'euros chaque année. Avec l'augmentation de la mobilité du patient à l'intérieur de l'UE, les HCAIs et la résistance anti-microbienne deviennent de plus en plus un problème européen.

Avec l'organisation de la Conférence sur la Menace microbienne à la Sécurité du Patient en Europe , qui a rassemblé des représentants des états-membres, des médecins, des directeurs d'hôpitaux et des scientifiques, la présidence tchèque de l'Union a voulu «ouvrir la voie à l'engagement politique.» Des ministres et des experts ont appelé de leurs vœux une action urgente pour arrêter la résistance croissante aux antibiotiques, qui freine l'efficacité clinique des médicaments et augmente les infections associées aux soins de santé.

Un des objectifs principaux de la conférence était de promouvoir la gestion des antibiotiques à l'hôpital. En plus de mesures de contrôle de l'infection destinées à surveiller la prolifération d'organismes résistant à une gamme de médicaments, un programme d'intendance antibiotique hospitalière a été proposé afin d'optimaliser l'utilisation thérapeutique et prophylactique des antibiotiques.

En outre, une coopération européenne est également nécessaire au niveau de la recherche et du développement de nouveaux antibiotiques, un objectif de la présidence suédoise de l'Union européenne.

L'accent a également été mis sur la façon dont les caractéristiques du système de santé influencent la résistance anti-microbienne et les HCAIs. Des problèmes structurels, organisationnels, financiers et managériaux ont tous une importance considérable. Ils varient de pays à pays, et la conférence a été l'occasion de discuter des forces et des faiblesses, des opportunités et des menaces autour de cette question.

Un des points principaux de la conférence était le leadership, la responsabilisation et le rôle qu'ils jouent dans la lutte contre la menace microbienne. Durant un workshop sur le sujet, dirigé par notre représentant le Dr J. Scheres, différentes bonnes pratiques européennes ont été présentées. Les groupes ont eu l'occasion d'entendre différentes stratégies de réduction des risques pour le patient liés à la résistance anti-microbienne et aux infections associées aux soins de santé ainsi que le rôle des gouvernements, des autorités sanitaires et de la gestion hospitalière (la présentation du Dr Scheres sur «le Rôle de la Direction hospitalière» est disponible sur le site de l'AEDH, www.aedh.eu.org).

Il a été suggéré que la direction hospitalière devrait s'atteler à dissiper le mythe selon lequel les HCAIs sont inévitables. On a souligné que le contrôle de l'infection n'était souvent pas une priorité pour les hôpitaux, parce qu'il ne présente pas de bénéfice direct; les HCAIs sont coûteuses mais n'influencent souvent pas le budget alloué à un hôpital. Le soutien de la surveillance, ainsi que la gestion qualité et l'accréditation hospitalière ont également été examinés. Il a été suggéré que l'amélioration de la qualité devrait être conduite par les dirigeants par le biais de données basées sur les preuves. En outre, le rôle de la gestion hospitalière en ce qui concerne l'intendance et la surveillance antibiotiques devrait être renforcé.

Les ministres finlandais, portugais, slovène et suédois se sont accordés sur le fait qu' «il est nécessaire de renforcer la coopération des états-membres de l'UE et l'échange d'expériences en termes d'implémentation de stratégies nationales concrètes, de programmes et de mécanismes de prévention et de contrôle de l'infection.»

La conclusion générale de cette conférence a été que les «les infections n'ont pas de frontières». La résistance anti-microbienne est un problème international et ne peut être combattu que par une coopération appropriée, internationale et au niveau de chaque hôpital, combinée à un fort soutien politique. Un appel a été lancé pour une utilisation prudente des antibiotiques à l'hôpital et une proposition a été faite autour de normes et d'indicateurs mesurables pour les programmes hospitaliers anti-microbiens.

Vu que ce défi va aller en s'intensifiant, l'AEDH encourage les directeurs d'hôpitaux en Europe à prendre la tête du combat contre la menace microbienne et à assurer la sécurité du patient à l'hôpital.

Tourisme médical – Le marché international du Voyage médical

Par Michael D. Horowitz

Le marché du voyage médical a été transformé par l'émergence récente du tourisme médical, un phénomène où les citoyens des pays industrialisées contournent les services médicaux offerts dans leur propre pays pour se rendre dans des pays en voie de développement afin d'y recevoir des soins. Des tarifs attractifs constituent la première motivation des Américains qui font appel au tourisme médical. Pour les patients canadiens, britanniques et venant de pays où un système de santé gouvernemental contrôle l'accès aux services médicaux, l'incitant principal pour voyager à l'étranger est le désir d'être soigné rapidement et d'éviter les retards liés aux longues listes d'attente. Le voyage international médical a un effet potentiel sur les systèmes de santé du pays d'origine ainsi que du pays de destination.

Indicateurs de Qualité pour Patients hospitaliers internationaux

Par Tricia J. Johnson, August Österle

Les patients internationaux sont devenus un socle lucratif pour certains hôpitaux, car ces patients paient généralement de leur poche et au moment où les services sont prestés. Les facteurs principaux qui incitent les consommateurs à se rendre dans d'autres pays pour y recevoir des soins médicaux sont le prix, l'accès et la qualité.

La qualité dans le tourisme médical se divise en trois catégories principales: traitement médical, communication, et logistique générale. Il est largement reconnu que l'accréditation internationale est une bonne manière de signaler un haut niveau de qualité aux patients internationaux. Pour l'instant quatre organisations accréditent les hôpitaux dans plusieurs pays: Joint Commission International, Accreditation Canada, l'Australian Council for Healthcare Standards International et le Trent Accreditation Scheme. Pour attirer les patients internationaux, un hôpital doit pouvoir promouvoir ses services.

Mobilité et Sécurité du Patient : Résultats d'une Etude qualitative sur le Point de Vue des Professionnels

Par Oliver Groene, Paula Vallejo, Rosa Suñol

Cette étude a identifié un certain nombre de questions qui affectent potentiellement la qualité et la sécurité des soins transfrontaliers. Alors que les exigences de qualité pour les soins transfrontaliers sont les mêmes que pour les patients locaux, certaines situations requièrent une attention particulière en ce qui concerne les besoins des patients transfrontaliers. Ceci inclut par exemple les problèmes de communication liés à l'anamnèse et au consentement informé; à la sécurité médicamenteuse vu les différences de types et de dosage de médicaments; à la continuité des soins après la sortie, étant donné le manque d'informations fournies au patient et aux prestataires de soins de suivi; et à la difficulté d'organiser un transfert médical de retour des patients à travers les frontières.

Le Livre Vert de l'UE décrit la Situation du Personnel de Santé

Par Dervla Gleeson

Lancé officiellement en décembre 2008, le Livre vert de la Commission européenne sur le Personnel de Santé de l'UE reconnaît que les systèmes de santé européens font face à de nombreux défis, dont la mobilité et la migration des travailleurs de santé au sein de l'UE. Cet article en résume les points principaux.

Le Livre vert décrit les défis communs à tous les états-membres en matière de personnel de santé. Ces défis sont la démographie et la durabilité du personnel de santé, les capacités de santé publique, la formation, la mobilité des travailleurs de santé à l'intérieur de l'UE, la migration des travailleurs de santé au niveau mondial, les données qui soutiennent la prise de décisions, les technologies nouvelles, le professionnel de santé en tant qu'entrepreneur, et la politique de cohésion.

Le Programme DATABANK

Par Kevin Reed

DATABANK a connu la célébrité lorsqu'il a été utilisé par l'American Hospital Association (AHA) qui a publié deux dossiers sur l'impact de la dégradation de l'économie américaine sur les hôpitaux locaux à travers le pays. C'est une base de données sur Internet, qui collationne des données telles que les sorties, les journées de séjour, les charges, les indemnités contractuelles, les soins gratuits, les dépenses et les effets patients bruts à recevoir, avec l'objectif de donner aux gestionnaires hospitaliers autant de données pertinentes, actualisées et complètes que possible.

Les gestionnaires hospitaliers trouvent le programme utile pour la comparaison des performances de leur hôpital avec d'autres établissements similaires. Les avantages de DATABANK consistent en des données actualisées et comparables, la création de groupes de pairs sur mesure, ainsi que des rapports et graphiques réguliers envoyés par mail tous les mois.

Evaluez mon Hôpital

Par John Gibbons

Ratemyhospital.ie a été lancé en septembre 2006 avec pour objectif de placer le patient solidement au centre de la presta-

tion de soins. Son mécanisme est un questionnaire complet en ligne comprenant 23 parties. A ce jour, 16.500 formulaires complets ont été rentrés, qui couvrent presque 70 hôpitaux publics et privés. Comme prévu, Rate my Hospital a reçu un accueil glacial de la part des autorités sanitaires et de nombreux gestionnaires hospitaliers, et le personnel a réagi avec indignation au culot des patients qui osaient dire ce qu'ils pensaient.

Cependant, toutes les réactions n'ont pas été négatives. Les cadres hospitaliers ont compris les avantages de cette procédure anonyme de plainte et de ce site web en tant qu'outil de détection des forces et des faiblesses du fonctionnement de l'hôpital. En fait, certains gestionnaires ont contacté le site pour recevoir des données supplémentaires à intégrer à leur procédure de gestion qualité interne. Le projet a été reconnu au niveau international en 2007, lors des World Summit Awards sponsorisés par l'ONU à Venise.

Déchets cliniques dangereux : la Perception a-t-elle Remplacé la Science ?

Par Karl Dalton

Imaginez des sacs de déchets cliniques, avec leurs symboles signalant un danger biologique, abandonnés dans la rue. Cela provoquerait une grande panique, mais quel danger représentent réellement les déchets cliniques par rapport aux déchets ménagers? Nous supposons que tous les déchets cliniques proviennent de patients souffrant de maladies infectieuses pathogènes et qu'un contact présenterait une grande probabilité de contamination. Ce que nous ne voyons pas est que la charge bactérienne des déchets hospitaliers peut être de 10 à 10.000 fois moins importante que celle des déchets ménagers.

Il existe différentes techniques de traitement des déchets cliniques, traditionnelles et alternatives, toutes coûteuses, et allant de l'incinération à la macération et à l'enfouissement direct. Il est clair que des recherches réactualisées sont nécessaires pour déterminer les risques réels posés à l'environnement et à la santé humaine par les déchets cliniques. Si des preuves scientifiques peuvent démontrer que nous allons au-delà des exigences de sécurité, on pourra réaliser d'énormes économies.

Coûts de Facility Management au Bloc opératoire : un Modèle de Processus

Par Karin Diez, Kunibert Lennerts

L'adoption du système allemand de DRG (Diagnosis Related Grouping) et la pression budgétaire qui en a résulté a intensifié la nécessité d'une utilisation optimisée des ressources spatiales à l'hôpital.

Au bloc opératoire, le processus le plus coûteux est l'approvisionnement en produits stériles. Une étude allemande de quatre hôpitaux a démontré que 39% des coûts de facility management est relié à l'approvisionnement en produits stériles. Etant donné la durée possible des opérations et la différence de coûts en produits stériles pour un style d'opération relativement court mais complexe, comme l'articulation de la hanche par exemple, il est évident qu'il faut allouer les ressources financières de façon transparente et réaliste. Les chercheurs de l'Institut de Technologie de Karlsruhe développent un modèle qui permet une allocation financière réaliste pour les flux de facility management en relation avec les processus primaires. Ceci constitue une base très importante de planification stratégique de l'espace et des ressources de l'hôpital.

Country Focus: Croatie

La première Année de Réforme du Système de Santé en République de Croatie

En 2008, au début de son mandat, le ministre de la santé et des affaires sociales a lancé le modèle d'une réforme structurelle innovante, motivée par une dette croissante des dépenses de santé. Les objectifs de base de la réforme des soins de santé sont la diminution de la consommation (irrationnelle) de médicaments, des soins hospitaliers et des consultations de spécialistes, la réduction des inégalités, la promotion d'activités de prévention, l'amélioration de la satisfaction du patient et du médecin, ainsi que de la qualité de la protection et l'effet général sur la santé, etc. Les résultats jusqu'à présent consistent en une diminution du taux de congé de maladie de 4,2 à 3,69 dans les quatre premiers mois et une réduction de la consommation de médicaments de 7%.

L'Introduction des DRGs en Croatie

Le gouvernement croate a décidé d'évoluer progressivement vers un système de paiement complet, prospectif et ajusté par cas sur base des DRGs. Depuis le 1er janvier 2009, tous les services résidentiels hospitaliers croates doivent être facturés selon le système DTS. Le gouvernement espère que l'implémentation complète du système DTS aura un effet positif important sur la prestation de services hospitaliers en Croatie: réduction de la durée de séjour, augmentation de la qualité et rationalisation du coût des traitements.

L'Association des Employeurs de Santé croates

L'Association des Employeurs de Santé croates est une organisation volontaire non gouvernementale et sans but lucratif rassemblant des institutions publiques et privées. Elle est devenue membre de l'AEDH en 1994. Ses activités récentes se sont concentrées sur l'amélioration des questions juridiques liées à la nouvelle loi sur les soins de santé.

Willy Heuschen

SIND WIR EUROPA?

Die geringe Beteiligung der EU-Bürger an der Wahl zur Neuzusammensetzung des Europäischen Parlamentes drängt diese Frage auf. Die Ursachen dieser mangelnden Motivation zur demokratisch-politischen Mitgestaltung der EU sind sicherlich vielfältig – so spielt die Erwartungshaltung der Bürger an die Europäische Union eine wichtige Rolle. Die zugrunde liegende Erwartung ist, das Aktionsfeld der europäischen Politik zu beschneiden und damit die Folgen im Leben des Bürgers so gering wie möglich zu halten. Die Verfechter dieser Haltung sehen Europa eher als Übel. Andere sind enttäuscht, da Brüssel weder Wirtschaftskrisen vermeiden noch die brotnötigen Arbeitsplätze schaffen kann, und einige betrachten Europa eher als Allheilmittel, als einen möglichst kostenfreien Selbstbedienungsladen oder als Mülldeponie ihrer Probleme mit Entsorgungspflicht zum Nulltarif. Die Verfechter der EU haben eine andere Haltung. Sie wissen, dass das friedliche Zusammenleben der europäischen Staaten seit Ende des Krieges durch das europäische Zusammenwachsen gefördert und gefestigt wurde; dass ohne Euro die derzeitige Wirtschaftskrise zu einem noch größerem Desaster geworden wäre, und dass sie ohne eine europäische Interessenvertretung der Nationalstaaten als aktive Akteure im Globalisierungsprozess außen vor bleiben .

Zugegeben: Diese Argumente überzeugen manchmal auch die Führungskräfte der Krankenhäuser in den EU-Staaten nicht. Auch hier klaffen die Meinungen auseinander. Die Einen sehen ihre Kliniken in der Obhut ihrer Nationalstaaten besser aufgehoben. Sie befürchten Nachteile für ihre Häuser durch eine europäische Harmonisierung der nationalen Gesetze und Vorschriften. Andere Krankenhausverantwortliche wissen, dass eine solche Harmonisierung zunächst den derzeit fehlenden bzw. zu schwachen politischen Willen der Nationalstaaten voraussetzt. Selbst das EU-Parlament und die Kommission vermögen kaum neue politische Akzente wider den Willen der EU-Länder durchzusetzen, selbst dann nicht, wenn es der politische Sachverstand gebietet. Diese Krankenhausmanager wissen, dass jeder Harmonisierungsprozess aufgrund der vielfältigen Unterschiede in der europäischen Krankenhauslandschaft ein Weg der kleinen Schritte sein muss; gleichzeitig sind sie überzeugt, dass eine starke Krankenhauslobby diese Schritte mitgestaltet. Die Führungsaufgabender Kliniken unterliegen einem starken Wandel: Angefangen bei Verhaltens- und Erwartungsveränderungen unserer Patienten und Mitarbeiter über den Fortschritt der Medizintechnik bis hin zu den staatlichen Rahmenbedingungen der Krankenhäuser. Die Herausforderungen dieses Wandels werden von Führungskräften unterschiedlich gemanagt, mit entsprechend vielfältigen Resultaten. Ein Benchmark zwischen Krankenhäusern kann durch Erfahrensaustausch dabei helfen, erfolgreiche Managementmethoden zu übernehmen. Diese Erfahrung stimmt auf Landesebene. Die Nationalverbände der Krankenhausdirektoren können, neben der wahrzunehmenden Interessenvertretung ihrer Mitglieder, diesen Ansatz des gegenseitigen Lernens fördern. Viele der uns angeschlossenen Verbände tun dies mit beachtlichen Erfolgen. Ein Benchmark zwischen europäischen Krankenhäusern kann weitere nützliche Erfahrungen vermitteln. Neben der Lobbyarbeit auf dem europäischen Parkett ist dies eine weitere Aufgabenstellung, die die EVKD als Dachverband der Krankenhausdirektoren der europäischen Länder wahrzunehmen hat. Durch unsere ständigen Arbeitsgruppen, unsere Kongresse und nicht zuletzt durch Hospital, unserer Fachzeitschrift, bemühen wir uns, dieser Aufgabenstellung gerecht zu werden. Durch das Zusammenführen von Berufskollegen verschiedener Länder schaffen wir ein Forum, das unseren Einrichtungen wesentliche Vorteile vermitteln kann, und die Basis einer stärkeren Identifizierung mit Europa. Ein Stück mehr Europa ist nicht nur langfristig unerlässlich, sondern bringt auch im Endeffekt auch Vorteile.

Willy Heuschen
EVKD Generalsekretär
Chefredakteur

Leitartikel in *(E)Hospital* werden von Führungspersönlichkeiten der EVKD verfasst. Die hier veröffentlichten Beiträge geben dennoch ausschließlich die Meinung der Autoren wieder und sind nicht als offizielle Stellungnahme der EVKD zu werten.

DIE MIKROBIELLE GEFAHR FÜR PATIENTENSICHERHEIT IN EUROPA

Die Ausbreitung Antibiotika-resistenter Bakterien ist eine Herausforderung für das Gesundheitswesen. Nachdem Antibiotika ihre klinische Wirksamkeit schneller verlieren, als dies noch vor fünf Jahren hätte vorausgesagt werden können, sind die Konsequenzen für Morbidität und Mortalität schwerwiegend – nicht zu vergessen die Auswirkungen auf die Dauer des Krankenhausaufenthalts und erhöhte Kosten. Nosokomiale Infektionen (healthcare associated infections, HCAI) geben Anlass zu konstanter Sorge, vor allem kombiniert mit einer erhöhten Antibiotika-Resistenz. Nach Schätzungen werden jährlich vier Millionen Menschen in Europa infiziert, es gibt 37.000 Todesfälle und 16 Millionen zusätzliche Spitalsbetten werden benötigt. Aus rein wirtschaftlicher Sicht beläuft sich die Gesamtsumme auf etwa 5,5 Milliarden Euro pro Jahr. Angesichts der gesteigerten Patientenmobilität innerhalb der EU werden auch die HCAIs und antimikrobielle Resistenzen mehr und mehr zu einem paneuropäischen Aspekt.

Mit der Organisation der Konferenz zum Thema „Die mikrobielle Gefahr für Patientensicherheit in Europa", welche Repräsentanten der Mitgliedstaaten, Ärzte, Krankenhausmanager und Wissenschaftler zusammenführt, möchte die Tschechische EU-Präsidentschaft „den Weg für politisches Engagement ebnen." Minister und Experten riefen dazu auf, dringend Sofortmaßnahmen gegen die ansteigende Antibiotikaresistenz einzusetzen, da diese die klinische Wirkung von Medikamenten vermindert und nosokomiale Infektionen fördert.

Ein zentrales Ziel der Konferenz war die Förderung von Führungsprogrammen im Bereich von Krankenhausantibiotika. Neben Maßnahmen zur Kontrolle von Infektionen und damit von multi-drug Resistenzen wurde ein Führungsprogramm für Krankenhausantibiotika vorgeschlagen, um den Antibiotika-Einsatz für Therapie und Prophylaxe zu optimieren. Zusätzlich ist die Europäische Kooperation für die Forschung und Entwicklung neuer Antibiotika nötig – ein Ziel der Schwedischen EU-Präsidentschaft.

Auch wurde betont, wie bestimmte Merkmale der Gesundheitssysteme die antimikrobielle Resistenz und damit HCAIs beeinflussen. Strukturelle, organisatorische, finanzielle und betriebsführende Bereiche haben alle einen wesentlichen Einfluss. Sie unterscheiden sich von Land zu Land, und diese Konferenz bot die optimale Chance, um Stärken und Schwächen, Gelegenheiten und Gefahren dieses Themas zu diskutieren.

Einer der Schwerpunkte der Konferenz waren Führung und Verantwortung und welche Rolle diese Faktoren im Kampf gegen die mikrobielle Gefahr spielen. Während eines Workshops zu diesem Thema, geleitet von unserem Repräsentanten Dr. J. Scheres, wurden mehrere ‚best practices' aus ganz Europa vorgestellt. Die Gruppen erhielten Informationen über Strategien zur Verminderung von Patientenrisiken, die mit Antibiotika-Resistenz und HCAIs verbunden sind, und außerdem über die Rollen der Regierung, der Führungskräfte des Gesundheitswesens und des Krankenhausmanagements (die Präsentation von Dr. J. Scheres über ‚Die Rolle des Krankenhausmanagements' kann über die EAHM Website abgerufen werden, www.eahm.eu.org).

Ein Vorschlag lautete, dass das Krankenhausmanagement verstärkt daran arbeiten sollte, das Missverständnis: ‚HCAIs sind unvermeidbar' auszuräumen. Es wurde darauf hingewiesen, dass die Infektionskontrolle wegen eines Mangels eines direkten Budgets oftmals keine Priorität hat – HCAIs sind teuer, doch in vielen Ländern haben sie keinen Einfluss auf das einem Krankenhaus zugeteilte Budget. Auch der besseren Überwachung, dem Qualitätsmanagement und der Krankenhausakkreditierung wurde viel Aufmerksamkeit entgegen gebracht. Ein weiterer Vorschlag lautete, dass Führungskräfte Qualitätsverbesserungen mithilfe evidenz-basierter Daten vorantreiben sollten. Außerdem sollte die Rolle des Krankenhausmanagements in der Führung und Überwachung von Antibiotika-Fragen gestärkt werden.

Die Minister von Finnland, Portugal, Slowenien und Schweden kamen zu der Übereinstimmung, dass „es für die Implementierung konkreter nationaler Strategien, Programme und Mechanismen notwendig ist, die Kooperation der EU-Mitgliedstaaten und den Erfahrungsaustausch zu stärken, um eine bessere Infektionsprävention und -kontrolle zu erlangen."

Die allgemeine Schlussfolgerung dieser Konferenz: „Infektionen kennen keine Grenzen." Die antimikrobielle Resistenz ist ein internationales Problem und kann nur mit ausreichender Kooperation – von der internationalen Ebene bis hin zur Krankenhausebene – wirksam bekämpft werden; kombiniert mit starkem politischem Rückhalt. Es wurde dazu aufgerufen, Antibiotika in Krankenhäusern wohlüberlegt einzusetzen, gefolgt von einem Vorschlag für Standards und messbare Indikatoren für antimikrobielle Programme an Krankenhäusern.

Angesichts der Tatsache, dass diese Herausforderung auch in Zukunft nur größer werden wird, ruft die EAHM alle Krankenhausmanager in Europa dazu auf, die Führung im Kampf gegen die mikrobielle Gefahr zu übernehmen, und die Sicherheit der Patienten in Krankenhäusern zu gewährleisten.

Medizintourismus – Der Internationale Medizinreisemarkt *Von Michael D. Horowitz*

Der Markt für medizinisch bedingtes Reisen ist durch das aktuelle Aufkommen des Medizintourismus grundlegend verändert worden. Hierbei handelt es sich um ein Phänomen, in dem Bürger der Industrienationen die in ihrem eigenen Land angebotenen Gesundheitsleistungen umgehen und in Entwicklungsländer reisen, um sich dort einer medizinischen Behandlung zu unterziehen. Die attraktiven niedrigen Kosten sind der primäre Ansporn für US-Amerikaner, um diese Leistungen in Zielorten des Medizintourismus aufzusuchen. Bei Patienten aus Kanada, Großbritannien und anderen Ländern, wo ein staatliches Gesundheitssystem den Zugang zu medizinischer Leistung reglementiert, liegt die hauptsächliche Motivation für die Reise in andere Länder darin, eine rechtzeitige Behandlung zu erhalten und Verzögerungen zu vermeiden, die mit langen Wartelisten assoziiert sind. Der Internationale Medizintourismus hat potentielle Einflüsse auf die Gesundheitssysteme beider beteiligten Länder.

Qualitätsindikatoren für Internationale Krankenhauspatienten *Von Tricia J. Johnson, August Österle*

Internationale Patienten sind für manche Krankenhäuser zum lukrativen Geschäft geworden, da diese Patienten üblicherweise ihre in Anspruch genommenen Leistungen sofort und vollständig bezahlen. Die Motivation für das Reisen in ein anderes Land zwecks medizinischer Leistung beruht auf drei wesentlichen Faktoren: Kosten, Zugang und Qualität. Die Qualität im Markt des Medizintourismus setzt sich aus mindestens drei Hauptkategorien zusammen, nämlich die Qualität der medizinischen Behandlung, die Kommunikation und die umfassende Qualität der Logistik. Es ist weithin akzeptiert, dass eine internationale Akkreditierung ein guter Weg ist, um internationalen Patienten eine hohe Qualität zu vermitteln. Im Moment gibt es vier Organisationen, die Krankenhäuser für mehrere Länder akkreditieren: die ‚Joint Commission International', die ‚Accreditation Canada', der ‚Australian Council for Healthcare Standards International' und den ‚Trent Accreditation Scheme'. Wer internationale Patienten für sein Krankenhaus interessieren will, muss wissen, wie er seine Angebote am besten vermarktet.

Patientenmobilität und Patientensicherheit *Von Oliver Groene, Paula Vallejo, Rosa Suñol*

Diese Studie identifizierte eine Bandbreite an Themen, die einen potentiellen Einfluss auf die Qualität und die Sicherheit grenzüberschreitender Gesundheitssorge haben. Obwohl die Qualitätsvoraussetzungen für grenzüberschreitende Gesundheitssorge denen für einheimische Patienten ähneln, gibt es doch bestimmte Situationen, die der besonderen Aufmerksamkeit für die Belange des grenzüberschreitenden Patienten bedürfen. Diese beinhaltet beispielsweise Kommunikationsprobleme in Bezug auf die Anamnese und Einverständniserklärung; die Sicherheit von Arzneimitteln bei Entlassung, wegen verschiedener Typen und Dosierungen von Medikamenten; die Sicherstellung eine weiterführenden Betreuung nach Entlassung wegen mangelnder Information der Patienten und weiterführender Gesundheitsversorger; und Schwierigkeiten dabei, einen grenzüberschreitenden Rücktransfer dieser Patienten zu organisieren.

EU-Grünbuch gibt Aufschlüsse über Arbeitskräfte im Gesundheitswesen *Von Dervla Gleeson*

Offiziell im Dezember 2008 gestartet, erkennt das Grünbuch der Europäischen Kommission über Arbeitskräfte des Gesundheitswesens in Europa die vielen Herausforderungen an, welchen die Gesundheitssysteme in Europa gegenüberstehen, einschließlich der Mobilität und Migration von Arbeitskräften innerhalb der EU. Dieser Artikel fasst die wichtigsten und interessantesten Punkte zusammen. Das Grünbuch beschreibt die Herausforderungen für die EU-Arbeitskräfte des Gesundheitswesens, die allen Mitgliedstaaten gemein sind. Diese Herausforderungen sind Demographie und nachhaltige Arbeitskräfte, die Kapazitäten des Gesundheitswesens, Weiterbildung, die Mobilität dieser Arbeitskräfte innerhalb der EU, die globale Migration der Arbeitskräfte des Gesundheitswesens, Daten zur Unterstützung von Entscheidungsprozessen, neue Technologien und die Arbeitskräfte, der Angehörige der Gesundheitsberufe als ‚Entrepreneur' und die Politik der Kohäsion.

Das DATABANK Programm *Von Kevin Reed*

Das DATABANK Programm erlangte breite Aufmerksamkeit, als es von der ‚American Hospital Association' (AHA) in ihrer Veröffentlichung zweier Schriftsätze des Managements über den Einfluss der sich verschlechternden US-Wirtschaft auf städtische Spitäler im ganzen Land eingesetzt wurde. Es handelt sich dabei um eine Internet-Datenbank, die Daten wie etwa Entlassungen, Dauer des Aufenthalts, Gebühren, vertragliche Spesen, wohltätige Betreuung, Ausgaben und Patientenabrechnungen sammelt, mit dem Ziel, Krankenhausmanagern so viele relevante, aktuelle und umfassende Daten wie nur möglich zur Verfügung zu stellen. Krankenhausmanager finden diese Programm für den Vergleich der Leistung ihres Krankenhauses mit anderen ähnlichen Einrichtungen nützlich. Die Vorteile der DATABANK sind unter anderem aktuelle und vergleichbare Daten, Erstellung von Zielgruppen, und Berichte und Graphiken, die monatlich per Email verschickt werden.

Bewerte mein Krankenhaus – Rate my hospital *Von John Gibbons*

Ratemyhospital.ie wurde im September 2006 gestartet, um zu versuchen, den Patienten einen festen Platz im Zentrum der Gesund-

heitssorge zu sichern; Mittel zum Zweck ist ein umfassender, 23-teiliger online-Fragebogen. Bis jetzt wurden etwa 16.500 komplett ausgefüllte Bögen abgegeben, die fast 70 öffentliche und private Krankenhäuser einschließen. Wie erwartet wurde ‚Rate my hospital' von den Gesundheitsbehörden mit Eiseskälte zur Kenntnis genommen, und auch viele Krankenhausmanager und das Personal reagierten eher empört auf die Frechheit der Patienten, tatsächlich ihre Sicht der Dinge zu präsentieren. Doch nicht alle Reaktionen waren negativ. Krankenhausmanager sahen auch die Vorteile dieser unpersönlichen Beschwerdeabgabe, und die Website als Werkzeug, die Stärken und Schwächen beim Führen eines Krankenhauses aufzudecken. Tatsächlich wandten sich manche Führungskräfte aktiv an die Website, um zusätzliche Daten zu erhalten, die bei ihrem internen Prozess der Qualitätsverbesserung helfen könnten. Das Projekt erhielt 2007 mit dem UN-gesponserten ‚World Summit Awards' in Venedig internationale Anerkennung.

Gefahren medizinischer Abfallprodukte: Wissenschaft ersetzt durch Wahrnehmung?

Von Karl Dalton

Man stelle sich Säcke mit klinischem Abfall vor, mit ihren Gefahrensymbolen, einfach auf der Straße abgestellt. Weit verbreitete Panik wäre die Folge, aber wie gefährlich ist medizinischer Abfall wirklich, verglichen mit Hausmüll? Wir gehen davon aus, dass jeglicher klinische Abfall von Patienten mit pathogenen Infektionskrankheiten abstammt, und dass wir nach auch nur dem kleinsten Kontakt ebenfalls an diesem Keim erkranken werden. Was wir uns nicht klarmachen, ist, dass die bakterielle Belastung von Krankenhausabfall 10- bis 100.000mal geringer sein kann, als die von Hausmüll. Es gibt verschiedene herkömmliche und alternative Technologien zur Aufarbeitung von Krankenhausabfall, einschließlich Verbrennung, Mazeration und direkter Ablage auf der Deponie – allesamt sind sie teuer. Es ist klar, dass wir den neuesten Stand der Forschung benötigen, um die echten Risiken für die Umwelt und die Gesundheit der Menschen in Bezug auf klinischen Abfall zu bestimmen. Falls der wissenschaftliche Beweis erbracht werden kann, dass wir über die adäquaten Sicherheitsvorgaben hinausgehen, sind die potentiellen Kostenersparnisse enorm.

Facility Management Kosten im OP – ein Prozessmodell

Von Karin Diez, Kunibert Lennerts

Durch die Implementierung des Deutschen ‚Diagnosis Related Grouping' (DRG) Systems und des daraus resultierenden Kostendrucks gibt es steigenden Bedarf für optimierte Einsätze und Abläufe räumlicher Ressourcen in Krankenhäusern. Im OP sind die Vorräte steriler Güter der hauptsächliche Kostenverursacher. Eine deutsche Studie an vier Krankenhäusern ergab, dass 39% der Kostenanteile des Facility Managements mit dem Vorrat an sterilen Gütern verbunden ist. Angesichts der möglichen Dauer von Operationen und der Kostenunterschiede für sterile Güter für eine relativ kurze aber komplexe Form einer Operation, wie beispielsweise Hüftgelenksoperationen, ist der Bedarf für eine transparente, realistische Kosteneinteilung klar ersichtlich. Die Forscher des Karlsruher Instituts für Technologie entwickeln ein Modell, dass eine realistische Kostenzuteilung für FM-Prozesse in Beziehung zu den Primärprozessen erlaubt, und eine Basis für das strategische Planen von Raum und Ressourcen im Krankenhaus legt.

Länderfokus: Kroatien

Das erste Jahr der Gesundheitsreform in Kroatien

2008, zu Beginn seiner Amtszeit, initiierte der Minister für Gesundheit und Soziale Wohlfahrt ein Modell für eine innovative, strukturelle Reform – die zugrundeliegende Motivation war der mit den Gesundheitsausgaben stetig steigende Schuldenberg. Die grundsätzlichen Ziele der Gesundheitsreform sind die Verminderung des (irrationalen) Konsums von Medikamenten, Krankenhaus- und Facharzt-vermittelter Gesundheitssorge, Verminderungen von Ungerechtigkeiten, Aufwertung präventiver Maßnahmen, verbesserte Zufriedenheit auf Seiten von Patienten und Ärzten und eine Verbesserung der generellen Gesundheitseffekte, etc. Erreicht wurden bislang die Verminderung der Rate von Krankheitstagen von 4,2 auf 3,69 in den ersten vier Monaten und eine Verminderung des Volumens des Medikamentenverbrauchs um 7%.

Einführung von DRGs in Kroatien

Die kroatische Regierung hat festgelegt, sich schrittweise einem umfassenden prospektiven fallpauschalierten Abrechnungssystems anzunähern, basierend auf DRGs. Vom 1. Januar 2009 an müssen alle Rechnungen für Krankenhausleistungen in Kroatien laut DTS-System verbucht werden. Die Regierung erwartet, dass die vollständige Implementierung des DTS Systems einen nachhaltigen, positiven Effekt auf die Bereitstellung von Krankenhausleistungen in Kroatien haben wird: ein kürzerer Krankenhausaufenthalt, höhere Qualität und die Rationalisierung von Behandlungskosten.

Die Vereinigung Kroatischer Angestellter des Gesundheitssystems

Bei dieser Vereinigung handelt es sich um eine nicht-staatliche non-profit Organisation auf freiwilliger Basis, die sowohl öffentliche als auch private Einrichtungen einschließt und 1994 ein vollwertiges Mitglied der EAHM wurde. Aktuelle Aktivitäten waren unter anderem das Budget und die Einführung des neuen DRG Systems, außerdem die Verbesserung rechtlicher Angelegenheiten angesichts einer neuen Gesetzgebung im Gesundheitsbereich. In den letzten acht Monaten hat die Vereinigung intensiv mit dem Ministerium für Gesundheit und Soziale Wohlfahrt hinsichtlich der Basis der Kroatischen Gesundheitsreform zusammengearbeitet.

August

FIME USA - International Medical Trade Fair & Congress 12-14
Miami Beach, USA
www.fimeshow.com

ESC 2009- Annual Congress of the European Society of Cardiology 29-2
Barcelona, Spain
www.escardio.org/Pages/index.aspx

22nd MIE International Congress 30-2
Sarajevo, Bosnia and Herzegovina
www.mie2009.org

September

1st International Conference OBESITY 2009 2-4
Brussels, Belgium

MCC Hospital World 2009 21-22
Berlin, Germany
www.hospitalworld.info

Hospital Management & Information Innovation 2009 22-23
Nanjing, China
www.hmii2009.com

Exopharm 24-27
Dusseldorf, Germany
www.expopharm.de

12th European Health Forum Gastein 30-3
Salzburg, Austria
www.ehfg.org

October

11th European Health Forum «Creating a better future for health in Europe» 1-4
Gastein, Austria
www.ehfg.org

HOSPITAL St. Petersburg 14th International Healthcare Exhibition 7-9
St.Petersburg, Russia
www.primexpo.ru

22nd Annual Congress European Society of Intensive Care Medicine 11-14
Vienna, Austria
www.esicm.org

REHACARE International 14-17
Dusseldorf, Germany
www.rehacare.de

World Medical Tourism and Global Health Congress 26-28
Los Angeles, USA
www.medicaltourismcongress.com

IT@networking Awards 2009 29-30
Brussels, Belgium
www.hitm.eu

November

IHF Rio 2009 36th World Hospital Congress 10-12
Rio de Janeiro, Brazil
www.ihfrio2009.com

ESICM - 22nd Annual Congress of the European Society of Intensive Care Medicine 11-14
Vienna, Austria
www.esicm.org

Medica 2009 18-21
Düsseldorf, Germany
www.medica.de

EAHM Seminar «Towards a balanced cooperation of public and private actors» 19
Düsseldorf, Germany

RSNA 2009 29-4
Chicago, USA
www.rsna.org

January

Society of Critical Care Medicine (SCCM) 39th Annual Critical Care Congress 9-13
Miami, USA
www.sccm.org

February

International Health Expo & Conferences (IHEC) 5-8
Chandigarh, India
www.healthexposindia.com

March

ECR 2010 5-9
Vienna, Austria
www.myesr.org

ISICEM 2010 23-26
Brussels, Belgium
www.intensive.org

IN THE NEXT ISSUE OF HOSPITAL:

- The Recession and the Hospital Sector
- Ambulatory Care
- Facility Management
- Integrating People with Different Cultural Backgrounds
- Country Focus Italy

European Association of Hospital Managers
Editorial Secretariat
EMC Consulting Group
Wetstraat 28/7
B-1040 Brussels
e-mail: office@hospital.be
homepage: www.myhospital.eu

Publisher and CEO
Christian Marolt
c@hospital.be

Communications Director
Luiza Kudelka
luiza@hospital.be

Art Director
Aleksander Bugge
a.b@emcconsulting.eu

Subscription Rates
One year : Europe 63 euros Overseas 88 euros
Two years : Europe 115 euros Overseas 157 euros

Production and Printing
Veszpremi Nyomda Zrt. Printed in Hungary.
Print run - 22,000

ISSN Hospital: E: 1374-321X

Verified Circulation according to the standards of International Business Press Audits. (E)Hospital is independently audited by Accountskantoor Closset on behalf of the European Association of Hospital Managers.

Internet: www.shimadzu.eu
Email: medical@shimadzu.eu

Shimadzu Europa GmbH
Albert-Hahn-Str. 6-10
47269 Duisburg, Germany

Phone +49 - 203 - 7687-0
Fax +49 - 203 - 7687680

MobileDaRt Evolution – the premium 32 kW
DR solution to digitalized mobile X-ray imaging

www.shimadzu.eu

Evolution drives you forward

Merging clinical feedback with the most advanced technologies available on the market, the brand-new MobileDaRt Evolution adds evolutionary steps to mobile X-ray imaging. It covers examinations in patient wards, emergency rooms, traumatology, intensive care and pediatrics.

Blur-free images within 3 seconds
optimized by various types of post-processing functions

FPD in 3 versions
differing in scintillator material and/or size

Advanced operability features
through customer driven design adding comfort and safety during bedside operation

Wireless DICOM support
for fast and easy integration into the hospital network

MobileDaRt Evolution

SHIMADZU
Solutions for Science
since 1875

More information on the IT @ Networking Awards 2009 on page 6 and 7.